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**An Evaluation of Housing Finance in Saudi Arabia:
the Real Estate Development Fund's Policies
and Alternative Options**

By

Hamad Saleh A. Al-Tasan

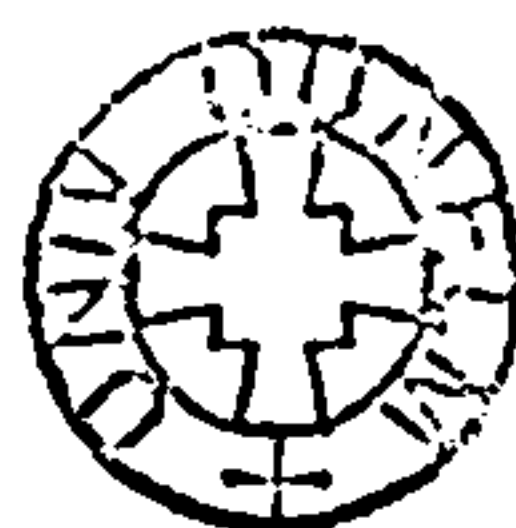
**A Thesis Submitted to the Faculty of Social Science
in Candidacy for the Degree of Doctor of Philosophy
in Economics**

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Department of Economics

University of Durham

February 1998



- 2 JUL 1998

DECLARATION

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LIST OF ABBREVIATIONS

| ABBREVIATIONS | FULL NAMES |
|----------------------|---|
| AB | Agricultural Bank |
| AD | Anno Domini (since the birth of Christ) |
| CM | Council of Ministers |
| MDA | Ministry of Defence and Aviation |
| MFNE | Ministry of Finance and National Economy |
| MI | Ministry of the Interior |
| MMRA | Ministry of Municipal and Rural Affairs |
| MP | Ministry of Planning |
| MPWH | Ministry of Public Works and Housing |
| MR | Ministerial Resolution |
| NG | National Guard |
| pbuh | may peace be upon him |
| PIF | Public Investment Fund |
| PLS | Profit or Loss Sharing |
| REDF | Real Estate Development Fund |
| SAMA | Saudi Arabian Monetary Agency |
| SIDF | Saudi Industrial Development Fund |
| SPSS | A Statistical Package for Social Science |
| SR | Saudi Riyal: exchange rate fixed \$1= SR 3.75 |
| SST | The Systematic Sampling Technique |

CHAPTER ONE

INTRODUCTION

1.0 INTRODUCTION

This chapter is organised into three main sections. The first outlines the aims of the study; the second considers the importance of housing, while the third describes the structure of the chapters. Thus, the main sections of this chapter are as follows:

1. Aims of the Study;
2. Importance of Housing;
3. Structure of Chapters

1.1 AIMS OF THE STUDY

The study examines the record of the Real Estate Development Fund (REDF) in providing Saudi citizens with finance for housing over the last twenty years (1975 to 1994). An attempt is made to analyse REDF activity in the light of its position as a governmental institution. Tables and graphs will provide information regarding capital development, loan commitments and disbursements, new loan applications, private housing loans, investment loans, types of buildings constructed and repayments.

The question of whether public funds should be used to finance housing has been an issue of debate in many countries. In Saudi Arabia, there seems to be support for government involvement through the REDF. The housing sector is considered to be one of the pillars of the Kingdom's programme to build the necessary social infrastructure for economic development and constructive social change. Consequently, it continues to receive support from the government, since the development of housing is a major objective of government policy.

It is hoped that it will be possible, on the basis of the study, to suggest methods by which the capital of the REDF might be increased. The study investigates the possibilities of increasing the capital of the REDF by recovering loans from those with outstanding debts, or by participation from the private sector.

The research also explores whether it may be feasible to reduce the waiting period for obtaining an REDF loan, since a major problem facing new applicants for loans is the long wait for loan approval.

An important component of the study will be a review of REDF regulations and policies. The organisation still operates with many of the regulations and policies established in

1974, and on its reorganisation in 1978 (Nassier, 1991,131). Many of these policies appear to be out of date, having been designed to meet conditions that may no longer exist. It may be noted here that although conditions are changing and government expenditure is becoming tighter, the fund's goals and policies remain the same. More specifically, there have been a number of important changes in the economic situation of the Kingdom of Saudi Arabia, one of which is a decrease in the government's budget due to slower growth in oil exports since 1983. However, since 1978 the REDF has not adequately adapted its policies to cope with these changes.

The study also puts forward proposals to introduce Islamic housing financing methods in order to meet the increased demand for housing. These would involve joint ownership of property and the pooling of money into a joint account with the REDF, by institutions dealing with Islamic housing financing methods.

The idea of these new housing financing methods is to create sufficient funds for individuals and to offer adequate housing to Saudi families in keeping with the Islamic way of life, bearing in mind that Islam requires replacement of the institution of interest with institutions whose statutes and rules expressly state their commitment to the principles of Islamic law (Shari'ah).

Such new housing financing methods could be based on the Islamic lending policy of partnership. In conformity with this policy, the cost could be repaid on a deferred repayment basis according to a pre-agreed schedule. It should also be possible to repay part of the amount in cash with the balance being deferred. The cost of deferred payment would be higher than the cash price. Individuals would be entitled to occupy their houses so long as they continue to make the agreed repayments. As a guarantee for the deferred payments, the financier would be entitled to ask the client for collateral, such as the deeds of the property.

Since such housing financing methods are based on the Islamic principle of participation, they are expected to meet with wide acceptance among Saudi citizens who are deeply attached to their religious beliefs but also want to own their homes (ibid., 136).

In the light of these considerations, the present study aims specifically to:

1. analyse the record of the REDF in providing housing finance;
2. ascertain the socio-economic status of those who have taken out loans (borrowers) and those seeking REDF loans (loan seekers);

3. review REDF regulations and policies which appear to be out of date and were intended to meet conditions that may no longer exist;
4. discuss whether the existing loan maximum (SR 300,000) is equal to (or more than) 70% of the construction cost of one housing unit;
5. assess whether the annual repayments (SR 9,600) are ever delayed;
6. study the reasons why some annual repayments (SR 9,600) might be delayed, in an attempt to overcome any difficulties;
7. identify borrowers' preferences regarding the various methods of loan repayment in order to increase the repayments;
8. ascertain borrowers' views as to whether their prompt or even early repayment would reduce the waiting period for those who seek loans;
9. study the reasons why some people who say they are interested in REDF loans do not apply for them;
10. explore whether it is feasible to reduce the waiting period for obtaining an REDF loan;
11. consider loan seekers' views on being offered a flexible method of borrowing money to suit their specific needs;
12. suggest methods by which the repayments to the REDF might be increased;
13. evaluate REDF loan seekers' views on being offered a loan on which interest is charged in order to build their houses;
14. evaluate REDF loan seekers' views on being offered various Islamic housing financing facilities in order to meet the increased demand for housing.

It should be mentioned, in this context, that the study is concerned with the period 1975-1995.

1.2 IMPORTANCE OF HOUSING

The provision of adequate shelter for people is one of the greatest problems in the world today. In many cases, it is the lack of this, combined with the lack of jobs and other economic opportunities, that causes the desperation, riots, and general social upheaval that are becoming common even in the most advanced countries (Al-Shiha, 1982, 12).

Owning a house or shelter is one of the basic human motives for undertaking economic activity. It has several features which make it more prominent than other motives like food and clothing. Firstly, the associated expenditure is much greater than that on food and clothing. Secondly, housing being a fixed asset, expenditure on it becomes an

investment because of its long term nature. Thirdly, and most importantly, this human need causes economic development as it generates demand for various basic industries like steel, cement, other building materials and fixtures etc (Ahmad, A. 1995, 38). One cannot expect, in the developing countries, that shelter should be provided on a large scale by welfare programmes. Ideally, market forces should be able to take care of this aspect of society. But since housing involves a large investment as compared with the average household's income, the availability of cheap finance plays an important role in its provision (Bendjilali and Khan, 1995, 34). Various strategies have been used to solve housing problems. An understanding of the economic, social and environmental conditions of the concerned households and country is essential in order to design a good housing programme.

Housing is a part of the building and construction sector. In addition, it is an important factor in social settlement, and one by which a society's welfare and progress can be evaluated. Every modern society should do its best to organise comprehensive housing programmes for its citizens, to enable them to obtain houses according to their income level and social standing. Adequate housing should be an integral requirement of a nation's evolution. The satisfaction of housing needs should be given top priority since it creates incentives for balanced growth, improves living standards, and provides conditions of security and happiness.

Housing constitutes a considerable percentage of the cost of a consumer's essential needs. Therefore, governments have continued their efforts to mitigate the effect of the housing problem by introducing subsidies.

It should be mentioned in this context that building industries, one of the biggest sectors of work today, have been established due to the great demand for housing. In addition, each country has a housing ministry or a department for planning and supervision of housing.

Development in the housing sector is a major contribution to the overall development process. Housing improvements have a great impact on individuals, who receive innumerable direct benefits, as well as improving social welfare, which is less tangible. The needs of the construction sector can encourage investment and development in new and existing industries, such as cement, plastics, steel and glass. Physical infra-structure, such as transport, communications facilities and utilities, must be improved to support both the building process and the new residents. Finally, an advanced financial system is

required, along with economic stability, to allow a sufficient system of investment and borrowing to be developed (Nassier, 1991,7)

The housing sector, as one of the pillars of the Kingdom's programme to build the social infra-structure for economic development and constructive social change, has received and continues to receive emphasis in the country's policy framework, as is evident from the budgetary allocations for this sector.

To fulfil its aim of ensuring that Saudi citizens are provided with adequate housing at reasonable prices, the government introduced three measures: it imposed regulations on private companies importing labour to build housing; it undertook large-scale housing projects in urban centres; and it established the REDF, to finance construction by individuals (for more details see *ibid.*, 6). The REDF is the product of a policy that is aimed at the distribution of national wealth and exists at a time of economic surplus (Al-Shiha, 1982, 12).

The government has accorded considerable attention to housing-development programmes. Its aim is to provide Saudi citizens adequate houses, at reasonable prices. However, there has been a significant change in the direction of the country's housing over the period 1975-1985. The housing sector in the Kingdom has witnessed substantial expansion due to the high priority accorded by the government to its development (Al-Yousef, 1987, 25)

1.3 STRUCTURE OF CHAPTERS

This study is comprised of ten chapters. The first chapter is an introductory chapter, while the second chapter gives an overview of housing in Saudi Arabia. This is presented in three sections. The first discusses the establishment and work of the REDF; the second considers the role of the MPWH, while the third reports on housing projects undertaken by other government institutions.

Chapter Three discusses a variety of methods, consistent with the teachings of the Qur'an and *Sunnah*, by which housing finance may be provided.

Chapter Four explains the design of the empirical component of the study. Hence, in this chapter, the study sample will be described, and the features of the questionnaires used in the study will be discussed.

Chapters Five and Six present the findings of the survey administered to the REDF borrowers and those who seek REDF loans respectively. The aim of these chapters is to

build up a profile of the REDF's existing and potential clients and analyse their attitudes towards certain financial matters.

Chapters Seven and Eight address a number of hypotheses related to current borrowers and those who seek REDF loans questions respectively. The aims of the hypotheses and the statistical methods used to test them are explained, and the results presented.

In Chapter Nine, selected study variables are examined simultaneously, in an attempt to find a summary measurement of these variables. Specifically, this chapter aims to find out whether the sample individuals form any kind of groups or whether they are randomly scattered. Cluster Analysis is used to achieve this objective.

Finally, Chapter Ten highlights the most significant outcomes of this research and offers policy recommendations for the future, as well as suggestions to improve evaluation methods.

CHAPTER TWO

HOUSING IN SAUDI ARABIA

2.0 INTRODUCTION

During the years from 1970 to 1985, Saudi Arabia witnessed accelerated growth in all sectors of the economy. There was a rapid expansion in oil income, government expenditure, gross national product and personal income. The gross capital formation, which is an indicator of growth trends in the economy, also witnessed a substantial expansion. The non-oil private sector experienced an upsurge in all aspects of its economic activity. Money supply, bank deposits and overall credit increased substantially.

The Saudi Arabian government was determined to take full advantage of the unique development opportunities afforded to it by the rise in both its income and reserves within the framework of social welfare. Its aim was to build the strong physical and social infrastructure necessary to attain self-sustaining and accelerated growth in all sectors of the economy, with the ultimate goals of diversifying the economy, bringing about an equitable distribution of income and raising the standard of living for all sections of the population.

In pursuit of these goals, the government expanded its programmes in the fields of vocational training, rural and urban community development, social care and relief and social security. In addition, it also provided free education at all levels and free health services.

The creation and improvement of housing was, and still is, a vital component of the government's social welfare plans. Despite the difficulties created by the vast area of the country (about 2.25 million square kilometres) and the great distances between the main urban centres, it is committed to making the Kingdom's towns and cities better places for life and work. Vast sums of money have been spent through the municipalities (district authorities) on asphaltting, paving, tree-planting, street-cleaning and lighting, sewerage systems and rain and storm water drainage.

One of the objectives of the First Five-Year Development Plan for the country (1970-1975) was to raise the standard of living and welfare of Saudi families. With regard to housing, the plan stated (MP, 1970, 443):

“Social and health standards should be raised and in particular raising the standards of housing of the lower-income groups, so that improvement in housing will go hand-in-hand with government’s efforts for improvements in health services, water supplies and urban development throughout the Kingdom”.

However, the plan did not define a specific housing policy for the country and did not assign to any independent government agency the task of carrying out these general housing objectives.

Subsequently, to accelerate economic development further, the activities of existing financial institutions were expanded and new ones were established. The functions of the Public Investment Fund (PIF) were widened to include participation with the private sector in establishing new industrial plants or expanding existing ones. The Agricultural Bank (AB) provided an increasing volume of credit to the private sector, thus helping in the process of rural development. The Saudi Industrial Development Fund (SIDF) was established to finance industrial projects.

Urgent measures were also undertaken to address the housing crisis which had ensued as a result of the Kingdom’s rapid economic expansion. The large-scale migration of expatriate workers and Saudi nationals to urban centres had affected the housing situation drastically. The housing stock in such areas was in high demand and most of it was rented out to expatriate workers who could pay a higher rent in advance, forcing Saudi families (Fadan, 1983, 215), especially those of lower income, to move to sub-standard homes with safety and sanitary problems. Consequently, the government resolved to provide every household with an affordable, decent, safe and sanitary dwelling in a reasonably short period of time. Priority was given to low-income families who were in more urgent need of better housing (MP, 1995).

To implement its housing objectives, the government created two agencies. The first was the REDF; the second one was the Ministry of Public Works and Housing (MPWH). The initiatives in housing construction undertaken through these and other government institutions form the focus of this chapter, which is organised into three main sections, together with a conclusion. The first discusses the establishment and work of the REDF; the second considers the role of the MPWH, while the third reports on housing projects undertaken by other government institutions. Therefore, the main sections of this chapter are as follows:

1. The Role of the REDF;
2. The Role of the MPWH;

3. The Role of other Government Institutions;
4. Conclusion.

2.1 THE ROLE OF THE REDF

A cornerstone of the government's housing programme is the REDF which provides loans for the construction of modern housing units. In the following sub-sections, the establishment of the REDF is described and its management structure and goals are explained. There follows an explanation of the organisation's financial operation, and some indication is given of the scope of the benefits it has provided since its inception.

2.1.1 ESTABLISHMENT OF THE REDF

The Ministry of Finance and National Economy (MFNE) put forward a proposal for the establishment of the REDF, embodied in the Minister's letter number 2939, dated 26.06.1974 (REDF, 1981, 8). The Council of Ministers (CM) approved the proposal in its document number 793, dated 26.06.1974. In response to these letters, the REDF was founded under Royal Decree number M/23, dated 01.07.1974, as a specialised financing institution (*ibid.*). According to this Royal Decree, the REDF is a financial institution linked to the MFNE with the aim of disbursing money for building houses and pushing forward the vehicle of development in the private sector of the housing field by offering long-term soft loans to Saudi citizens (*ibid.*; REDF, 1992, 12; REDF, 1982, 8).

2.1.2 THE REDF MANAGEMENT COMMITTEE

The REDF is administered by a committee composed of a president and seven members. The president is nominated by the Minister of Finance and National Economy and approved by the President of the CM. The seven committee members are as follows (REDF, 1981, 8; Nassier, 1991, 70):

1. One representative of the MFNE;
2. One representative of the Ministry of Municipal and Rural Affairs (MMRA);
3. One representative of the Ministry of Planning (MP);
4. One representative of the MPWH;
5. Three members selected from among specially-qualified Saudi citizens.

2.1.3 REDF GOALS

The REDF was founded for the purpose of achieving several immediate and long-term goals (Nassier, 1991, 71, 127, 128; REDF, Annual Reports, 1984-1995).

The first goal is to set up a financial assistance programme to increase the participation of private individuals in capital formation. The goal of the REDF was eventually to provide a self-sustaining financial institution that would facilitate the transfer of cash into capital for private individuals. Hence, the REDF extends interest-free loans to individuals and companies for the construction of houses and apartment buildings. Since financing is the main problem that the execution of a housing plan faces, a financial policy was formulated to look into financing requirements. The REDF was seen as an essential instrument for accelerating housing development in the Kingdom. An analysis of the REDF's activities shows that it has made a significant contribution to the provision of housing stock in Saudi Arabia. Initially, it took less than six months for applicants to obtain a loan from the REDF. However, it now takes much longer to get loans, often many years, as the decline in oil prices has meant that no new government money can be injected into the fund.

The second goal is to alleviate the severe shortage of housing for both the indigenous and the foreign population. The REDF was created as part of an overall plan to modernise the country and to offer adequate housing to Saudi families, in keeping with the Islamic way of life and to assure the occupants total comfort with privacy and security. This would, in turn, encourage expansion and completion of other aspects of the physical infrastructure, such as utilities, roads and communications. The REDF is contributing effectively to the construction of owner-occupied houses and residential buildings through the extension of long and medium-term loans to individuals and construction companies.

The third goal is to improve the standard of living of households who would finance and eventually own their homes. This would also have certain psychological and sociological effects in terms of meeting the expectations of the rising middle class.

The fourth goal is to maintain the Islamic traditions and principles that govern finance and guarantee the ownership of a private home for the Muslim household.

The fifth goal is to increase private participation in easing the severe housing shortage and induce the private sector to participate in the development of housing construction; in other words, to accelerate housing development in the Kingdom by encouraging the private sector to build for residential and commercial purposes.

The sixth goal is to distribute the huge increase in national income in the Saudi society, particularly the middle class. The fact that the REDF is an interest-free agency with

continual government support has made it a form of welfare programme, in the sense that people receive subsidised handouts from the government for capital investment (Nassier, 1991, 132). Rather than being a financial institution for turning cash into capital to make additional cash for additional capital, the REDF has become an institutionalised welfare system for rising middle class families (ibid.,).

The final goal is to improve the living standards and meet the rising expectations of a society in the process of modernisation. The REDF participates in improving living conditions by providing loans to people to build their own houses and by making loans available to investors in housing.

These goals are in line with the objectives for housing development of Saudi Arabia which were adopted in the Second Five-Year Development Plan (1975-1980) which were to:

1. enable every household to have a decent, safe and sanitary dwelling appropriate to his level of income;
2. ensure that enough housing, both permanent and temporary, was built during the plan period to accommodate additional manpower;
3. develop housing within orderly urbanisation patterns, in accordance with the employment, social and environmental requirements of residential settlements (MP, 1975, 511).

The programme has proved to be a success in quantitative terms. It has financed more than half of all Saudi dwellings built in the last two decades (REDF, 1993). However, it has also created a nine-year waiting list for loan seekers. Moreover, its success, in terms of the quality of the housing and suitability of foreign design concepts, is still highly debatable.

2.1.4 CAPITAL OF THE REDF

The REDF's capital is made up of two components, the authorised capital and the paid-up capital, each of which is analysed below.

2.1.4.1 AUTHORISED CAPITAL

The REDF began its operation with a modest authorised capital of SR 250 million (REDF, 1995, 11). This was subsequently raised to SR 9,000 million in the first year of the REDF's activity (fiscal year of 1975) i.e. a 36-fold increase (see Table 2.1). In the fiscal year of 1976, the REDF witnessed another improvement in its capital position. The government approved an increase of SR 14,800 million in the authorised capital of the

REDF. However, the CM Resolution number 530, dated 13.05.1975, raised the REDF's capital from the initial sum of SR 250 million to SR 2,000 million. By 1976, the authorised capital reached SR 23,800 million (REDF, 1981, 10). This was an increase of 164% over the previous year and an overwhelming 9,000% increase over the original authorised capital. In 1977, the authorised capital increased again to SR 33,800 million. This was an increase of 42.02% over the previous year. In the fiscal year of 1979 the annual increase was SR 5,000 million. Another SR 5,000 million was also added in 1980. The total authorised capital reached SR 51,100 million by the end of the 1981fiscal year. This amount then grew rapidly to SR 59,500 million by the year 1982 and there were further substantial increases in 1983 and 1984, bringing the total to SR 69,000 million. However, for the next two years the government contribution to authorised capital dropped drastically. In 1987, it was only SR 331 million. This gave the REDF an authorised capital of SR 73,769 million, a figure which has remained stable to the present time. The following is a presentation of the growth of the REDF authorised capital from its foundation (1975) until the fiscal year of 1994.

Table 2.1
Authorised Capital of REDF (in Millions SR)
During the Period 1975-1994

| Fiscal Year | Authorised Capital | Annual Difference | Percentage Change |
|--------------------|---------------------------|--------------------------|--------------------------|
| 1975 | 9,000 | 8,750 | 97.22 |
| 1976 | 23,800 | 14,800 | 164.44 |
| 1977 | 33,800 | 10,000 | 42.02 |
| 1978 | 33,800 | 0 | 0 |
| 1979 | 38,800 | 5,000 | 14.79 |
| 1980 | 43,800 | 5,000 | 12.89 |
| 1981 | 51,100 | 7,300 | 16.67 |
| 1982 | 59,500 | 8,400 | 16.44 |
| 1983 | 62,400 | 2,900 | 4.87 |
| 1984 | 69,000 | 6,600 | 10.58 |
| 1985 | 70,393 | 1,393 | 2.02 |
| 1986 | 73,438 | 3,044 | 4.32 |
| 1987 | 73,769 | 331 | 0.45 |
| 1988 | 73,769 | 0 | 0 |
| 1989 | 73,769 | 0 | 0 |
| 1990 | 73,769 | 0 | 0 |
| 1991 | 73,769 | 0 | 0 |
| 1992 | 73,769 | 0 | 0 |
| 1993 | 73,769 | 0 | 0 |
| 1994 | 73,769 | 0 | 0 |

Source: REDF, Annual Reports, 1984-1995 (the first and second columns)

Figure 2.1.1

Authorised Capital of REDF
During the Period 1975-1994

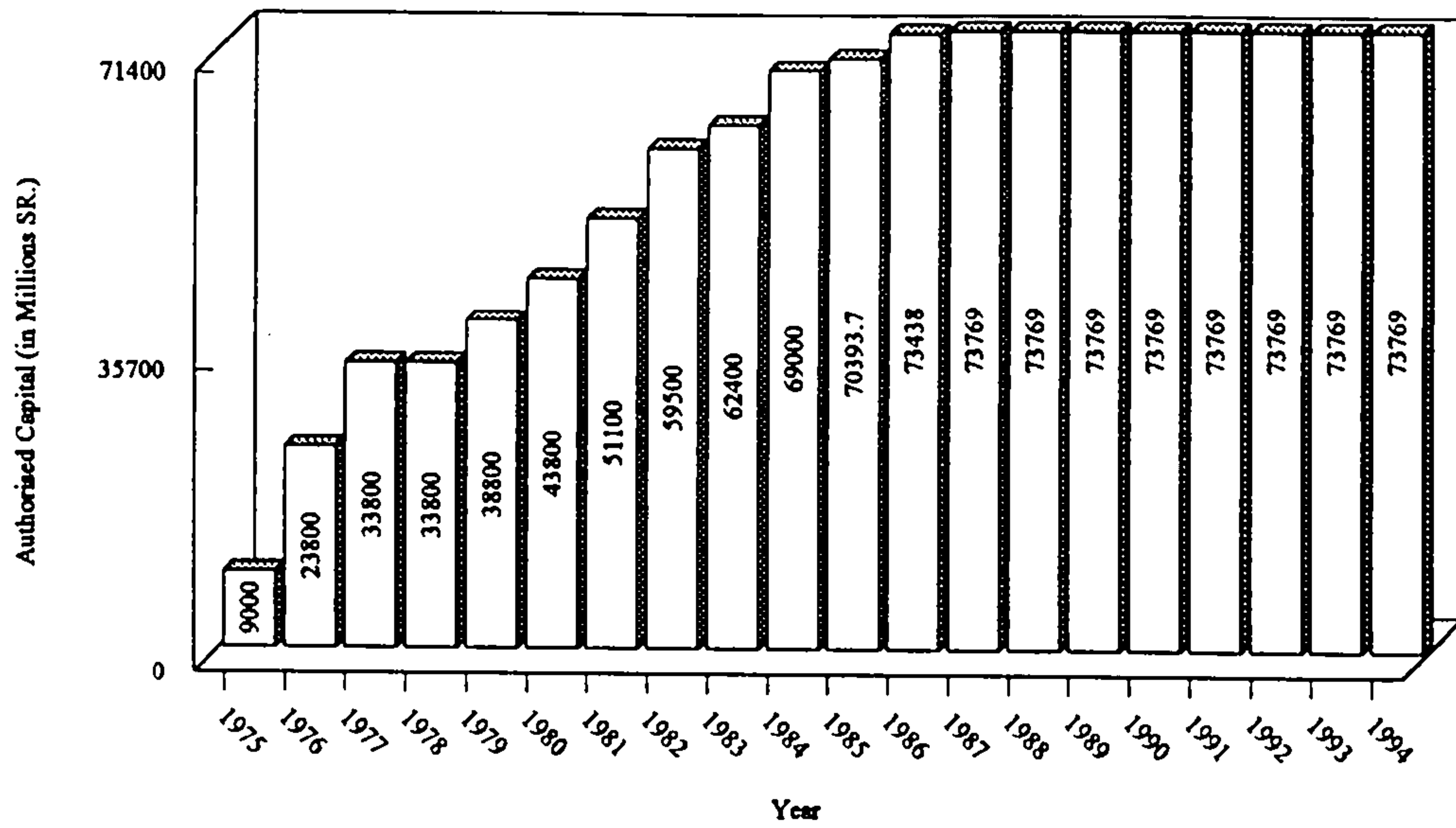


Figure 2.1.2

Annual Difference in Authorised Capital of REDF
During the Period 1975-1994

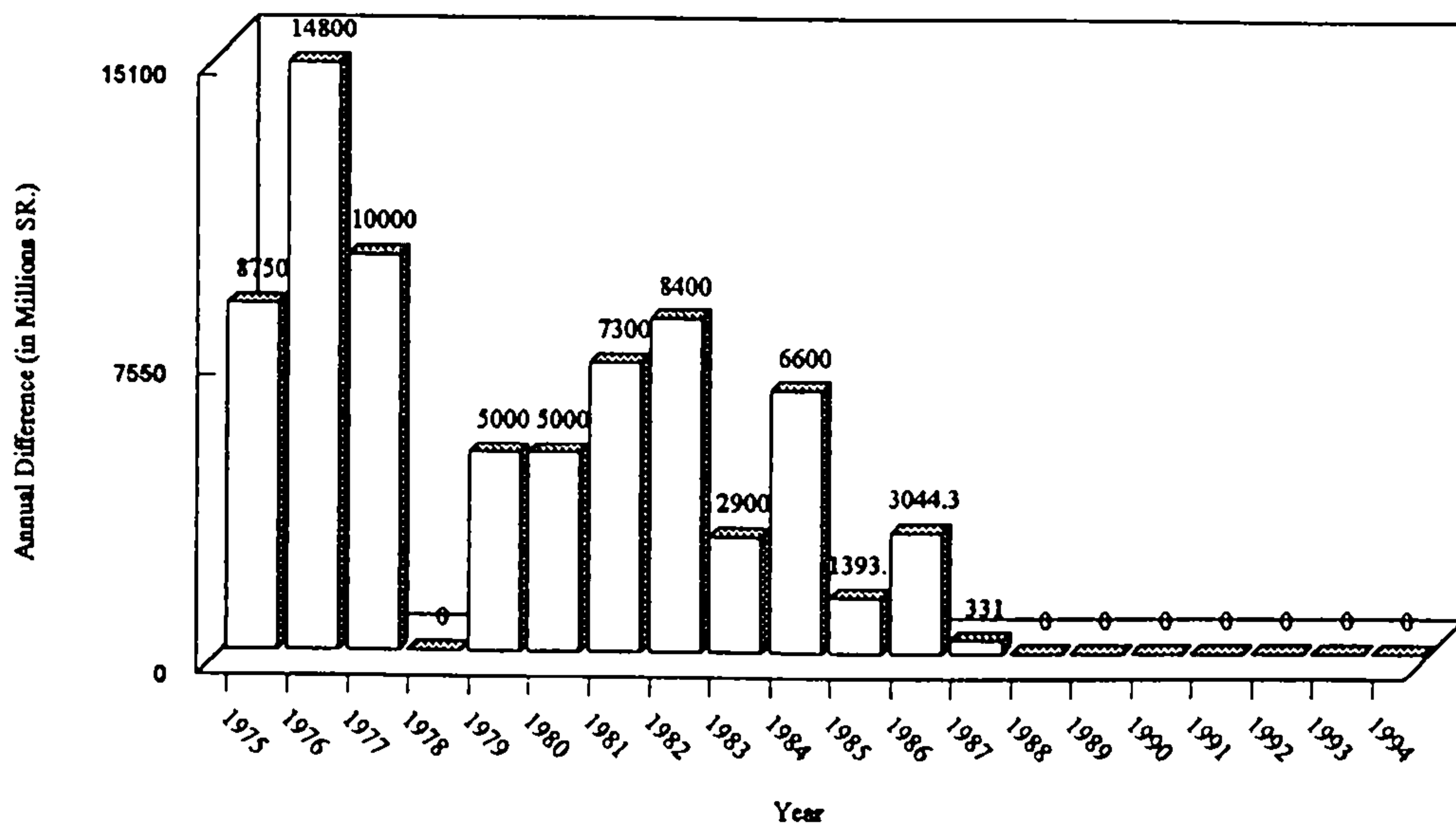
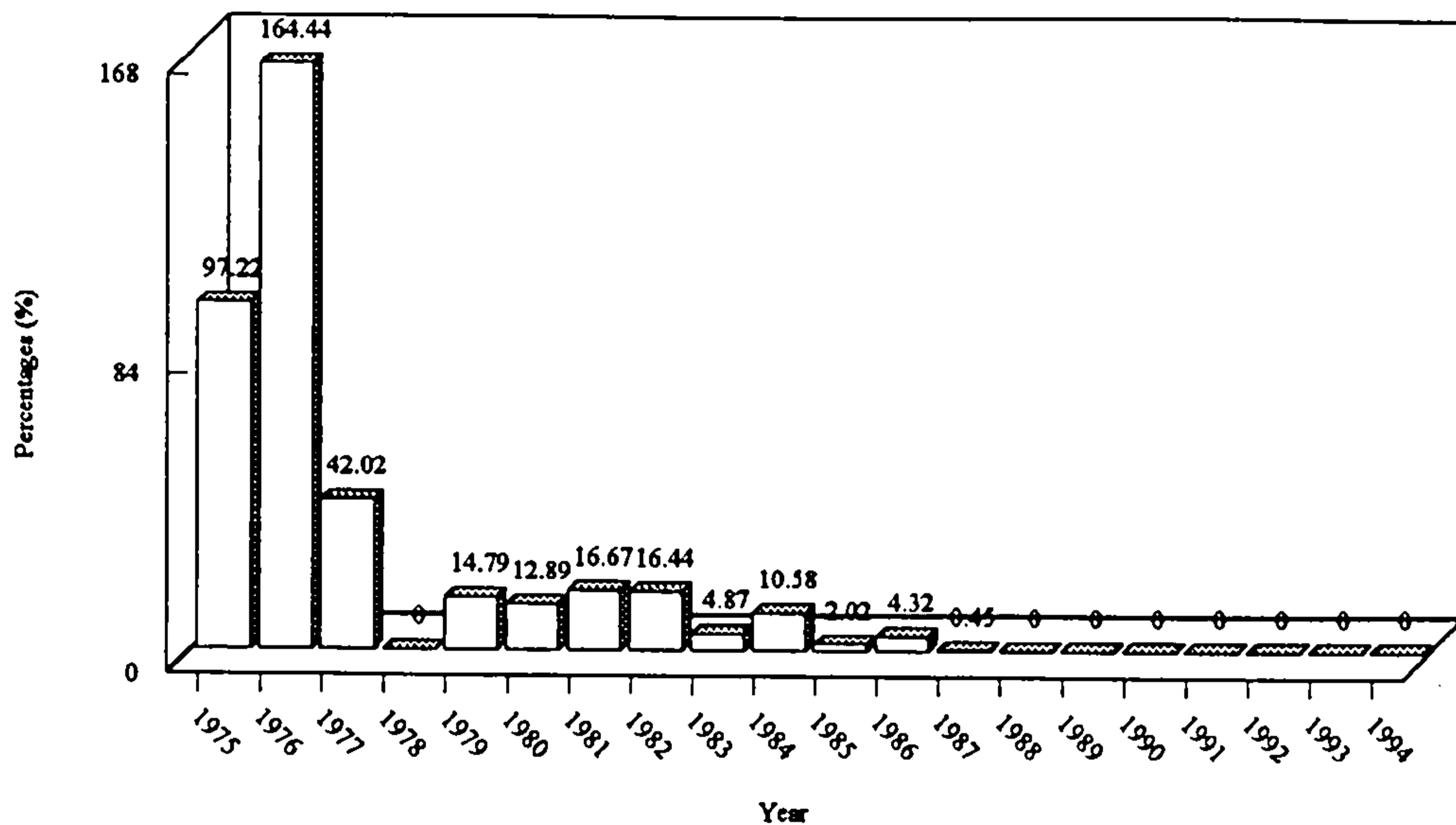


Figure 2.1.3

**Percentage Change in Authorised Capital of REDF
During the Period 1975-1994**



2.1.4.2 PAID-UP CAPITAL

The past twenty years have witnessed a more than fourteen-fold increase in the paid-up capital of the REDF, which rose from SR 5,000 million in the 1975 fiscal year to SR 70,840 million in that of 1994. For example, the paid-up capital of the REDF in the 1976 fiscal year alone increased by 110% as compared with the previous year. In 1977, it increased by 89.52% as compared with the previous year (see Table 2.2). Nassier (1991, 135) stated:

“New capital can also be raised through the participation of the private sector, thus, widening the economic ripple effect benefits of this development institution”.

It should be mentioned in this context that the long-term goal of the REDF is to eventually become a self-sustaining programme in which the repayments will be used as paid-in capital to continue financing other loans. The following is a presentation of the growth of the REDF paid-up capital from its foundation (1975) until the fiscal year of 1994.

Table 2.2
Paid-up Capital of REDF (in Millions SR)
During the Period 1975-1994

| Fiscal Year | Paid-up Capital | Annual Difference | Percentage Change |
|-------------|-----------------|-------------------|-------------------|
| 1975 | 5,000 | 5,000 | 100 |
| 1976 | 10,500 | 5,500 | 110 |
| 1977 | 19,900 | 9,400 | 89.52 |
| 1978 | 24,900 | 5,000 | 25.13 |
| 1979 | 30,850 | 5,950 | 23.9 |
| 1980 | 38,850 | 8,000 | 25.93 |
| 1981 | 43,850 | 5,000 | 12.87 |
| 1982 | 50,650 | 6,800 | 15.51 |
| 1983 | 57,650 | 7,000 | 13.82 |
| 1984 | 64,250 | 6,600 | 11.45 |
| 1985 | 68,553 | 4,303 | 6.7 |
| 1986 | 68,967 | 414 | 0.6 |
| 1987 | 70,840 | 1,873 | 2.72 |
| 1988 | 70,840 | 0 | 0 |
| 1989 | 70,840 | 0 | 0 |
| 1990 | 70,840 | 0 | 0 |
| 1991 | 70,840 | 0 | 0 |
| 1992 | 70,840 | 0 | 0 |
| 1993 | 70,840 | 0 | 0 |
| 1994 | 70,840 | 0 | 0 |

Source: REDF, Annual Reports, 1984-1995 (the first and second columns)

Figure 2.2.1

Paid-up Capital of REDF
During the Period 1975-1994

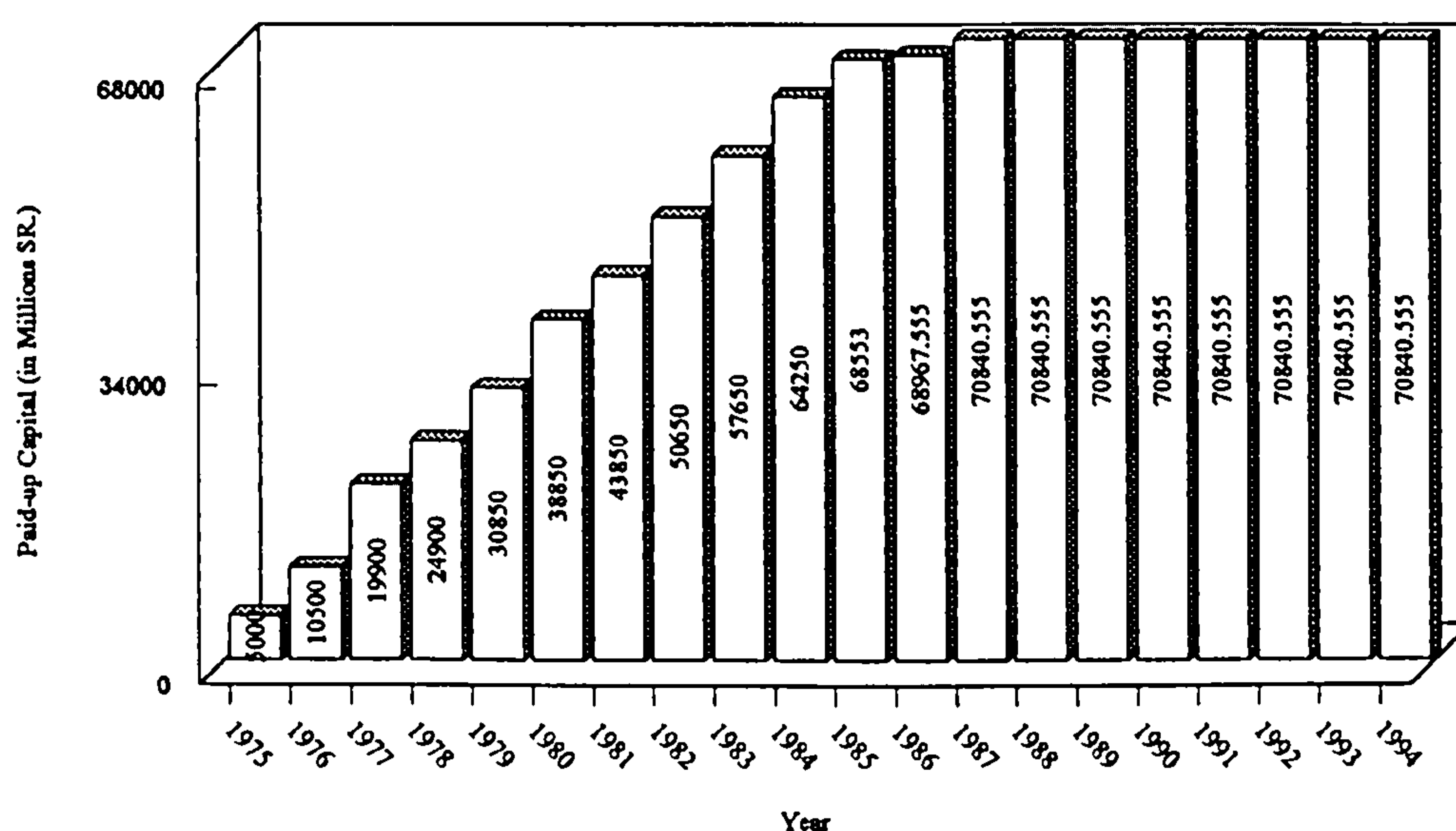


Figure 2.2.2
Annual Difference in Paid-up Capital of REDF
During the Period 1975-1994

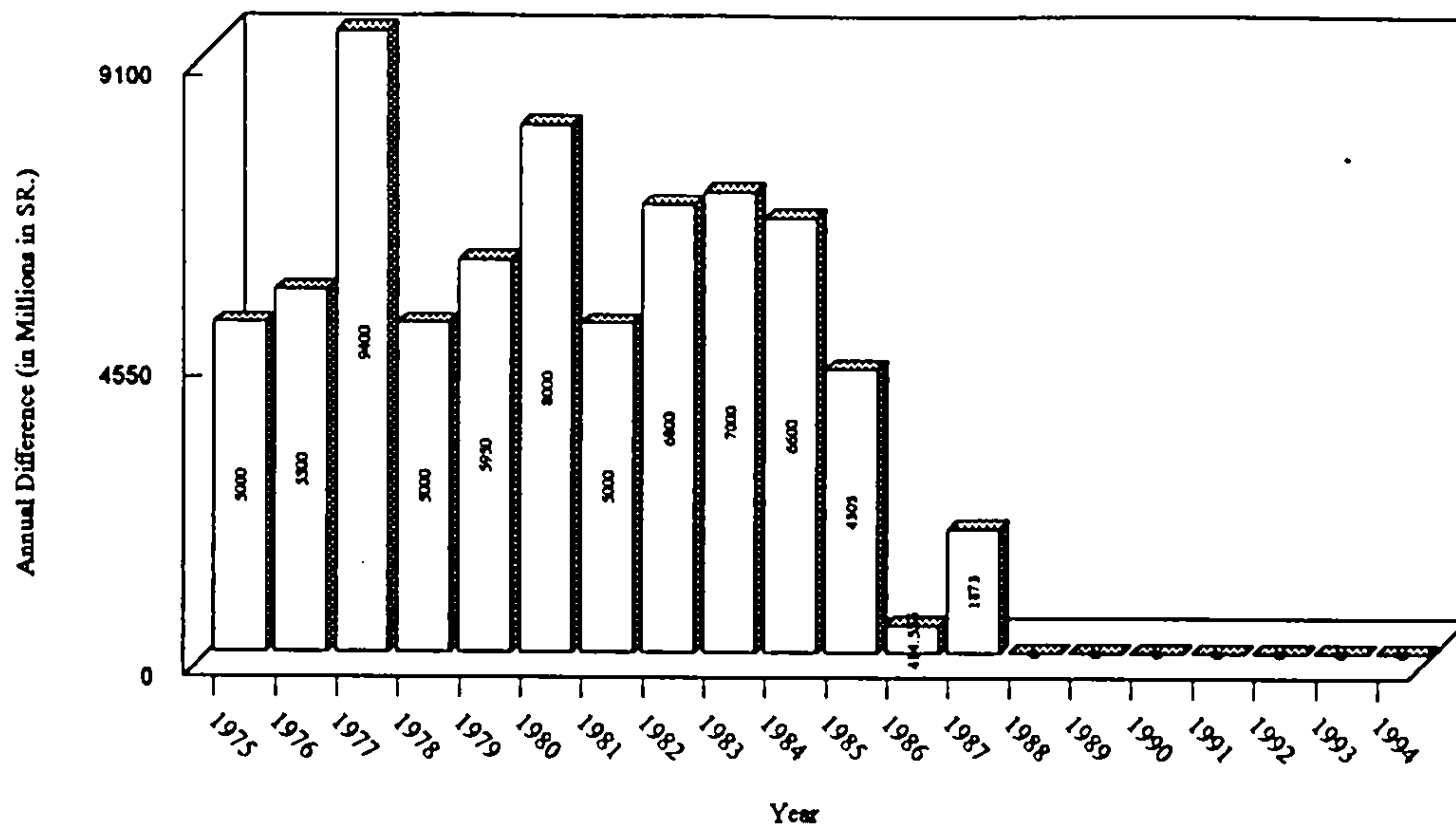
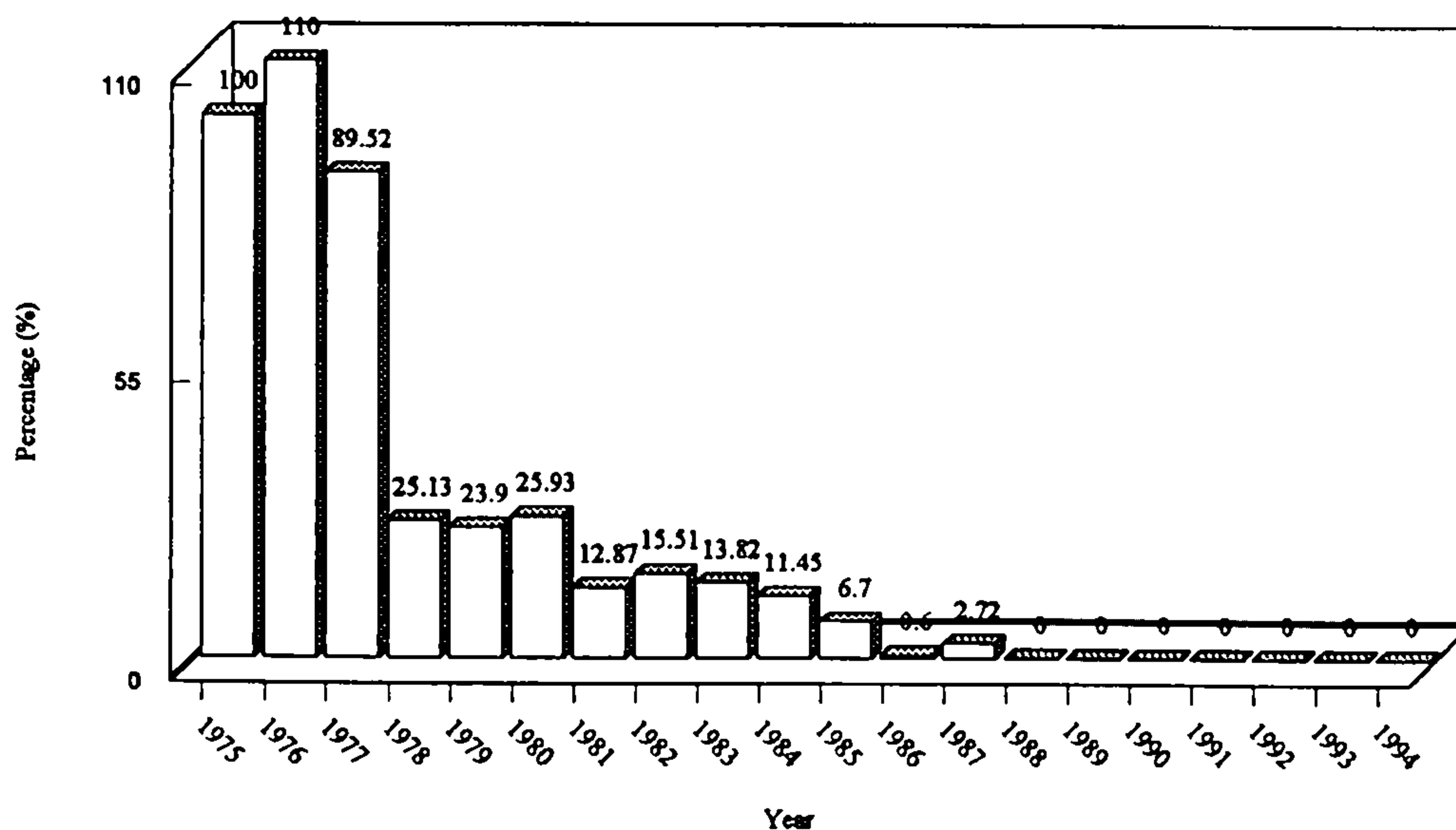


Figure 2.2.3
Percentage Change in Paid-up Capital of REDF
During the Period 1975-1994



2.1.5 COMMITMENTS AND DISBURSEMENTS

The following table shows commitments and disbursements during the period 1975-1994, while Tables 2.4 and 2.5 clarify the difference (in both absolute and percentage terms) year by year, for commitments and disbursements respectively.

Table 2.3
Commitments and Disbursements (in Millions SR)
During the Period 1975-1994

| Fiscal Year | Commitment | Disbursement |
|--------------------|-------------------|---------------------|
| 1975 | 7,827 | 2,645 |
| 1976 | 13,601 | 8,513 |
| 1977 | 1,304 | 7,511 |
| 1978 | 9,577 | 5,775 |
| 1979 | 8,549 | 8,579 |
| 1980 | 7,457 | 7,557 |
| 1981 | 8,626 | 7,165 |
| 1982 | 10,061 | 8,307 |
| 1983 | 8,304 | 8,897 |
| 1984 | 7,541 | 8,606 |
| 1985 | 5,438 | 6,783 |
| 1986 | 3,145 | 4,116 |
| 1987 | 3,246 | 3,973 |
| 1988 | 3,436 | 3,384 |
| 1989 | 2,330 | 2,979 |
| 1990 | 2,301 | 2,444 |
| 1991 | 1,609 | 1,741 |
| 1992 | 2,290 | 1,537 |
| 1993 | 6,459 | 2,677 |
| 1994 | 3,768 | 4,761 |
| TOTAL | 116,869 | 107,950 |

Source: REDF, Annual Reports, 1984-1995

Table 2.4
Commitments (in Millions SR)
During the Period 1975-1994

| Fiscal Year | Commitments | Annual Difference | Percentage Change |
|--------------------|--------------------|--------------------------|--------------------------|
| 1975 | 7,827 | - | - |
| 1976 | 13,601 | 5,774 | 73.77 |
| 1977 | 1,304 | -12,297 | -90.41 |
| 1978 | 9,577 | 8,273 | 634.43 |
| 1979 | 8,549 | -1,028 | -10.73 |
| 1980 | 7,457 | -1,092 | -12.77 |
| 1981 | 8,626 | 1,169 | 15.68 |
| 1982 | 10,061 | 1,435 | 16.64 |
| 1983 | 8,304 | -1,757 | -17.46 |
| 1984 | 7,541 | -763 | -9.19 |
| 1985 | 5,438 | -2,103 | -27.89 |
| 1986 | 3,145 | -2,293 | -42 |
| 1987 | 3,246 | 101 | 3.21 |
| 1988 | 3,436 | 190 | 5.85 |
| 1989 | 2,330 | -1,106 | -32.19 |
| 1990 | 2,301 | -29 | -1.24 |
| 1991 | 1,609 | -692 | -30 |
| 1992 | 2,290 | 681 | 42 |
| 1993 | 6,459 | 4,169 | 182 |
| 1994 | 3,768 | 1,478 | 65 |
| TOTAL | 116,869 | | |

Source: REDF, Annual Reports, 1984-1995 (the first and second columns)

Table 2.5
Disbursements (in Millions SR)
During the Period 1975-1994

| Fiscal Year | Disbursements | Annual Difference | Percentage Change |
|--------------------|----------------------|--------------------------|--------------------------|
| 1975 | 2,645 | - | - |
| 1976 | 8,513 | 5,868 | 221.85 |
| 1977 | 7,511 | -1,002 | -11.77 |
| 1978 | 5,775 | -1,736 | -23.11 |
| 1979 | 8,579 | 2,804 | 48.55 |
| 1980 | 7,557 | -1,022 | -11.91 |
| 1981 | 7,165 | -392 | -5.19 |
| 1982 | 8,307 | 1,142 | 15.94 |
| 1983 | 8,897 | 590 | 7.1 |
| 1984 | 8,606 | -291 | -3.27 |
| 1985 | 6,783 | -1,823 | -21.18 |
| 1986 | 4,116 | -2,667 | -39.32 |
| 1987 | 3,973 | -143 | -3.47 |
| 1988 | 3,384 | -589 | -14.83 |
| 1989 | 2,979 | -405 | -11.97 |
| 1990 | 2,444 | -535 | -17.96 |
| 1991 | 1,741 | -703 | -28.76 |
| 1992 | 1,537 | -204 | -11.72 |
| 1993 | 2,677 | 1,140 | 74.17 |
| 1994 | 4,761 | 3,224 | 209.76 |
| TOTAL | 107,950 | | |

Source: REDF, Annual Reports, 1984-1995 (the first and second columns)

2.1.6 THE REDF REGULATIONS

The REDF regulations provide for:

1. granting medium and long-term loans to (REDF, 1974, 2; REDF, 1989, 18):
 - a) a Saudi national in low and medium-income bracket for home construction for up to 70% of the estimated cost, up to a maximum of SR 300,000;
 - b) both legal and natural entity companies for the construction of residential compounds with multi-housing units for rental or hotel purposes. Up to 50% of the estimated home construction cost may be borrowed up to a maximum of SR 10 million (REDF, 1995, 14);
2. development and improvement of cities and towns by acquisition of old sections for the purpose of planning new residential and commercial areas, in agreement with the Municipalities concerned;

3. granting loans to Saudi establishments for up to 50% of the cost of constructing housing compounds for their employees;
4. granting loans to any other housing project, the feasibility of which can be proved to the committee in charge of the REDF.

In accordance with this programme, any eligible citizen who wishes to build his own house can be granted up to 70% of the estimated construction cost, up to a maximum of SR 300,000. The loan is payable over a twenty-five year period. Eligibility is determined by the borrower's age, marital status, gender and home ownership status. Specifically, the REDF can provide loans to (REDF, 1995, 14; Al-Saati, 1987, 260):

1. Saudi males of at least twenty-one years of age;
2. Saudi males of eighteen years provided that they are married;
3. widowed or divorced Saudi women who are legal custodians of their children;
4. Saudi women aged forty or above, who are spinsters;
5. a group of orphans;
6. an orphan of less than eighteen years old.

The loan is a once in a lifetime programme. In other words, no loans will be granted to an applicant who has already received a loan or who already owns a house. However, those who live in old or mud houses and wish to demolish them to build new houses for their private occupancy are entitled to an REDF loan. In addition, the potential borrower must: (Nassier, 1991, 72, 76; Al-Saati, 1987, 260)

- a) own a site upon which to build;
- b) have a municipal permit;
- c) have a set of building plans that meet REDF specifications.

Borrowers sign a mortgage contract with the REDF, by which the recipient is prohibited from selling, relinquishing, transferring ownership or changing the status of the property until the mortgage is redeemed or the last repayment of the loan is made. The contract also gives the REDF the right to sell the mortgage in order to collect all or part of the remaining repayments in case of failure to repay any instalment on the due date (Al-Saati, 1987, 260; Nassier, 1991, 77).

A major drawback of these regulations is their tendency to inflate land and housing prices. Fadan (1983b, 251) stated:

“Despite the fact that many individuals seem to have benefited, faults in the eligibility terms still prevent many poor and landless individuals from utilising this

programme. On the other hand, it has proved a bonanza for speculative land developers.”

Similarly Eshmawi (1983, 86) argued:

“The REDF loan programme has not really contributed to low-income housing construction through its lending programme to the private sector. This is largely due to the requirement of land ownership for individuals as a condition for loan application. The lower-income level households cannot therefore take advantage of the credit system available”.

2.1.7 TYPES OF REDF LOAN

The fund grants two types of loan: private and investment. The former are provided to enable citizens to build properties for their own private occupation, while the latter are available to individuals and organisations to finance the construction of non-residential property, or of residential compounds to be let by their owners. The relevant classifications and the development in number of loans granted in each category are discussed below.

2.1.7.1 PRIVATE LOANS

These are long-term loans, repayable over a period of 25 years. They enable citizens to finance the construction of their private houses at the rate of 70% of the total building cost of construction according to categories ranging from SR 200,000 to 300,000.

2.1.7.1.1 CLASSIFICATION OF PRIVATE LOANS

Originally the maximum limit on loans for private residences was the same (SR 300,000), whether the house was to be located in a large urban area or in a small village. A new policy, however, was introduced early in 1978 by the CM. In its decision number 101, dated 26.01.1978, villages and towns were grouped by size and population (REDF, 1981, 13). The maximum value of private loans issued for construction in big cities remained at SR 300,000, but the limits on loans for residents of smaller towns were adjusted to match the lesser growth needs in those areas. These four groups were defined, as follows (ibid.; REDF, 1989, 19):

First Group: This included the largest cities. The value of private loans was limited to SR 300,000.

Second Group: This included medium sized towns. The value of private loans was limited to SR 240,000.

Third Group: This included small towns. The value of private loans was limited to SR 170,000.

Fourth Group: This included villages and rural areas. The value of private loans was limited to SR 100,000.

The CM reconsidered this issue on 03.05.1981 and amended their original decision, as follows (REDF, 1981, 15; REDF, 1982, 13-15):

Group A: loans designated for use in major cities were limited to SR 300,000.

Group B: loans designated for use in medium-sized towns were limited to SR 250,000.

Group C: loans designated for use in villages were limited to SR 200,000.

Nassier (1991, 82) stated:

“The reclassification was intended to simplify the procedure and reward rural areas as it was felt that their need for housing construction was much greater, at that time, than in urban centres. Construction costs were much less in the rural areas and the full loan amount could buy a much larger house than the same amount in the urban centres”.

2.1.7.1.2 METHOD OF DISBURSEMENT

Private loans approved by the REDF are paid in accordance with standard disbursement in four payments, in accordance with the applicable regulations, as follows (REDF, 1987, 21; REDF, 1995, 14; Al-Saati, 1987, 260):

The first payment represents 10% of the loan value, payable upon signing the contract.

The second payment represents 40% of the loan value, payable after the completion of structural framework.

The third payment represents 40% of the loan value, payable after the completion of exterior finishing, installation of sanitary systems and tiling.

The last payment represents 10% of the loan value, payable upon completion of the finishing work on the whole building.

Such distribution of payment and specification of percentages are effected to ensure that loans are used for their intended purpose and that construction work is satisfactorily completed. Periodic inspection visits are made to the construction site by the REDF's engineers, who issue disbursement certificates confirming that each constructional phase has been completed on time (REDF, 1995, 14).

2.1.7.1.3 APPLICATIONS FOR PRIVATE LOANS

The total number of private loan applications submitted to the REDF during the period 1975-1994 was 598,850 (see Table 2.6).

Table 2.6
Number of Private Loan Applications Submitted to the REDF
During the Period 1975-1994

| Fiscal Year | Number of Applications | Annual Difference | Percentage Change |
|--------------------|-------------------------------|--------------------------|--------------------------|
| 1975 | 34,189 | 0 | - |
| 1976 | 46,955 | 12,766 | 37.34 |
| 1977 | 30,700 | -16,255 | -34.62 |
| 1978 | 35,308 | 4,608 | 15.01 |
| 1979 | 37,016 | 1,708 | 4.84 |
| 1980 | 36,815 | -201 | -0.54 |
| 1981 | 35,572 | -1,243 | -3.38 |
| 1982 | 41,735 | 6,163 | 17.33 |
| 1983 | 39,541 | -2,194 | -5.26 |
| 1984 | 39,280 | -261 | -0.66 |
| 1985 | 29,590 | -9,690 | -24.67 |
| 1986 | 17,448 | -12,142 | -41.03 |
| 1987 | 19,203 | 1,755 | 10.06 |
| 1988 | 17,153 | -2,050 | -10.68 |
| 1989 | 15,209 | -1,944 | -11.33 |
| 1990 | 13,146 | -2,063 | -13.56 |
| 1991 | 18,565 | 5,419 | 41.22 |
| 1992 | 20,467 | 1,902 | 10.25 |
| 1993 | 36,046 | 15,579 | 76.12 |
| 1994 | 34,912 | -1,134 | -3.15 |
| TOTAL | 598,850 | | |

Source: REDF, Annual Reports, 1984-1995 (the first and second columns)

2.1.7.1.4 PRIVATE LOANS ISSUED

The establishment of the REDF has been the most important factor contributing to the ample availability of houses and the resultant decline in house rents. During its first ten years of operation, the REDF funded the construction of 24,775 rental housing and apartment units. Because some private housing loans covered the cost of more than one home in a family compound, the total number of private residential units built with REDF loans during the same period was 388,700.

As Table 2.7 shows, the number of private loans issued in the 1977 fiscal year decreased by 91.08% as compared with the previous year. Consequently, their value (in SR

million) and the number of housing units built with them decreased by 91.59% and 91.84% respectively, as compared with the previous year (see Tables 2.8 and 2.9). One possible explanation for this could be that in 1977 REDF stopped its operations for about six months to reorganise (Al-Shiha, 1982, 93).

From its inception in 1975 up to 1994 the REDF granted 425,306 private loans with a total value of SR 111,701 million, contributing to the construction of 505,718 housing units. Tables 2.7, 2.8 and 2.9 respectively, show the number of private loans issued, their value (in SR million) and the number of housing units built with them during the years 1975-1994.

Table 2.7
Number of Private Loans Issued
During the Period 1975-1994

| Fiscal Year | Number of Loans | Annual Difference | Percentage Change |
|--------------------|------------------------|--------------------------|--------------------------|
| 1975 | 32,705 | - | - |
| 1976 | 47,063 | 14,358 | 43.9 |
| 1977 | 4,196 | -42,867 | -91.08 |
| 1978 | 35,394 | 31,198 | 743.52 |
| 1979 | 32,727 | -2,667 | -7.54 |
| 1980 | 28,742 | -3,985 | -12.18 |
| 1981 | 31,684 | 2,942 | 10.24 |
| 1982 | 35,727 | 4,043 | 12.76 |
| 1983 | 29,334 | -6,393 | -17.89 |
| 1984 | 26,225 | -3,109 | -10.6 |
| 1985 | 18,842 | -7,383 | -28.15 |
| 1986 | 11,182 | -7,660 | -40.65 |
| 1987 | 11,633 | 451 | 4.03 |
| 1988 | 12,279 | 646 | 5.55 |
| 1989 | 8,174 | -4,105 | -33.43 |
| 1990 | 8,121 | -53 | -0.65 |
| 1991 | 5,476 | -2,645 | -32.57 |
| 1992 | 8,867 | 3,391 | 61.92 |
| 1993 | 23,340 | 14,473 | 163.22 |
| 1994 | 13,595 | 4,728 | 53.32 |
| TOTAL | 425,306 | | |

Source: REDF, Annual Reports, 1984-1995 (the first and second columns)

Figure 2.7.1
 Number of Private Loans Issued
 During the Period 1975-1994

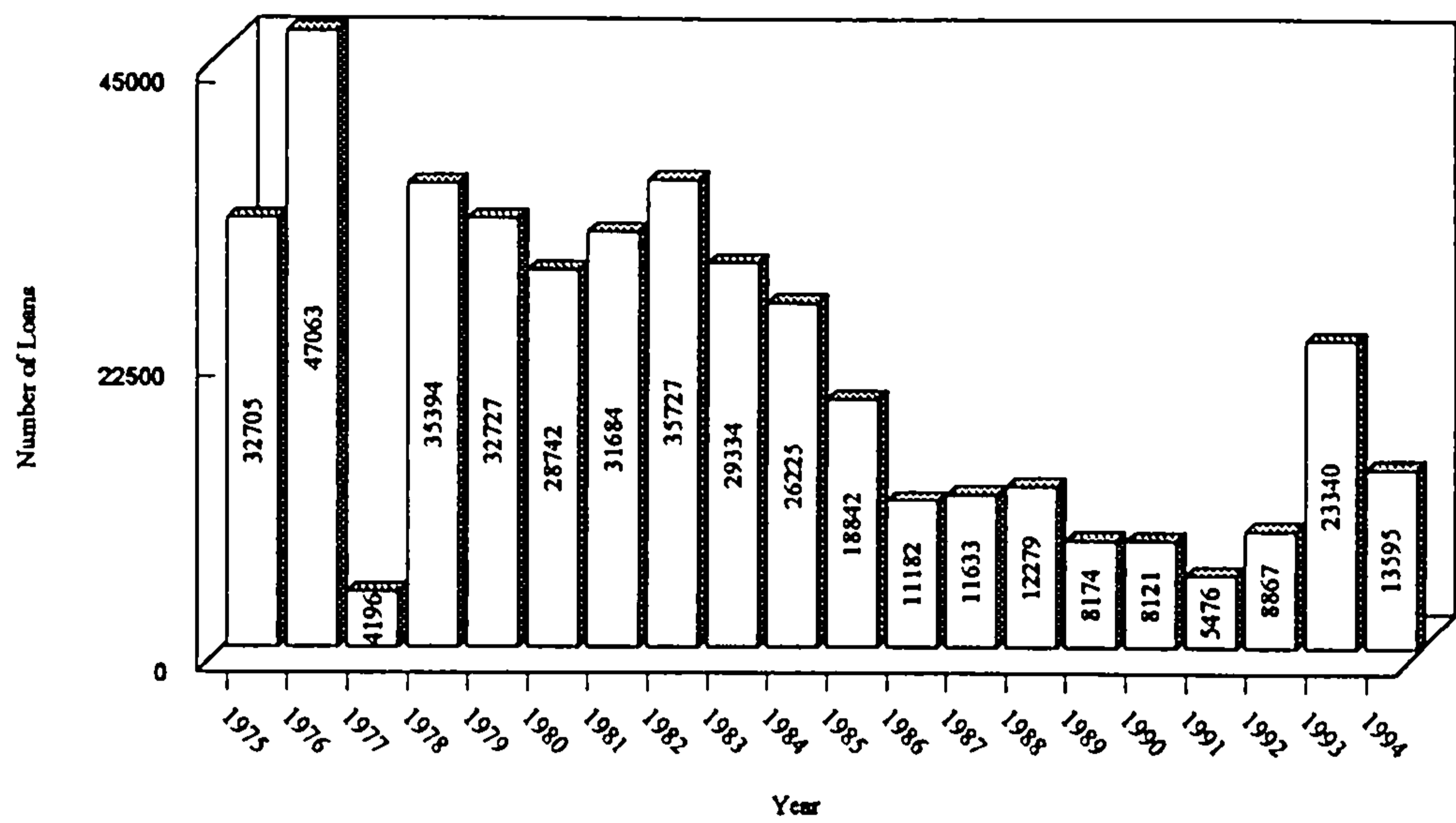


Figure 2.7.2
 Annual Difference in Number of Private Loans Issued
 During the Period 1976-1994

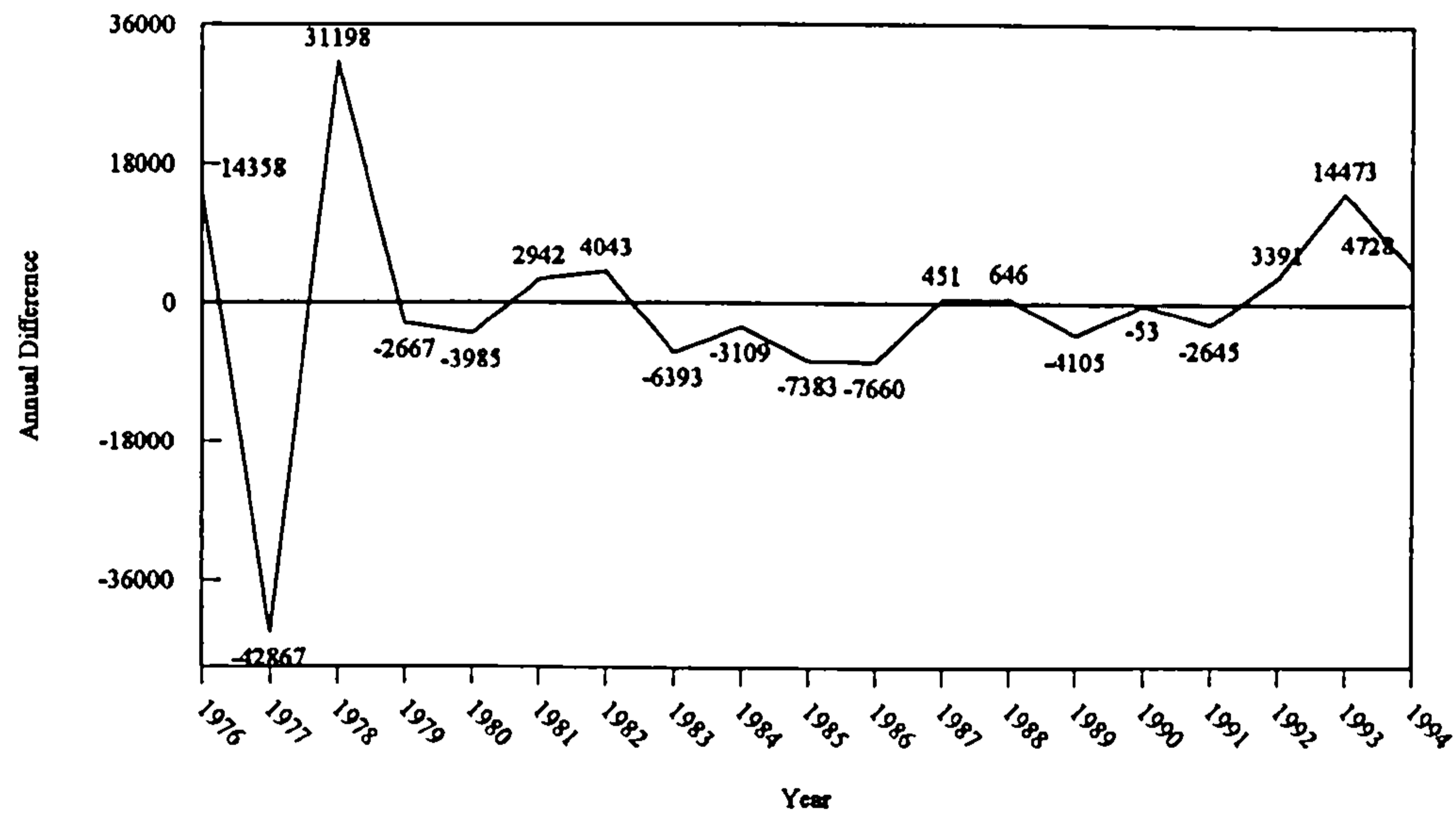


Figure 2.7.3
Percentage Change in Number of Private Loans Issued
During the Period 1976-1994

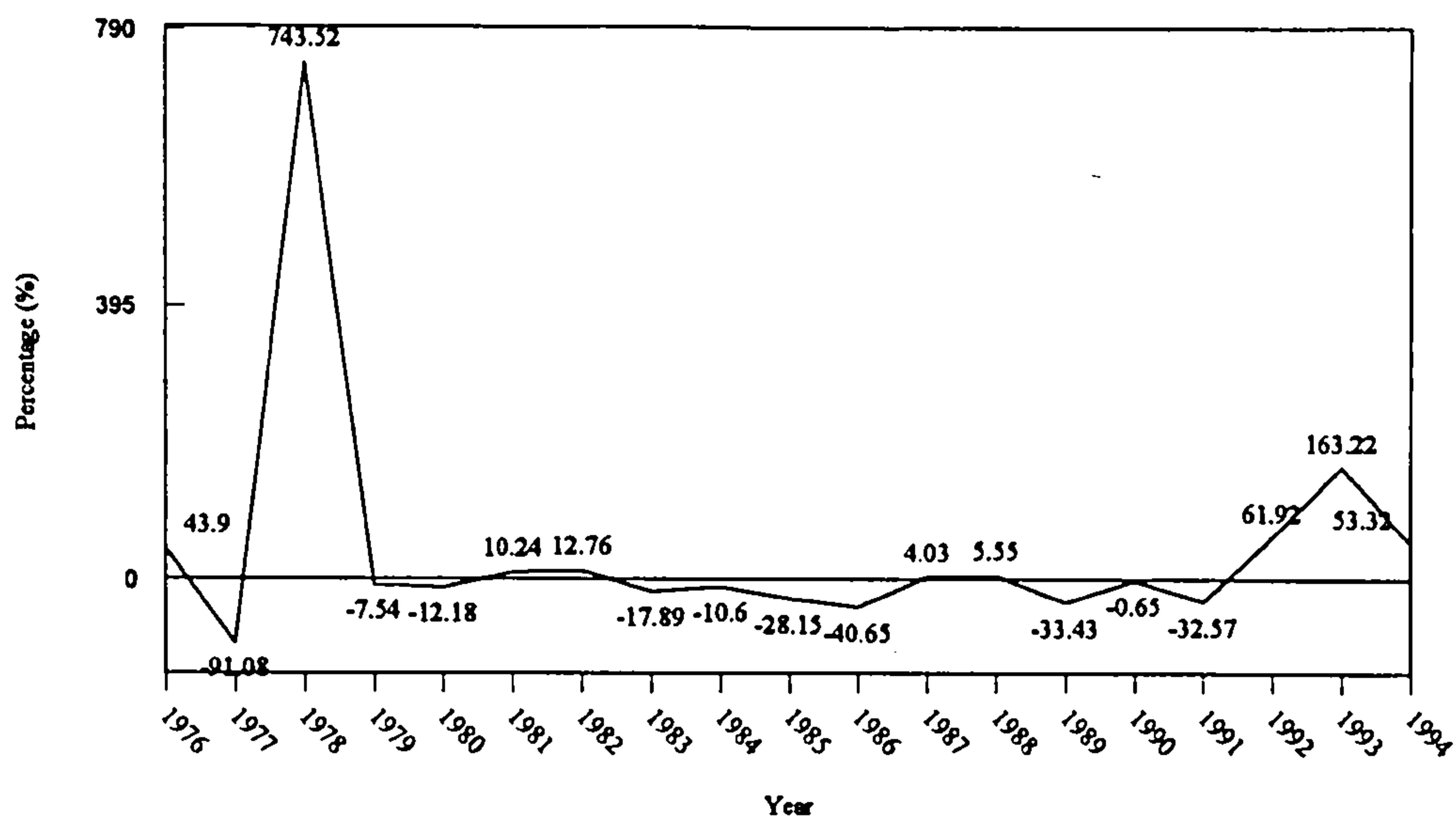


Table 2.8
Value of Private Loans (in Millions SR)
During the Period 1975-1994

| Fiscal Year | Value of Loans | Annual Difference | Percentage Change |
|--------------|----------------|-------------------|-------------------|
| 1975 | 7,827 | - | - |
| 1976 | 12,694 | 4,867 | 62.18 |
| 1977 | 1,068 | -11,626 | -91.59 |
| 1978 | 8,913 | 7,845 | 734.55 |
| 1979 | 8,060 | -853 | -9.57 |
| 1980 | 7,058 | -1,002 | -12.43 |
| 1981 | 8,185 | 1,127 | 15.97 |
| 1982 | 9,546 | 1,361 | 16.63 |
| 1983 | 7,935 | -1,611 | -16.88 |
| 1984 | 7,134 | -801 | -10.09 |
| 1985 | 5,158 | -1,976 | -27.7 |
| 1986 | 3,059 | -2,099 | -40.69 |
| 1987 | 3,193 | 134 | 4.38 |
| 1988 | 3,377 | 184 | 5.76 |
| 1989 | 2,243 | -1,134 | -33.58 |
| 1990 | 2,224 | -19 | -0.85 |
| 1991 | 1,565 | -659 | -29.63 |
| 1992 | 2,276 | 711 | 45.43 |
| 1993 | 6,432 | 4,156 | 182.6 |
| 1994 | 3,754 | 1,478 | 64.94 |
| TOTAL | 111,701 | | |

Source: REDF, Annual Reports, 1984-1995 (the first and second columns)

Figure 2.8.1
Value of Private Loans
During the Period 1975-1994

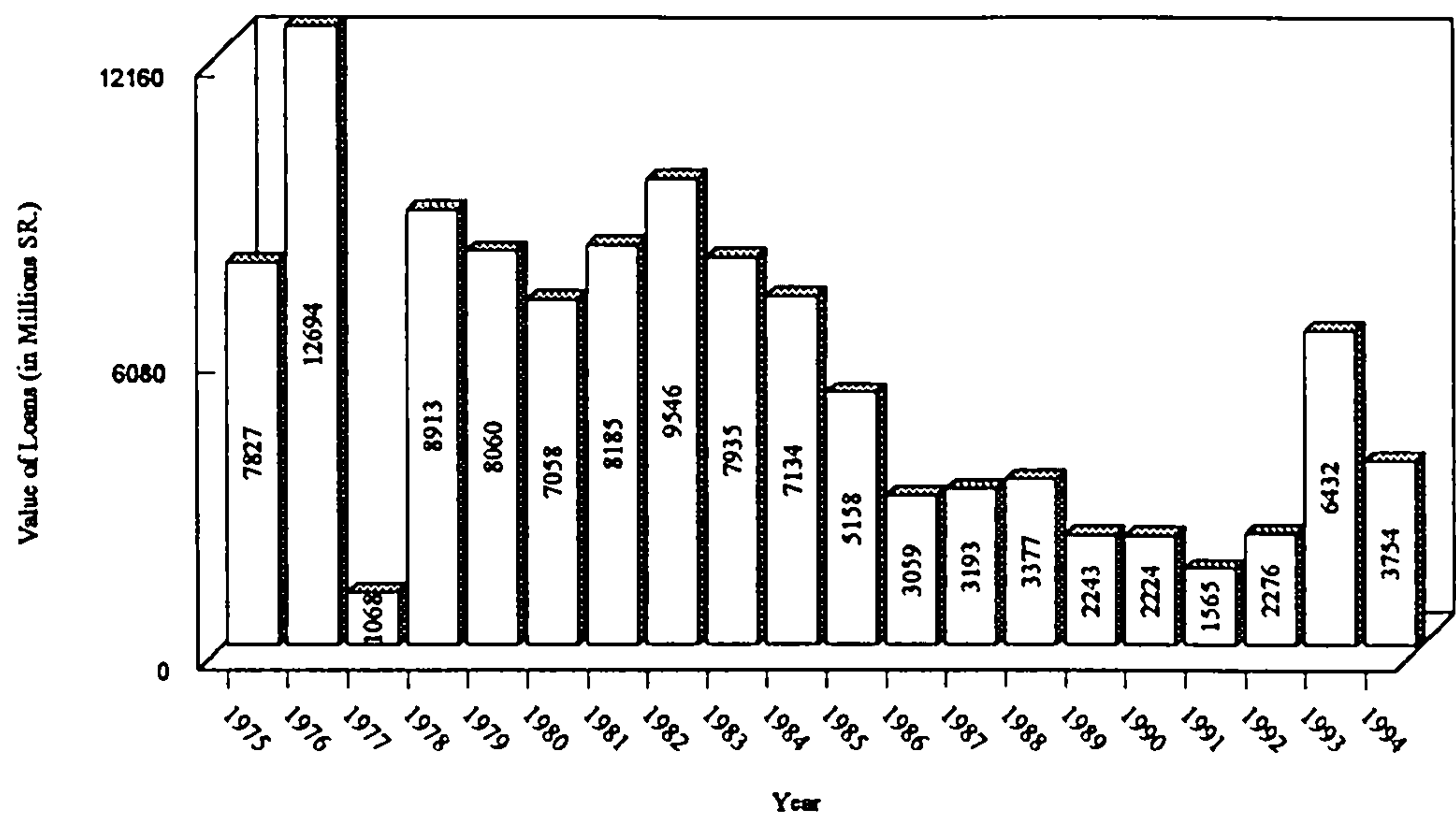


Figure 2.8.2
Annual Difference in Value of Private Loans
During the Period 1976-1994

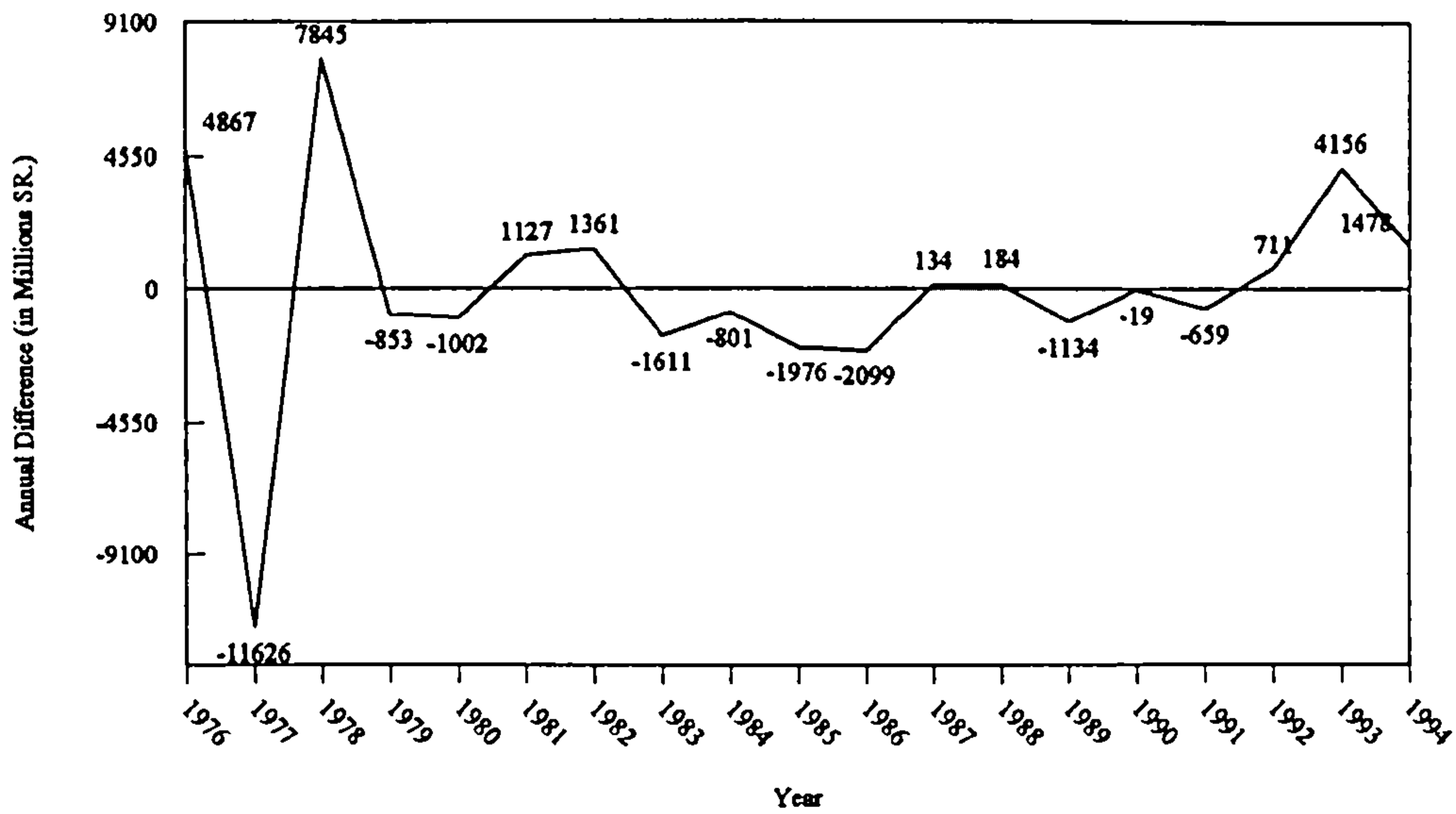


Figure 2.8.3
Percentage Change in Value of Private Loans
During the Period 1976-1994

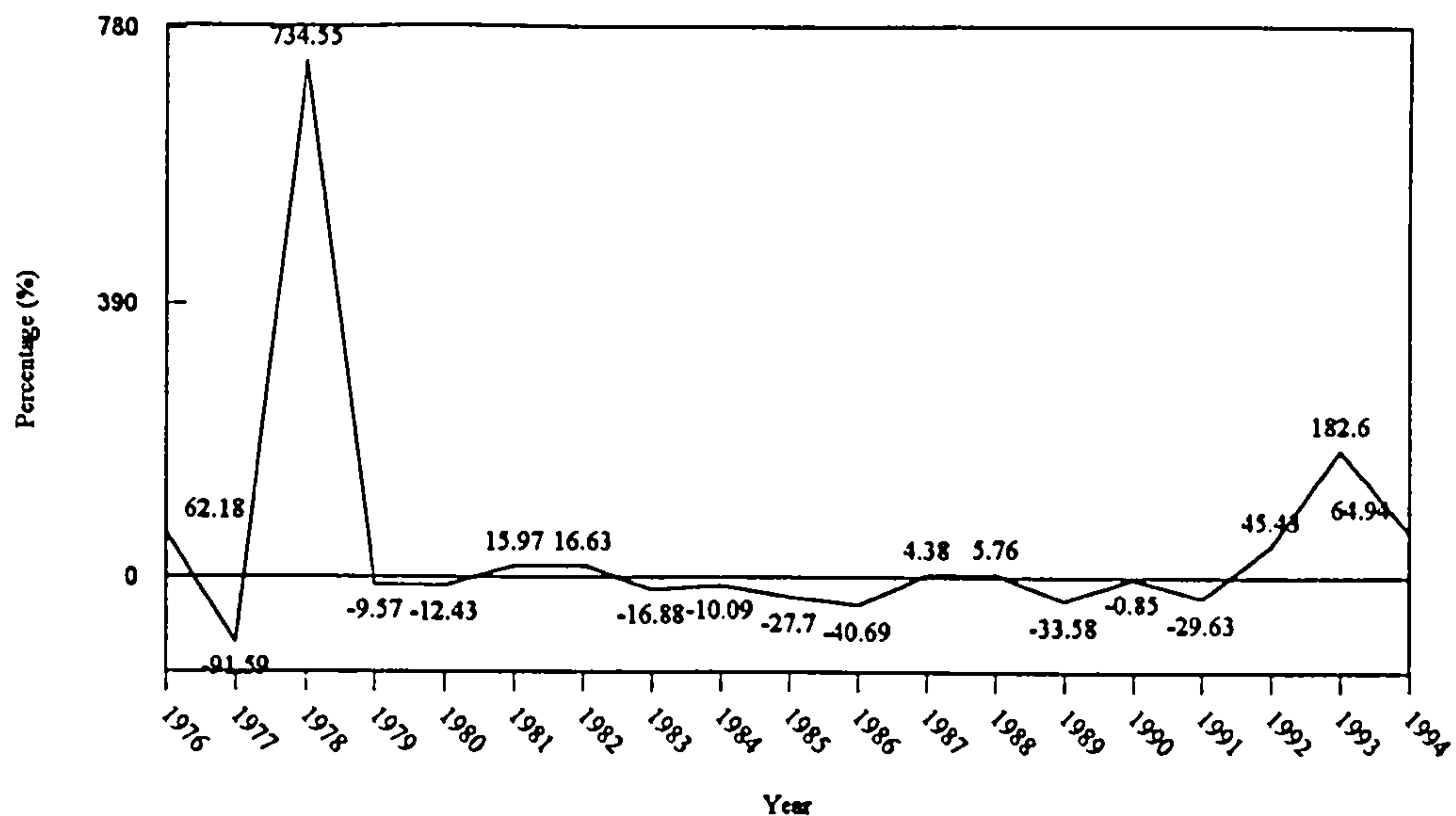


Table 2.9
Number of Housing Units Built with Private Loans
During the Period 1975-1994

| Fiscal Year | Number of Housing Units | Annual Difference | Percentage Change |
|--------------|-------------------------|-------------------|-------------------|
| 1975 | 41,017 | - | - |
| 1976 | 56,346 | 15,329 | 37.37 |
| 1977 | 4,598 | -51,748 | -91.84 |
| 1978 | 41,288 | 36,690 | 797.96 |
| 1979 | 39,828 | -1,460 | -3.54 |
| 1980 | 34,312 | -5,516 | -13.85 |
| 1981 | 37,360 | 3,048 | 8.88 |
| 1982 | 42,430 | 5,070 | 13.57 |
| 1983 | 35,280 | -7,150 | -16.85 |
| 1984 | 31,458 | -3,822 | -10.83 |
| 1985 | 22,613 | -8,845 | -28.12 |
| 1986 | 13,450 | -9,163 | -40.52 |
| 1987 | 13,978 | 528 | 3.93 |
| 1988 | 14,725 | 747 | 5.34 |
| 1989 | 9,806 | -4,919 | -33.41 |
| 1990 | 9,744 | -62 | -0.63 |
| 1991 | 6,270 | -3,474 | -35.65 |
| 1992 | 6,892 | 622 | 9.92 |
| 1993 | 28,009 | 21,117 | 306.4 |
| 1994 | 16,314 | 9,422 | 136.71 |
| TOTAL | 505,718 | | |

Source: REDF, Annual Reports, 1984-1995 (the first and second columns)

Figure 2.9.1
 Number of Housing Units Built with Private Loans
 During the Period 1975-1994

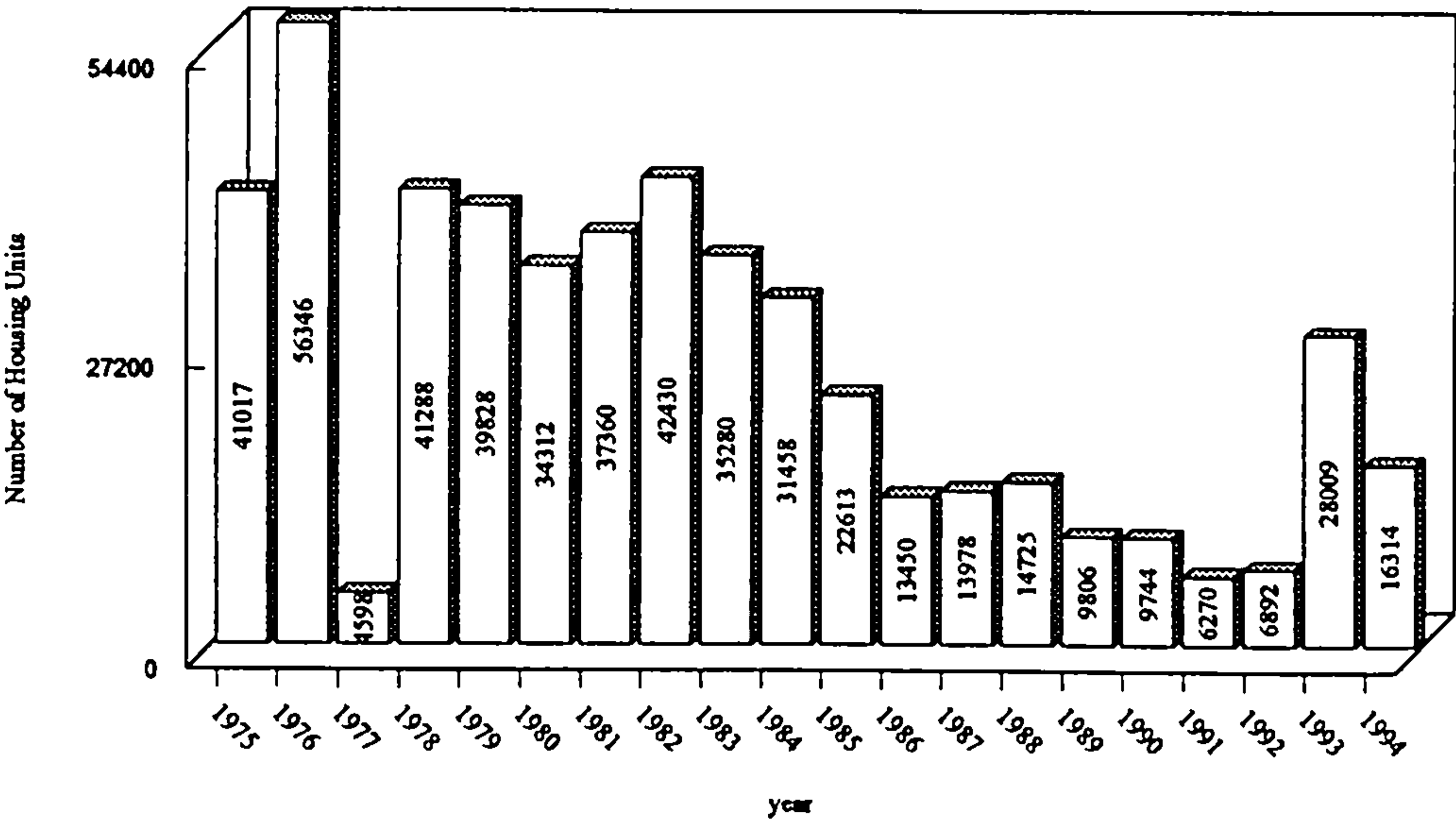


Figure 2.9.2
 Annual Difference in Number of Housing Units Built with Private Loans
 During the Period 1976-1994

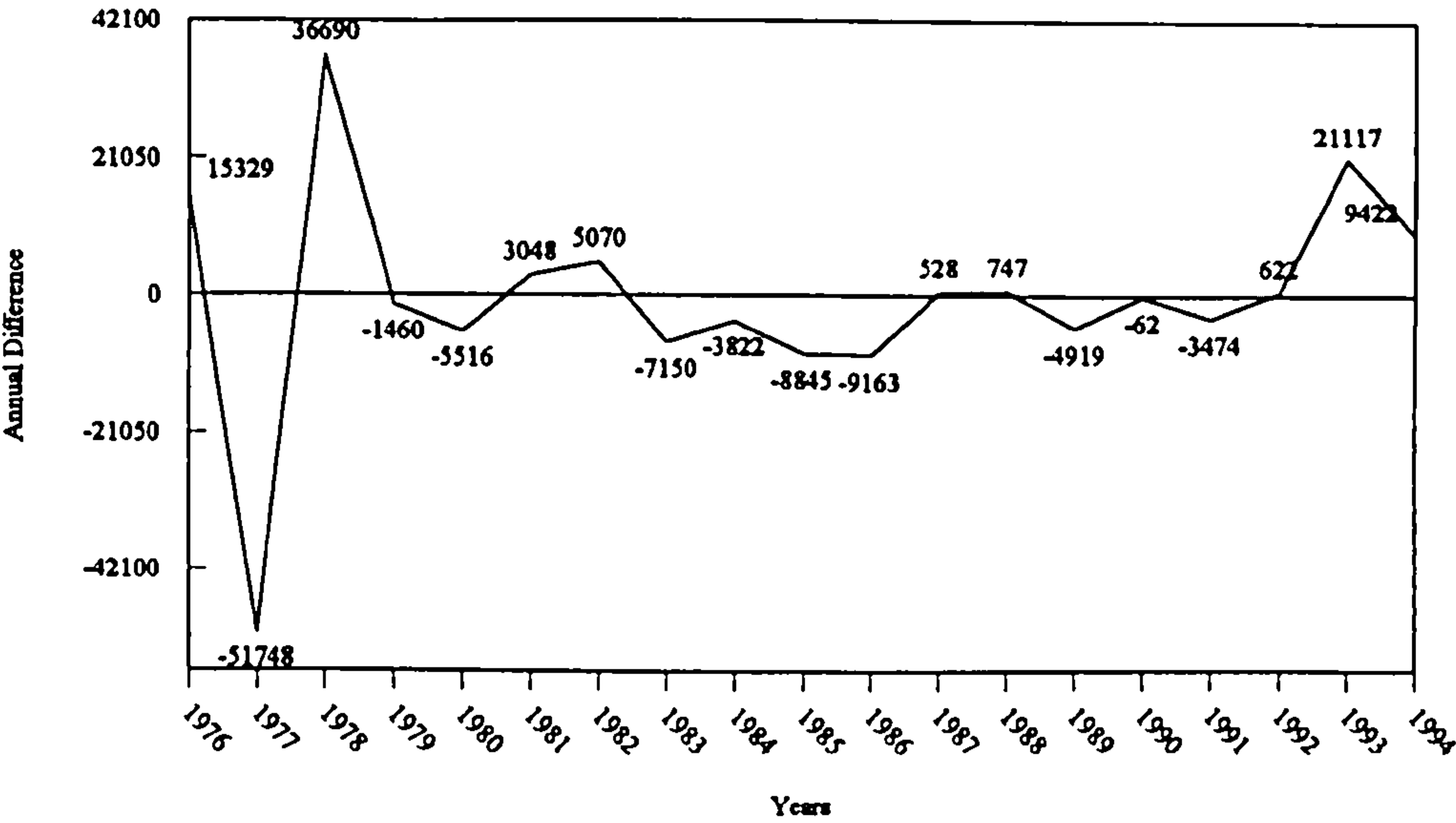
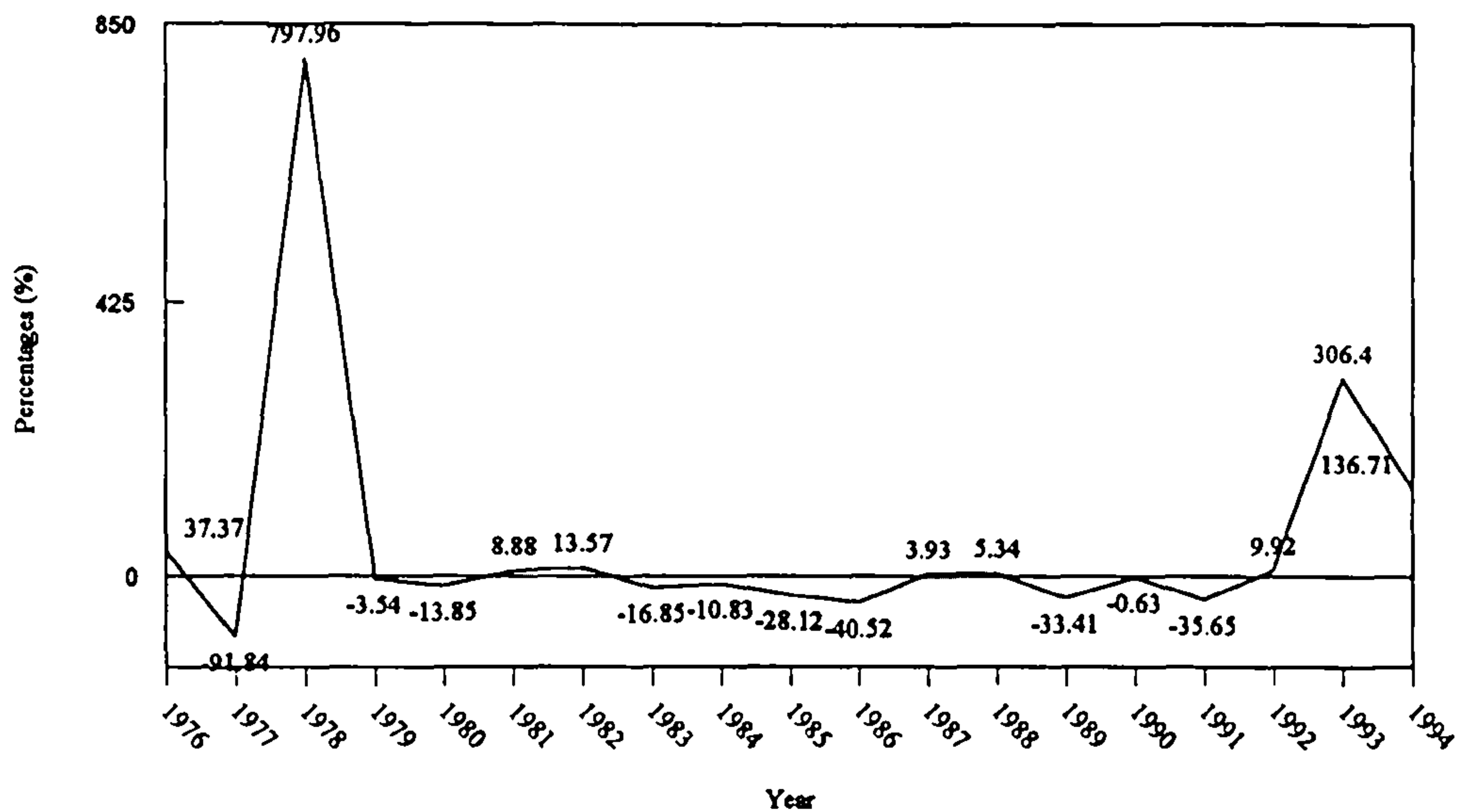


Figure 2.9.3
Percentage Change in Number of Housing Units Built with Private Loans
During the Period 1976-1994



As Table 2.10 shows, private loans comprise 99.42% of all loans provided by the fund since 1975 and the value of such loans is 95.58% of the value of all loans (see Table 2.11). This is to be expected, since the fund's major objective is to support a fundamental and essential aspect of the life of citizens by enabling them to obtain financial resources to build their own houses. In other words, private loans constitute the larger segment of the fund's lending activities, due to the fact that they are related to the largest concentration of citizens. This indicates the extent to which citizens have benefitted from the financing provided by the REDF for the construction of their houses.

Table 2.10
Number of Private and Total Loans Issued
During the Period 1975-1994

| Fiscal Year | Private Loans Issued | Total Loans Issued | Percentage of Private Loans Issued to Total Loans Issued |
|--------------------|-----------------------------|---------------------------|---|
| 1975 | 32,705 | 32,705 | 100 |
| 1976 | 47,063 | 47,429 | 99.23 |
| 1977 | 4,196 | 4,327 | 96.97 |
| 1978 | 35,394 | 35,803 | 98.86 |
| 1979 | 32,727 | 33,002 | 99.17 |
| 1980 | 28,742 | 28,947 | 99.29 |
| 1981 | 31,684 | 31,876 | 99.4 |
| 1982 | 35,727 | 35,958 | 99.36 |
| 1983 | 29,334 | 29,497 | 99.45 |
| 1984 | 26,225 | 26,344 | 99.55 |
| 1985 | 18,842 | 18,931 | 99.53 |
| 1986 | 11,182 | 11,219 | 99.67 |
| 1987 | 11,633 | 11,668 | 99.7 |
| 1988 | 12,279 | 12,328 | 99.6 |
| 1989 | 8,174 | 8,241 | 99.19 |
| 1990 | 8,121 | 8,169 | 99.41 |
| 1991 | 5,476 | 5,509 | 99.4 |
| 1992 | 8,867 | 8,876 | 99.9 |
| 1993 | 23,340 | 23,352 | 99.95 |
| 1994 | 13,595 | 13,607 | 99.91 |
| TOTAL | 425,306 | 427,788 | 99.42 |

Source: REDF, Annual Reports, 1984-1995 (the first, second and third columns)

Table 2.11
Value of Private Loans and Total Value of Loans (in Millions SR)
During the Period 1975-1994

| Fiscal Year | Value of Private Loans | Total Value of Loans | Percentage of Value of Private Loans to Total Value of Loans |
|--------------------|-----------------------------------|---------------------------------|---|
| 1975 | 7,827 | 7,827 | 100 |
| 1976 | 12,694 | 13,601 | 93.33 |
| 1977 | 1,068 | 1,304 | 81.9 |
| 1978 | 8,913 | 9,577 | 93.07 |
| 1979 | 8,060 | 8,549 | 94.28 |
| 1980 | 7,058 | 7,457 | 94.65 |
| 1981 | 8,185 | 8,626 | 94.89 |
| 1982 | 9,546 | 10,061 | 94.88 |
| 1983 | 7,935 | 8,304 | 95.56 |
| 1984 | 7,134 | 7,541 | 94.6 |
| 1985 | 5,158 | 5,438 | 94.85 |
| 1986 | 3,059 | 3,145 | 97.27 |
| 1987 | 3,193 | 3,246 | 98.37 |
| 1988 | 3,377 | 3,436 | 98.28 |
| 1989 | 2,243 | 2,330 | 96.27 |
| 1990 | 2,224 | 2,301 | 96.65 |
| 1991 | 1,565 | 1,609 | 97.27 |
| 1992 | 2,276 | 2,290 | 99.39 |
| 1993 | 6,432 | 6,459 | 99.58 |
| 1994 | 3,754 | 3,768 | 99.63 |
| TOTAL | 111,701 | 116,869 | 95.58 |

Source: REDF, Annual Reports, 1984-1995 (the first, second and third columns)

2.1.7.1.5 ACHIEVEMENT IN RELATION TO PRIVATE LOANS

As Table 2.12 shows, the number of private loans granted as a percentage of the number of applications for such loans during the period 1978-1982 was 78.07%-100.24%, whereas this was 29.5%-64.75% during the period 1989-1994. In addition, the average number of private loan applications submitted during the period 1978-1982 was more than one and a half (1.62) times that for 1989-1994. This indicates that the achievement of the REDF has decreased over time.

Table 2.12
Number of Private Loan Applications Submitted to
the REDF and Number of Private Loans Issued
During the Period 1975-1994

| Fiscal Year | Number of Applications Submitted | Number of Loans Issued | Percentage of Number of Private Loans Issued to Number of Private Loan Applications |
|--------------------|---|-------------------------------|--|
| 1975 | 34,189 | 32,705 | 95.66 |
| 1976 | 46,955 | 47,063 | 100.23 |
| 1977 | 30,700 | 4,196 | 13.67 |
| 1978 | 35,308 | 35,394 | 100.24 |
| 1979 | 37,016 | 32,727 | 88.41 |
| 1980 | 36,815 | 28,742 | 78.07 |
| 1981 | 35,572 | 31,684 | 89.07 |
| 1982 | 41,735 | 35,727 | 85.6 |
| 1983 | 39,541 | 29,334 | 74.19 |
| 1984 | 39,280 | 26,225 | 66.76 |
| 1985 | 29,590 | 18,842 | 63.68 |
| 1986 | 17,448 | 11,182 | 64.09 |
| 1987 | 19,203 | 11,633 | 60.58 |
| 1988 | 17,153 | 12,279 | 71.59 |
| 1989 | 15,209 | 8,174 | 53.74 |
| 1990 | 13,146 | 8,121 | 61.78 |
| 1991 | 18,565 | 5,476 | 29.5 |
| 1992 | 20,467 | 8,867 | 43.32 |
| 1993 | 36,046 | 23,340 | 64.75 |
| 1994 | 34,912 | 13,595 | 38.94 |
| TOTAL | 598,850 | 425,306 | 71.02 |

Source: REDF, Annual Reports, 1984-1995 (the first, second and third columns)

2.1.7.2 INVESTMENT LOANS

Medium-term investment loans are offered to both natural and legal entities (individuals and establishments) to help them to build housing compounds, offices, showrooms and commercial compounds (REDF, 1984, 24). The REDF began to grant investment loans in the second fiscal year of its operation (1976) (REDF, 1995, 14).

At first, the amount loaned to investors was not to exceed 50% of the total building cost, with the maximum loan value being SR 15 million (REDF, 1981, 16). In 1978, a new ceiling was introduced at the rate of 50% of the total cost, with a maximum amount of SR 10 million (ibid.; REDF, 1992, 12; Fadaak, 1984, 109).

2.1.7.2.1 THE OBJECTIVES OF INVESTMENT LOANS

The main objectives of investment loans are to (REDF, 1981, 16):

1. give Saudi investors the opportunity to participate in the construction of larger housing complexes;
2. make more housing units available;
3. enable more buildings, suitable for commercial centres, banks, companies, offices and business centres, to be built.

An investment loans guide with preliminary standards has been published.

2.1.7.2.2 METHOD OF DISBURSEMENT

Investment loans are issued in five instalments, each of which is paid after completion of 20% of the construction work (REDF, 1995, 14).

The REDF is keen that standard specifications are observed in the implementation of projects financed by the REDF. Two Ministerial Resolutions (MR): number 3/4180, dated 29.05.1982 and number 4908, dated 04.07.1983 have been decreed on the matter of investment regulations (REDF, 1987, 22). Their provisions include stipulations on services provision, safety standards and aesthetics in buildings financed by the REDF (REDF, 1992, 16; REDF, 1989, 24; Nassier, 1991, 78, 79).

2.1.7.2.3 APPLICATIONS FOR INVESTMENT LOANS

The total number of investment loan applications submitted to the REDF during the period 1976-1994 was 3,345 (see Table 2.13).

Table 2.13
Number of Investment Loan Applications Submitted to the REDF
During the Period 1976-1994

| Fiscal Year | Number of Applications | Annual Difference | Percentage Change |
|--------------------|-------------------------------|--------------------------|--------------------------|
| 1976 | 436 | 366 | 83.94 |
| 1977 | 311 | 131 | 42.12 |
| 1978 | 310 | 409 | 131.94 |
| 1979 | 242 | 275 | 113.64 |
| 1980 | 296 | 205 | 69.26 |
| 1981 | 239 | 192 | 80.33 |
| 1982 | 178 | 231 | 129.8 |
| 1983 | 291 | 163 | 56.01 |
| 1984 | 595 | 119 | 20 |
| 1985 | 202 | 89 | 44.06 |
| 1986 | 18 | 37 | 205.56 |
| 1987 | 7 | 35 | 500 |
| 1988 | 18 | 49 | 272.22 |
| 1989 | 17 | 67 | 394.12 |
| 1990 | 27 | 48 | 177.78 |
| 1991 | 27 | 33 | 122.2 |
| 1992 | 29 | 9 | 31.03 |
| 1993 | 46 | 12 | 26.09 |
| 1994 | 56 | 12 | 21.43 |
| TOTAL | 3,345 | | |

Source: REDF, Annual Reports, 1984-1995 (the first, second and third columns)

2.1.7.2.4 INVESTMENT LOANS ISSUED

From its inception in 1975 up to 1994, the REDF has granted 2,482 investment loans with a total value of SR 5,168 million, contributing to the construction of 29,338 housing units. Tables 2.14, 2.15 and 2.16 respectively show the number of investment loans issued, their value (in SR million) and the number of housing units built with them during the years 1976-1994.

As Table 2.14 shows, the number of investment loans issued in the fiscal year of 1977 decreased by 64.21% as compared with the previous year. Consequently, their value (in SR million) and the number of housing units built with them decreased by 73.98% and 74.28% respectively as compared with the previous year (see Tables 2.15 and 2.16). One possible explanation for this could be the REDF's temporary cessation of operations for the purpose of reorganisation (Al-Shiha, 1982, 93), referred to in an earlier section.

Table 2.14
Number of Investment Loans Issued
During the Period 1976-1994

| Fiscal Year | Number of Loans | Annual Difference | Percentage Change |
|--------------------|------------------------|--------------------------|--------------------------|
| 1976 | 366 | - | - |
| 1977 | 131 | -235 | -64.21 |
| 1978 | 409 | 278 | 212.21 |
| 1979 | 275 | -134 | -32.76 |
| 1980 | 205 | -70 | -25.45 |
| 1981 | 192 | -13 | -6.34 |
| 1982 | 231 | 39 | 20.31 |
| 1983 | 163 | -68 | -29.44 |
| 1984 | 119 | -44 | -26.99 |
| 1985 | 89 | -30 | -25.21 |
| 1986 | 37 | -52 | -58.43 |
| 1987 | 35 | -2 | -5.41 |
| 1988 | 49 | 14 | 40 |
| 1989 | 67 | 18 | 36.73 |
| 1990 | 48 | -19 | -28.36 |
| 1991 | 33 | -15 | -31.25 |
| 1992 | 9 | -24 | -72.73 |
| 1993 | 12 | 3 | 33.33 |
| 1994 | 12 | 0 | 0 |
| TOTAL | 2,482 | | |

Source: REDF, Annual Reports, 1984-1995 (the first and second columns)

Figure 2.14.1
Number of Investment Loans Issued
During the Period 1976-1994

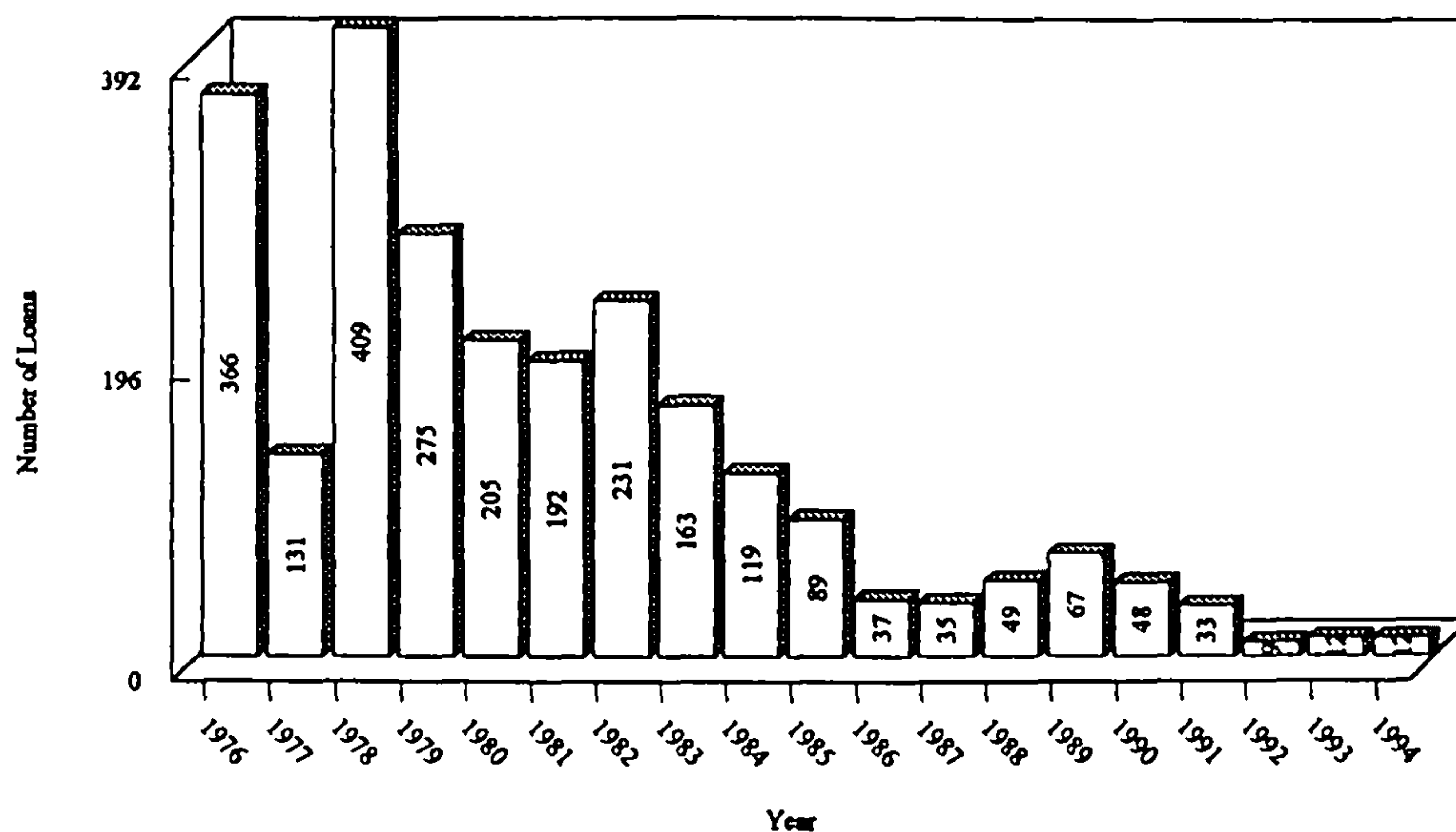


Figure 2.14.2
Annual Difference in Number of Investment Loans Issued
During the Period 1977-1994

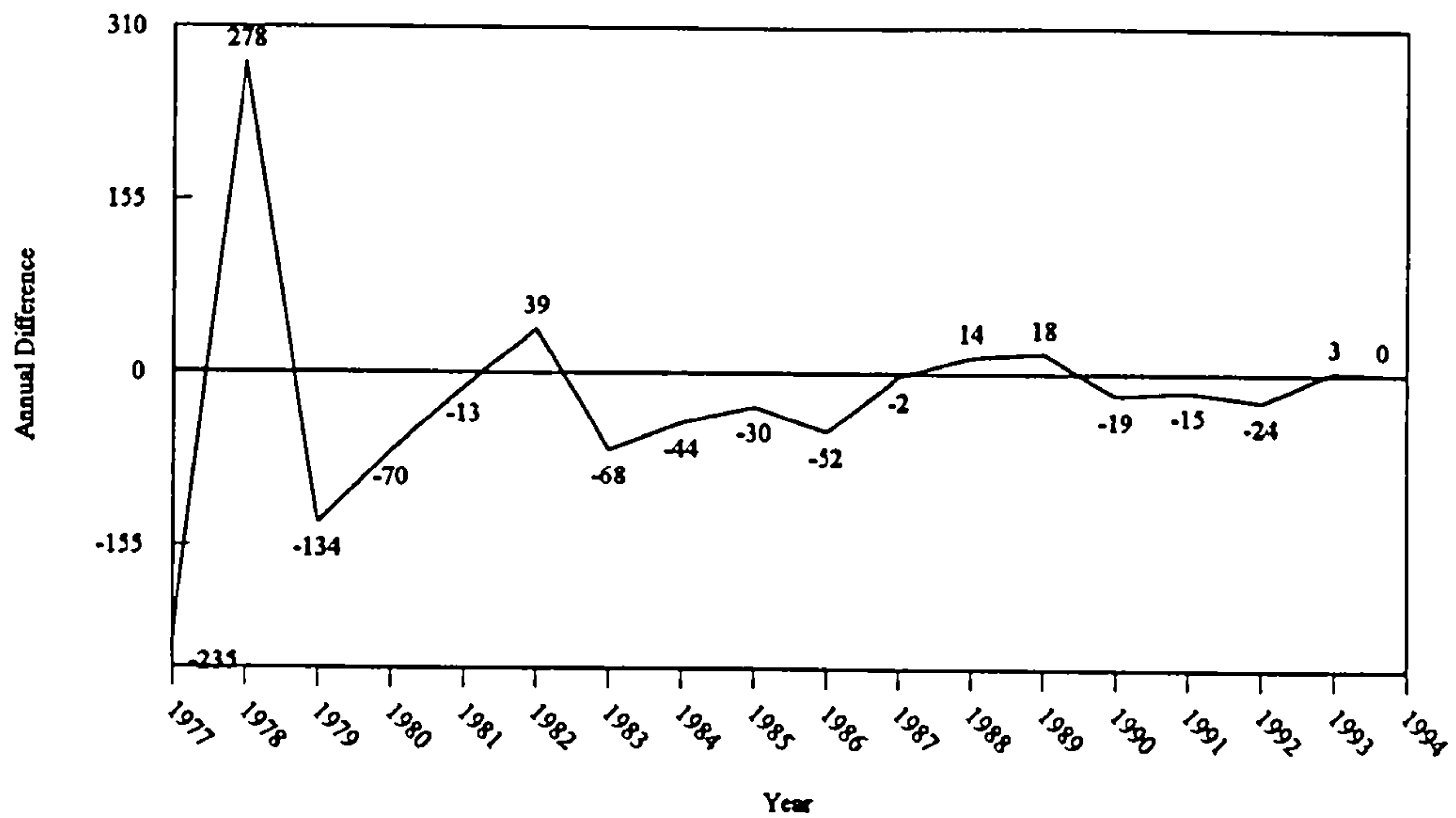


Figure 2.14.3
Percentage Change in Number of Investment Loans Issued
During the Period 1977-1994

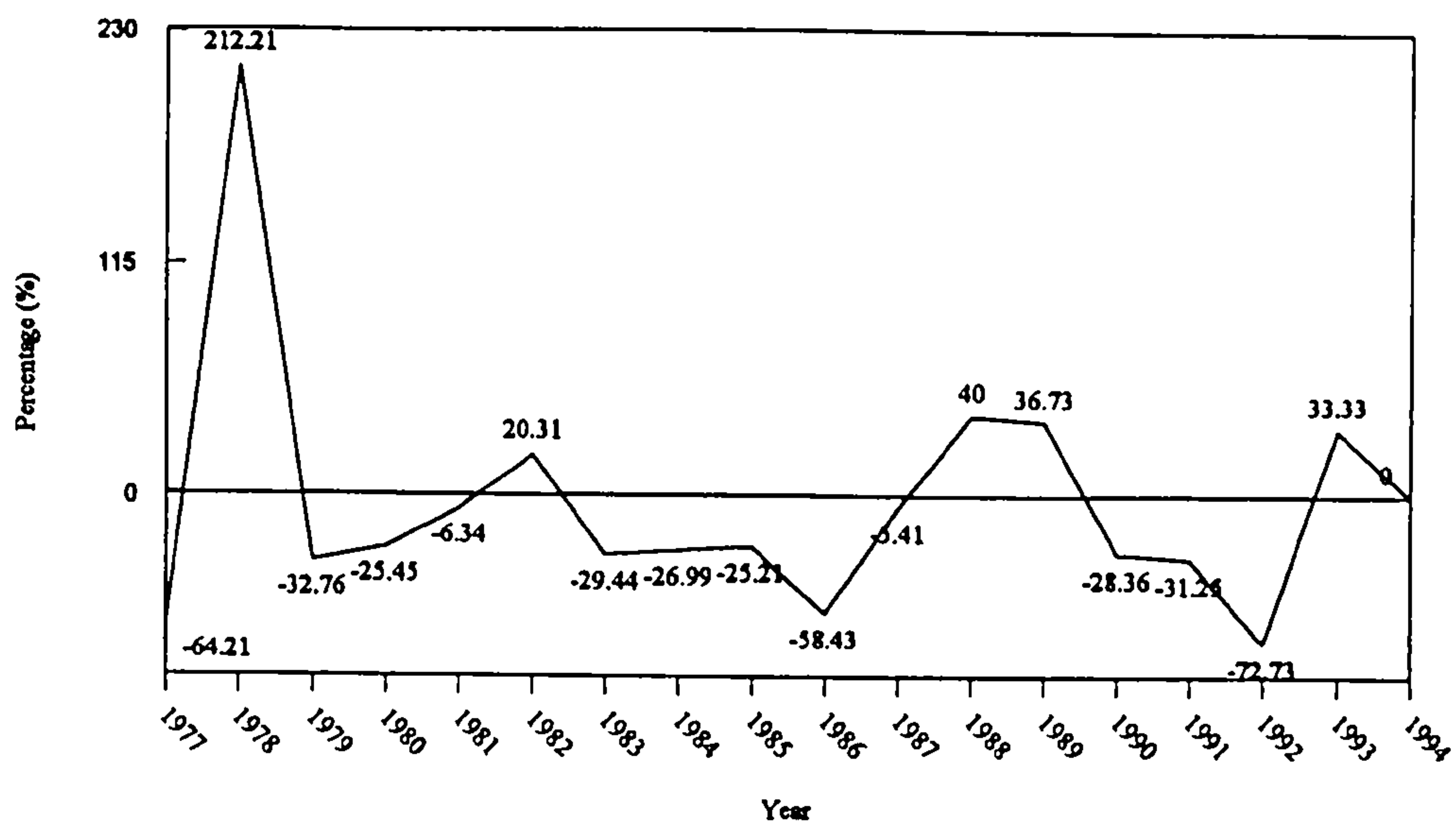


Table 2.15
Value of Investment Loans (in Millions SR)
During the Period 1976-1994

| Fiscal Year | Loan Value | Annual Difference | Percentage Change |
|--------------------|-------------------|--------------------------|--------------------------|
| 1976 | 907 | - | - |
| 1977 | 236 | -671 | -73.98 |
| 1978 | 664 | 428 | 181.36 |
| 1979 | 489 | -175 | -26.36 |
| 1980 | 399 | -90 | -18.4 |
| 1981 | 441 | 42 | 10.53 |
| 1982 | 515 | 74 | 16.78 |
| 1983 | 369 | -146 | -28.35 |
| 1984 | 407 | 38 | 10.3 |
| 1985 | 280 | -127 | -31.2 |
| 1986 | 86 | -194 | -69.29 |
| 1987 | 53 | -33 | -38.37 |
| 1988 | 59 | 6 | 11.32 |
| 1989 | 87 | 28 | 47.46 |
| 1990 | 77 | -10 | -11.49 |
| 1991 | 44 | -33 | -42.86 |
| 1992 | 14 | -30 | -68.18 |
| 1993 | 27 | 13 | 92.86 |
| 1994 | 14 | -13 | -48.15 |
| TOTAL | 5,168 | | |

Source: REDF, Annual Reports, 1984-1995 (the first and second columns)

Figure 2.15.1
Value of Investment Loans
During the Period 1976-1994

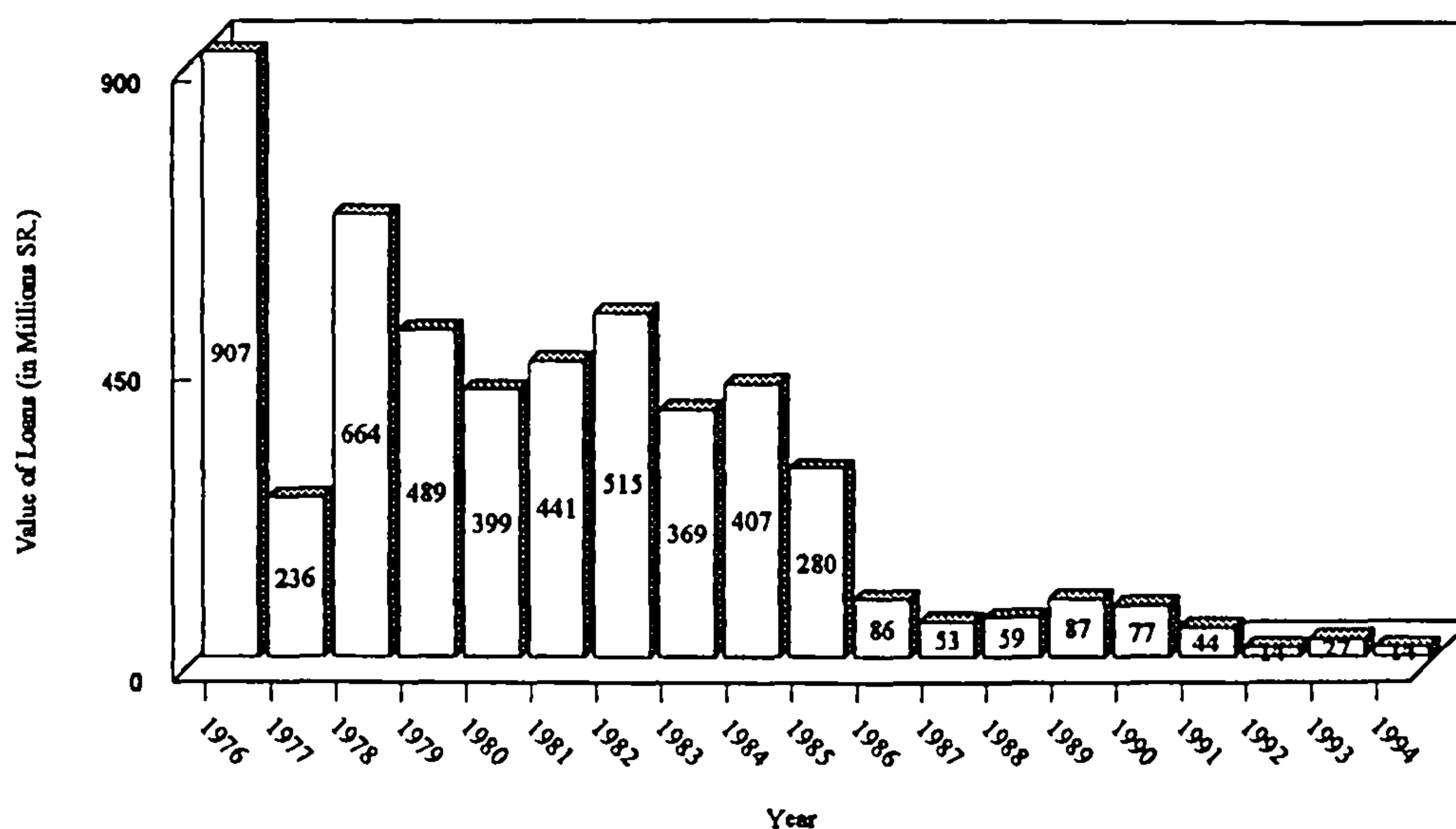


Figure 2.15.2

Annual Difference in Value of Investment Loans
During the Period 1977-1994

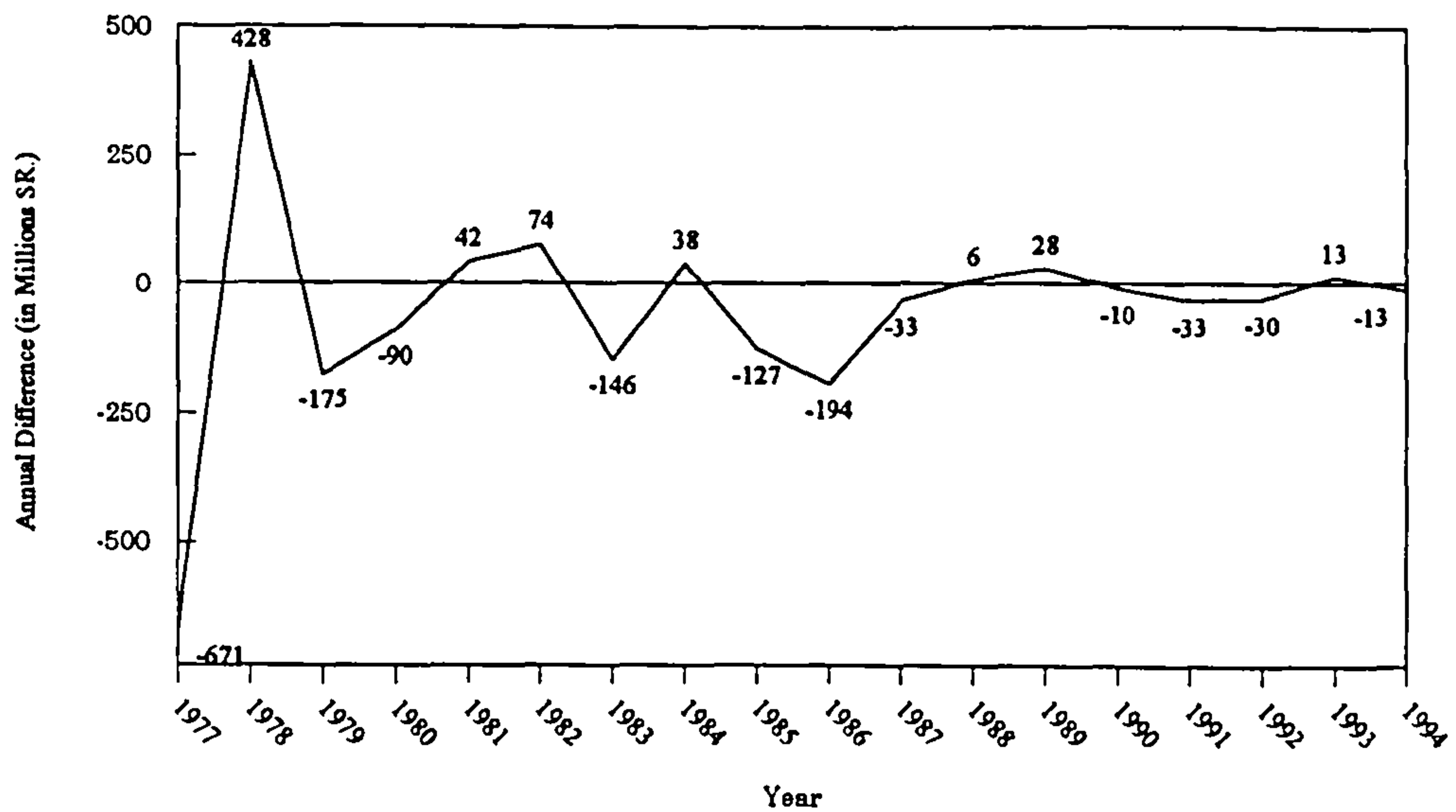


Figure 2.15.3

Percentage Change in Value of Investment Loans
During the Period 1977-1994

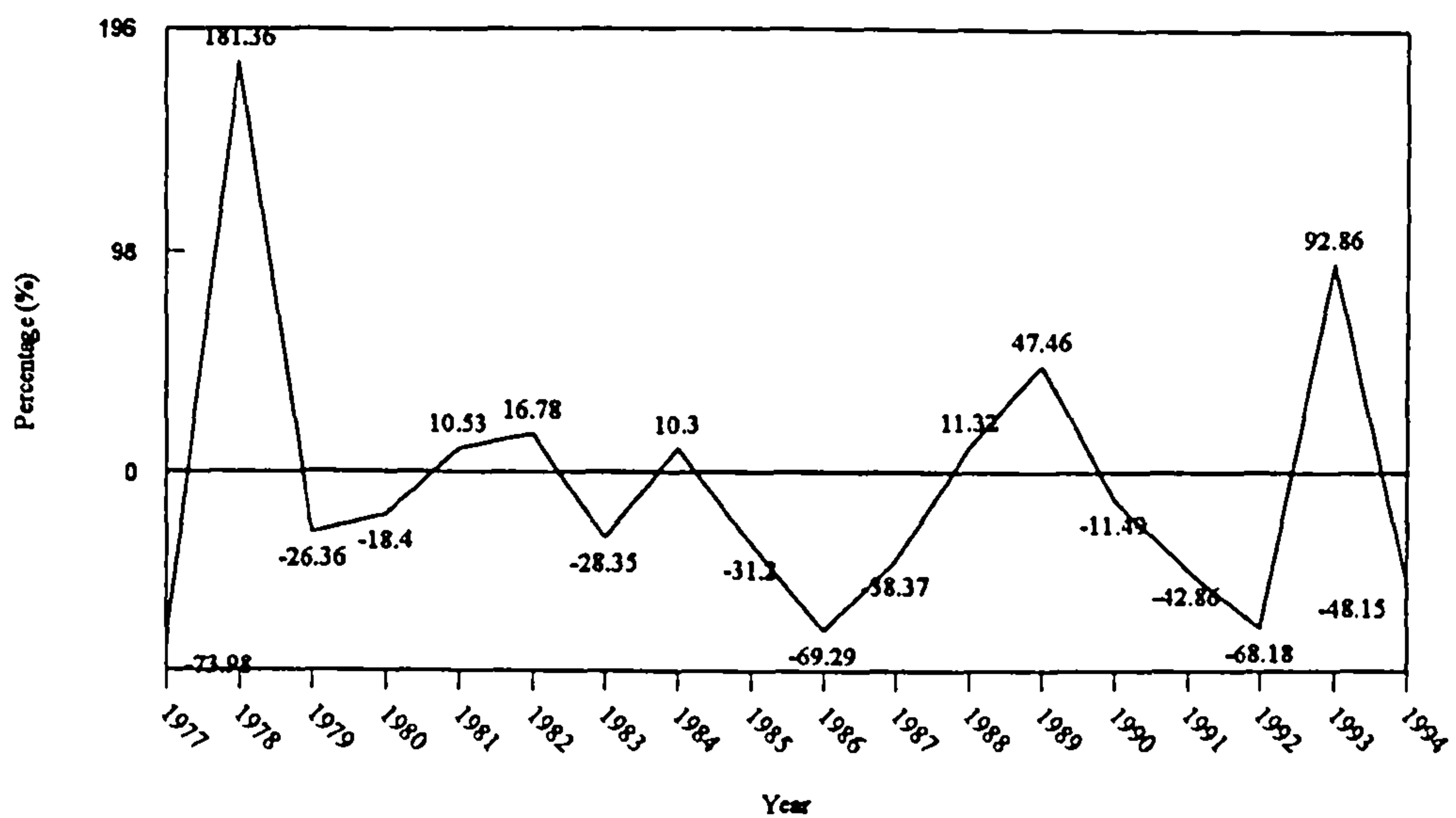


Table 2.16
Number of Housing Units Built with Investment Loans
During the Period 1976-1994

| Fiscal Year | Number of Housing Units | Annual Difference | Percentage Change |
|--------------------|--------------------------------|--------------------------|--------------------------|
| 1976 | 7,854 | - | - |
| 1977 | 2,020 | -5,834 | -74.28 |
| 1978 | 4,740 | 2,720 | 134.65 |
| 1979 | 2,559 | -2,181 | -46.01 |
| 1980 | 1,774 | -785 | -30.68 |
| 1981 | 1,582 | -192 | -10.82 |
| 1982 | 1,950 | 368 | 23.26 |
| 1983 | 1,423 | -527 | -27.03 |
| 1984 | 1,580 | 157 | 11.03 |
| 1985 | 1,062 | -518 | -32.78 |
| 1986 | 400 | -662 | -62.34 |
| 1987 | 312 | -88 | -22 |
| 1988 | 407 | 95 | 30.45 |
| 1989 | 562 | 155 | 38.08 |
| 1990 | 454 | -108 | -19.22 |
| 1991 | 286 | -168 | -37 |
| 1992 | 93 | -193 | -67.48 |
| 1993 | 169 | 76 | 81.72 |
| 1994 | 111 | -58 | -34.32 |
| TOTAL | 29,338 | | |

Source: REDF, Annual Reports, 1984-1995 (the first and second columns)

Figure 2.16.1
Number of Housing Units Built with Investment Loans
During the Period 1976-1994

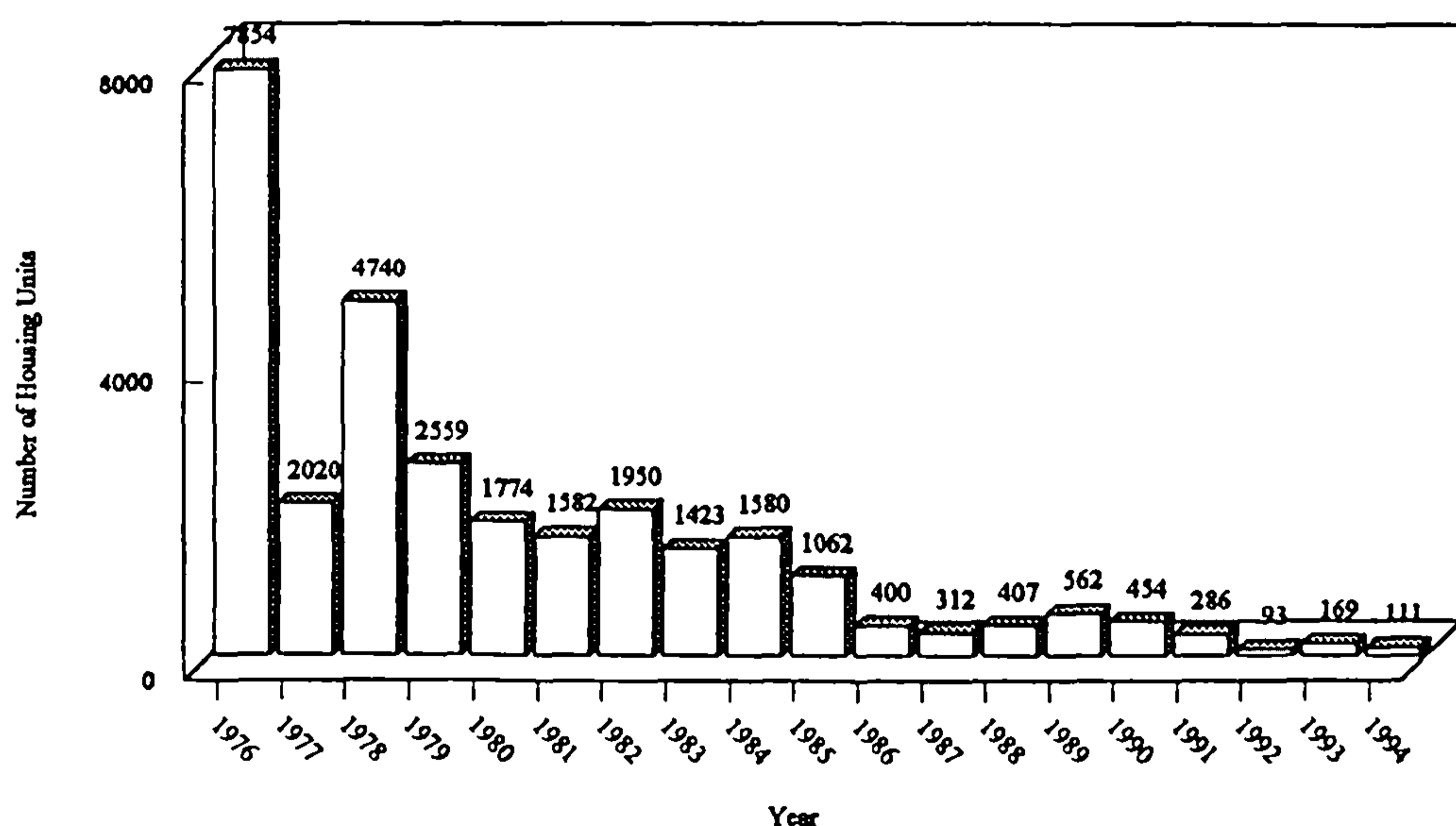


Figure 2.16.2

Annual Difference in Number of Housing Units Built with Investment Loans
During the Period 1977-1994

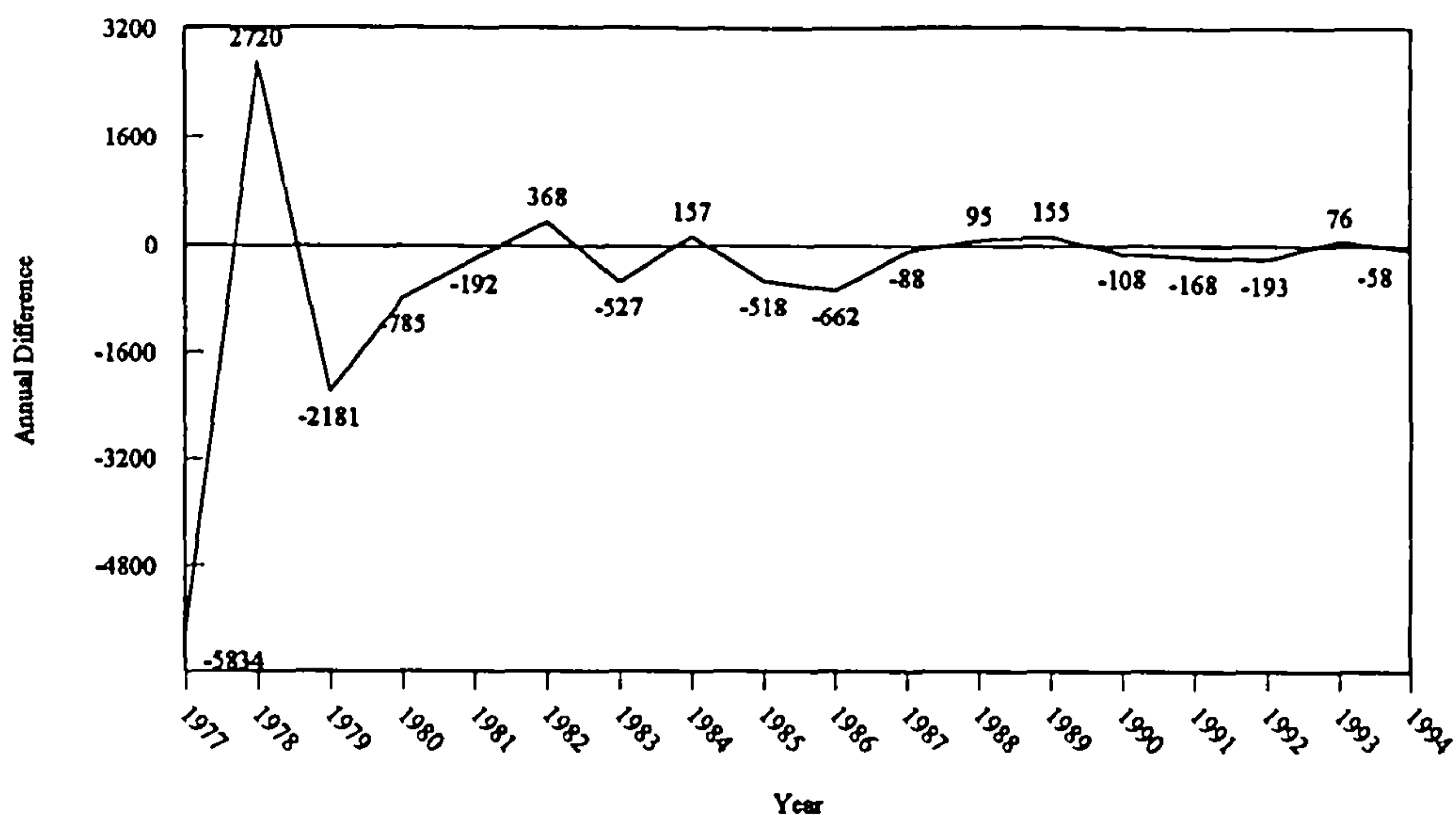
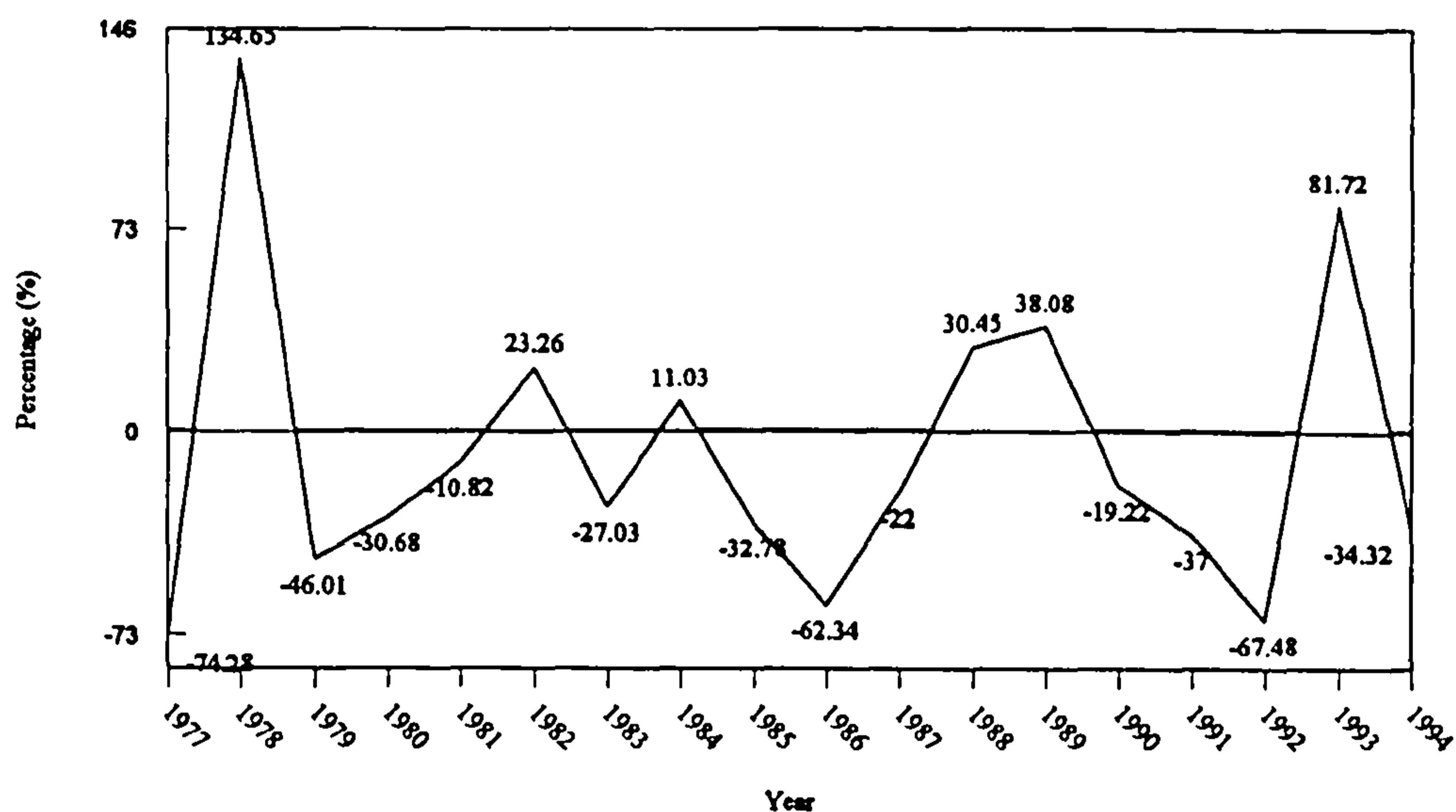


Figure 2.16.3

Percentage Change in Number of Housing Units Built with Investment Loans
During the Period 1977-1994



As Tables 2.14 and 2.15 show, the number and value of investment loans reached a peak in 1982, after which they continued to decline until 1992, when a slight increase occurred. For example:

1. the number of investment loans issued in the fiscal year of 1982 is more than nineteen (19.25) times the number of those for 1994 (see Table 2.14);
2. the value of investment loans issued in the fiscal year of 1982 is more than thirty six and a half (36.79) times the value of those for 1994 (see Table 2.15).

One possible explanation for this could be that the REDF considered that the supply of housing complexes was becoming sufficient to warrant a reduction.

At this point, it may be important to stress that such loans did not exceed about 0.59% of the total number of loans issued by the fund during the period 1975-1994 (see Table 2.17) and 4.43% of the total value of annual lending (see Table 2.18).

Table 2.17
Number of Investment and Total Loans Issued
During the Period 1975-1994

| Fiscal Year | Investment Loans Issued | Total Loans Issued | Percentage of Investment Loans Issued to Total Loans Issued |
|--------------------|------------------------------------|-------------------------------|--|
| 1975 | 0 | 32,705 | 0 |
| 1976 | 366 | 47,429 | 0.77 |
| 1977 | 131 | 4,327 | 3.03 |
| 1978 | 409 | 35,803 | 1.14 |
| 1979 | 275 | 33,002 | 0.83 |
| 1980 | 205 | 28,947 | 0.71 |
| 1981 | 192 | 31,876 | 0.6 |
| 1982 | 231 | 35,958 | 0.64 |
| 1983 | 163 | 29,497 | 0.55 |
| 1984 | 119 | 26,344 | 0.45 |
| 1985 | 89 | 18,931 | 0.47 |
| 1986 | 37 | 11,219 | 0.33 |
| 1987 | 35 | 11,668 | 0.3 |
| 1988 | 49 | 12,328 | 0.4 |
| 1989 | 67 | 8,241 | 0.81 |
| 1990 | 48 | 8,169 | 0.59 |
| 1991 | 33 | 5,509 | 0.6 |
| 1992 | 9 | 8,876 | 0.1 |
| 1993 | 12 | 23,352 | 0.05 |
| 1994 | 12 | 13,607 | 0.09 |
| TOTAL | 2,482 | 427,788 | 0.58 |

Source: REDF, Annual Reports, 1984-1995 (the first, second and third columns)

Table 2.18
Value of Investment and Total Value of Loans (in Millions SR)
During the Period 1975-1994

| Fiscal Year | Value of Investment Loans | Total Value of Loans | Percentage of Value of Investment Loans to Total Value of Loans |
|--------------------|----------------------------------|-----------------------------|--|
| 1975 | 0 | 7,827 | 0 |
| 1976 | 907 | 13,601 | 6.67 |
| 1977 | 236 | 1,304 | 18.1 |
| 1978 | 664 | 9,577 | 6.93 |
| 1979 | 489 | 8,549 | 5.72 |
| 1980 | 399 | 7,457 | 5.35 |
| 1981 | 441 | 8,626 | 5.11 |
| 1982 | 515 | 10,061 | 5.12 |
| 1983 | 369 | 8,304 | 4.44 |
| 1984 | 407 | 7,541 | 5.4 |
| 1985 | 280 | 5,438 | 5.15 |
| 1986 | 86 | 3,145 | 2.73 |
| 1987 | 53 | 3,246 | 1.63 |
| 1988 | 59 | 3,436 | 1.72 |
| 1989 | 87 | 2,330 | 3.73 |
| 1990 | 77 | 2,301 | 3.35 |
| 1991 | 44 | 1,609 | 2.73 |
| 1992 | 14 | 2,290 | 0.61 |
| 1993 | 27 | 6,459 | 0.42 |
| 1994 | 14 | 3,768 | 0.37 |
| TOTAL | 5,168 | 116,869 | 4.42 |

Source: REDF, Annual Reports, 1984-1995 (the first, second and third columns)

2.1.7.2.5 ACHIEVEMENT IN RELATION TO INVESTMENT LOANS

As Table 2.19 shows, the number of investment loans granted as a percentage of the number of applications for such loans during the period 1978-1980 was 69.26%-131.94%, whereas this was 21.43%-31.03% during the period 1992-1994. In addition, the average number of investment loan applications submitted during the period 1978-1980 was more than six times (6.47) the average of that for 1992-1994 (see Table 2.13). This means that the achievement of the REDF has decreased over time.

Table 2.19
Number of Investment Loan Applications Submitted to the REDF
and Number of Investment Loans Issued
During the Period 1976-1994

| Fiscal Year | Number of Applications Submitted | Number of Loans Issued | Percentage of Number of Investment Loans Issued to Number of Investment Loan Applications Submitted |
|--------------------|---|-------------------------------|--|
| 1976 | 436 | 366 | 83.94 |
| 1977 | 311 | 131 | 42.12 |
| 1978 | 310 | 409 | 131.94 |
| 1979 | 242 | 275 | 113.64 |
| 1980 | 296 | 205 | 69.26 |
| 1981 | 239 | 192 | 80.33 |
| 1982 | 178 | 231 | 129.8 |
| 1983 | 291 | 163 | 56.01 |
| 1984 | 595 | 119 | 20 |
| 1985 | 202 | 89 | 44.06 |
| 1986 | 18 | 37 | 205.56 |
| 1987 | 7 | 35 | 500 |
| 1988 | 18 | 49 | 272.22 |
| 1989 | 17 | 67 | 394.12 |
| 1990 | 27 | 48 | 177.78 |
| 1991 | 27 | 33 | 122.2 |
| 1992 | 29 | 9 | 31.03 |
| 1993 | 46 | 12 | 26.09 |
| 1994 | 56 | 12 | 21.43 |
| TOTAL | 3,345 | 2,482 | 74.2 |

Source: REDF, Annual Reports, 1984-1995 (the first, second and third columns)

2.1.8 EXEMPTIONS

To encourage borrowers to repay their loans, the REDF has initiated a policy under which the repayments are made over a 25 year period. Repayment of interest free loans is done in instalments with the first repayment due two years after the loan is disbursed. Incentives are offered, such as 20% discounts on each annual repayment and an additional 10% discount for settling the total loan balance if the repayments are made before the due date (REDF, 1995, 14, 16; Nassier, 1991, 76; Al-Saati, 1987, 260). In other words, if the loan is totally repaid before the due date, 30% of the unpaid balance will be discounted.

To summarise, borrowers are granted exemptions that are applicable if the repayments

are settled as follows (REDF, 1995, 16; REDF, 1992, 24):

- 1) An exemption of 20% deductible from the value of each annual repayment (i.e. $12,000 \times 0.2 = 2,400$ SR) is granted if repaid within sixty days of the due date. Hence, the annual repayment would be $(12,000 - 2,400 = 9,600$ SR).
- 2) An exemption of 30% deductible from the value of each annual repayment (i.e. $12,000 \times 0.3 = 3,600$ SR) is granted if repaid prior to the due date, provided that repayments are settled regularly, in which case, the annual repayment would be $(12,000 - 3,600 = 8,400$ SR).
- 3) An exemption of 30% deductible from the total loan-value (i.e. $300,000 \times 0.3 = 90,000$ SR) is granted to those who settle the whole loan in one repayment, in which case, the total repayments would be $(300,000 - 90,000 = 210,000$ SR);
- 4) An exemption of 30% deductible from the loan's outstanding balance is granted if repaid in full within 24 years.

2.1.9 REPAYMENTS

The REDF's private loans are extended without bearing costs or charges and are repayable in 25 annual instalments. The amount paid annually to cover the cost of building a house is less than the cost of renting a similar property.

The repayment period for investment loans was originally specified as five years. In 1980, the repayment period was extended to ten years (REDF, 1982, 16).

Loan repayments are increasing yearly. This can be attributed to:

1. many loan repayments becoming due for settlement as a result of increasing loans;
2. the maturity of previous loans;
3. the response of some borrowers and their regularity in repaying their debts;
4. the efforts exerted by the fund in following up collection.

The fund directs these repayments towards offering more loans. In addition, the annual extra appropriation in the general budget has added to the fund's capital. However, at this point it may be important to stress that there is no serious effort on the part of the fund to collect overdue repayments (Nassier, 1991, 85). Repayment is left up to the integrity of the borrower, who may have provided a false address or mysteriously moved since applying for the loan. It is also good politics not to insist on repayments (ibid.). The prevailing attitude among some borrowers has been, as long as there is enough

money, why worry about repayment? (ibid.) Moreover, the loss is less to the delinquent borrower than to the fund. Had the borrower kept up with loan repayment, he would have benefited from a 20% discount. However, default involves no penalty. It is the fund's hope and intention that, given continuing improvements in the rate of loan repayments, the fund in the future will reach a position of self-sufficiency wherein financing requirements will be met by moneys generated through repayments, as opposed to further capital contributions from the government. The point of self-sufficiency, however, remains somewhat distant, since private housing loans have a long term of 27 years from the date of signing the contract.

The following table (2.20) shows loan repayments (in millions SR) during the period 1975-1994, while Tables 2.21, 2.22 and 2.23 clarify the difference (in both absolute and percentage terms) year by year, for private loan repayments, investment loan repayments and total repayments respectively.

Table 2.20
Loan Repayments (in Millions SR)
During the Period 1975-1994

| Fiscal Year | Repayments of Private Loans | Repayments of Investment Loans | Total Repayments |
|--------------------|------------------------------------|---------------------------------------|-------------------------|
| 1975 | 14 | - | 14 |
| 1976 | 52 | 0.95 | 52.95 |
| 1977 | 210 | 10 | 220 |
| 1978 | 434 | 55 | 489 |
| 1979 | 915 | 89 | 1,004 |
| 1980 | 821 | 112 | 933 |
| 1981 | 1,153 | 177 | 1,330 |
| 1982 | 1,318 | 213 | 1,531 |
| 1983 | 1,519 | 268 | 1,787 |
| 1984 | 1,763 | 260 | 2,023 |
| 1985 | 1,970 | 227 | 2,197 |
| 1986 | 1,684 | 179 | 1,863 |
| 1987 | 2,246 | 238 | 2,484 |
| 1988 | 2,298 | 275 | 2,573 |
| 1989 | 2,321 | 229 | 2,550 |
| 1990 | 2,240 | 214 | 2,454 |
| 1991 | 454 | 187 | 641 |
| 1992 | 589 | 218 | 807 |
| 1993 | 1,883 | 186 | 2,069 |
| 1994 | 1,851 | 141 | 1,992 |
| TOTAL | 25,721 | 3,279 | 29,000 |

Source: REDF, Annual Reports, 1984-1995 (the first, second and third columns)

Table 2.21
Private Loan Repayments (in Millions SR)
During the Period 1975-1994

| Fiscal Year | Repayments | Annual Difference | Percentage Change |
|--------------------|-------------------|--------------------------|--------------------------|
| 1975 | 14 | - | - |
| 1976 | 52 | 38 | 271.43 |
| 1977 | 210 | 158 | 303.85 |
| 1978 | 434 | 224 | 106.67 |
| 1979 | 915 | 481 | 110.83 |
| 1980 | 821 | -94 | -10.27 |
| 1981 | 1,153 | 332 | 40.44 |
| 1982 | 1,318 | 165 | 14.31 |
| 1983 | 1,519 | 201 | 15.25 |
| 1984 | 1,763 | 244 | 16.06 |
| 1985 | 1,970 | 207 | 11.74 |
| 1986 | 1,684 | -286 | -14.52 |
| 1987 | 2,246 | 562 | 33.4 |
| 1988 | 2,298 | 52 | 2.32 |
| 1989 | 2,321 | 23 | 1 |
| 1990 | 2,240 | -81 | -3.5 |
| 1991 | 454 | -1,786 | -79.73 |
| 1992 | 589 | 135 | 29.74 |
| 1993 | 1,883 | 1294 | 219.69 |
| 1994 | 1,851 | -32 | -5.43 |
| TOTAL | 25,721 | | |

Source: REDF, Annual Reports, 1984-1995 (the first and second columns)

Figure 2.21.1
Private Loan Repayments
During the Period 1975-1995

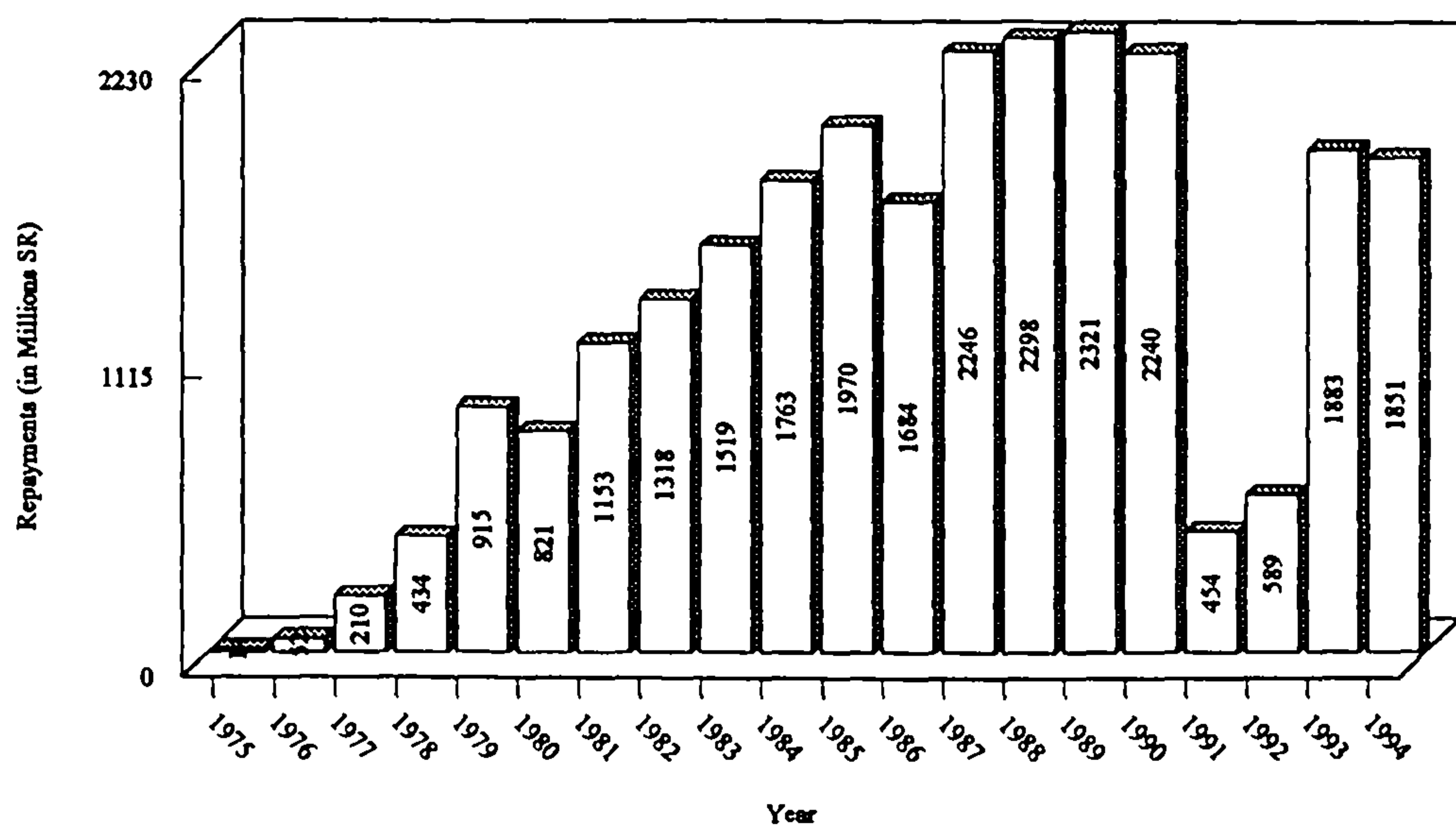


Figure 2.21.2
Annual Difference in Private Loan Repayments
During the Period 1976-1994

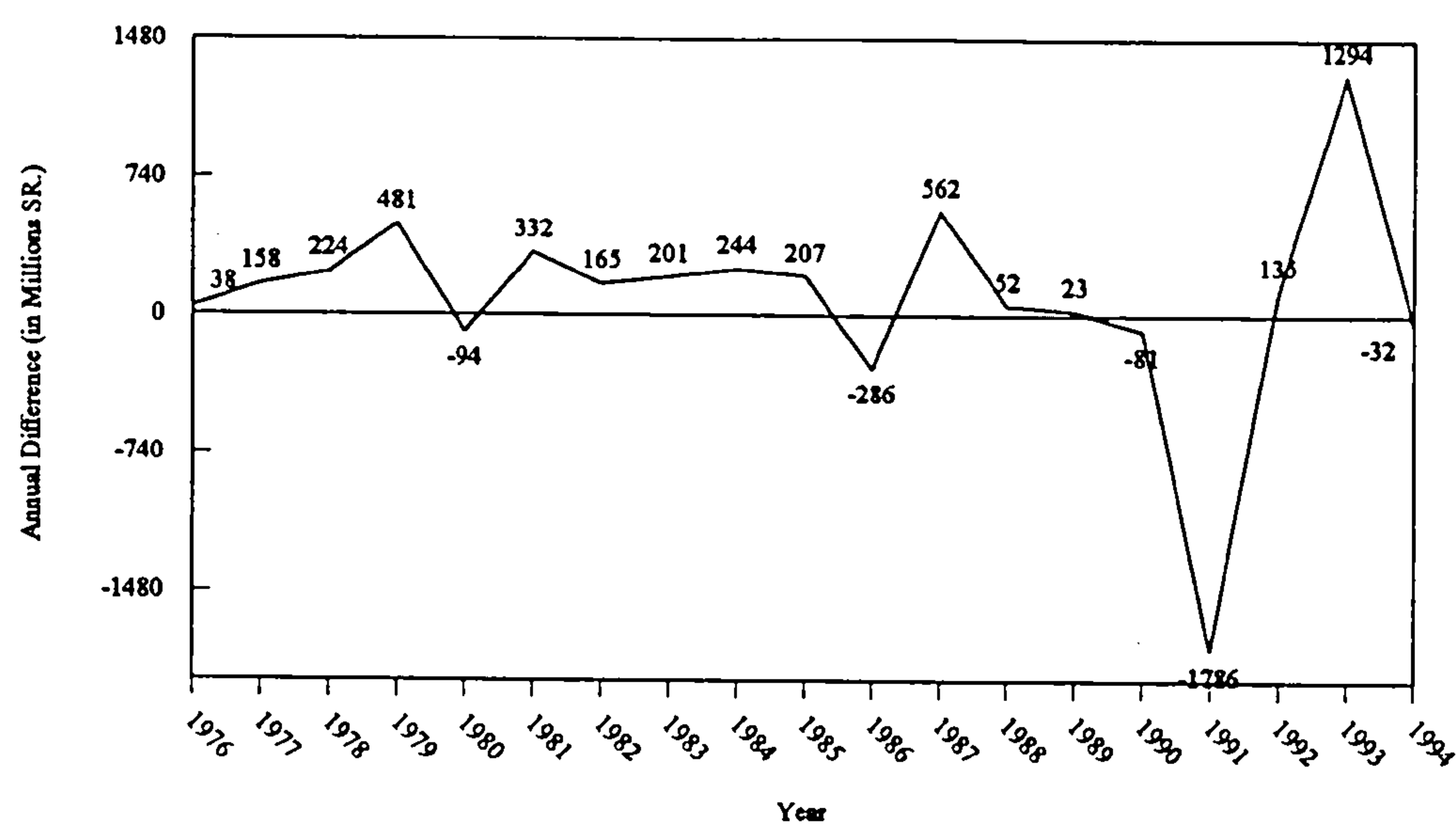


Figure 2.21.3
Percentage Change in Value of Private Loan Repayments
During the Period 1976-1994

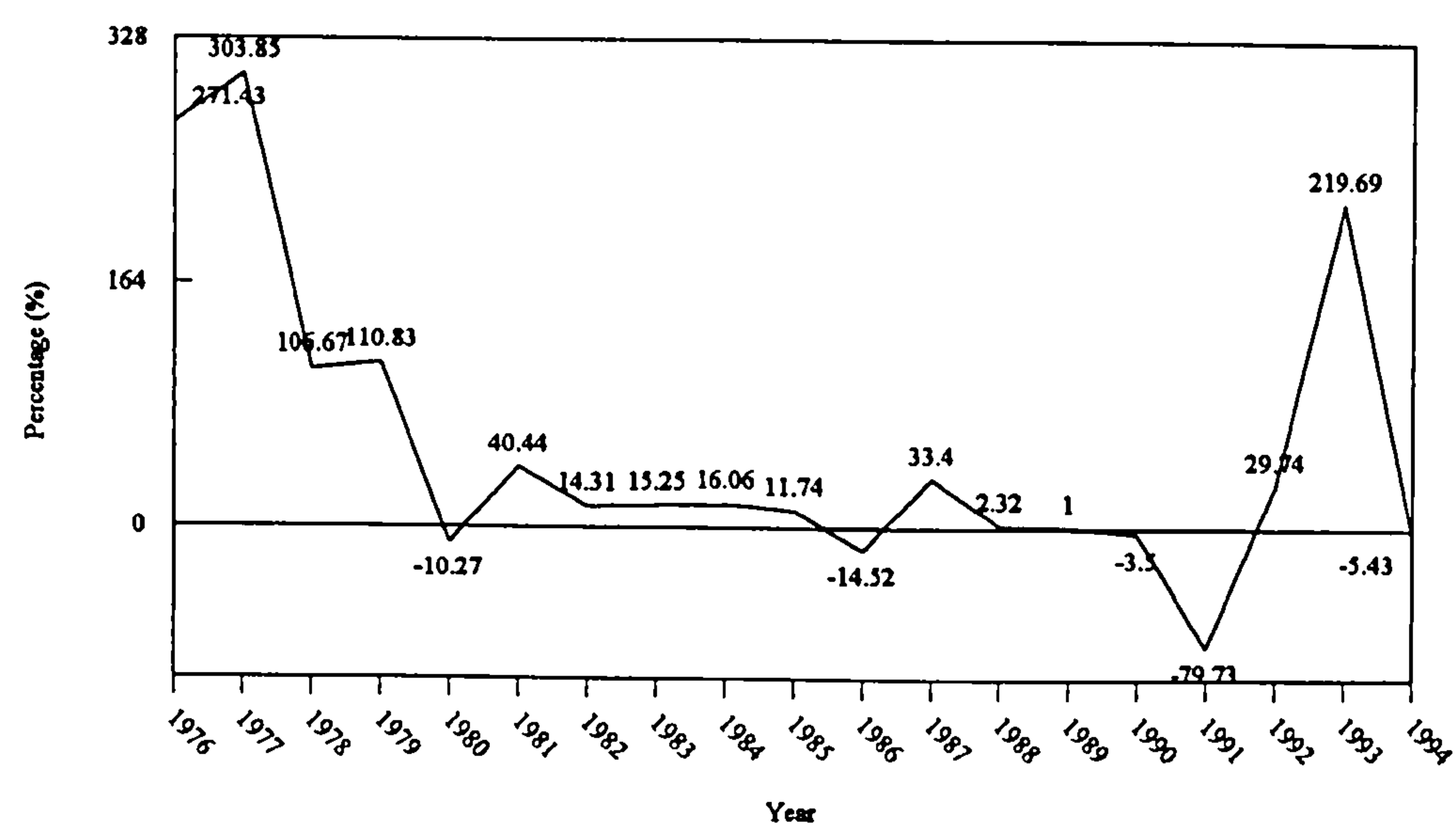


Table 2.22
Investment Loan Repayments (in Millions SR)
During the Period 1975-1994

| Fiscal Year | Repayments | Annual Difference | Percentage Change |
|--------------------|-------------------|--------------------------|--------------------------|
| 1975 | - | - | - |
| 1976 | 0.95 | - | - |
| 1977 | 10 | 9.05 | 952.63 |
| 1978 | 55 | 45 | 450 |
| 1979 | 89 | 34 | 61.82 |
| 1980 | 112 | 23 | 25.84 |
| 1981 | 177 | 65 | 58.04 |
| 1982 | 213 | 36 | 20.34 |
| 1983 | 268 | 55 | 25.82 |
| 1984 | 260 | -8 | -2.99 |
| 1985 | 227 | -33 | -12.69 |
| 1986 | 179 | -48 | -21.15 |
| 1987 | 238 | 59 | 32.96 |
| 1988 | 275 | 37 | 15.55 |
| 1989 | 229 | -46 | -16.73 |
| 1990 | 214 | -15 | -6.55 |
| 1991 | 187 | -27 | -12.62 |
| 1992 | 218 | 31 | 16.58 |
| 1993 | 186 | -32 | -14.68 |
| 1994 | 141 | -77 | -35.32 |
| TOTAL | 3,279 | | |

Source: REDF, Annual Reports, 1984-1995 (the first and second columns)

Figure 2.22.1
Investment Loan Repayments
During the Period 1976-1994

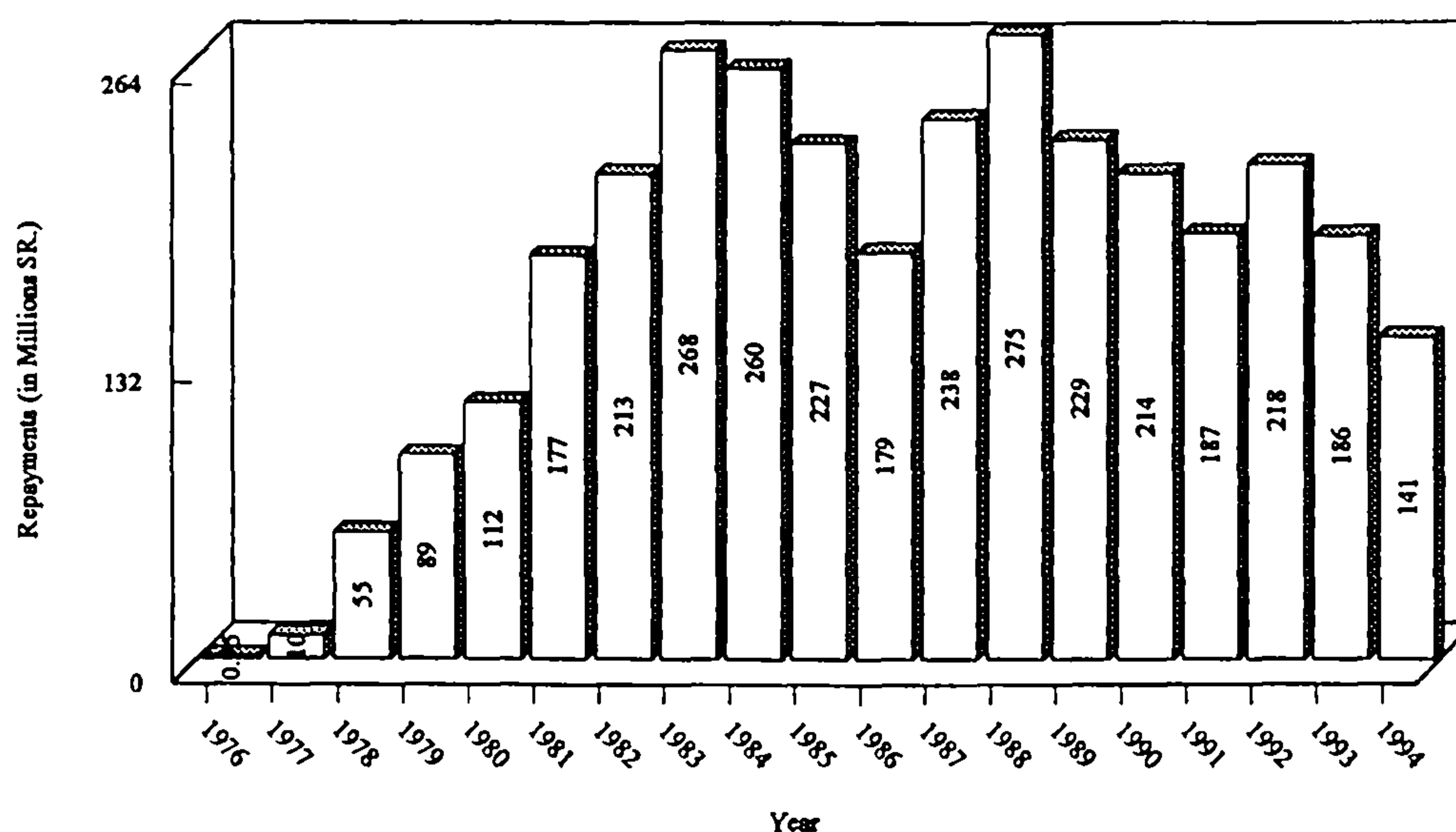


Figure 2.22.2
Annual Difference in Investment Loan Repayments
During the Period 1977-1994

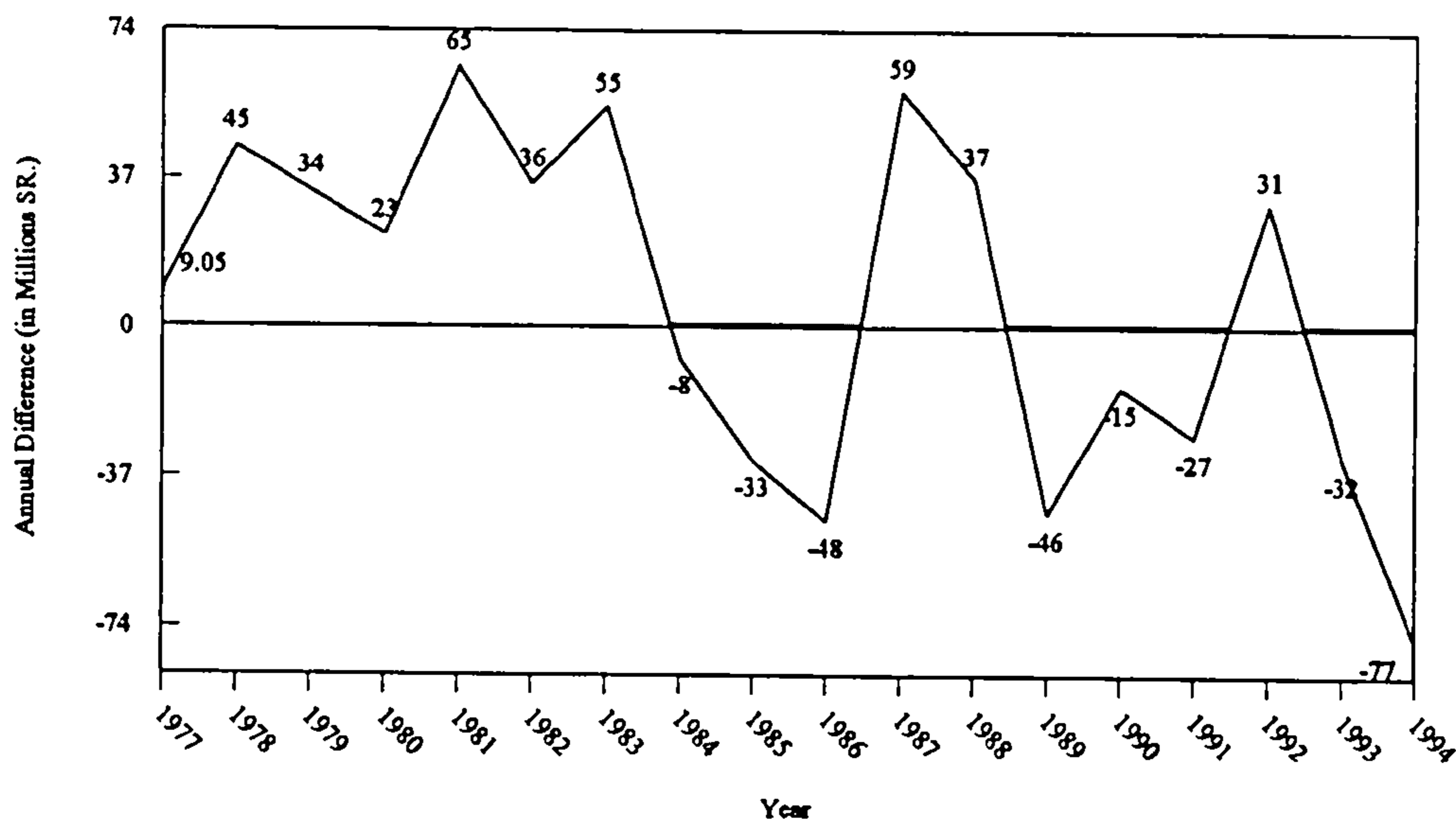


Figure 2.22.3
Percentage Change in Value of Investment Loan Repayments
During the Period 1977-1994

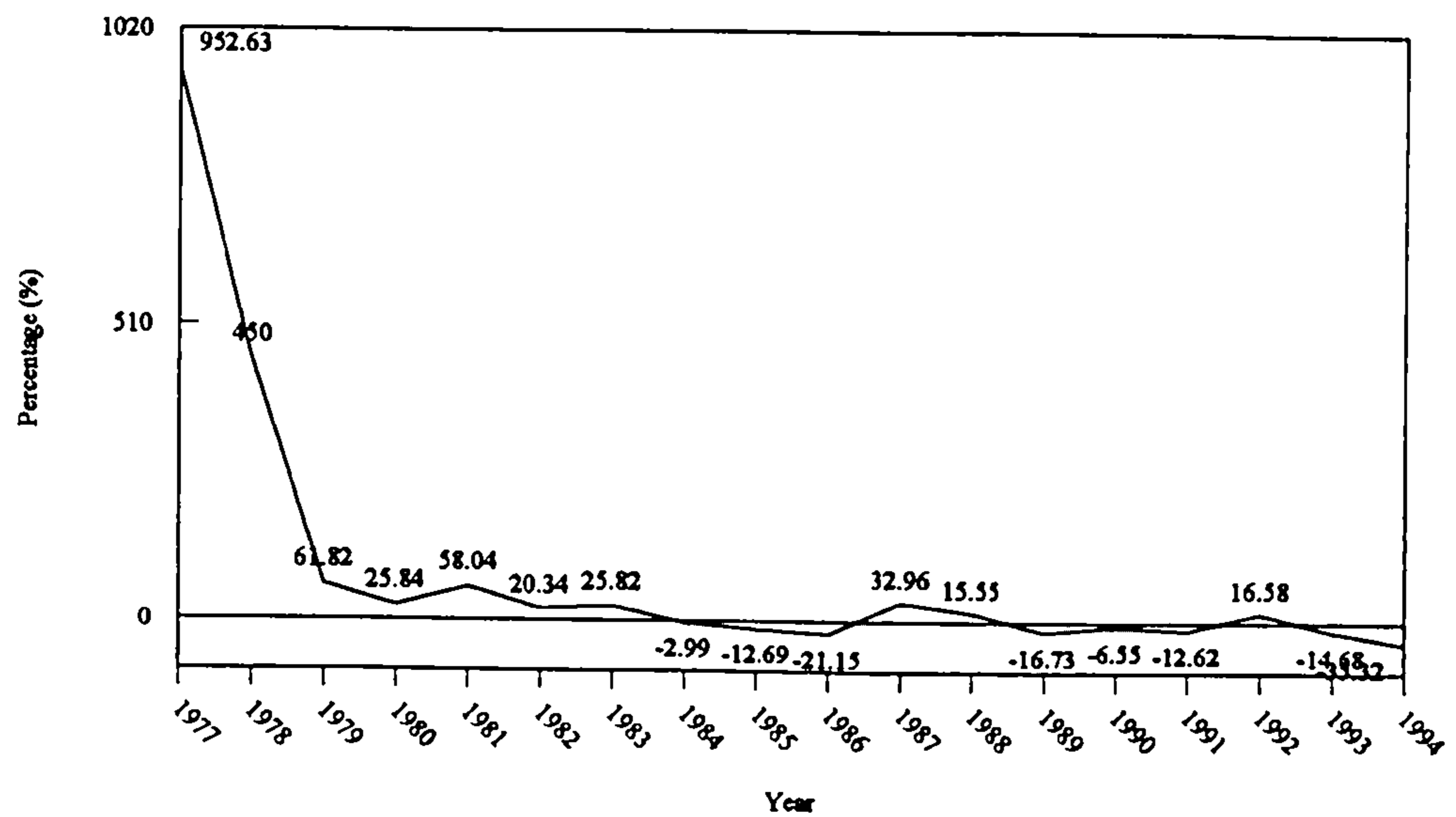


Table 2.23
Total Repayments (in Millions SR)
During the Period 1975-1994

| Fiscal Year | Total Repayments | Annual Difference | Percentage Change |
|--------------------|-------------------------|--------------------------|--------------------------|
| 1975 | 14 | - | |
| 1976 | 52.95 | 38.95 | 278.21 |
| 1977 | 220 | 167.05 | 315.49 |
| 1978 | 489 | 269 | 122.27 |
| 1979 | 1,004 | 515 | 105.32 |
| 1980 | 933 | -71 | -7.07 |
| 1981 | 1,330 | 397 | 42.55 |
| 1982 | 1,531 | 201 | 15.11 |
| 1983 | 1,787 | 256 | 16.72 |
| 1984 | 2,023 | 236 | 13.21 |
| 1985 | 2,197 | 174 | 8.6 |
| 1986 | 1,863 | -334 | -15.2 |
| 1987 | 2,484 | 621 | 33.33 |
| 1988 | 2,573 | 89 | 3.58 |
| 1989 | 2,550 | -23 | -0.89 |
| 1990 | 2,454 | -96 | -3.76 |
| 1991 | 641 | -1813 | -73.88 |
| 1992 | 807 | 166 | 25.9 |
| 1993 | 2,069 | 1262 | 156.38 |
| 1994 | 1,992 | -77 | -3.72 |
| TOTAL | 28,999.95 | | |

Source: REDF, Annual Reports, 1984-1995 (the first and second columns)

Figure 2.23.1
Total Loan Repayments
During the Period 1975-1994

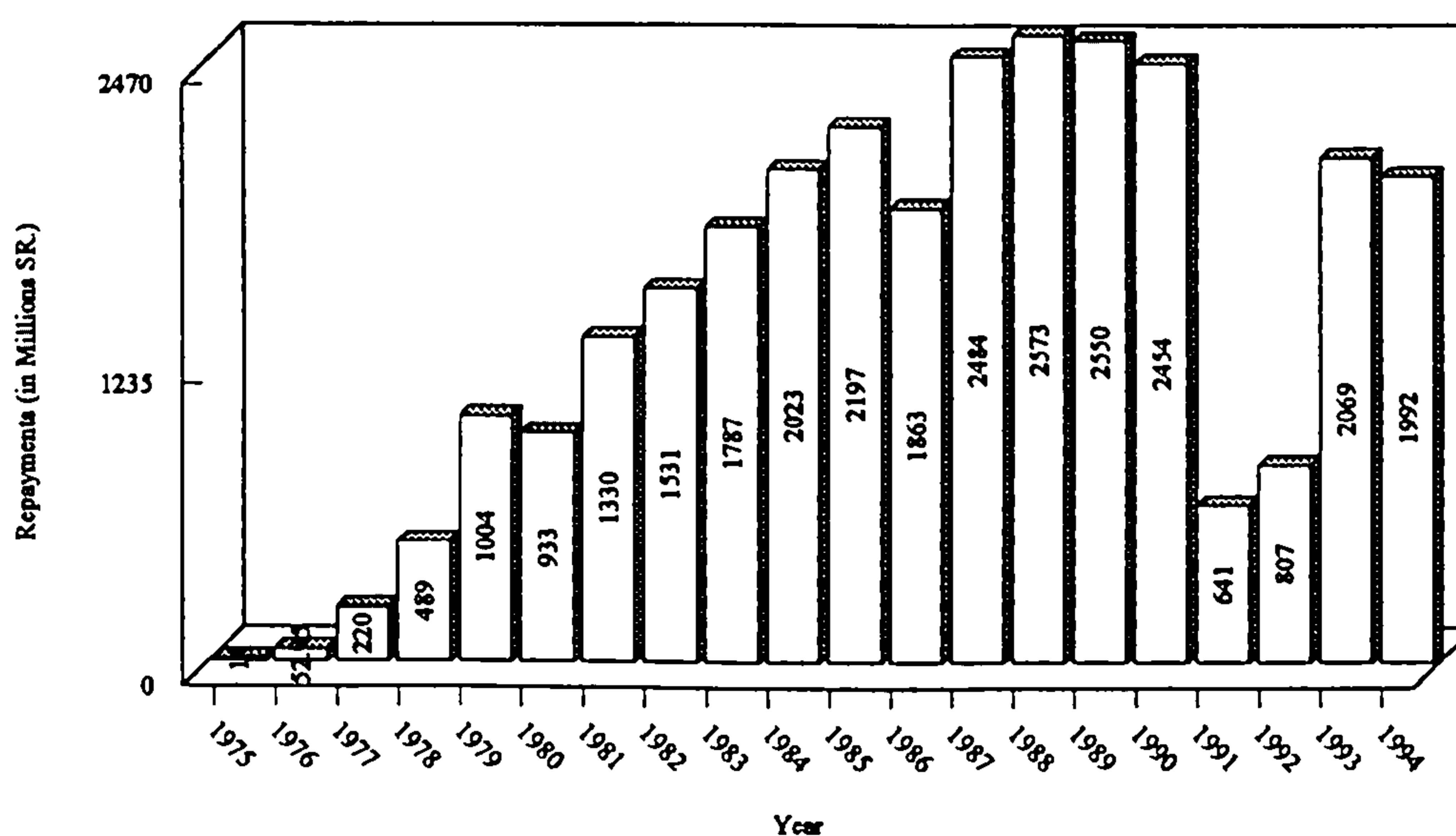


Figure 2.23.2
Annual Difference in Total Loan Repayments
During the Period 1976-1994

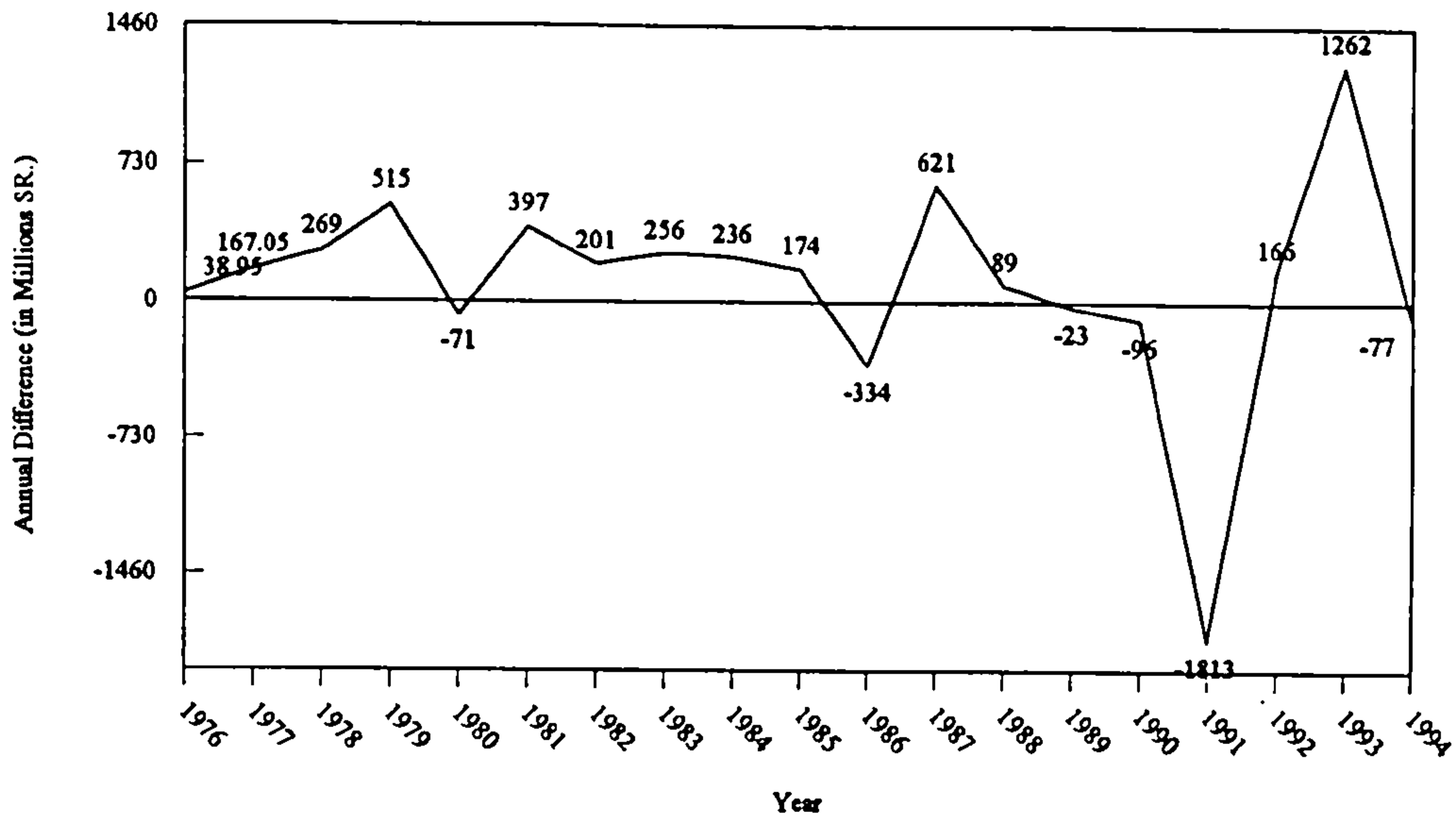
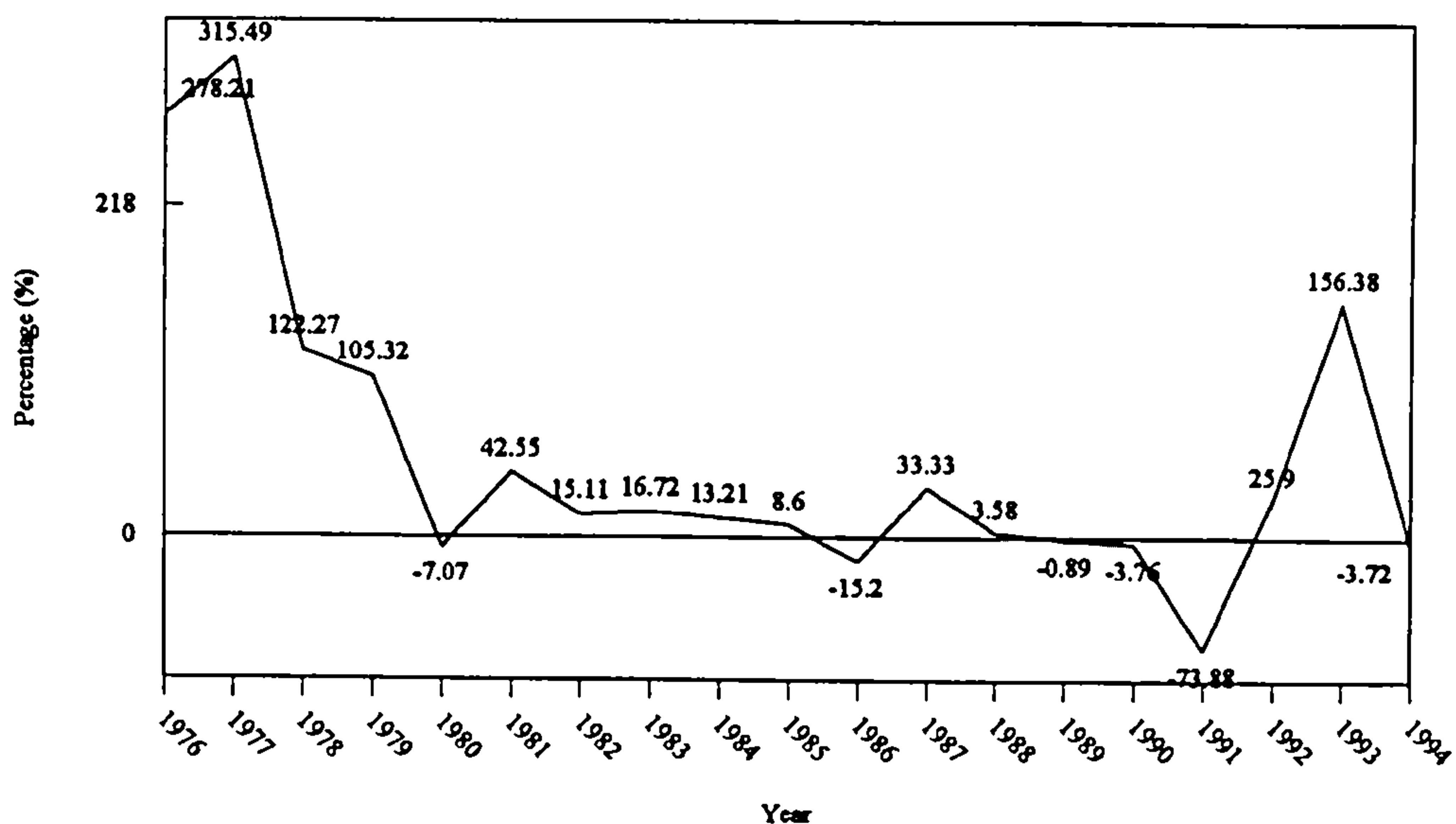


Figure 2.23.3
Percentage Change in Value of Total Loan Repayments
During the Period 1976-1994



As Table 2.23 shows, the total repayments in the fiscal year of 1979 were more than twice those of 1978. One possible explanation for this could be that, on 12.12.1979 the minister of MFNE issued decision number 3/343, based on the CM's decision number 554, dated 04.04.1977, and Royal Decree number 3/F/1182, dated 03.12.1979 (REDF, 1981, 20). This stated that borrowers were to be granted exemptions, applicable on settlement of repayments, as follows (ibid.):

- 1) An exemption of 20% deductible from the value of each annual repayment (i.e. $12,000 \times 0.2 = 2,400$ SR) is granted if the annual repayment is made within thirty days of its due date. Hence, the repayment would be $(12,000 - 2,400 = 9,600$ SR).

- 2) An exemption of 30% deductible from the value of the total loan (i.e. $300,000 \times 0.3 = 90,000$ SR) is granted to those who settle the whole loan in one repayment, in which case, the total repayments would be $(300,000 - 90,000 = 210,000$ SR).

In contrast, as Table 2.21 shows, the repayments of private loans in the fiscal year of 1990 were almost five times those of fiscal year of 1991. This is probably the result of the Royal Decree number 11799 issued on 11.01.1991 which exempted the borrowers of private loans from two due instalments for a period of two consecutive years. The total amount of exemptions was more than SR 6,886 million (REDF, 1992, 19). Hence, the repayments of private loans in the fiscal year of 1991 decreased by 79.73% as compared with the previous year (see Table 2.21). Consequently, the total repayments in the fiscal year of 1991 decreased by 73.88% as compared with the previous year (see Table 2.23).

2.1.9.1 CONTRIBUTIONS OF FUND'S RESOURCES

The following table (2.24) shows loan repayments (fund's resources) and loan values (in millions SR) during the period 1975-1994. It shows that the total loan repayments comprise only 24.81% of all loans provided by the fund. This is to be expected, since there is no serious effort on the part of the fund to collect overdue repayments, as previously mentioned. Hence, the goal of becoming self-financing through loan repayments has not been achieved, and there is a long waiting period for obtaining a REDF loan.

Table 2.24
Total Loan Values and Total Repayments (in Millions SR)
During the Period 1975-1994

| Fiscal Year | Total Loan Values | Total Repayments | Percentage of the Total Repayment to Total Loan Values |
|--------------------|--------------------------|-------------------------|---|
| 1975 | 7,827 | 14 | 0.18 |
| 1976 | 13,601 | 52.95 | 0.39 |
| 1977 | 1,304 | 220 | 16.87 |
| 1978 | 9,577 | 489 | 5.11 |
| 1979 | 8,549 | 1,004 | 11.74 |
| 1980 | 7,457 | 933 | 12.51 |
| 1981 | 8,626 | 1,330 | 15.42 |
| 1982 | 10,061 | 1,531 | 15.22 |
| 1983 | 8,304 | 1,787 | 21.52 |
| 1984 | 7,541 | 2,023 | 26.83 |
| 1985 | 5,438 | 2,197 | 40.40 |
| 1986 | 3,145 | 1,863 | 59.24 |
| 1987 | 3,246 | 2,484 | 76.52 |
| 1988 | 3,436 | 2,573 | 74.88 |
| 1989 | 2,330 | 2,550 | 109.44 |
| 1990 | 2,301 | 2,454 | 106.65 |
| 1991 | 1,609 | 641 | 39.84 |
| 1992 | 2,290 | 807 | 35.24 |
| 1993 | 6,459 | 2,069 | 32.03 |
| 1994 | 3,768 | 1,992 | 52.87 |
| TOTAL | 116,869 | 28,999.95 | 24.81 |

Source: REDF, Annual Reports, 1984-1995 (the first, second and third columns)

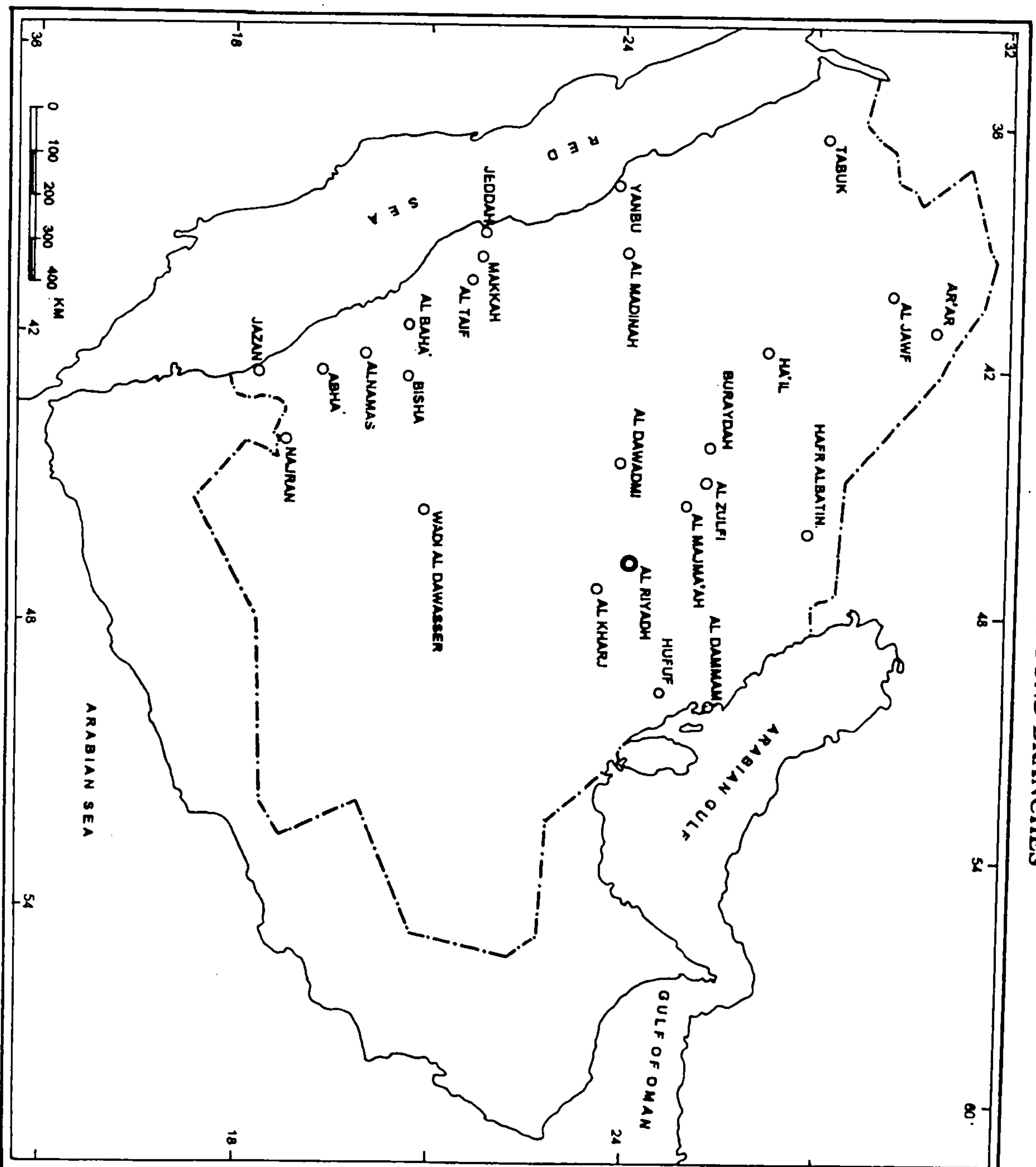
2.1.10 REDF BRANCHES

There were 25 branches at the end of 1994 in various areas of the Kingdom, namely: Abha, Al-Ahsa, Al-Baha, Al-Dammam, Al-Dawadmi, Al-Jawf, Al-Kharj, Al-Madinah, Al-Majma'a, Al-Namas, Al-Riyadh, Al-Taif, Al-Zulfi, Ar'ar, Bishah, Buraydah, Ha'il, Hafr Al-Batin, Jeddah, Jizan, Makkah, Najran, Tabuk, Wadi Al-Dawasser and Yanbu (REDF, 1995, 22).

These branches have been vested with appropriate powers and have also been entrusted with several duties towards projects in their local areas, such as (ibid.):

1. accepting, reviewing and auditing new loan applications prior to submitting them to headquarters;
2. the supervision of buildings under construction;
3. the issue of performance certificates;

REAL ESTATE DEVELOPMENT FUND BRANCHES



SOURCE : ADAPTED FROM MAP CENTER, KING ABU LAZIZ UNIVERSITY, 1415 H.

4. the follow-up of repayments.

Most of these offices have been linked to the central computer system at the REDF's headquarters (ibid.).

2.1.11 THE NUMBER OF TOWNS AND VILLAGES BENEFITING FROM REDF SERVICES

So far, some 3,297 cities, towns and villages have benefited from REDF services (REDF, 1995, 23). This figure reflects the REDF's coverage of all parts of the Kingdom and is indicative of the extent of service extended by the fund to the various sectors in the Kingdom. Such services have not been confined to cities, but have also extended to cover remote areas via the organisation's branches, which are distributed throughout the Kingdom. This has contributed significantly to urban and rural development and the provision of proper, healthy housing for all citizens, which is one of the main targets of the development policy adopted by the government and one of its main purposes in establishing the REDF, bearing in mind the housing objectives adopted by the government in the Second Five-Year Development Plan (1975-1980), referred to earlier (see Section 2.1.3).

An important policy objective of the Saudi government is to increase the quality of services provided for its people. As a result of the incentives provided by the government, the private sector has become increasingly active in the development of the country.

2.1.12 THE REDF'S ROLE IN FIVE-YEAR DEVELOPMENT PLANS

In 1968, the MP, assisted by advisors from the Stanford Research Institute, set up the First Five-Year Development Plan for the country (1970-1975) (Al-Dakheel, 1995, 8). One of the plan's objectives was to raise the living standards and welfare of Saudi families. General housing objectives were incorporated into the plan, the pursuit of which was given renewed impetus and direction by the subsequent founding of the REDF (ibid. 8,9).

The first ten years of the REDF (1975-1984) coincided with the Second and Third Five-Year Development Plans. This helped the REDF to participate effectively in achieving the targets of the two plans in developing the housing sector. The REDF even exceeded its established targets.

In its first five years (1975-1980) the REDF, under the Second Five-Year Development Plan, was entrusted with financing the construction of 122,100 housing units (REDF,

1984, 16). In fact, the REDF gave out 153,857 loans which helped in the construction of 200,163 housing units (ibid.). This exceeded the target by 63.93%. Private housing loans accounted for the greatest share in this achievement, resulting in the construction of 183,087 housing units whose value amounted to SR 39,563 million (ibid.).

The Third Five-Year Development Plan (1980-1985) witnessed remarkable infrastructure development and the expansion of social services which resulted in the development of many previously uninhabitable areas (ibid.). This caused an increase in the demand for REDF loans. There were 193,000 applications during the period (1980-1984), an increase of 5% on the total number of applications submitted during the period (1975-1979) (ibid.). By the end of the fiscal year of 1984 the REDF had given 151,617 loans to a value of SR 41,623 million, which resulted in the construction of 195,000 housing units, thus, exceeding its specified target in the Third Five-Year Development Plan (1980-1985) by 89% (ibid., 17). The REDF programme was, in fact, responsible for 44% of all housing units completed during this plan (MP, 1985b, 411).

This achievement was possible due to the State's support for the REDF, as exemplified in the increasing appropriations for this sector in the State's general budget which, by the end of the last year of the Second Five-Year Development Plan (1975-1980), amounted to SR 38,850 million (see Table 2.2). This was in addition to the REDF's own resources, which witnessed a continuous yearly increase, reaching more than SR 11 billion by the end of the financial year of 1984, thus, constituting a participation of almost 15% of the total value of loans offered during this period (ibid.).

In general, considerable progress was made in increasing the number of houses built with REDF loans during the Second and the Third Five-Year Development Plans. However, in the Fourth Five-Year Development Plan (1985 - 1990), the growth in housing construction financed by REDF loans fell sharply against both past performance and planned target since the target was 150,000 housing units, whereas the actual was 87,000 (MP, 1990a, 385). This means a deviation of actual from the target by -42%.

The situation improved in the Fifth Five-Year Development Plan (1990-1995), when the target number of housing units to be built with REDF loans was 78,792, whereas the number of housing units actually built with such loans was 79,120. This means a deviation of actual from the target by 0.42%. The total housing stock built with REDF loans at the end of the Fifth Five-Year Development Plan (1995) amounted to 545,820, equal to 19.1% of the total housing stock (MP, 1990a, 388 and MP, 1996, 389).

2.2 THE ROLE OF THE MPWH

The government, under pressure to increase the scope and magnitude of its housing services, established the General Housing Department under the MFNE in May 1975 (Al-Dakheel, 1995, 2, 11), as the second agency through which it would implement its housing programme. Within a year, due to the increased urgency of the housing crisis and the government's ambitious plans to remedy the problem, the Department was expanded and became the Ministry of Public Works and Housing, as an independent agency (ibid.). That is to say, the MPWH was established at the beginning of the Second Five-year Development Plan (1976). Its goals were to implement the government's housing programmes and policies as presented in the development plans.

Although its achievements have been less than was anticipated at the time of its inception, the Housing Affairs Division of the MPWH has completed a number of housing projects in various parts of the Kingdom, and with varying degrees of success (ibid., 11,13). These projects, under the Rush Campaign and General Housing Programme, are outlined in the next two sub-sections, after which the MPWH's contribution to the five-year development plans is evaluated.

2.2.1 THE RUSH HOUSING CAMPAIGN

The Rush Housing Campaign was hastily planned and used foreign design concepts and new construction materials and techniques to meet the desperate demand for housing at that time. The campaign produced three public housing projects located in urban areas throughout the country (see Table 2.25) (Al-Dakheel, 1995, 3, 11). Each project had several multilevel buildings, ranging from 4 to 18 stories, with apartment-type units. For example, the Jeddah housing project is made up of 32 buildings comprising 1,936 apartments, each of which is 241 square metres and consists of six large rooms. These three projects incurred a variety of problems regarding distribution and management (ibid.).

The design of these projects clashed badly with the cultural traditions and religious beliefs of their potential occupants. For instance, entrances and communal areas were designed for mixed use, whereas the end-users' religious beliefs required gender separation in public areas (ibid.). Consequently, the three projects stood empty for about thirteen years, except for a brief period during the Gulf War of 1990, when they were used to house refugees. In addition to the initial design and construction costs, the vacant

projects are still draining public funds for the cost of maintenance and security services (ibid. 3,11,14).

Table 2.25
The Rush Housing Project

| No. | The City | Number of Housing Units | Type of Housing Units |
|--------------|-----------|-------------------------|-----------------------|
| 1 | Al-Dammam | 1,664 | apartments |
| 2 | Al-Riyadh | 1,152 | apartments |
| 3 | Jeddah | 1,936 | apartments |
| TOTAL | | 4,752 | apartments |

Source: SAMA, Annual Report, 1992

2.2.2 THE GENERAL HOUSING PROGRAMME

The general housing programme is the larger of the two programmes undertaken by the MPWH. The programme consisted not only of housing facilities as such, but included a wide variety of religious, social and educational buildings, which complete a community and make it a worthwhile place to live in. The main objectives of the general housing programme were to:

1. offer adequate housing to Saudi families in keeping with the Islamic way of life;
2. assure their occupants' total comfort with privacy and security.

In 1979, a ministerial decision was issued regulating the distribution of housing units constructed by the MPWH to persons whose houses had either been demolished by the government to create room for government projects, or had become dilapidated and unsafe for further occupancy.

The CM Resolution number 130, dated 06.04.1989 provided for housing built under these projects to be assigned to the REDF for allocation to loan applicants (REDF, 1995, 120; Al-Dakheel, 1995, 14). This made possible a decrease in the waiting period to obtain a loan from the fund, in particular in the cities where the housing projects were already under way: Al-Ahsa, Al-Dammam, Al-Khobar, Al-Madinah, Al-Qatif, Al-Riyadh, Buraydah, Jeddah and Makkah.

The general housing programme involved the construction of villas and apartments.

2.2.2.1 THE VILLA PROTOTYPE CAMPAIGN

Along with the basic infrastructure, the prototype was replicated in seven different developments ranging from 400 to 2,633 dwellings (ibid., 4, 15). Eventually, the seven sites will house 11,016 families by their projected completion date in 1997 (ibid.). These

developments are located in suburban areas near the cities of Al-Ahsa, Al-Madinah, Al-Qatif, Al-Riyadh, Buraydah and Makkah (see Table 2.26). Details of some of these projects are as follows (REDF, 1992, 23)

1. Al-Ahsa Housing Project consists of 400 villas. Each villa is approximately 216 square metres and is built on a plot of about 400 square metres.
2. Al-Riyadh Housing Project (on Khurays Road) consists of 1,258 villas, each of which is 220 square metres and is built on a plot of 484 square metres.
3. Buraydah Housing Project consists of 949 one-story villas. Each villa is 227 square metres and is built on a plot of 400 square metres.

Table 2.26
The General Housing Project (villas only)

| No. | City | Number of villas |
|--------------|------------------------------------|------------------|
| 1 | Al-Ahsa | 400 |
| 2 | Al-Ahsa (Low Cost Housing Project) | 500 |
| 3 | Al- Madinah | 2,084 |
| 4 | Al-Qatif | 600 |
| 5 | Al-Riyadh (on Al-Khari Road) | 2,633 |
| 6 | Al-Riyadh (on Khurays Road) | 1,258 |
| 7 | Buraydah | 949 |
| 8 | Makkah | 2,592 |
| TOTAL | | 11,016 |

Source: SAMA, Annual Report, 1989

The ownership of each of these seven developments is transferred upon its completion to the REDF Housing Programme. Under the CM's Resolution number 130, the housing units will be privately owned by individuals on the REDF waiting list through a twenty-five year interest-free home loan.

2.2.2.2 APARTMENT BLOCKS

The general housing programme also involved the construction of 9,943 apartments. Table 2.27 summarises the number of housing units built.

Table 2.27
The General Housing Project (apartments only)

| No. | City | Number of apartments |
|--------------|------------------------------|----------------------|
| 1 | Al-Khubar | 4,106 |
| 2 | Al-Riyadh (on Al-Kharj Road) | 2,408 |
| 3 | Jeddah | 3,420 |
| TOTAL | | 9,934 |

Source: SAMA, Annual Report, 1995

2.2.3 MPWH'S ROLE IN FIVE-YEAR DEVELOPMENT PLANS

The number of housing units built by the MPWH during the Third Five-Year Development Plan (1980-1985) was 17,800, whereas the target was 32,900. This means a deviation of actual from the target by -45.89%. Hence, the number of housing units built by the MPWH during the Third Five-Year Development Plan was equal to only 4% of the plan supply (MP, 1985b, 411).

The target number of housing units to be built by the MPWH during the Fourth Five-Year Development Plan was 7,800. In fact, the MPWH only managed to build 2,207 during this period (MP, 1990a, 385). This means a deviation from the target by -71.71%.

The target number of housing units to be built by the MPWH during the Fifth Five-Year Development Plan was 5,676, whereas the number of housing units actually built was 4,570 (MP, 1990a, 385 and MP 1996, 389). This means a deviation of actual from the target by -19.49%.

2.3 THE ROLE OF OTHER GOVERNMENT INSTITUTIONS

In addition to the MPWH, many other government institutions such as the Ministry of Defence and Aviation (MDA), the Ministry of the Interior (MI), the National Guard (NG), public hospitals and universities, have constructed large housing complexes for their employees. Some examples are given below, after which the contribution of these institutions under the five-year development plans is highlighted.

The Military Works Department of the MDA has constructed several extensive housing projects for officers, non-commissioned officers and soldiers with their families all over the Kingdom. The projects offer full living facilities and public services have been considered in the design and construction. Entertainment and recreation areas have been provided for the comfort and enjoyment of the ministry staff in order to encourage them to perform their duties efficiently and actively.

The MFNE initiated its housing programme for the benefit of low-income Saudi nationals, building 1,000 and 750 housing units in Al-Riyadh and Jeddah respectively. The target was to provide housing, over a reasonable number of years, to Saudi citizens with a monthly income of less than SR 1,000 on an easy instalments plan.

2.3.1 GOVERNMENT INSTITUTIONS' ROLE IN FIVE-YEAR DEVELOPMENT PLANS

The target number of housing units built by government institutions during the Third Five-Year Development Plan (1980-1985) was 53,300, whereas the number of housing units actually built by them during this period was 121,600, which means a deviation of actual from the target by 128.14%. These units accounted for 28% of all housing units built during the Third Five-Year Development Plan (MP, 1985b, 411).

The target number of housing units built by government institutions during the Fourth Five-Year Development Plan (1985-1990) was 67,200, whereas the actual number of housing units built by them during this period was 46,400 (MP, 1990a, 385). This means a deviation of actual from the target by -30.95%.

During the Fifth Five-Year Development Plan (1990-1995), government institutions did not build any housing units (MP, 1996a, 389).

2.4 CONCLUSION

The economic boom which began in Saudi Arabia in the early 1970s led to urban migration on a large scale, a serious housing shortage and an escalation in the cost of rented accommodation. Thus, housing became an urgent priority to be addressed by the Saudi government's development plans.

Two main institutions have been created with the aim of providing affordable housing for Saudi citizens: the REDF and the MPWH. The REDF provides long-term soft loans for the construction of houses and apartment blocks. In addition to alleviating the housing shortage, this is intended to serve capital formation and wealth redistribution objectives. Over 3,000 cities, towns and villages have benefited from REDF loans since its inception in 1975. The second and the third five-year development plans (1975-1985), in particular, witnessed considerable progress, exceeding the plan targets. In later plan periods, however, the number of housing units built with REDF assistance has been below planned levels. Government funding for the REDF has declined, the goal of

becoming self-financing through loan repayments has not been achieved, and there is a long waiting period for loans.

The MPWH, founded in 1975, has failed to accomplish its original goals, which were to co-ordinate the government's housing programmes among the different public agencies and to build a significant number of housing units. Its only two campaigns, the Rush Housing Campaign of the mid 1970s and the General Housing Campaign of the early 1990s, contributed less than 2% of the housing stock in the country. The former project, in particular, proved to be a costly mistake. Because the design of the housing units conflicted with cultural requirements, they have for the most part stood empty, while the cost of their maintenance remains a drain on the public purse.

Other government institutions play a limited role in housing provision, usually by constructing housing for their own employees. Some of these have been very successful on their own terms; nevertheless their contribution to the housing stock in the Kingdom as a whole is small.

Thus, it can be seen that housing provision in the Kingdom has witnessed some notable successes, but there have also been some unfortunate failures. The possibility of improving the situation by enhancing the effectiveness of the REDF is considered in the remaining chapters of this study.

CHAPTER THREE

ISLAMIC MODES OF FINANCING

3.0 INTRODUCTION

Owning a house is one of the fundamental human motives for undertaking economic activity. However, the cost of building a house, in general, is very high. In developing countries one cannot expect shelter to be provided on a large scale by welfare programmes. Ideally, market forces should be able to take care of this aspect of society, but housing involves a large investment in relation to the average household's income. Therefore, the availability of cheap finance plays an important role in the provision of housing.

Governments capable of providing housing finance undertake construction of houses which can be sold on a deferred payment basis or by instalments. Investors, both individual and corporate, may undertake the construction of houses to be sold on a deferred payment basis.

As Islam prohibits the hiring of money (i.e. borrowing on interest), this chapter focuses on the economic issues related to its basis in the Qur'an and *Sunnah* (teachings of the Prophet Mohammad). This will help to provide a better idea of the nature, scope and potentialities of profit or loss sharing (PLS) in contemporary circumstances. The chapter then considers a variety of methods, consistent with the teachings of the Qur'an and *Sunnah*, by which housing finance may be provided.

The chapter is set out as follows: Section One outlines some general background issues relevant to Islamic economic thought. It looks at the nature and rationale of the prohibition of interest (usury) in Islam. Section Two considers alternative techniques. Section Three presents a comparative discussion of the alternative techniques described in Section Two, in terms of their implications for the provider and the beneficiary, their suitability for use and their macroeconomic implications. Section Four presents a conclusion.

3.1 GENERAL BACKGROUND ISSUES

Islamic finance draws a clear distinction between trade and *Riba* (interest or usury). The former is permitted, but the latter is not, as is stated in the Qur'an:

Those who devour usury
Will not stand except

As stands one whom
The Satan by his touch
Hath driven to madness.
That is because they say:
"Trade is like usury,"
But Allah hath permitted trade
And forbidden usury.
Those who after receiving
Admonition from their Lord,
Desist, shall be pardoned
For the past; their case
Is for Allah (to judge);
But those who repeat
(The offence) are Companions
Of the Fire: they will
Abide therein (for ever). (2: 275)

O ye who believe!
Fear Allah, and give up
What remains of your demand
For usury, if ye are indeed believers (2: 278).
If ye do it not,
Take notice of war
from Allah and His Messenger:
But if ye repent
Ye shall have
your capital sums:
Deal not unjustly,
And ye shall not
Be dealt with unjustly (2: 279).

Another clear prohibition against usury from the *Sunnah* is the following:

"Abd Allah bin Mas'ud said that the Apostle of Allah (peace be upon him) cursed the one who accepted usury, the one who paid it, the witness to it, and the one who recorded it"(Hasan, 1985 vol. 2, p. 946).

For more details see: Khan, M. 1985, vol. 3, p. 168 - 170.

The Qur'an does not spell out in detail why usury receives such a universal ban. However, various scholars have highlighted the reasons for it. The injustice of usury is clear in consumption loans. However, its injustice in other types of loans, such as production loans, can also be seen (Ali, M. 1992, 343-344).

A borrower whose project makes very little profit or actually makes a loss still has to repay the principal plus the interest. This is perceived as clearly unfair to the borrower. However, if huge profit results from the enterprise, then the amount of interest to be repaid is still the same. This is perceived as unfair to the lender (ibid., 344).

The interest system is prohibited because it is inequitable, since the financier is assured a definite return while the risk is borne by the borrower. It is not conducive to the efficient and equitable use of resources (for further details see Khan and Mirakhor, 1987, 4-5). In addition, the interest permits the lender to augment his capital without effort, which is regarded as objectionable, "as money does not create a surplus value by itself" (Presley and Sessions, 1994, 586). Presley and Sessions further said:

"The lender has no right to an automatic reward for supplying money unless he shares in the provision of enterprise; even the reward is not fixed or guaranteed, but dictated by the proportion of his contribution. This, in turn, determines his justifiable share of profits (or losses)" (p. 586).

Today, interest plays a key role in most financial transactions. However, modern Muslim scholars have found that, in theory, it is possible to run an economy without interest. This idea has received a great deal of attention, following different modalities aimed at the elimination of interest. In order to find practical solutions to modern-day problems, *Shari'ah* experts have tried to follow, as closely as possible, the precepts of the highly respected Muslim jurists.

In recent years, conscious efforts have been made to re-orient the activities of Islamic banks to achieve Islamic socio-economic objectives and to seek to establish a just and humane socio-economic order, which should be free from all forms of exploitation. However, in matters on which the Qur'an and *Sunnah* provide no specific injunctions, Islamic banks have now devised various modes of financing which are in compliance with general Islamic principles. In such modes, depositors are not guaranteed a predetermined return on their savings but they are entitled to a share in the actual profits earned by the bank. The financier should share the risk with the entrepreneur if he wishes to earn profit. These techniques have the ability to fulfil the financial needs of both the private and the public sectors (Chapra, 1985, 69).

As the financier cannot earn interest by lending money, Islamic banks have to undertake investment to earn profit, not only for the financier but also for those who deposit funds in investment accounts. The shares of joint stock companies may also serve as an alternative to interest-bearing government and corporate bonds (*ibid.*, 164).

Money can be obtained as an interest-free loan or on the basis of PLS. This does not apply, however, to the other factors of production, e.g., labour, land and physical capital. Their services can either be hired or acquired on a PLS basis. In other words, a labourer, an owner of land or an owner of capital goods can either obtain wages or rentals by

hiring out their services or assets, or by exposing themselves to some risk, and entering into a PLS arrangement.

Under an Islamic system the risks and the gains of enterprises are equitably distributed between the two partners. The provision of capital carries with it the risk of sharing any loss with the partner. Hence, the lender has the right to expect to share with the partner any gain. All monies used to gain a return may be viewed as risk capital. Therefore, there can be no guarantee of either return of principal or profit. Any guaranteed return of principal which carries with it an additional return or gain is a case of usury. Under an Islamic system, loans ought not to be provided as a means of receiving a guaranteed return, but rather as a deed of kindness, without seeking a reward.

The phraseology of the verses of the Holy Qur'an, as well as the *Sunnah*, which condemn the institution of interest, clearly portray the Islamic viewpoint in this regard. Therefore, countries seeking to introduce an Islamic economic system must organise financial practices on a basis other than interest.

There is a basic difference between Islam and capitalism with regard to the treatment of money capital as a factor of production. In the capitalist system, money capital is treated on a par with labour and land, each being entitled to a return irrespective of profit or loss. This is not so in an Islamic system which treats money on a par with enterprise. Research on the subject has suggested that the ideal alternatives to interest in an Islamic economic system are PLS and interest-free loans.

The modalities of the conversion of interest-based banking to an interest-free basis have to be derived from the principles of *Shari'ah*. Hence, there would be no objection to getting a return on capital if the provider of capital enters into a partnership with a worker or entrepreneur and is prepared to share in the risks of business. Similarly, a bank cannot be guaranteed a predetermined return on capital provided by it to the business undertaking, but can enter into a PLS arrangement with it.

In summary, the Holy Qur'an and the *Sunnah* make it clear that usury is incompatible with the Islamic way of life.

3.2 ALTERNATIVE FINANCING TECHNIQUES

This section is mostly concerned with the modalities of the conversion of interest-based banking to Islamic banking.

The elimination of interest occupies a key position in the establishment of the Islamic order. However, there are several possible financing techniques conforming to Islamic principles, some of which have been discussed in traditional *Fiqh* (Islamic jurisprudence) literature. The others have emerged recently to meet contemporary needs in a manner consistent with the teaching of Islam. These financing techniques could be divided into four basic modes of finance, namely: the sale-based modes, the participatory modes, the rent-based modes and the interest-free loan (*Qard Hasan*). The following is a description of the four modes.

3.2.1 THE SALE-BASED MODES

There are four sale-based modes, namely: Instalment Sale, *Murabahah*, *Bay' Al-Salam* and *Istisna'*.

3.2.1.1 INSTALMENT SALE

Instalment sale may be defined as sale under which the price of the item involved is payable on a deferred basis.

On this basis, financial institutions could build low cost housing units and supply them to the public. This would mean that institutions would be required to declare the cost of acquiring such houses and their own profit margin in advance. The total price could then be deferred to be paid in instalments in accordance with an agreed schedule (*ibid.*). In this respect, the institution should exert every effort to make the deal such that the cost of the purchased materials becomes less than or equal to their cost in the retail market (Abdallah, A. 1995, 47). To reach this end, the institution may need to establish relationships with wholesale merchants and purchase the materials at wholesale prices, so that when the margin of profit is added to these prices, the final price will still be competitive.

Instalment sale can be applied through the construction of houses by government-owned institutions, private investment institutions (e.g. banks and companies), or individuals, the property then being offered for sale to the public through instalment sale techniques.

In such cases, the client may provide part of the cost of the house and the financier provide the remaining. This is the prevalent situation nowadays. The property would be

jointly owned. The financier would sell the house to the client on a deferred payment basis, for a price exceeding his cost (Al-Othmani, 1995, 63).

If the intention is to build a house on a plot of land, the same procedure can be followed as regards the purchase of the land. The financier and the client can jointly purchase the plot of land. Then, the financier sells his share to the client according to deferred payment arrangements (ibid., 64).

If the land is the property of the client, or has become his through this arrangement, then the financier and the client can build the house jointly. The house would become their joint property. Once construction is completed, the financier sells his share to the client on a deferred payment basis. However, some Islamic banks also finance the purchase and sale of ready-built houses on this basis (ibid.).

In applying this technique, Resolution No. 52/1/6 of the Islamic Jurisprudence Academy, should be taken into account. This includes the following: (Abu Ghuddah, 1995, 56-57).

1. The two prices should be indicated together. However, the sale is not rendered valid unless the parties have decided whether the sale will be by immediate payment or by instalments.
2. It is prohibited to separate the return for accepting deferred payment from the cash price in such a way that it becomes directly linked to the duration of the transaction.
3. If the debtor fails to pay the agreed instalments, it is not permissible to charge him an additional amount, whether or not an advance condition was made to that effect, since such an additional amount constitutes prohibited usury.
4. It is prohibited for a solvent debtor to delay the repayment. However, it is not permissible to provide in the agreement for compensation to be paid in such a case.
5. It is permissible for the seller to impose earlier payment of instalments if the debtor delays the payment of some instalments, despite his agreement to that condition at the time of concluding the contract.
6. The seller has no right to maintain ownership of the sold property after the sale has been effected. However, he may make a condition requiring the purchaser to mortgage the property as a collateral for payment of a deferred instalment.

The financier, in this case, owns a house which he sells to the client at a profit on a deferred payment basis and will accept payments by instalments specified in the contract.

3.2.1.2 MURABAHAH

Murabahah is a contract which involves a sale with a profit mark-up on the cost. The seller purchases the goods which have been ordered by a client. Then, he sells it to the client at a higher price than the purchase price, with the payment, which is generally in instalments, being made in the future (Ahmad, A. 1993, 10). The seller undertakes all the management needed for the purchase and also bears the risk for the goods until they have been delivered to the client (Chapra, 1985, 171, 262). The risk remains with the seller, which justifies his profit. A condition of this practice of financing is that the client is bound to buy the goods.

Murabahah is the most common Islamic financing technique. It has been estimated that 70-80% of the total finance provided by Islamic banks is through *Murabahah* (Ahmad, A. 1993, 38, 59). In addition, it was the most common financing technique in the early stages of the development of Islamic banks. The main reason is that it is simple in application compared with the other Islamic methods which require more elaborate arrangements (ibid., 60).

One of the main uses of *Murabahah* is in housing finance. In such a case, the financier authorises the client to build the house, which would then be the property of the financier. The client would supervise the construction of the house, as his representative. Once construction is completed, the financier would sell the house to the client on a deferred payment basis. This is used in cases where the client is completely unable to use his own resources to buy or build the house (Al-Othmani, 1995, 63; Mahdi, 1995, 272).

Islamic rules state that a *Murabahah* contract will be invalid unless the asset sold comes under the ownership of the financier. It is common knowledge that Muslims are forbidden to sell anything which they do not own. Accordance with the rules, therefore, requires double registration of the house, in the name of the financier initially, then in the name of the client when the sale between the financier and the client is signed.

In view of the high property prices which prevail in inflationary conditions, and the high rate of the registration fee (usually a fixed percentage of the declared value of the house), double registration may be a considerable financial burden (Ahmad, A. 1995, 40).

3.2.1.3 BAY' AL-SALAM

This is a contract of forward sale in which the price is to be paid immediately while the goods sold are to be delivered after a specific period of time. The goods sold are well defined, though not available when the contract is signed (Ahmad and Awan, 1992, 432).

3.2.1.4 ISTISNA'

Istisna' is a contractual arrangement whereby one party (purchaser) orders a specifically defined product to be produced for him by the other party (producer, seller) in the future, at a specific price, the raw materials to be supplied by the producer (Al-Baberti, vol. 5, 356; Mahdi, 1995, 12). In other words, "*Istisna'* is defined as a contract to purchase now, for a definite price, something that may be manufactured or constructed later according to agreed specifications" (Zarqa, 1997, 68). The target of *Istisna'* is "often not available now, but will be made later by the manufacturer or contractor" (ibid.).

Istisna' may be practised by institutions dealing in housing finance. Either the purchaser chooses a contractor acceptable to the institution or the institution chooses such a contractor. In either case, it is the responsibility of the institution to see that the house is built according to the specifications. In other words, it has to be built in a way that is suited to the purchaser's choice and his ability to repay. The institution will sign two contracts, one with the contractor, and the other with the purchaser (Salama, 1995, 30).

This technique is used when an individual who owns a piece of land wants to enter into an agreement with a contractor to build a house according to certain specifications in return for an agreed price. The price may be repaid by instalments upon completion of the house. The building materials are provided by the contractor.

This technique is suitable for low- and middle-income groups who own land but cannot afford to provide the materials and pay the construction cost in advance (Ahmad, A, 1995, 41). For more details see Zarqa, 1997, 67-74.

3.2.2 THE PARTICIPATORY MODES

The participatory modes consist of *Mudarabah*, Partnership (*Musharakah*) and Decreasing Partnership (Diminishing *Musharakah*).

3.2.2.1 MUDARABAH

Mudarabah is a contract in which one side provides capital (capital-owner) and the other provides work (working partner or *mudarib*). Profits are to be shared in a proportion agreed in advance. In the case of loss, the capital-owner bears all of the loss incurred, provided that there has been no violation of the stipulated contract or neglect on the part of the working partner (Ahmad, A. 1993, 44; Mahdi, 1995, 12; Chapra, 1985, 262). The working partner is required to work with honesty and sincerity and to exercise the maximum possible care and precaution in the discharge of his functions (Chapra, 1985, 250).

Mudarabah is an agreement between two or more persons whereby one or more of them provides finance, while the others provide entrepreneurship and management. Under this method, the bank provides the capital and the client is fully responsible for management, in consideration of which the partner gets an agreed proportion of the net profits. Presley and Sessions (1994, 588) stated:

“A *Mudarabah* contract creates an explicit mapping between the remuneration of capital and the outcome of the project, the prohibition of interest implying that compensation cannot be tied directly to the level of capital investment”.

Mudarabah is traditionally applied to commercial activities of a short duration.

Classical *Mudarabah* is based on a one to one relationship between the capital-owner and the working partner (entrepreneur). However, most contemporary Muslim scholars clearly state that it is possible to have numerous capital-owners and only one working partner (Kahf and Khan. 1992, 23). *Mudarabah* may also be consummated between several capital-owners and working partners (entrepreneurs) (Chapra, 1985, 248).

A two-tier *Mudarabah* is possible. This is generally taken as a model for Islamic banks in their dealings with members of the public and businesses (ibid., 165). In the two-tier *Mudarabah*, the first agreement is between the depositors and the bank, while the second one is between the bank and the parties to whom finance is provided.

Mudarabah deposits and shareholders' equity are deemed to be the two remunerable liabilities of an Islamic bank. The holders of *Mudarabah* deposits are treated as one

homogeneous group. However, the profit earned will be distributed between the capital-owner and the working partners on the basis of proportions agreed. No fixed amount can be settled for any party.

If there is more than one capital-owner, profit or loss are distributed between them strictly in proportion to their capital contribution.

Commercial banks providing funds to business enterprises would be entitled to receive a part of the profits earned by the enterprise in accordance with the agreed proportions.

For the purpose of profit distribution, the respective capital contributions of the parties, utilised for varying periods, would be brought to a common denominator by multiplying the amounts by the number of days during which each item (such as equity capital for the firm, its current cash surpluses, suppliers' credit as well as the finance provided by the bank) was actually deployed in the business.

Under this method, the financier provides all the capital and the beneficiary is fully responsible for management. The financier bears the financial risk, which justifies his claim to a share in the profit. The beneficiary is, however, held responsible for the loss of capital, should this occur as a result of his negligence or wilful act. To guard against this, the financier may require security from the beneficiary. Presley and Sessions argued:

"Mudarabah therefore, allows the contract to control directly the manager's incentive to exert effort since the effort affects the relationship between capital investment and the outcome of the project" (p. 588).

It will, "under certain conditions, lead to an enhanced level of capital investment on account of the ability of *Mudarabah* to act as an efficient revelation device" (ibid., 595).

3.2.2.2 PARTNERSHIP (*MUSHARAKAH*)

The word *Musharakah* is derived from the Arabic word *Sharikah* meaning "partnership". *Musharakah* is a form of business arrangement in which the financiers and their clients agree to join in a temporary participation (not different from the joint venture concept) to effect a certain operation within an agreed period of time. Both parties contribute to the capital of the operation (taken to mean assets both fixed and working, technical and managerial effort, etc.) in varying degrees. They agree to divide the profit in proportions agreed upon in advance (Mahdi, 1995, 12; Ahmad, A. 1993, 10).

One of the partners can, if he wishes, dispose of his share either immediately or gradually, by selling to the other partner. This is usually the case in joint ownership of a lodging or the tools of a profession.

Musharakah can take many forms. It could be a joint venture between two parties, in which case the property may be jointly owned by both according to the percentage of finance. However, in all cases, a rent will be determined and the beneficiary can either pay a share of the rent, or the premises can be let out to a third party and the rent shared between the two parties.

In partnership forms, the financier makes the funds available, not as a lender but as an investor. The financier is not assured, in advance, of a positive rate of return; rather, his profit or loss depends on the ultimate outcome of the business.

Application of partnership in house financing could take one of two forms:

1. The beneficiary may provide either the land or part of the finance, or both, while the financier provides the remainder. The house will be jointly owned according to the percentage of finance. The house can either be occupied by the beneficiary or let to a third party. A rent will be determined and the beneficiary can either pay the share of the rent due to the financier, or the house can be let and the rent shared between the financier and the beneficiary. The beneficiary pays a regular rent and a regular instalment simultaneously. As he continues to do so, he will increase his share in the partnership and reduce that of the financier. Accordingly, the rent will decrease as the beneficiary continuously pays instalments. When the last instalment is paid, the rent will be zero.
2. The financier may provide financing for such purchases on the basis of *Musharakah*. The financier will assess the rent and will share it according to the extent to which he is financing the purchase and according to pre-agreed terms. As the beneficiary pays off the instalments, the financier's share in the income will be reduced gradually until the whole property is transferred to the beneficiary (Mahdi, 1995, 273).

Partnership can be effected with regard to ownership of the building only, while the land is owned by the beneficiary. Both the financier and the beneficiary shoulder part of the cost of the building which will be jointly owned by them according to their shares. The

financier then sells his share to the beneficiary against a lump sum or on deferred payment (ibid.).

For the purpose of profit/loss distribution, the respective capital contributions of the parties, utilised for varying periods, would be brought to a common denominator by multiplying the amounts by the number of days during which each item (such as equity capital of the firm, its current cash surpluses, supplier's credit, as well as the finance provided by the bank) was actually deployed in the business.

The calculation of the respective capital contributions of the parties may be made on a daily product basis. However, in no case can the highest multiple used for calculating the daily product exceed the total number of days covered by the accounting period (ibid., 123). The holder will take a percentage of the profits of the project that the bonds are financing. The basis of this bond is a participation contract through which one or more partners with their money (the beneficial owners), and another with his efforts (participant), get together to earn profit in a permissible trade. Profits will be divided between them in an agreed proportion.

The profit-sharing ratio between the partners cannot fluctuate from month to month or day to day like the rate of interest. This is because it is determined by custom and considerations of justice and remains contractually stable throughout the duration of the partnership agreement. Since the ultimate outcome of business depends on a number of factors which do not change erratically, an equity-based economy would tend to be more stable than a loan-based economy. The financier's liability remains limited to the extent of the financing provided by him.

3.2.2.3 DECREASING PARTNERSHIP (DIMINISHING *MUSHARAKAH*)

Decreasing partnership may proceed as follows: on the basis of a partnership agreement, the financier and the beneficiary buy the house as a joint property in proportion to the sum paid by each. The financier leases his portion to the beneficiary for a specified periodic rent. The financier's portion is divided into shares. As the beneficiary, according to the agreed schedule, buys these shares at a specified price, the total number of shares of the financier decreases. Hence, the rental amount is reduced proportionately and the beneficiary's share in the ownership of the house increases until he has the full ownership. At this point both the partnership agreement and the lease contract come to an end (Ahmad, A. 1995, 41).

Decreasing partnership has been successfully applied by the Jordan Islamic Bank to finance real estate projects and construction of commercial buildings (ibid.). The two parties should agree on that:

- 1) The financier sells his portion lump sum or by instalments;
- 2) Priority of the purchase be given to the beneficiary;
- 3) Shares should be regularly transferred from financier to beneficiary, so that shares of the former continuously decrease while shares of the latter increase, to the effect that all shares will eventually be owned by the latter;
- 4) Titles and obligations, during this process, are determined according to the share of each party in the jointly owned property (Abdallah, 1995, 48, 49).

The above method (decreasing partnership) requires three contracts:

- 1) To establish joint ownership;
- 2) To lease the share of the financier to the beneficiary;
- 3) To sell the shares of the financier to the beneficiary (Al-Othmani, 1995, 67, 68).

A decreasing partnership contract is in the best interests of the financial institution as decreasing partnership enables the financial institution systematically to liquidate itself from maturing projects, thus, diverting financial institution funds toward new projects (Bendjilali and Khan, 1995, 19). In addition, the financier does not require guarantees for this type of financing, except that the initial mortgage for the building be in its favour.

Important features of a decreasing partnership contract are as follows:

- 1) Financier and beneficiary develop a joint project on the basis of *Musharakah*.
- 2) Profits are shared in accordance with an agreed ratio and losses in proportion to initial contribution.
- 3) The financier makes a binding promise to sell his shares to the beneficiary by instalments.
- 4) The beneficiary voluntarily purchases the shares of the financier.
- 5) The beneficiary, on completion of the contract, becomes the sole owner of the project. However, since stock markets are not efficient in Muslim countries, the parties agree in advance to accept the share prices yearly indicated by their auditors.
- 6) The project may also be developed on the orders of the beneficiary and then sold to the beneficiary who buys the shares with the revenues generated by the project.

7) The financier is only bound by the sale component of a decreasing partnership contract (ibid., pp. 19-20).

3.2.2.3.1 THE CASE OF AL-BARAKA ISLAMIC BANK

A London-based subsidiary of Al-Baraka Islamic Bank provided finance for the purchase of residential and non-residential buildings during the 1989-1992 period. The contractual relationship rested on the basis of the participation between the client and Al-Baraka in purchasing real estate according to agreed proportions. The portion of Al-Baraka was not to exceed 80% in the case of residents and 70% in the case of non-residents. The price of the real estate was divided into shares, the value of each share being one pound. This value remains fixed throughout the contractual period. If the price of the purchased house was £100,000, Al-Baraka's portion of shares would be £70,000 and that of the client would be £30,000 (Shaltut, 1995, 128).

It was incumbent on the client to purchase Al-Baraka's shares within an agreed period, which should not exceed twenty years for residents and seven years for non-residents (Abdallah, A. 1995, 50). Al-Baraka's shares would decrease gradually until the real estate was wholly owned by the client.

The real estate was registered in the name of the client. It was mortgaged to the benefit of Al-Baraka as a guarantee for payment. The two parties agreed to the selling of the real estate if the client failed to purchase Al-Baraka's portion of shares (ibid., 49, 50; Shaltut, 1995, 128-133).

The bank has faced many problems from legal and *Shari'ah* points of view, due to its being newly established and to the fact that it operates in a country which does not recognise Islamic *Shari'ah*. The obstacles include the following:

- 1) Non-compliance with prompt payments;
- 2) Registration fees;
- 3) Cost of assessment, insurance and legal fees;
- 4) Acceptance of dealings with insurance companies; (Shaltut, 1995, 133-135).

In the end, the scheme was wound up, as Al-Barakah was advised by the Bank of England to operate as an investment company rather than a bank. Al-Baraka did not wish to change its ownership structure to comply with the 1987 Financial Scheme Act.

3.2.3 LEASING AND LEASE ENDING WITH OWNERSHIP

Leasing is a relatively new type of long-term financing which is progressively gaining ground in industrialised countries. Finance leasing is based on a contract between the lessor and the lessee for the hire of a specific asset selected from a manufacturer or vendor of such assets by the lessee. The lessor retains the ownership of the asset and the lessee has the possession and the right to use the asset on payment of specified rentals over a given period. The use of this method enables financial institutions to provide medium and long-term finance, either directly or through their leasing subsidiaries, without having to look into the accounts of the firms.

The Jordan Islamic Bank uses this method in leasing residential units to clients for a monthly rent for thirty years. The maximum period of repayment varies from person to person. At the end of this period the bank assigns the ownership of the unit to the lessee (Yahya, 1995, 91). This method involves housing investment for rental purposes with profit as the motive.

3.2.4 INTEREST-FREE LOAN (*QARD HASAN*)

Qard Hasan is a loan extended without interest or profit-sharing. It is extended to the borrower in order to help him, rather than to benefit from his situation (Ahmad, A. 1993, 10; Ahmad and Awan, 1992, 440). This is permissible by Islamic *Shari'ah*, as stated in the following verse:

Who is he
That will loan to Allah
A beautiful loan, which Allah
Will double unto his credit
And multiply many times?
It is Allah that giveth (you)
Want or Plenty.
And to Him shall be
Your return (2: 245).

It is stated in the *Sunnah* that giving an interest-free loan (*Qard Hasan*) is more rewarding than giving voluntary charity (*Sadaqah*). The justification for this is that: "whereas the petitioner may ask for what he owns, the borrower is prompted by his need to borrow" (Abdulbage, 1980, vol. 2, 812). In addition, it is stated that the Prophet (pbuh) said:

"...whoever brought his (Muslim) brother out of a discomfort, Allah will bring him out of the discomforts of the Day of Resurrection, and whoever screened a

Muslim, Allah will screen him on the Day of Resurrection” (Khan, 1985, vol. 3, 373).

The interest-free loan is socially and economically vital to the community as it reflects co-operation and contributes to social security. Therefore, the basic condition for *Qard* is that it should be interest-free. The charging of interest would be considered as usury, which is absolutely prohibited in Islamic *Shari'ah*.

Indeed, so strict is the prohibition of interest in *Qard* contracts that some *fuqaha* go as far as prohibiting gifts from the borrower to the lender if they are suspected to be a reward for the service. However, if the borrower decides voluntarily to give more, this is acceptable according to the Prophet's (pbuh) statement:

“ ... for the best amongst the people is he who repays his debts in the most handsome manner” (ibid., vol. 3, 339).

For more details see the same book, vol. 3, 336 - 340.

Interest-free loans are one method of house financing based on co-operation, interdependence and a desire for God's reward. As such, interest-free loans are not an instrument for investment. Government, institutions and individuals should pay due attention to this method for the benefit of those who cannot secure houses using their own means.

Interest-free loan financing is used, especially, in assisting members of the community such as small businessmen, farmers, etc., so that they may gain financial independence. This technique is also used in carrying out government schemes, which may not be expected to produce profit, but which are of benefit to the community. This provision of interest-free loan for financial aid in the cases mentioned is in line with the principles of benevolence (*Ihsan*), and would also aid in advancing individual initiatives and the distribution of resources (Ali, M. 1992, 346).

The Faisal Islamic Bank of Egypt provides interest-free loans to the holders of investment and current accounts, in accordance with the conditions laid down by its board of directors. The Jordanian Islamic Bank Law is authorised to give interest-free loans for productive purposes in various fields to enable the beneficiaries to start independent lives or to raise their income and standard of living (Ahmad, A. 1993, 49).

It should be mentioned in this context that the banks that provide interest-free loans are permitted to charge the borrower a service charge to cover the administrative cost of

handling these loans, so long as the charge is not related to the amount or the duration of the loan (Khan, M. And Mirakhor, 1987, 5).

3.3 DISCUSSION

The various financing techniques available have different economic implications for financier and beneficiary, due to differences in the nature of the finance, the role of the financier and the degree of risk involved.

Financing techniques can be classified in accordance with the nature of the finance involved in each. *Bay'Al-Salam* and *Murabahah* can be considered as debt-based modes of finance, as in both cases, the finance is in the nature of a debt (Khan, F, 1991, 13). The beneficiary (the buyer) is obliged to pay back the entire sum or, as agreed in *Bay'Al-Salam*, its equivalent. The repayment by the beneficiary is pre-determined. Therefore, it is a type of debt from his perspective. In contrast, *Mudarabah* and *Musharakah* are non-debt modes since the beneficiary (the working partner) is not obliged to repay the total amount of finance. *Mudarabah* and *Musharakah* involve the beneficiary paying according to the profit or loss that results from the use of the finance, whereas in *Ijarah*, only rent is paid, which is usually a small part of the total value of the asset (ibid.).

The debt-creating modes (*Bay'Al-Salam* and *Murabahah*) involve a financial burden on the user, regardless of how much or how little he benefits from the funds, whereas non-debt-creating modes (*Mudarabah* and *Musharakah*) carry no financial burden, the beneficiary paying only according to any benefit he derives from the finance (ibid.).

The methods under review differ in terms of the role of the financier. The financier has no role in the management of the funds by the beneficiary under *Bay'Al-Salam*, since after the total price has been handed over, the beneficiary has the freedom to use the funds (total price) as he wishes. *Mudarabah* may also be considered under this category, since the financier has no right to interfere in the management of any enterprise for which the funds are being used. However, *Musharakah* allows the financier the opportunity to have a role in the fund management. Under *Murabahah*, full control over the use of funds is in the hands of the financier himself (ibid.).

With regard to the extent of risk, *Mudarabah* involves the entire capital invested by the financier being at stake. He is responsible for any financial losses involved in any enterprise for which the funds are used. Under *Musharakah*, the financier must bear any financial losses, proportional to his capital in the total investment of the enterprise.

Likewise, *Ijarah* makes the asset-owner responsible for risks involved during the life of the enterprise. Under *Bay'Al-Salam*, risk ensues from the uncertainty of the future price of the commodity involved in the enterprise (ibid., 14). However, under *Murabahah*, the risk is significantly less, in that the risk-bearing of the financier lasts only until the goods are handed over to the beneficiary, not until the return of the capital. Hence, *Murabahah* involves minimal risk for the financier when compared with other modes because:

1. The financier's risk is for only that period in which a spot sale is to be made and the goods handed over to the beneficiary. This is important since other modes involve the risk's remaining throughout the period of the enterprise.
2. The only consideration in this form of finance is the current prices of goods involved to determine the finance and its return (ibid. 14,15).

Also of interest is the economic role of the various finance techniques. In terms of household consumption/saving choice, *Murabahah* and *Bay'Al-Salam* would appear to have an advantage over the other techniques from the point of view of the beneficiary, in that they may be used for meeting household consumption needs, whereas the *Mudarabah* and *Musharakah* techniques cannot be utilised thus (ibid., 20,21).

It would seem that among PLS techniques, *Musharakah* may be preferable to *Mudarabah*, in that in the former the capital owner has a right to participate in the management, thus providing some control over any problems. However, there is no such control with *Mudarabah* (ibid., 21).

With regard to financial intermediation, *Mudarabah* and *Musharakah* are argued in the literature to be the most suitable instruments for managing the liability side of banking (i.e. bank-depositor relationship). The advantages of *Mudarabah* are: (ibid., 25)

1. Banks simply select a suitable entrepreneur, invest their funds and await results for the PLS.
2. This method is capable of being utilised for varying periods of investment and with a variety of entrepreneurs, large or small, allowing the bank varying degrees of risk and return.

However, the disadvantages of *Mudarabah* include the fact that the bank's bearing all the loss. This could result in moral hazard on the part of the users of the bank's funds (ibid.).

Musharakah offers the following advantages:(ibid., 26)

1. Moral hazards are reduced as the client would also be investing. The bank would also have the right to participate in the management of the project.
2. The bank can improve its profitability by investing in larger and already established concerns, thus, ensuring higher profitability and less risk.
3. This mode can be employed for either short or long periods in the industrial, commercial, agricultural and service sectors.

Although this type of finance (*Musharakah*) allows the bank the right to participate in the management of the funds, it might choose to waive this right and act only as the financial intermediary (ibid.).

Lease-based finance such as *Ijarah* requires a bank to change its role of financial intermediary and involve itself in:

1. Purchase of an asset (requiring certain expertise) which it would then retain until the asset is disposed, necessitating storage capacity.
2. Maintaining the asset and bearing all maintenance and replacement costs should it be defective or fail to perform the service for which it has been leased. This would entail knowledge and expertise in respect of the assets under lease.
3. Disposal of the asset, should it not be needed. This involves accepting the risks resulting from price fluctuation and from lack of marketing expertise (ibid., 26, 27).

An advantage of lease-based finance is that it does not involve informational asymmetry, as in the case of *Mudarabah/Musharakah*. Should a bank not be completely satisfied that its clients will declare correct profits, it can then provide them financing on the basis of leasing instruments/equipment/assets. Some moral hazard issues may still, however, remain, as clients may misuse the assets, thus imposing unnecessary costs on the bank as the owner of the assets.

Murabahah financing is similar to that of *Ijarah*, except that the bank is involved in trading, rather than leasing, to earn income. *Murabahah* has several advantages over lease-based finance since the risk-bearing period in trade finance is less than that in lease-based finance. In addition, the bank knows its profit immediately after the purchase-sale transaction is completed, even though its investment may not have been fully recovered.

Bay'Al-Salam also involves the bank in trading, but provides the bank with no objective basis for anticipating its profits, and forces speculation on future prices. This mode of

finance may prove unattractive to clients because of the possibility of exploitation by the bank in the process of speculating on future prices (ibid., 28).

Ijarah techniques may create more liquidity problems than PLS techniques, since it is unlikely that the rental assets can be redeemed at short-notice without adversely affecting the profitability of the financier. However, *Murabahah* is totally illiquid from the point of view of the financier.

Islamic financing techniques also have distinct macroeconomic implications. The *Mudarabah* and *Musharakah* techniques can be used to augment production and capital accumulation; they also make all the capital within the economy risk-bearing capital. In addition, they create new entrepreneurs. In particular, *Mudarabah* looks for entrepreneurs to provide capital with some positive earning. This may encourage people to reconsider entrepreneurial activity when they see the availability of risk-bearing capital. It follows that this may create new sources of growth in the economy, that may not be available in an interest-based system (ibid., 29).

Ijarah can best serve the purpose of capital accumulation through development financing institutions in the public sector. Trading-based techniques, i.e., mark-up and *Bay'Al-Salam*, are the least conducive to capital accumulation compared to other techniques, since they only add the value of the trading service to the economy.

Mudarabah and *Musharakah* may not prove ideal in promoting the formation of fixed assets and infrastructural development. *Ijarah* techniques are more suited to the formation of fixed assets, infrastructural development, long-term investment and the financing of larger projects such as dams, roads, railways and airways, etc. (ibid., 30).

Mudarabah and *Musharakah* techniques finance production, not consumption. Hence, they are unlikely to generate demand-pull inflation in the economy. *Ijarah* techniques and, on a lesser scale, *Murabahah*, can generate cost-push inflation because of the cost of capital being predetermined, and they may rise, for example, due to excess demand for consumer-durable goods, yet not create any corresponding increase in output or productivity (ibid.).

In terms of employment generation and alleviation of poverty, the implications of Islamic financing techniques are:

- 1 *Mudarabah* and *Bay' Al-Salam* meet the capital needs of human resources who do not possess capital. In addition, *Mudarabah* can generate quick income for them, helping them to meet their needs and providing an incentive to save.
- 2 *Musharakah* can be used to help those who possess limited capital. The possibility of obtaining capital on the *Musharakah* basis will serve the same purpose as that of *Mudarabah* for labour without capital.
- 3 *Ijarah* and trading-based techniques may also be helpful. However, people with low incomes may be unable, initially, to afford the fixed cost of the rent or mark-up techniques (ibid., 31)

The *Musharakah* method may fare better when compared with *Murabahah*, instalment Sale or interest. It provides a cushion against inflation, from the viewpoint of the financier, as *Musharakah* secures a percentage of the value of the asset to the financier. While the value of the building appreciates with inflation, the share of the financier will also appreciate. Therefore, the financier becomes secured against inflation. If the building is sold, the share of the financier will increase due to capital appreciation. If *Musharakah* continues, it will reap the lock-in effects as well as the increase in rent (Salama, 1995).

In the case of *Musharakah* and *Mudarabah*, the financier remains the owner until the end of the contract. In case of liquidating an enterprise, these features of *Musharakah* and *Mudarabah* contracts create no difficulty. However, financing an ongoing enterprise with such *Musharakah* and *Mudarabah* contracts is practicable.

Moreover, share prices are determined in stock markets. These markets are not very active in Muslim countries. Therefore, the parties have to agree in advance to accept the share prices yearly indicated by their auditors, instead of depending on the prevailing prices of the shares (Bendjilali and Khan, 1995, 20).

Under any method of housing finance there is a risk to the financier of delayed payment or non-repayment. Interest acts as a deterrent to such risk since if the principal is not repaid, the interest will accumulate as the remaining balance stays fixed. However, in the case of *Murabahah* and *Bay'ajil*, non-repayment entails no cost for the beneficiary (borrower). Under decreasing partnership, rent will affect a customer who evades repayment, as it will remain fixed as long as repayment of the principal is not made.

Under *Murabahah* and *Bay'ajil* the bank would be wise to adopt extra precautionary measures such as mortgages. A special court should be established to ensure that prompt measures are taken against delinquents as these housing finance methods are dependent on how quickly repayment is made to the financiers (Salama, 1995).

Murabahah is not entirely free of risk. Purchasers may refuse to accept items purchased, and if this happens the seller has to bear the loss since a promise to buy is not regarded as binding in a sale contract under according to most school of *fiqh*..

3.4 CONCLUSION

In this chapter, an attempt has been made to survey Islamic financing techniques. In Section One, the general background issues related to Islamic methods of financing were highlighted, beginning with quotations from the Qur'an forbidding interest and explaining briefly why the interest system is prohibited. In Section Two, various methods of financing devised by Islamic banks to comply with Islamic teaching were looked into in some detail. Section Three examined the implications of these methods of financing for both the financier and beneficiary, and their possible impact on the economy as a whole. It may be observed that Islamic financing techniques are far more interesting and complex than conventional banking. Even in the case of deposit mobilisation, Islamic financing techniques have been able to offer various kinds of financial products. However, it is in the area of assets rather than in liabilities that the practices of Islamic banks are more diverse and complex than those of conventional banks.

Although this chapter has not attempted a comparative study of the frequency of use of different financing techniques, it is generally believed that *Murabahah* is the most widely-used technique and that the majority of the financing provided by Islamic banks goes to short-term trade and the financing of real estate.

There is no doubt that *Murabahah* was the most popular financing technique in the early stages of the development of Islamic banks. This was for several reasons, as follows:

First, *Murabahah* is simple to apply. In terms of simplicity of application, the *Murabahah* financing technique may be best placed to compete with conventional interest based borrowing. All other Islamic financing techniques require more elaborate arrangements for their application.

Second, it was possible to get higher returns on depositors' money using this technique, and in their initial stages of establishment and development. Islamic banks required higher returns in order to build up their confidence (Ahmad, A. 1993).

However, it should be borne in mind that the dynamics of contemporary Islamic banking change at a fast rate under market pressure. Hence, it may be that the composition of the financing techniques used by Islamic banks is also undergoing a significant change.

These techniques offer a number of feasible alternatives to the western-style mortgage system, which can be used in the area of housing finance.

Nevertheless, there are disadvantages as well as advantages with each of these financing techniques. For instance, under *Murabahah* and *Bay'ajil* the capital provider would be wise to adopt extra precautionary measures such as mortgages since the client faces no penalties for delayed repayment.

Thus, each of the financing techniques has its own particular profile. This makes it possible to see that the capital provider must select his preferred mode of financing according to the nature of the enterprise, and that the complexity and variety of banking techniques that have grown in response to Islam ensure him a great flexibility of choice.

CHAPTER FOUR

DESIGN OF THE STUDY

4.0 INTRODUCTION

This chapter will consider four aspects of the study design: the study sample will be described, the features of the questionnaires used in the study will be discussed and their preparation and the conduct of the pilot study reported, the selected data collection methods will be presented and finally, the methods used in analysis and tabulation of the collected data will be explained. Hence, this chapter is organised into four main sections, together with a conclusion, as follows:

1. The Sample.
2. The Questionnaires.
3. Data Collection.
4. Analysis and Tabulation of Data.
5. Conclusion.

4.1 THE SAMPLE

This section is divided into four parts: the first part presents a discussion of the sampling method, while the second part describes the area of the study. Part three presents a discussion regarding the sample size and finally, part four deals with the limitations of the sample population.

4.1.1 SAMPLING METHOD

As this study is for research purposes, the sample was chosen at random from Saudi citizens who had already received loans from the REDF (i.e. borrowers) and those currently seeking REDF loans (i.e. loan seekers). In other words, the target population under study were those people who already had REDF loans and those attempting to obtain a loan in order to build a residence.

The Systematic Sampling Technique (SST) was used. In SST, each and every unit of the population has an equal chance of being selected. This method was chosen due to limited resources and the fact that no reliable list of names of the population was available. The city of Jeddah was selected for the study, based on several criteria which will be discussed below.

4.1.2 AREA OF THE STUDY

The sample was drawn from the population of REDF borrowers and loan seekers in Jeddah, a city which has been transformed in the last fifty years from a mud-walled town of 25,000 inhabitants to an international metropolis with a population of over one and a half million and a corresponding growth in the number of dwelling units.

At present, modern buildings are being constructed, representing a radical shift from mud buildings. Jeddah, like most cities in Saudi Arabia, is growing rapidly and expanding geographically at a great rate. In addition, like many other cities and villages in the Kingdom of Saudi Arabia, Jeddah has witnessed a great improvement in the quality of construction during the last twenty years.

Limiting the study to Jeddah city raises the question of representation, or in other words to what extent this city is representative of the total population. Since the population of Saudi Arabia is relatively homogeneous in terms of ethnicity, language, religious affiliation, etc., any segment of the population should be a fairly accurate representation of the population as a whole. Furthermore, the representation of that segment of the total population affected by the fund programme will be even greater, partly because of the conditions attached to REDF loans. It is mostly adult citizens over the age of twenty-one years, usually married, who share the same interest in obtaining REDF loans and probably the same aspiration to build their own homes. Hence, homogeneity among all REDF programme recipients is considerable.

4.1.3 SAMPLE SIZE

A successful survey generally requires a large sample in order to include a cross-section of the population, adequately reflecting any differences which might exist in the total population, and to allow estimation of the incidence or prevalence of any relatively rare phenomena. Undoubtedly, small samples and poor responses negatively affect the final results of a survey.

A sample is a small selected portion of the population. The availability of resources is a primary factor in determining sample size. Another basic factor in determining sample size is that results from large samples do not vary as much as results from small samples. A large sample, however, was beyond the scope and nature of this study, particularly in view of time and resource constraints.

At this point, it is important to stress that a small sample can provide a fair representation of the total population, especially if it is homogeneous, as noted by Pourcher:

“...the accuracy of the inquiry will depend primarily upon the representativeness quality of the sample: in a homogeneous population the sample may be extremely small, whereas in a heterogeneous population a larger sample may be necessary” (quoted in Al-Saati, 1987, 31).

With respect to the size of the sample of this study, it was small enough to fit within the practical time limitations. At the same time, it was large enough to reflect potentially significant differences between sub-groups of the target population within the sample.

Four hundred cases from each group (borrowers and loan seekers) were selected randomly to ensure that the results obtained would be representative of the population. Thus, the sample consisted of 800 cases, involving the distribution of 800 questionnaires, as shown in Table 4.1 below.

Table 4.1
The Sample Size of the Study

| No. | Category | Sample size |
|-------|--------------|-------------|
| 1 | Borrowers | 400 cases |
| 2 | Loan seekers | 400 cases |
| TOTAL | | 800 cases |

4.1.4 THE LIMITATIONS OF THE SAMPLE POPULATION

The limitations of the sample population taken for this study are listed, as follows:

1. The survey was conducted in the city of Jeddah. Other cities and villages were excluded.
2. Saudis living overseas for any purpose were excluded.
3. Saudi women were excluded, due to cultural considerations.
4. Mentally ill or handicapped Saudis, or those incarcerated during the period of the interview section of the study were excluded.

Aside from these limitations, the results of the survey are generally applicable to the whole country, based on the fact that Saudi society is homogeneous, as previously mentioned.

4.2 THE QUESTIONNAIRES

This section is divided into five parts. The first part outlines the primary goals of the questionnaires. Parts two and three describe the preparation of the questionnaires and the pilot study respectively. The fourth part discusses the questionnaires' reliability. Finally, the fifth part relates to the number of questions which were used in the questionnaires.

4.2.1 PRIMARY GOALS OF THE QUESTIONNAIRES

It was deemed appropriate to collect the required data by means of a sample survey of borrowers and loan seekers, primarily because of the paucity of available data from the REDF.

The instruments used were questionnaires addressed to people who had sought or were seeking to obtain a loan to build a house. Those who had already received REDF loans (borrowers) were distinguished from those still seeking a loan to build a house (loan seekers). Separate questionnaires were addressed to each of these categories of respondents.

The main goals of the questionnaires were to:

1. collect the required data to test the hypotheses of this study;
2. obtain statistics of a descriptive nature, such as frequencies of cases;
3. determine the opinions and attitudes of respondents towards certain subjects related to financial matters;
4. seek opinions regarding some Islamic housing financing methods.

4.2.2 PREPARATION OF THE QUESTIONNAIRES

The preparation of the questionnaires involved many drafts. The first drafts of the two questionnaires were drawn up in English in the winter of 1995 and reviewed by the researcher's academic supervisor, Professor Rodney Wilson of the Department of Economics at the University of Durham. The questionnaires were quite lengthy, some areas proving problematic, with several questions needing to be removed and additional ones incorporated.

Modifications were made, and the second drafts were reviewed by Miss Cathy Thompson of the Information Technology Service of Durham University, as well as by the research supervisor. However, both considered that certain parts of the questionnaires required further modification. Cathy Thompson recommended the following workbook: *Questionnaire Design: A Practical Introduction*, developed by

Noel Wilson and Sally McClean. Accordingly, the researcher read the workbook and incorporated ideas into the design of the questionnaire for this study.

The third drafts of the questionnaires were translated into Arabic by an English/Arabic translator. Copies of the questionnaires were then distributed to members of the Economics Department of King Abdulaziz University, particularly those with experience in questionnaire design. The Department members were informed of the purposes of the survey and requested to comment on the clarity and comprehensibility of the questions.

Additional modifications were suggested and incorporated into the fourth drafts of the questionnaires. These fourth drafts were reviewed by professors in the Statistics Department at King Abdulaziz University, and their notes and comments were taken into account to improve the wording of the questions. In addition, these professors agreed that the SPSS (Statistical Package for Social Science) program could be used for statistical analysis, which would allow the researcher to make a correlation between the variables.

Because the final versions of the questionnaires were in English, a language not understood by the prospective respondents, the questionnaires were then translated back into Arabic. The translation was checked by an independent native Arabic speaker.

4.2.2.1 THE PILOT STUDY

The pre-testing of the questionnaires was carried out exactly as it would be performed in the main study. Thirty cases from each group (borrowers and loan seekers) were selected randomly. They were then interviewed using the fourth draft of the questionnaire for the pilot study.

The purpose of the pilot study was to:

1. test the ability of the questionnaires to do the job for which they were designed;
2. improve the clarity of any questions which may have been vague or difficult for respondents to answer;
3. reduce the number of questions with an open-ended format, substituting questions with appropriate response categories to facilitate data analysis;
4. reveal any weaknesses in the questionnaires and improve their organisation;
5. measure the length of time taken to answer the questions;
6. identify subjective questions.

The researcher noted any ambiguity, misunderstanding, or sensitivity that occurred.

Some respondents sought clarification on certain items, which was immediately given. In addition, the responses of the reviewers were used to improve the wording of the questions.

Reservations by respondents were noted, particularly if they avoided answering certain questions, e.g. those about monthly income and number of dependants.

The positive reaction of respondents of the pilot study toward the questionnaires and any interesting comments were noted and taken as an indication that the questionnaires were meaningful and successful.

The results of the pilot study were, then, used to construct the final questionnaires. For example, it was decided that sensitive and personal questions, especially those dealing with financial matters, should only require the respondent to choose a single answer from a selected list of broad categories, rather than to give detailed information.

To make the questionnaires easy to complete, it was mostly a matter of simply ticking boxes. In other words, most questions were multiple choice questions. The questions were also arranged sequentially.

A covering letter was attached explaining the procedure for completing the questionnaires and advising that the survey would be used for independent research only. Respondents were briefed on the purpose of gathering the information and were requested to co-operate by providing accurate replies to all questions. The statement, “Your replies are anonymous and all information will be treated as strictly confidential”, was included in the covering letter, in order to encourage respondents to answer all the questions.

Final versions of the two questionnaires were designed, one for REDF loan borrowers, and another for those seeking REDF loans, with versions in both English and Arabic.

4.2.3 QUESTIONNAIRE RELIABILITY

In line with the recommendations of Hill and Kerber (1957, 64: quoted in Al-Mizjaji, 1982, 67) the following measures were taken in this study in order to maximise the reliability of questionnaire items:

1. The two questionnaires had a primary subject, seeking only information which could not be obtained from non-survey data.
2. The two questionnaires requested only data essential to that subject.

3. Respondents were given clear instructions on how to answer each question.
4. Questions were objectively constructed, with no hint of desired responses.
5. Questions were presented in good psychological order, proceeding from general to specific responses.
6. Embarrassing questions were avoided.

These are the characteristics of a reliable questionnaire, which were very carefully followed during the construction of the questionnaire.

4.2.4 NUMBER OF QUESTIONS

Two questionnaires were used in the survey, one for REDF borrowers, and the other for REDF loan seekers. The two questionnaires contained thirty-one questions altogether. Besides general information, the questionnaires sought information on specific financial matters.

The questionnaire for REDF borrowers consisted of ten questions, while that for REDF loan seekers consisted of twenty-one questions. A greater number of questions were directed at the loan seekers because borrowers were already in possession of loans, and therefore houses. In contrast, loan seekers had neither (loans nor houses) and thus faced a greater problem. Consequently, their answers were more important in relation to this study, since the major problems addressed were those facing this particular group of the population.

The original versions of the questionnaires are provided in Appendices A.

4.3 DATA COLLECTION

This section is divided into two parts. The first one describes the methods used for data collection. The second part discusses the elimination of errors in the data collection.

4.3.1 THE METHODS USED FOR DATA COLLECTION

Interviews were used for collecting most of the data. However, questionnaires were handed out to some respondents who expressed a preference for this method.

There were several reasons for adopting the interview technique for gathering most of the data for this study. They are listed below:

1. A face to face interview provides the interviewer with the opportunity to eliminate any possible misunderstanding of questions by respondents.

2. Some of the questions required explanation, in particular those about Islamic housing financing methods, since they contained information new to most of the loan seeker respondents.
3. Some respondents were illiterate and the questionnaires would not have generated any information in such cases.
4. Interviews help to reduce the number of missing answers.

Since the mail survey technique is well known for its poor response rate, it was thought desirable to develop some kind of personal contact with the respondents.

To summarise, most of the data required to test the hypotheses of this study was generated by face to face interviews.

The interviews were conducted by the researcher and a team of seven volunteers. The status of the interviewers in higher education reduced suspicion among the respondents about the questions. Each interviewer was asked to interview about ninety people. Hence, the interviewers were asked to interview a total of about six hundred and thirty people ($7 \times 90 = 630$). The researcher planned to interview about one hundred and seventy people.

Some of the interviewers were acquainted with some of the borrowers and loan seekers or knew some of the managers of certain public establishments, which made it easier to interview employees who were suitable for the survey.

It should be pointed out here that some managers requested a letter of authority from King Abdulaziz University and then required a considerable amount of time to schedule the interviews.

In order to meet the requirements of the managers, several copies of recommendation letters were obtained from the Economics Department at King Abdulaziz University. Each included brief information about the investigator: his name, his job, the title of his research and encouragement to help him. These letters provided protection against any suspicion and were presented to some respondents before conducting the interview.

All of this increased the time required for data collection. Nevertheless, interviewing employees in their place of work simplified the data collection considerably, as the alternative was conducting the interviews in the homes of respondents, which were obviously spread around different parts of the city of Jeddah.

Meanwhile, in order to overcome difficulties, the help of several mediators or third-parties was sought to facilitate arranging meetings with the respondents. These mediators included relatives of the respondents, close friends, colleagues and employers.

Efforts were made to allow respondents to consider their answers for as long as they needed. The interview schedule was designed to allow respondents sufficient time to give a considered response to the questions. Hence, the interviewers did not rush the respondents during the interview, especially when answers involved a calculation or when respondents were answering rank order questions, since the options were superficially similar to each other and it may have been difficult to detect the difference between them.

Most respondents completed the questionnaires at their workplace, but some completed them in their homes. A third group was contacted at home by telephone. The main reason for this was that they were very busy.

It should be pointed out that there were several interruptions during some interviews, since they were conducted at work. On average, each interview lasted about fifteen minutes.

Almost all interviews went smoothly, with some respondents seeming very friendly and co-operative. However, twenty-five respondents refused to complete the questionnaires.

After the interview, the questionnaire was carefully checked by the investigator in order to ensure that all questions had been properly answered.

Overall, due to delays in arranging interviews and the unenthusiastic attitudes of some respondents, data collection took over three months to complete. The sample survey was conducted during the period from June to October 1995. It must be emphasised that despite the tremendous efforts of the researcher and the team of interviewers, only two hundred and sixty-three questionnaires were returned by the first group (borrowers) and two hundred and sixty-five by the second group (loan seekers).

Thirteen borrowers' questionnaires were discarded (nine incomplete and four inconsistent in their responses). Fifteen loan seekers' questionnaires were discarded (seven incomplete and eight inconsistent in their responses) as shown in Table 4.2 below.

Table 4.2
Discarded Questionnaires

| No. | Category | Discarded | | Total |
|-------|--------------|------------|--------------|-------|
| | | Incomplete | Inconsistent | |
| 1 | Borrowers | 9 | 4 | 13 |
| 2 | Loan seekers | 7 | 8 | 15 |
| TOTAL | | 16 | 12 | 28 |

To sum up briefly, twenty-eight questionnaires were rejected. The survey yielded two hundred and fifty questionnaires with all questions answered, for each sample category, as shown in Table 4.3 below.

Table 4.3
Questionnaires Used

| No. | Category | Collected | Discarded | Yielded |
|-------|--------------|-----------|-----------|---------|
| 1 | Borrowers | 263 | 13 | 250 |
| 2 | Loan seekers | 265 | 15 | 250 |
| TOTAL | | 528 | 28 | 500 |

Five hundred cases were finally found suitable to be considered for this study. In other words, out of the eight hundred borrowers and loan seekers (400 borrowers and 400 loan seekers) approached, five hundred (250 borrowers and 250 loan seekers) responded to the questionnaires. This constitutes 62.5% of the original number of borrowers and loan seekers (800 cases) approached (see Table 4.4). The return rate could be considered acceptable for statistical testing. Having such a rate of return does not necessarily mean that the sample is biased, because there was no known systematic reason for non-response.

Table 4.4
Target and Actual Sample Size of the Study

| No. | Category | Sample size | | Return Rate |
|-------|--------------|-------------|--------|-------------|
| | | Target | Actual | |
| 1 | Borrowers | 400 | 250 | 62.5% |
| 2 | Loan seekers | 400 | 250 | 62.5% |
| TOTAL | | 800 | 500 | 62.5% |

4.3.2 ELIMINATION OF ERRORS IN THE DATA COLLECTION

Considerable care was taken in data collection. Errors which affect data collection can be divided into two groups as follows:

- I. **Sampling Errors:** those which occur because data is gathered from a sample rather than from an entire population;
2. **Non-sampling Errors:** it is difficult to provide a comprehensive list of sources of non-sampling errors. However, these can be broadly divided into four categories, as follows:
 - a) **Conceptual error:** due to survey design, definitions or specifications.
 - b) **Non-response error:** due to no coverage, lack of respondents' co-operation or collecting agents' omissions, illegible entries, lost records, etc.
 - c) **Response error:** where description of the same situation is different on different occasions, or different if given by two different people.
 - d) **Assessment error:** due to a lack of environmental control, poorly calibrated measuring instruments, a badly designed questionnaire or improper scrutiny.

Attempts were made to control all the above non-sampling errors. Respondents were assured that the information would remain confidential. Some influential intermediaries assisted in data collection.

4.4 ANALYSIS AND TABULATION OF DATA

The researcher used the SPSS program for analysis of data. The data collected was tabulated in statistical tables and presented in the form of statistical charts and diagrams. Such presentation helps the reader to appreciate visually the salient characteristics of the data and can also suggest the type of statistical treatment.

4.4.1 STATISTICAL TECHNIQUES

Following the completion of all questionnaires in October 1995, the raw data was coded into a standard format and entered on the computer. Closed-ended questions were assigned mutually exclusive categories representing each variable in the study. The codes were equally spaced and, in order to preserve as much of the original detail in the data as possible, exhaustive categories were established for each question. After the creation of a code manual, each questionnaire was coded and the data was then entered into an SPSS data file. Each measure was evaluated using univariate analysis and an

Multivariate analysis when appropriate. The data was tabulated using the SPSS programme. Presentation and analysis of the data involved the following:

4.4.2 ONE WAY TABULATIONS

One way tabulations were used to study frequency and percentage of respondents who answered certain questions. Distribution tables were utilised to:

- A. display the distribution of responses to each variable in the survey;
- B. detect wild codes;
- C. compare different groups' responses.

These descriptive statistics were very helpful in presenting most data in a relatively simple way that could be understood by the non-researcher. However, cross-tabulation technique was also incorporated in order to combine relevant statistics with explanatory material (Alreck and Settle, 1985, 324). It should be mentioned in this context that frequency tables alone do not include enough information for the purposes of the study, as one of the aims of the thesis is to define relationships among several variables. Norusis (1990) states that:

“Frequency tables, bar charts and histograms are not of much help in answering questions, like those questions that involve relations among several variables”. (p. 105).

4.4.3 CROSS-TABULATION

Cross-tabulation was mainly used to test the level of significance between the dependent variable and each independent variable. This helped to identify contributing measures as well as to eliminate irrelevant ones.

In the cross-tabulation test, caution must be exercised in interpreting data when the percentage of cells with an expected frequency of less than 5 is more than 20% of the total. The researcher had to combine the classes within variables. Bryman and Cramer (1990) state that:

“chi-square should not be used when any expected frequency is smaller than 1 or when more than 20 per cent of the expected frequencies are smaller than 5. In this situation, it may be possible to increase the expected frequencies in a category by combining them with those of another.” (p. 122)

Thus, for this study cross-tabulation is used for comparative purposes to examine the independence of two nominal variables in order to analyse the results of the data. The chi-square method of cross-tabulation, which is in fact a test of independence, was used where appropriate. The chi-square was used to test the significance of the difference

between the frequency obtained by the researcher and the frequency anticipated for the random proposition. Chi-square tests provided a simple way to answer many questions relating to counting data with one or two variables of classification, since all that was needed to carry out these tests was the ability to calculate a set of expected frequencies with which the observed frequencies can be compared. Chi-square was used to test the agreement between hypothesis and observation.

4.4.4 HYPOTHESES

The null hypothesis (H_0) is a hypothesis containing no differences. It is used mainly for the purpose of rejection. If and when rejected, the alternative hypothesis (H_1) may be said to be true. The alternative hypothesis is the actual statement of the experimenter's research hypothesis. That is to say, the results of the statistical tests (for cross tabulated data) are examined by rejecting the null hypothesis H_0 in favour of the research (alternative) hypothesis H_1 , if these statistical techniques yield a value whose associated probability of occurrence under H_0 is less than, or equal, to the probability or significance level (P less than 0.05). Large values of chi-square indicate that a systematic relationship of some sort exists between the variables. This, however, depends in part upon degrees of freedom which vary with the number of rows and columns. These are important because the probability of obtaining a specific chi-square value depends on the number of cells in the table.

By its nature, this statistic will be large in situations where the observed and expected frequencies are very different, and it will be small when the observed and expected frequencies are similar. A value of zero can occur only if all the observed frequencies are exactly equal to their expected values. Thus, the chi-square statistic is an objective measure of agreement between the observed and expected frequencies.

In passing it is noteworthy that, when calculating the chi-square test for a 2X2 table, it is common to make use of what is called "Fisher's exact test" with the idea of improving the chi-squared approximation for the significant level of the data.

4.4.4.1 CHI-SQUARE:

The hypothesis that two variables of a cross-tabulation are independent of each other is often of interest to researchers. Two variables of definition are independent if the probability that a case falls into a given cell is simply the product of the marginal probabilities of the two categories defining the cell.

A statistic often used to test the hypothesis that the rows and columns variables are independent is the Pearson Chi-Square. It is calculated by summing over all cells the squared residuals divided by the expected frequencies.

4.5 CONCLUSION

This chapter has explained the design of the empirical research conducted in Jeddah, Saudi Arabia. A detailed account has been given of the sample, the design of the two questionnaires, data collection and approach to the analysis and tabulation of data. The responses to the questionnaires will be presented in the next two chapters, beginning in Chapter Five with responses obtained from those who have already received REDF loans.

CHAPTER FIVE

ANALYSIS OF BORROWERS' RESPONSES

5.0 INTRODUCTION

This chapter presents the findings of the survey administered to the REDF borrowers. The aim of this chapter is to study their responses and analyse their attitudes towards certain financial matters. The questions used can be divided into five groups, as follows:

The first group consists of the first three questions which relate to background information on the respondent: marital status, number of dependants and income level respectively.

The second group is made up of two questions, 4 and 4A, which relate to the construction cost of housing.

The third group comprises two questions, 5 and 5A, which ask the respondents to indicate whether they have any overdue annual repayments and if so, to indicate the reasons for this.

The fourth group is composed of two questions, 6 and 7, which attempt to ascertain the respondents' attitudes towards repaying by monthly direct debit.

The fifth group consists of question 8 only, which asks the respondents to indicate their opinions concerning their awareness of the fact that their own prompt repayments would reduce the waiting period for obtaining REDF loans for others who seek them.

Accordingly, the main body of this chapter is divided into six sections, corresponding to the above groups. Within each group, frequencies and percentages of responses are analysed for each question. The final section will present the conclusion. Therefore, the main sections of this chapter are headed as follows:

1. Respondents' background information.
2. Construction cost.
3. Delayed repayments.
4. Repayment by monthly direct debit.
5. Respondents' attitude towards prompt repayment.
6. Conclusion.

5.1 RESPONDENTS' BACKGROUND INFORMATION

This section analyses the character of the sample in terms of marital status, number of dependants and income level.

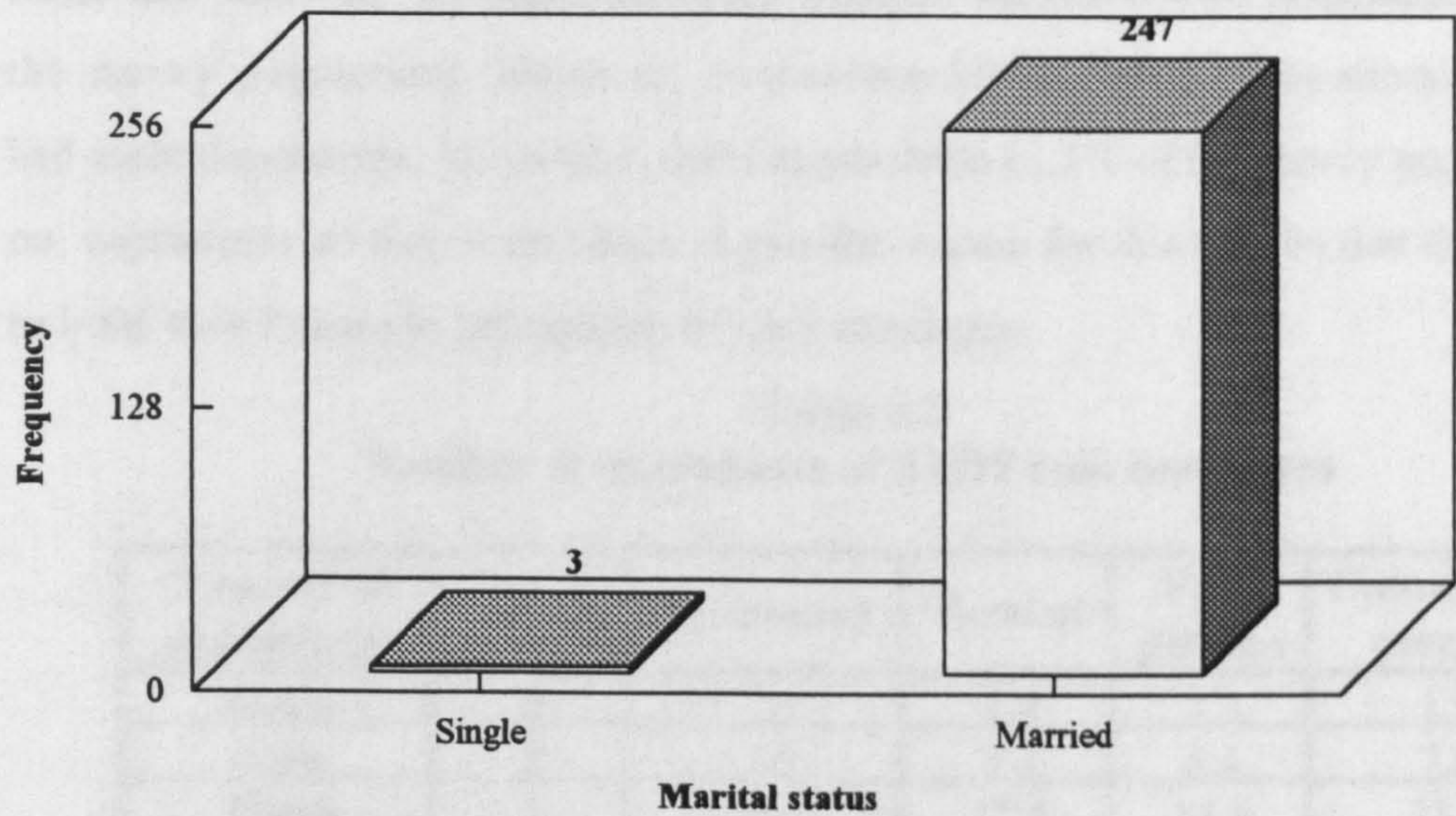
5.1.1 MARITAL STATUS OF REDF LOAN HOLDERS

The first question dealt with the marital status of REDF loan holders (borrowers). Table and Figure 5.1 present the responses, as follows:

Table 5.1
Marital status of REDF loan borrowers

| Marital status | Value | Frequency | Percent | Valid percent | Cumulative percent |
|----------------|-------|------------|------------|---------------|--------------------|
| Single | 1 | 3 | 1.2 | 1.2 | 1.2 |
| Married | 2 | 247 | 98.8 | 98.8 | 100 |
| TOTAL | | 250 | 100 | 100 | |

Figure 5.1
Marital Status of REDF Loan Borrowers



The first group consists of only three respondents (1.2% of the survey population) who were single.

The second group consists of the vast majority of respondents (two hundred and forty-seven respondents, 98.8% of the survey population) who were married. In other words, the largest percentage of loans went to people who were married, as shown in Table and Figure 5.1.

These findings may be explained by the fact that loans from the REDF are provided to any Saudi citizen who is twenty-one years old, or eighteen years of age and married. It



should be mentioned in this context that, on average, a twenty-one year old seeking an REDF loan would expect to wait seven years to obtain such a loan. As a result, by the time they receive the loan, they will be twenty-eight years of age on average, which in Saudi Arabia inevitably means that they are likely to be married. This is due to the importance of marriage in the religion and culture of Saudi Arabia where sexual relationships are prohibited outside marriage and religious laws encourage people to marry. The Prophet (pbuh) said:

O young people: whoever among you is able to marry, should marry, and whoever is not able to marry, is recommended to fast, as fasting diminishes his sexual power. (Khan, 1985, vol. 7, p.4)

Another possible explanation for the above finding could be that most of the people who want to build homes wish to do so to shelter their families. In addition, some single people applying for loans could include those planning to marry in the near future.

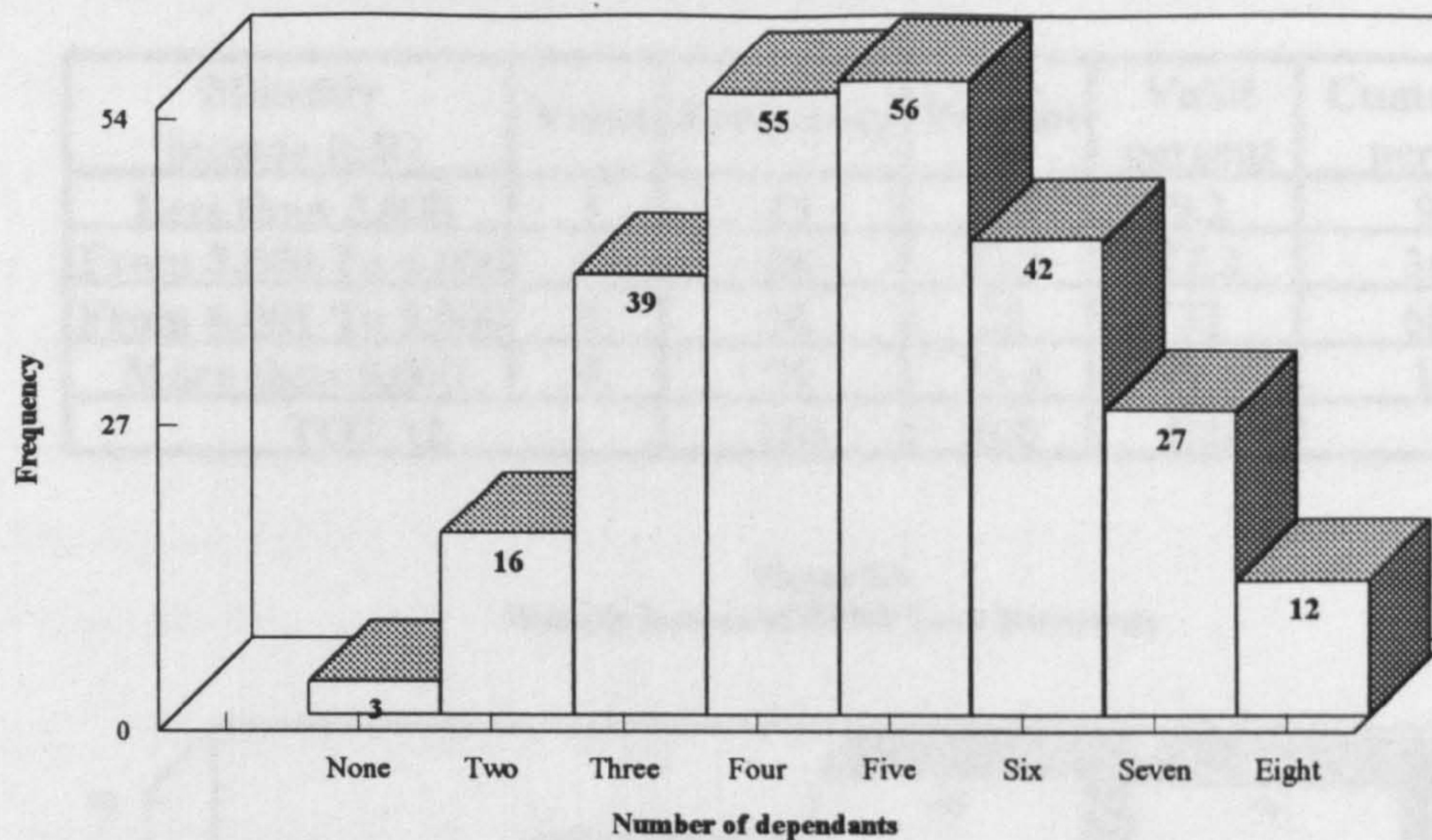
5.1.2 NUMBER OF DEPENDANTS OF REDF LOAN HOLDERS

Question two studied the family size (number of dependants) of REDF loan holders. Most had three to six dependants (one hundred and ninety-two respondents, 76.8% of the survey population). However, twelve respondents (4.8% of the survey population) had eight dependants. In contrast, three respondents (1.2% of the survey population) had no dependants as they were single. A possible reason for this may be that they preferred to build their houses in anticipation of their marriages.

Table 5.2
Number of dependants of REDF loan borrowers

| Number of dependants | Value | Frequency | Percent | Valid percent | Cumulative percent |
|----------------------|-------|-----------|---------|---------------|--------------------|
| None | 0 | 3 | 1.2 | 1.2 | 1.2 |
| Two | 2 | 16 | 6.4 | 6.4 | 7.6 |
| Three | 3 | 39 | 15.6 | 15.6 | 23.2 |
| Four | 4 | 55 | 22 | 22 | 45.2 |
| Five | 5 | 56 | 22.4 | 22.4 | 67.6 |
| Six | 6 | 42 | 16.8 | 16.8 | 84.4 |
| Seven | 7 | 27 | 10.8 | 10.8 | 95.2 |
| Eight | 8 | 12 | 4.8 | 4.8 | 100 |
| TOTAL | | 250 | 100 | 100 | |

Figure 5.2
Number of Dependants of RDEF Loan Borrowers



Sixteen respondents (6.4% of the survey population) and twenty-seven respondents (10.4% of the survey population) had two and seven dependants respectively, as shown in Table and Figure 5.2. The average number of dependants of the families surveyed (borrowers) was 4.8.

The above findings are consistent with the religion and culture of Saudi Arabia which encourages individuals to have large families. The Prophet (pbuh) said:

Marry such women as are affectionate, child-producing; and verily I shall be an instrument in increasing your members among the nations. (Hasan, A. 1982, vol. 5, p. 545, 546)

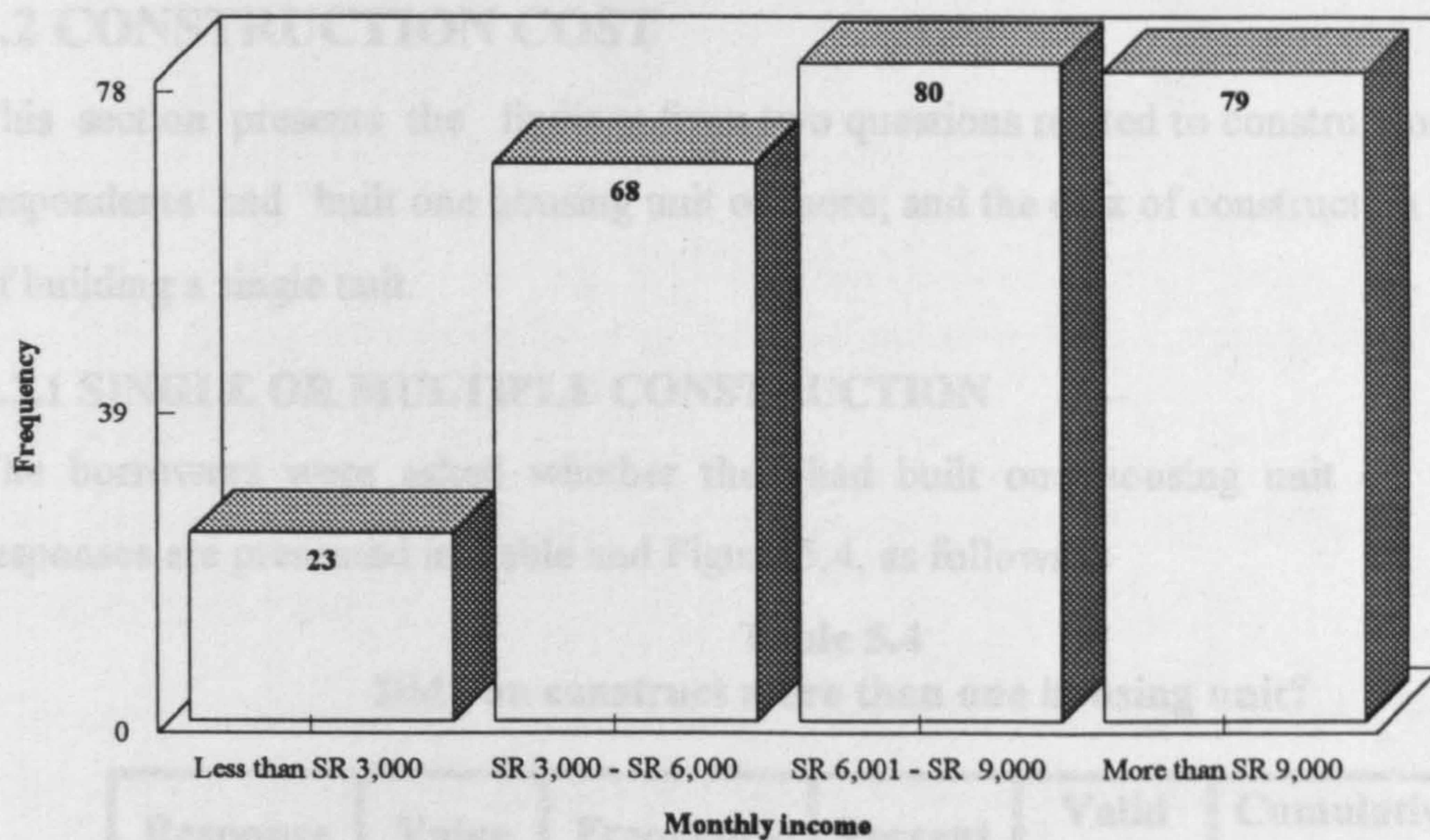
5.1.3 MONTHLY INCOME OF REDF LOAN HOLDERS

Question three relates to the data regarding monthly income level (from all sources) of the survey population. The monthly income groups were set to cover a range from less than SR 3,000 to greater than SR 9,000 at intervals of 3,000. This breakdown could show how the REDF loans are distributed by monthly income level. If the REDF were primarily reaching low income people, then there would be a higher percentage of loans at the top of Table 5.3. If the more wealthy respondents were primarily the recipients, the greater percentage would be seen at the lower end of the table. However, from Table and Figure 5.3 it can be seen that loans were spread across the four groups, as follows:

Table 5.3
Monthly income of REDF loan borrowers

| Monthly income (SR) | Value | Frequency | Percent | Valid percent | Cumulative percent |
|---------------------|-------|------------|------------|---------------|--------------------|
| Less than 3,000 | 1 | 23 | 9.2 | 9.2 | 9.2 |
| From 3,000 To 6,000 | 2 | 68 | 27.2 | 27.2 | 36.4 |
| From 6,001 To 9,000 | 3 | 80 | 32 | 32 | 68.4 |
| More than 9,000 | 4 | 79 | 31.6 | 31.6 | 100 |
| TOTAL | | 250 | 100 | 100 | |

Figure 5.3
Monthly Income of REDF Loan Borrowers



The first group consisting of only twenty-three respondents (9.2% of the survey population) had a monthly income of less than SR 3,000.

The second group consisting of sixty-eight respondents (27.2% of the survey population) had a monthly income of between SR 3,000 and SR 6,000.

The third group including eighty respondents (32% of the survey population) had a monthly income of between SR 6,001 and SR 9,000.

The fourth group consisting of seventy-nine respondents (31.6% of the survey population) had a monthly income of more than SR 9,000.

There was no significant difference in the number of cases for each income group. However, as can be seen from Table and Figure 5.3, the number of cases in the fourth group (80 cases) was almost the same as in the third group (79 cases). Respondents in both of these groups had a monthly income of more than SR 6,000. In addition, neither

the fourth group nor the third group was the minority group. As a consequence, many borrowers (one hundred and fifty-nine respondents, 63.6% of the survey population) had a monthly income of more than SR 6,000. One possible explanation could be that most borrowers (one hundred and seventy-five respondents, 70% of the survey population) had built more than one housing unit (as shown in Table and Figure 5.4), living in one and renting out the other(s) to increase their income.

In conclusion, it seems to be the case that every economic group has benefited from the policy of the REDF, but those in the middle and higher income groups appear to have benefited more.

5.2 CONSTRUCTION COST

This section presents the findings from two questions related to construction: whether respondents had built one housing unit or more; and the cost of construction in the case of building a single unit.

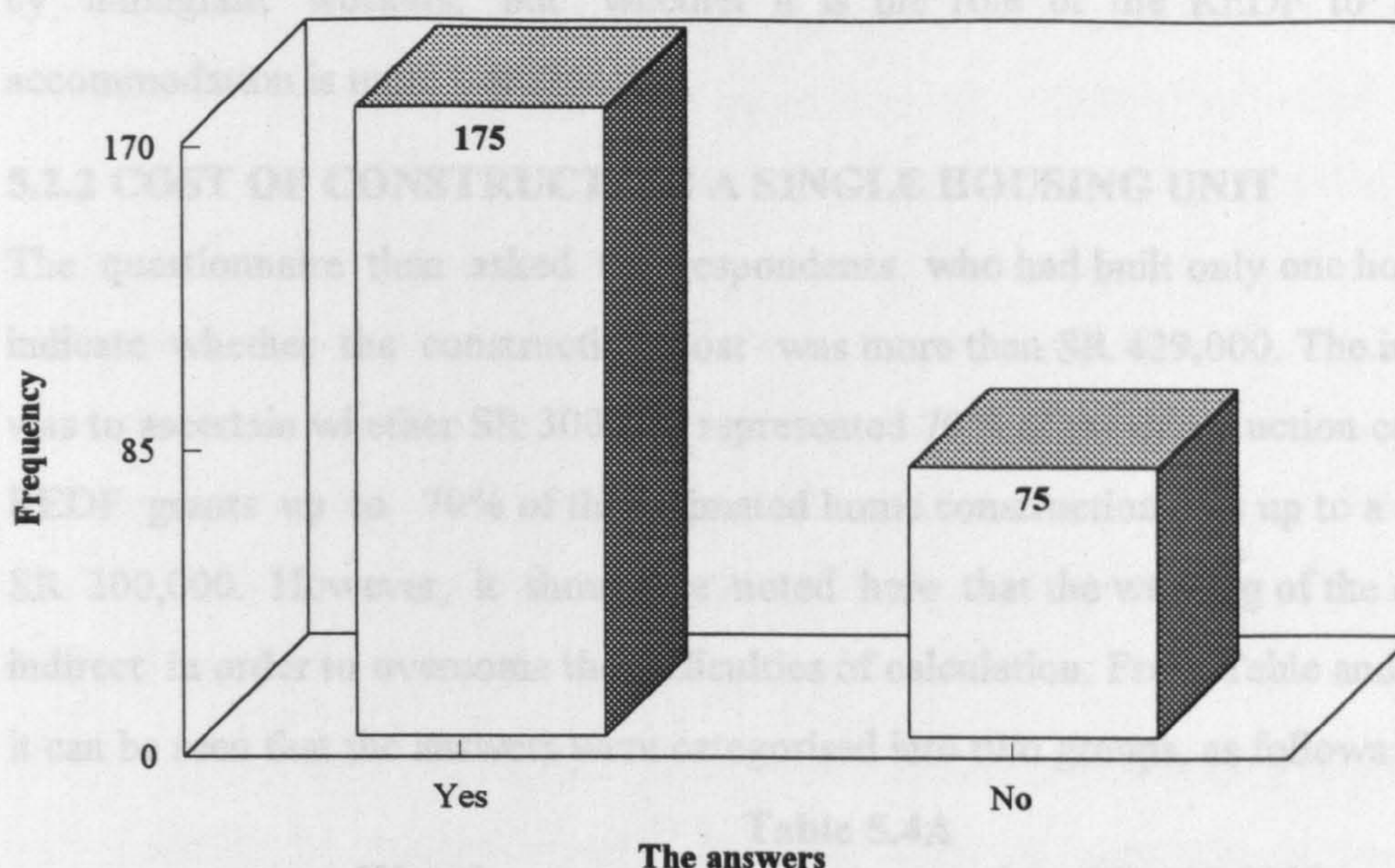
5.2.1 SINGLE OR MULTIPLE CONSTRUCTION

The borrowers were asked whether they had built one housing unit or more. The responses are presented in Table and Figure 5.4, as follows:

Table 5.4
Did you construct more than one housing unit?

| Response | Value | Frequency | Percent | Valid percent | Cumulative percent |
|----------|-------|-----------|---------|---------------|--------------------|
| Yes | 1 | 175 | 70 | 70 | 70 |
| No | 2 | 75 | 30 | 30 | 100 |
| TOTAL | | 250 | 100 | 100 | |

Figure 5.4
Did you Construct more than One Housing Unit?



The first group consisting of one hundred and seventy-five respondents (70% of the survey population) said 'yes'.

The second group consisting of seventy-five respondents (30% of the survey population) said 'no'.

The replies revealed that a significant majority had built more than one housing unit. This can be explained by the fact that property is one of the best investments, as housing demand has greatly increased during the past decade or so, particularly since the Second Development Plan (1975-1980) which resulted in a great increase in foreign manpower requiring houses. This has led to a rise in house rental prices. Foreign companies contracting for project construction within certain periods must provide housing for their employees, whatever the rent. Hence, rental prices have become higher as the demand for housing has increased. In brief, a rapid population increase has created a massive demand for dwellings.

Table and Figure 5.4 indicate that seventy-five respondents (30% of the survey population) had built only one housing unit. This is likely to be because these borrowers did not have enough money to build more.

The question arises as to whether subsidised funds should be provided to those building more than one housing unit, when first time buyers have a long waiting period for funds. It can be argued that those who build housing for rent should only have access to funds

on commercial terms rather than subsidised loans. There is no reason why there should be any restriction on multiple ownership, as rented accommodation is needed, especially by immigrant workers, but whether it is the role of the REDF to finance such accommodation is more questionable.

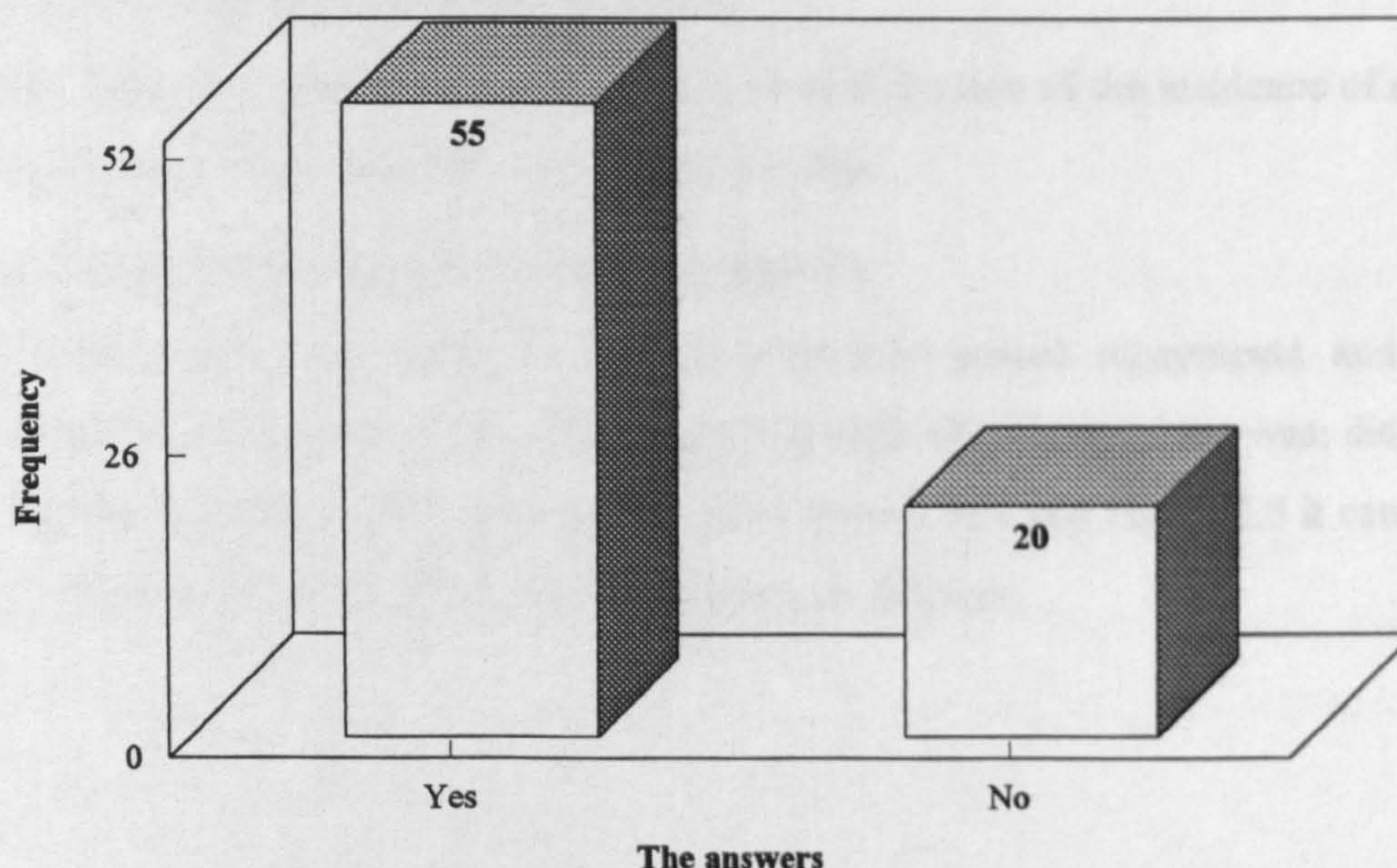
5.2.2 COST OF CONSTRUCTING A SINGLE HOUSING UNIT

The questionnaire then asked the respondents who had built only one housing unit to indicate whether the construction cost was more than SR 429,000. The intention here was to ascertain whether SR 300,000 represented 70% of the construction cost, since the REDF grants up to 70% of the estimated home construction cost up to a maximum of SR 300,000. However, it should be noted here that the wording of the question was indirect in order to overcome the difficulties of calculation. From Table and Figure 5.4A it can be seen that the answers were categorised into two groups, as follows:

Table 5.4A
Was the construction cost more than SR 429,000?

| Response | Value | Frequency | Percent | Valid percent | Cumulative percent |
|--------------|-------|-----------|------------|---------------|--------------------|
| Yes | 1 | 55 | 70 | 73.3 | 73.3 |
| No | 2 | 20 | 30 | 26.7 | 100 |
| TOTAL | | 75 | 100 | 100 | |

Figure 4.4A
Was the Construction Cost more than SR 429,000?



The first group consists of fifty-five respondents (73.3% of the survey population who had built only one housing unit) whose answer was 'yes'.

The second group consists of twenty respondents (26.7% of the survey population who had built only one housing unit) whose answer was 'no'.

In other words, it was found that in most cases (55 cases out of 75) the cost of constructing one housing unit was more than SR 429,000, of which SR 300,000 represented 69.93%. This can be taken as clear evidence of the fact that a substantial portion (often around one-third) of the construction cost must be met by the borrowers themselves. The above finding can perhaps be explained by rising construction costs. These result from imported inflationary pressures, combined with those generated domestically which have brought about a significant rise in the cost of living in Saudi Arabia. Moreover, it is widely acknowledged in Saudi Arabia that increased government spending has tended to increase inflationary pressure.

In the light of this finding, the policy that eligible citizens wishing to build their own houses should be granted up to 70% of the estimated home construction cost up to a maximum of SR 300,000, should be reviewed, as it may be necessary to change the maximum loan available.

The issue which now arises is whether the REDF should try to cover all construction costs, or whether its share of housing finance should be allowed to fall as far as each applicant is concerned. There is a choice between funding the whole construction cost for fewer houses, or funding a proportion of the purchase price for a greater number.

5.3 DELAYED REPAYMENTS

The responses analysed in this section give an indication of the incidence of overdue loan repayments, and reasons for not paying on time.

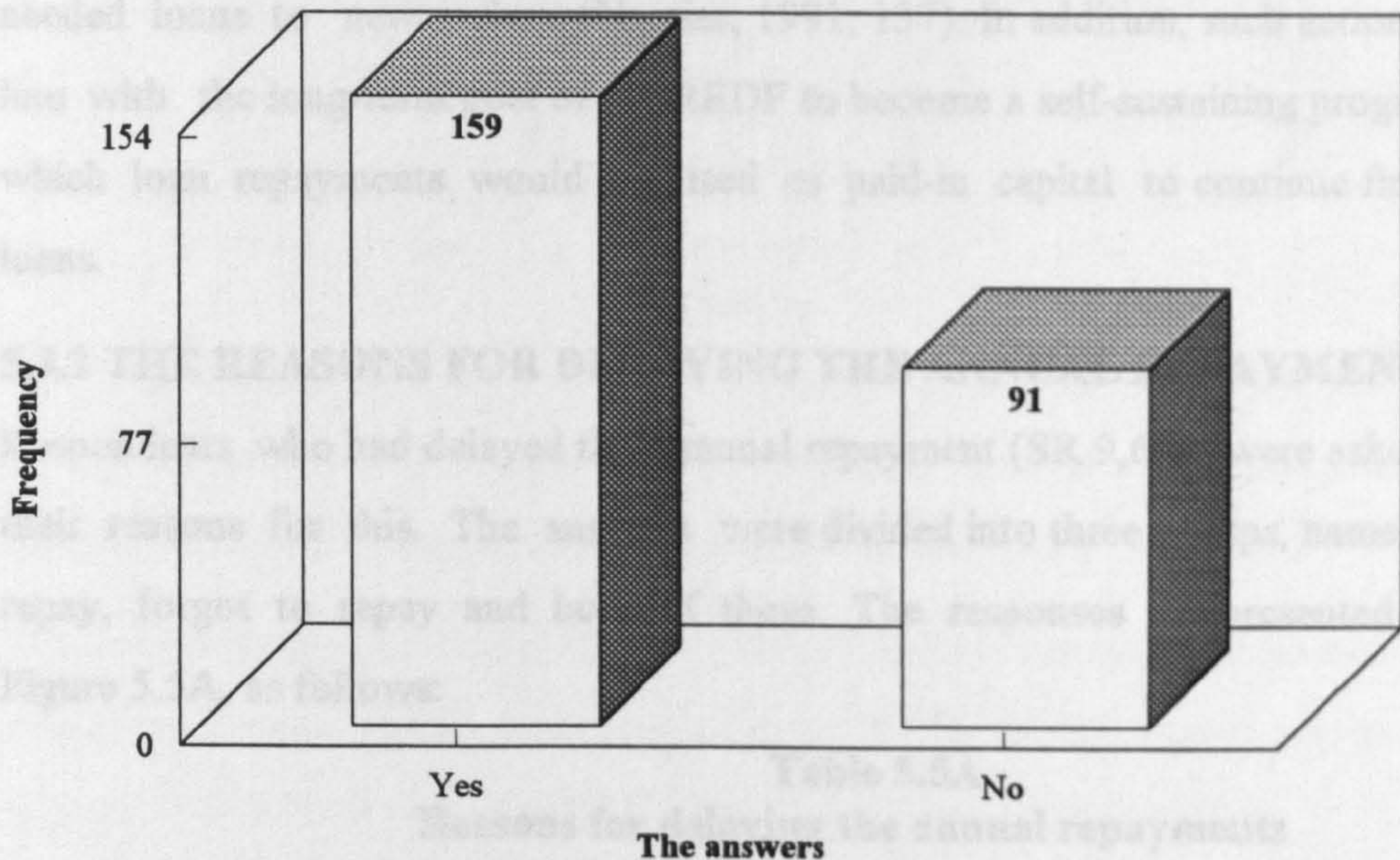
5.3.1 DELAYED ANNUAL REPAYMENTS

Question five was important since it related to annual repayments and views about delays in repayment of loan instalments. Specifically, the question was: did your annual repayment (SR 9,600) ever get delayed? From Table and Figure 5.5 it can be seen that the answers were classified into two groups, as follows:

Table 5.5
Did your annual repayment (SR 9,600) ever get delayed?

| Response | Value | Frequency | Percent | Valid percent | Cumulative percent |
|----------|-------|-----------|---------|---------------|--------------------|
| Yes | 1 | 159 | 63.6 | 63.6 | 63.6 |
| No | 2 | 91 | 36.4 | 36.4 | 100 |
| TOTAL | | 250 | 100 | 100 | |

Figure 5.5
Did Your Annual Repayment (SR 9,600)
ever get Delayed?



The first group consisting of one hundred and fifty-nine respondents (63.6% of the survey population) stated they had not always been on time with their annual repayments of SR 9,600.

The second group including ninety-one respondents (36.4% of the survey population) stated they had always been on time with their annual repayments of SR 9,600.

In the majority of cases, the answer to this question was ‘yes’, as can be seen in Table and Figure 5.5. This means that only 36.4% of the survey population were repaying the annual repayments of SR 9,600 regularly. This figure is surprisingly low and explains why the REDF is experiencing a lack of repayment and why the waiting period for obtaining the loan is longer for new REDF loan seekers.

It is noteworthy that repayments are scheduled over a twenty-five year period, with no interest on the unpaid balance. Furthermore, to encourage the borrowers to repay their loans, the REDF has initiated a policy under which the borrower will be exempt for 20%

of the amount of each annual repayment repaid within sixty days of the due date. From the above findings it can be seen that the majority of respondents did not take advantage of this 20% discount.

It is worth mentioning that some borrowers used their loans to buy other things, rather than to build houses. This may be due partly to a low educational level and a lack of information about the REDF, but it could also indicate that borrowers are deliberately abusing the system. In an attempt to overcome this difficulty, some action should be taken to protect the REDF against recipients who carelessly default and take advantage of generous government grants and a long legal process, at the expense of granting needed loans to new seekers (Nassier, 1991, 137). In addition, such action would be in line with the long-term goal of the REDF to become a self-sustaining programme under which loan repayments would be used as paid-in capital to continue financing other loans.

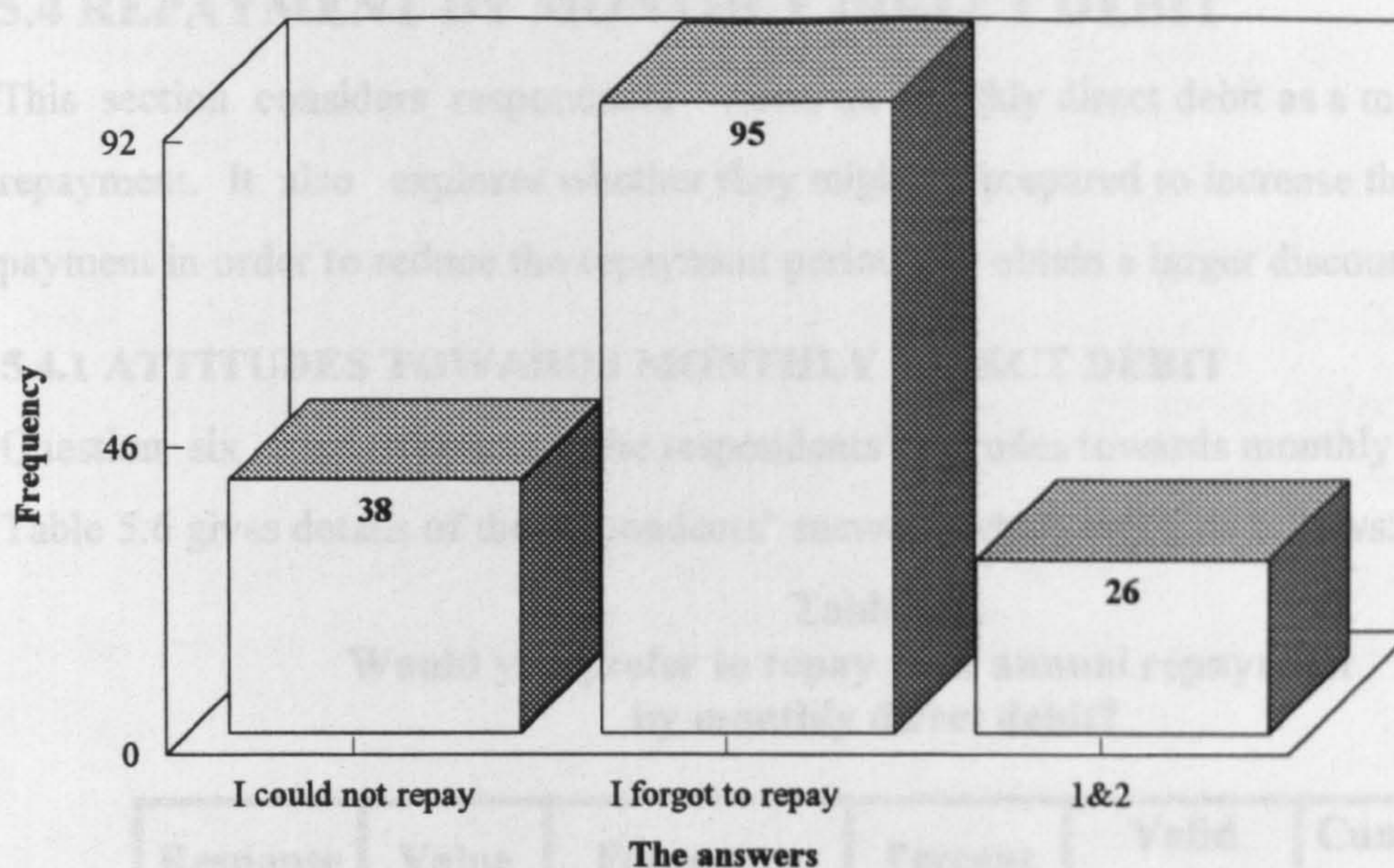
5.3.2 THE REASONS FOR DELAYING THE ANNUAL REPAYMENTS

Respondents who had delayed their annual repayment (SR 9,600) were asked to indicate their reasons for this. The answers were divided into three groups, namely: could not repay, forgot to repay and both of these. The responses are presented in Table and Figure 5.5A, as follows:

Table 5.5A
Reasons for delaying the annual repayments

| Response | Value | Frequency | Percent | Valid percent | Cumulative percent |
|---|-------|------------|------------|---------------|--------------------|
| I could not repay | 1 | 38 | 23.9 | 23.9 | 23.9 |
| I forgot to repay | 2 | 95 | 59.7 | 59.7 | 83.6 |
| I could not repay and I forgot to repay | 3 | 26 | 16.4 | 16.4 | 100 |
| TOTAL | | 159 | 100 | 100 | |

Figure 5.5A
Reasons for Delay the Annual Repayments



The first group composed of over one-fifth of respondents who had delayed their annual repayment (thirty-eight respondents, 23.9% of the survey population who had delayed their annual repayment). This group said they could not repay.

The second group consisting of nearly three-fifths of respondents who had delayed their annual repayment (ninety-five respondents, 59.7% of the survey population who had delayed their annual repayment). This group said they forgot to repay.

The third group including twenty-six respondents (16.4% of the survey population who had delayed their annual repayment). This group said that sometimes they could not repay and sometimes they forgot to repay.

Thus, it is clear from Table 5.5A that the most common reason given for late repayment was forgetting to repay (about 121 cases out of 159, 76.1% of the survey population who had delayed their annual repayment). Therefore, there is a need for the REDF authorities to make regular follow-up visits/letters, etc. to remind borrowers of their responsibility. Such information may be very helpful in providing appropriate solutions in an attempt to overcome this difficulty.

Another way to overcome the problem of repayments being overlooked, would be to introduce a system of monthly repayment by direct debit, which would take the worry out of repaying the annual repayment (SR 9,600) by spreading the instalment over the year ($\text{SR } 9,600 / 12 = 800 \text{ SR per month}$). This automatically raises the question of

whether the borrowers like the idea of repaying by monthly direct debit. This is addressed in the next section.

5.4 REPAYMENT BY MONTHLY DIRECT DEBIT

This section considers respondents' views on monthly direct debit as a method of loan repayment. It also explores whether they might be prepared to increase the direct debit payment in order to reduce the repayment period and obtain a larger discount.

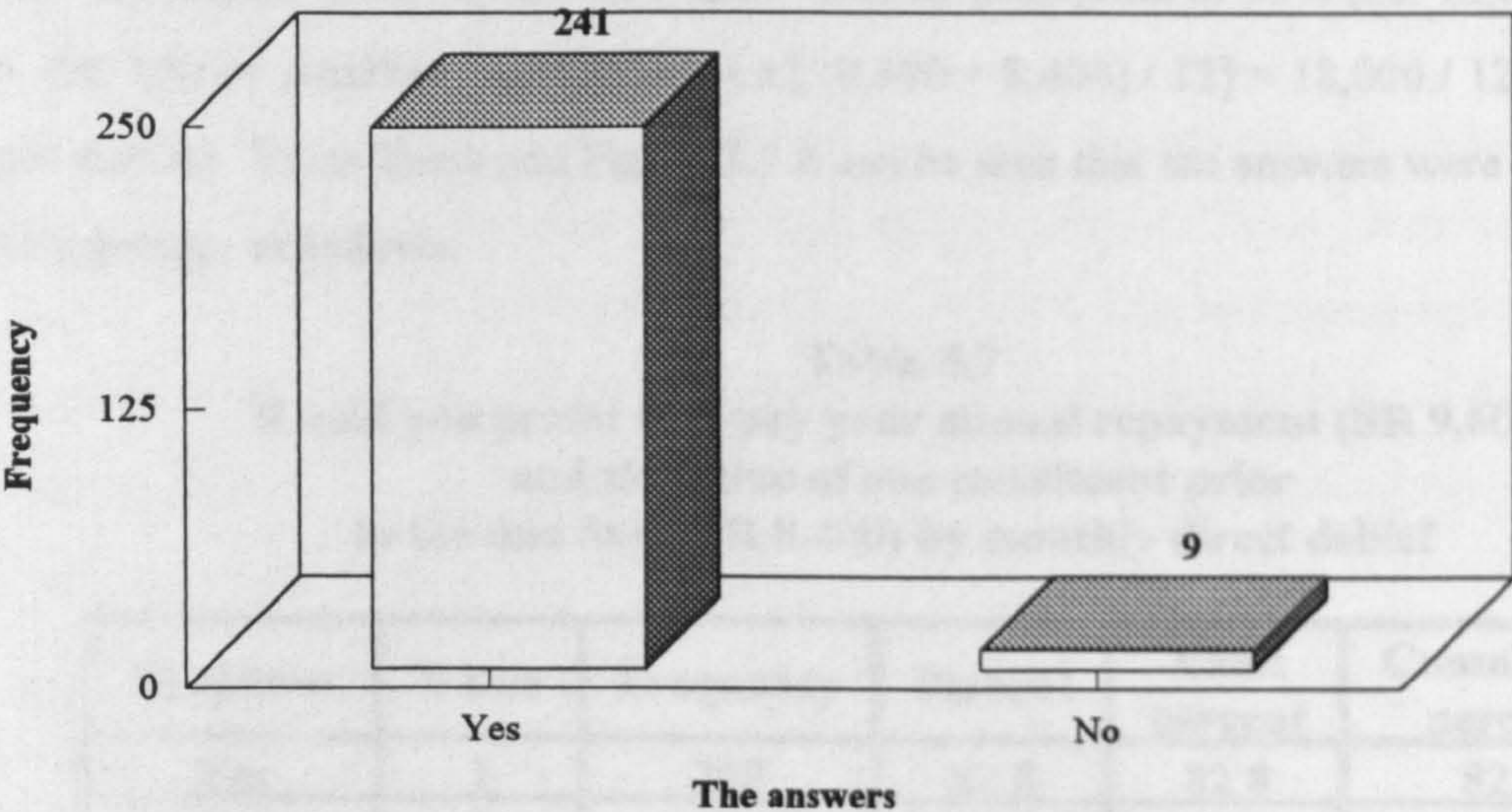
5.4.1 ATTITUDES TOWARDS MONTHLY DIRECT DEBIT

Question six tried to ascertain the respondents' attitudes towards monthly direct debits. Table 5.6 gives details of the respondents' answers, which were, as follows:

Table 5.6
Would you prefer to repay your annual repayment by monthly direct debit?

| Response | Value | Frequency | Percent | Valid percent | Cumulative percent |
|----------|-------|-----------|---------|---------------|--------------------|
| Yes | 1 | 241 | 96.4 | 96.4 | 96.4 |
| No | 2 | 9 | 3.6 | 3.6 | 100 |
| TOTAL | | 250 | 100 | 100 | |

Figure 5.6
Would You Prefer to Repay Your Annual Instalment by Monthly Direct Debit?



The positive answer was given by two hundred and forty-one respondents (96.4% of the survey population) who ticked the 'yes' box.

The negative answer was given by nine respondents (3.6% of the survey population) who ticked the 'no' box.

It was very encouraging to find that the vast majority of the respondents (two hundred and forty-one respondents, 96.4% of the survey population) were in favour of repaying monthly instalments of SR 800 rather than repaying the whole SR 9,600 in a single annual repayment, as shown in Table and Figure 5.6. In addition, this would reduce a problem experienced by the REDF.

Thus, as expected, the overwhelming majority of respondents would like the REDF to deduct repayments directly from their monthly salary cheques or from their bank. As a result, nearly all of the respondents would be able to take advantage of the REDF's 20% discount on timely repayments. This finding shows beyond doubt that the best method for repayment of the total annual requirement of SR 9,600 is by monthly direct debit. It would also prove advantageous for the REDF since the total repayments would be increased.

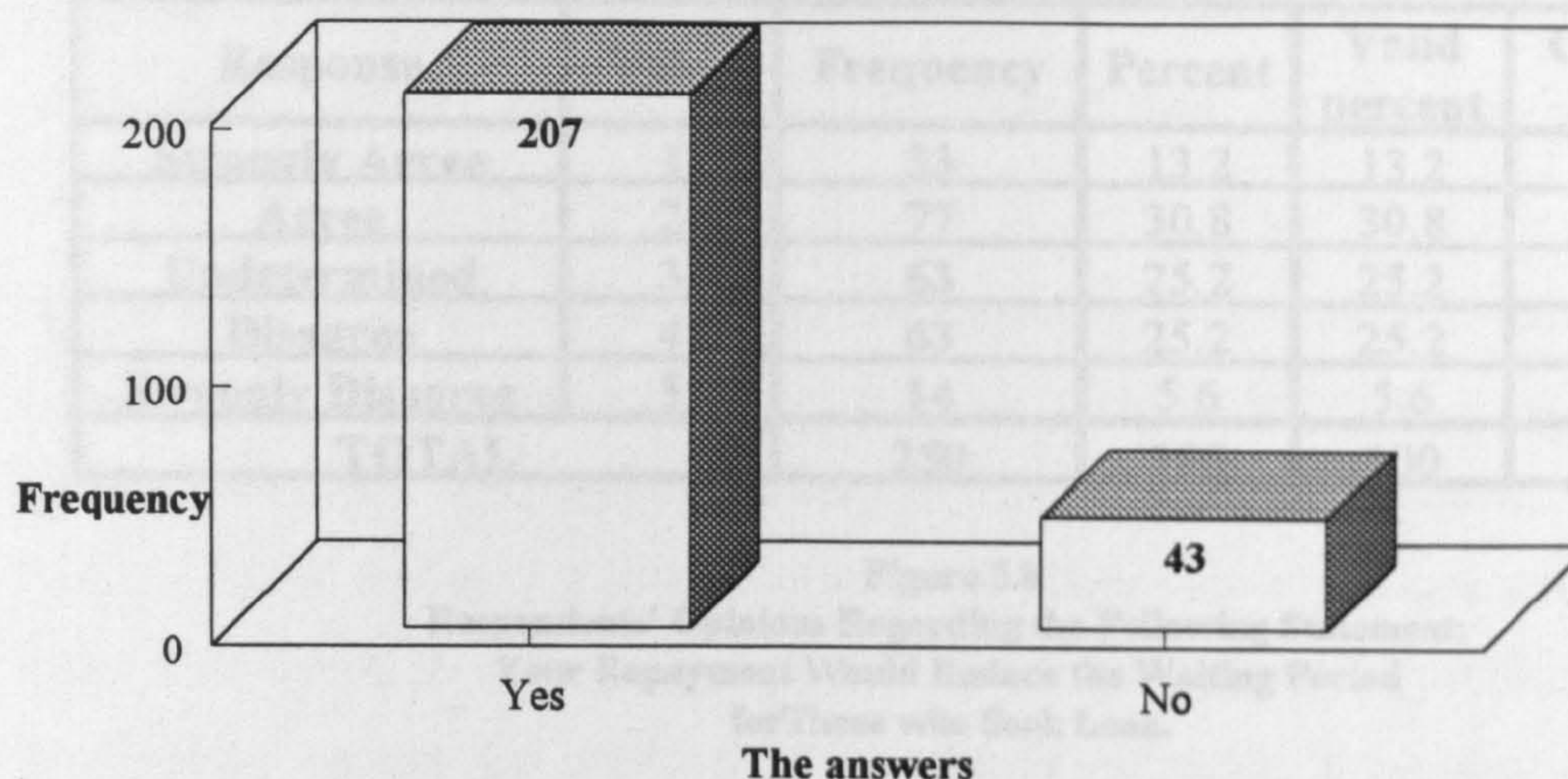
5.4.1 ATTITUDES TOWARDS INCREASING THE AMOUNT OF EACH MONTHLY INSTALMENT

In an attempt to achieve further improvement in REDF services, borrowers were also asked to indicate their attitudes towards increasing the amount of each monthly instalment. The scheme put forward for their consideration was to repay the annual repayment with an exemption of 20% (i.e. $12,000 * 20\% = 9,600$ SR) plus the value of one instalment prior to the due date with an exemption of 30% (i.e. $12,000 * 30\% = 8,400$ SR) by monthly direct debit { i.e. $[(9,600 + 8,400) / 12] = 18,000 / 12 = 1,500$ SR per month}. From Table and Figure 5.7 it can be seen that the answers were combined in two groups, as follows:

Table 5.7
Would you prefer to repay your annual repayment (SR 9,600)
and the value of one instalment prior
to the due date (SR 8,400) by monthly direct debit?

| Response | Value | Frequency | Percent | Valid percent | Cumulative percent |
|-----------------|--------------|------------------|----------------|----------------------|---------------------------|
| Yes | 1 | 207 | 82.8 | 82.8 | 82.8 |
| No | 2 | 43 | 17.2 | 17.2 | 100 |
| TOTAL | | 250 | 100 | 100 | |

Figure 5.7
Would You Prefer to Repay Your Annual Repayment(SR 9,600)
and the Value of One Instalment Prior to the Due Date(SR 8,400)
by Monthly Direct Debit?



The first group consisting of two hundred and seven respondents (82.8% of the survey population) said they would prefer to repay their loans by this method.

The second group composed of forty-three respondents (17.2% of the survey population) who said they would not prefer to repay their loans by this method. In other words, they were not in any hurry to repay what they had borrowed. They were either willing to take up to the full twenty-five year term to repay the loan amount or they belonged to the low income category, and so could not afford larger repayments.

From the above findings, it can be concluded that the vast majority of respondents would prefer to repay two instalments by this method. If they did so, their loans would be repayable over 12 to 13 years instead of 25 years. This finding supports the previous findings. On this basis, it can be deduced that monthly direct debit is the best method of repayment for both borrowers and REDF, and that an accelerated repayment option would be taken up by many borrowers.

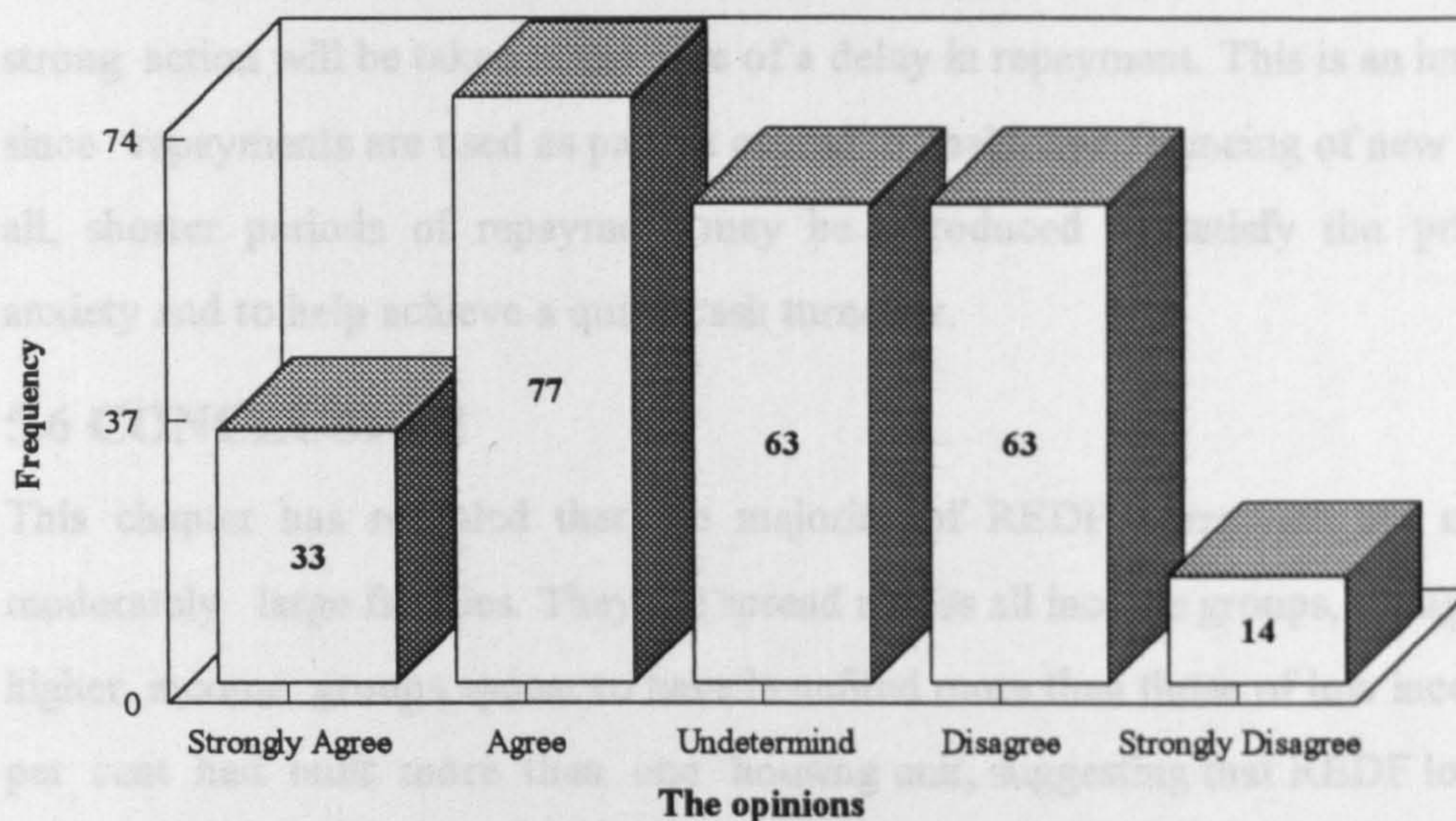
5.5 RESPONDENTS' ATTITUDE TOWARDS PROMPT REPAYMENT

Finally, and most importantly for this research, borrowers were asked about their awareness of the fact that their repayment would reduce the waiting period for obtaining loans for those who seek REDF loans. From Table and Figure 5.8 it can be seen that the answers were combined in five groups, as follows:

Table 5.8
Respondents' opinions regarding the following statement:
Your prompt repayment would reduce the waiting period for those
who seek loans

| Response | Value | Frequency | Percent | Valid percent | Cumulative percent |
|-------------------|-------|------------|------------|---------------|--------------------|
| Strongly Agree | 1 | 33 | 13.2 | 13.2 | 13.2 |
| Agree | 2 | 77 | 30.8 | 30.8 | 44 |
| Undetermined | 3 | 63 | 25.2 | 25.2 | 69.2 |
| Disagree | 4 | 63 | 25.2 | 25.2 | 94.4 |
| Strongly Disagree | 5 | 14 | 5.6 | 5.6 | 100 |
| TOTAL | | 250 | 100 | 100 | |

Figure 5.8
Respondents' Opinions Regarding the Following Statement:
Your Repayment Would Reduce the Waiting Period
for Those who Seek Loan.



The first group consisting of thirty-three respondents (13.2% of the survey population), stated that they strongly agreed with the statement.

The second group comprised seventy-seven respondents (30.8% of the survey population), stated that they agreed with the statement.

The third group including sixty-three respondents (25.2% of the survey population), stated that they had no opinion, so they were marked undetermined.

The fourth group containing sixty-three respondents (25.2% of the survey population), stated that they disagreed with the statement.

The fifth group consisting of fourteen respondents (5.6% of the survey population), stated that they strongly disagreed with the statement.

It was found that a total of one hundred and ten respondents (44% of the survey population) strongly agreed or agreed with the statement. However, almost a third of the respondents (seventy-seven respondents, 30.8% of the survey population) strongly disagreed or disagreed with the statement. The remaining respondents (sixty-three respondents, 25.2% of the survey population) had no opinion and indicated 'Undetermined'.

In general, it appears from the findings that, regarding repayment of the loan in question 8, over half of the respondents (140 cases out of 250, 56% of the survey population) indicated that they strongly disagreed, disagreed or were undetermined (see Table and Figure 5.8). It seems that many do not feel that they have any responsibility or duty to repay their loans at the stipulated time. In order to overcome this problematic attitude, the findings support the need to indicate clearly and simply in the loan agreement that strong action will be taken in the case of a delay in repayment. This is an important topic since repayments are used as paid-in capital to enable the financing of new loans. Above all, shorter periods of repayment may be introduced to satisfy the private sector's anxiety and to help achieve a quick cash turnover.

5.6 CONCLUSION

This chapter has revealed that the majority of REDF borrowers are married, with moderately large families. They are spread across all income groups, though middle and higher income groups appear to have benefited more than those of low income. Seventy per cent had built more than one housing unit, suggesting that REDF loans are being used to finance investment projects. Those who built only one unit were meeting a substantial portion of the cost from their own resources, raising the question of whether the loan should be increased (and fewer loans made) or whether the REDF should allow its share of construction cost per unit to fall, in order to serve more applicants. A large proportion of respondents had failed to meet repayments on time.

There are a number of reasons which have contributed to the low rate of repayment, such as inability to repay, forgetting to repay and the carelessness of borrowers who do not feel there is any responsibility to repay their loans on time. Monthly direct debits could resolve the first two reasons for the problem of late repayment, while clear information and warnings of strong action could help change the attitudes of borrowers. If these methods are used in combination, it should be possible for the waiting period for obtaining a loan to be reduced.

The question now arises: would the loan seekers, who will be the borrowers of the future, agree with these measures? Further discussion of this issue will be left for the next chapter which presents the findings from the loan seekers' sample.

CHAPTER SIX

ANALYSIS OF THE RESPONSES OF REDF LOAN SEEKERS

6.0 INTRODUCTION

This chapter presents the findings of the survey administered to those who seek REDF loans. Its aim is to study their responses and analyse their attitudes towards certain financial matters. The questions used may be divided into five groups, as follows:

The first group consists of the first six questions which relate to background information on the respondents. The first one deals with marital status, while the second one deals with the number of dependants. Question three relates to the income level of the respondent surveyed. Question four asks whether or not the respondent is facing any housing problems. Question five asks whether or not the respondent has applied for an REDF loan. Finally, question five (A) asks those who have not applied for an REDF loan, their reason(s) for not doing so.

The second group is made up of three questions which relate to the respondents' ability to repay more in order to obtain some advantage, such as a reduction of the waiting period or a greater discount. These questions are 6, 6A and 6B.

The third group consists of only one question, which asks the respondents to indicate their opinions concerning whether or not strong action should be taken in order to prevent overdue annual repayments.

The fourth group is composed of three questions which attempt to ascertain the respondents' attitudes toward increasing the REDF loan and the amount of annual repayment.

The fifth group contains the last six questions which investigate respondents' attitudes towards interest loans and Islamic housing financing methods. They can be sub-categorised as follows:

- (a) Interest loans questions, consisting of two questions: 11 and 11A.
- (b) Islamic housing financing methods questions, consisting of four questions: 12, 12A, 13 and 14. However, each of the last two questions is divided into two questions: 13A and 14A.

This chapter is, therefore, divided into sections, corresponding to these groups of related questions. Frequency and percentage tables are provided for each question. The final section will present the conclusion. Therefore, the main sections of this chapter are headed as follows:

- 6.1 Respondents' background information.
- 6.2 The ability to increase repayment.
- 6.3 Attitudes towards action against overdue repayments.
- 6.4 Attitudes towards alternative schemes.
- 6.5 Attitudes towards loans involving interest and Islamic housing financing methods.
- 6.6 Conclusion.

6.1 RESPONDENTS' BACKGROUND INFORMATION

This section analyses the personal background data obtained from the questionnaire including family circumstances, income, housing problems and whether or not the respondent has applied for an REDF loan.

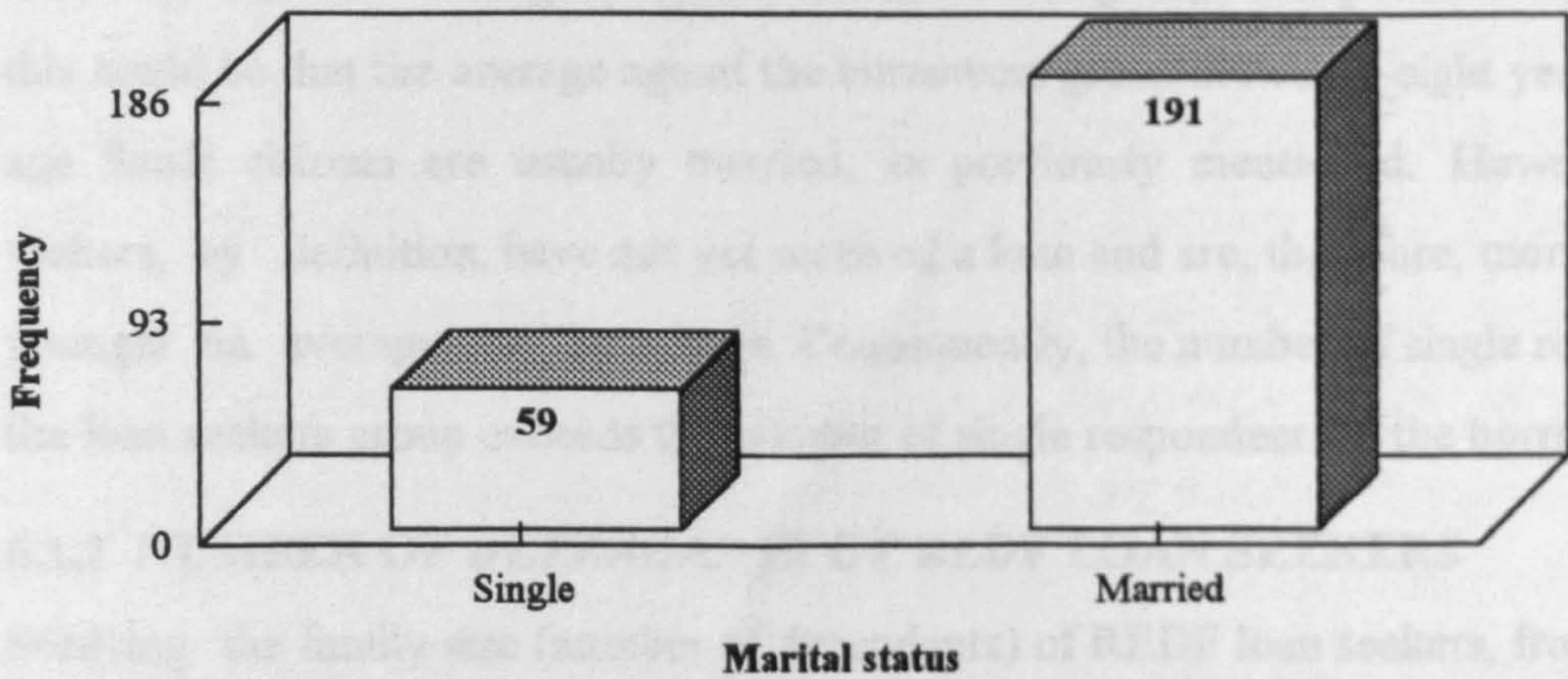
6.1.1 MARITAL STATUS OF REDF LOAN SEEKERS

The first question deals with the marital status of REDF loan seekers. From Table and Figure 6.1 it can be seen that the answers were as follows:

Table 6.1
Marital status of REDF loan seekers

| Marital status | Value | Frequency | Percent | Valid percent | Cumulative percent |
|----------------|-------|-----------|---------|---------------|--------------------|
| Single | 1 | 59 | 23.6 | 23.6 | 23.6 |
| Married | 2 | 191 | 76.4 | 76.4 | 100 |
| TOTAL | | 250 | 100 | 100 | |

Figure 6.1
Marital Status of REDF Loan Seekers



The first group consists of fifty-nine single respondents (23.6% of the survey population).

The second group consists of one hundred and ninety-one married respondents (76.4% of the survey population).

As expected, the majority of the respondents were married. In other words, the largest percentage of REDF loans will go to people who are married, as shown in Table and Figure 6.1. These findings may be explained by the fact that private loans from REDF are provided to any Saudi citizen who is either twenty-one years old, or eighteen years of age and married (see page 20). It should be mentioned in this context that in the case of a potential borrower who is twenty-one years old, he must own a site upon which to build against the mortgage of land and has obtained municipal permission (see page 20). Hence, the home ownership programme is limited to land owners with municipal permission to build, as conditions for REDF loan applications. As a result of this and the considerable rise in land prices, the lower-income level citizen cannot take advantage of the credit system available. Many individuals wait until they have saved the money required to buy a plot of land. On average this takes seven years, at which time they immediately apply for an REDF loan. As a result, the average age of loan seekers is twenty-eight years, by which age most Saudi men are married. This is due to the importance of marriage in the religion and culture of Saudi Arabia, as mentioned in the previous chapter. Another possible explanation for the above finding could be that most of the people who want to build houses do so to provide shelter for their families.

On the other hand, a minority of respondents were single. This number (fifty-nine) is greater than the number of single people in the borrowers group (only three respondents). The number of single people in the loan seekers group was nearly twenty times the number of single people in the borrowers group. One possible explanation for this could be that the average age of the borrowers group is twenty-eight years, by which age Saudi citizens are usually married, as previously mentioned. However, the loan seekers, by definition, have not yet received a loan and are, therefore, more likely to be younger on average, and thus single. Consequently, the number of single respondents in the loan seekers group exceeds the number of single respondents in the borrowers group.

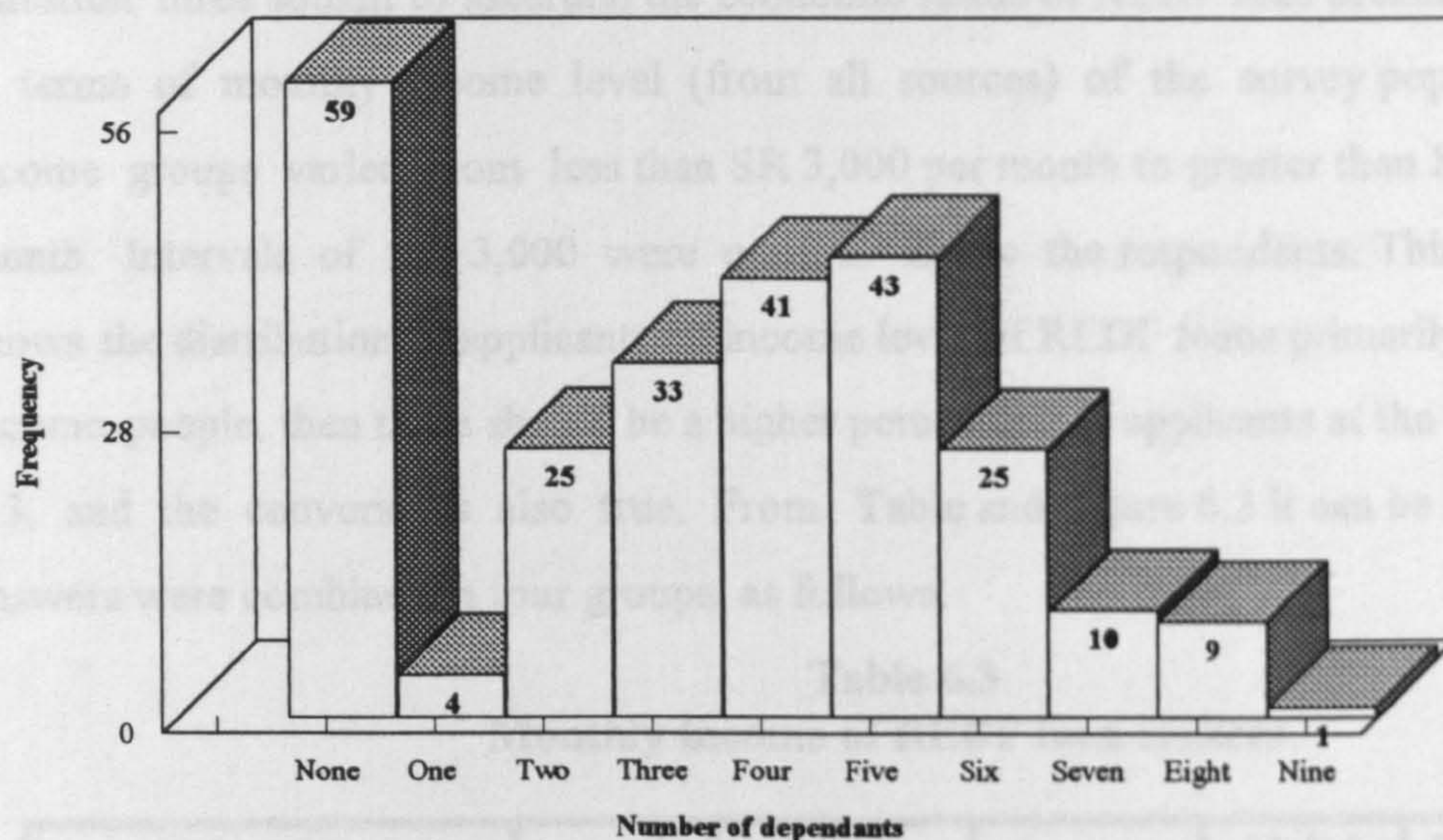
6.1.2 NUMBER OF DEPENDANTS OF REDF LOAN SEEKERS

Studying the family size (number of dependants) of REDF loan seekers, from Table and Figure 6.2 it can be seen that the answers were as follows:

Table 6.2
Number of dependants of REDF loan seekers

| Number of dependants | Value | Frequency | Percent | Valid percent | Cumulative percent |
|----------------------|-------|------------|------------|---------------|--------------------|
| None | 0 | 59 | 23.6 | 23.6 | 23.6 |
| One | 1 | 4 | 1.6 | 1.6 | 25.2 |
| Two | 2 | 25 | 10 | 10 | 35.2 |
| Three | 3 | 33 | 13.2 | 13.2 | 48.4 |
| Four | 4 | 41 | 16.4 | 16.4 | 64.8 |
| Five | 5 | 43 | 17.2 | 17.2 | 82 |
| Six | 6 | 25 | 10 | 10 | 92 |
| Seven | 7 | 10 | 4 | 4 | 96 |
| Eight | 8 | 9 | 3.6 | 3.6 | 99.6 |
| Nine | 9 | 1 | 0.4 | 0.4 | 100 |
| TOTAL | | 250 | 100 | 100 | |

Figure 6.2
Number of Dependants of REDF Loan Seekers



Fifty-nine respondents (23.6% of the survey population) had no dependants, as they were single. So the most frequent number of dependants recorded was zero. A possible reason for this may be that they hoped to build their houses before marriage. In contrast, one respondent (0.4% of the survey population) had nine dependants and nine respondents (3.6% of the survey population) had eight dependants. The second greatest number had between two and six dependants. Furthermore, forty-three respondents (17.2% of the survey population) had five dependants. Ten respondents (4% of the survey population) had seven dependants. In brief, the average number of dependants of the Saudi families surveyed in the loan seekers group was 3.3. The above findings are very similar to the average number of dependants of the Saudi families surveyed in the borrowers group, i.e. 4.8 dependants (see page 103). However, the average number of

dependants of those in the borrowers group was greater than that of the loan seekers group. This could be explained by the following:

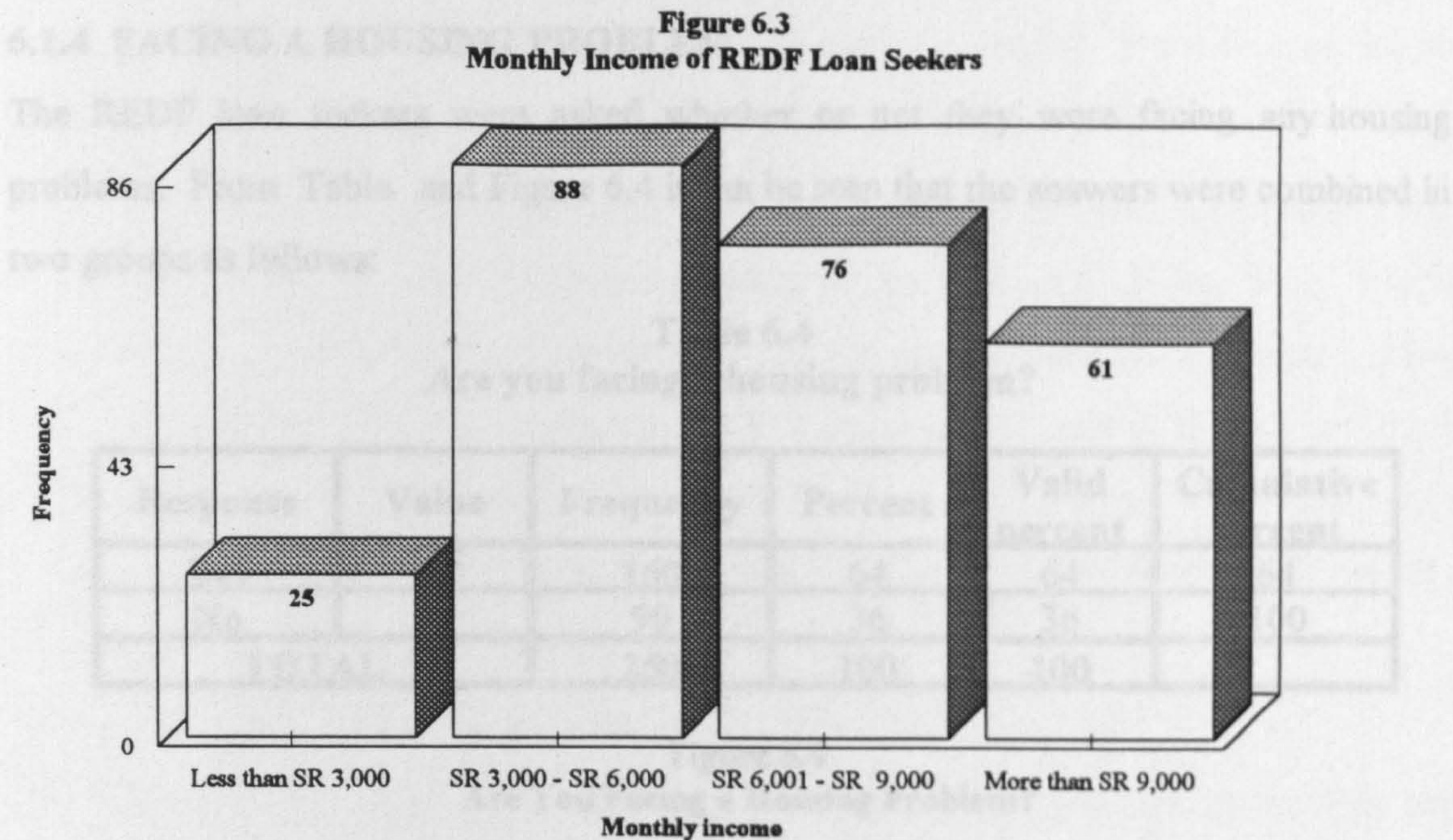
- (a) The number of single people in the loan seekers group (59) was nearly twenty times the number of single people in the borrowers group (3); thus, the average number of dependants would immediately be reduced.
- (b) Loan seekers were on average younger than the borrowers, as previously mentioned. Accordingly, the number of children of the former group would be less, on average, than the number of children of the latter group. Hence, there is a positive correlation between the age of the individual and the number of his children.

6.1.3 MONTHLY INCOME OF REDF LOAN SEEKERS

Question three sought to ascertain the economic status of REDF loan seekers, expressed in terms of monthly income level (from all sources) of the survey population. The income groups varied from less than SR 3,000 per month to greater than SR 9,000 per month. Intervals of SR 3,000 were used to divide the respondents. This breakdown shows the distribution of applicants by income level. If REDF loans primarily attract low income people, then there should be a higher percentage of applicants at the top of Table 6.3, and the converse is also true. From Table and Figure 6.3 it can be seen that the answers were combined in four groups, as follows:

Table 6.3
Monthly income of REDF loan seekers

| Monthly income (SR) | Value | Frequency | Percent | Valid percent | Cumulative percent |
|---------------------|-------|-----------|---------|---------------|--------------------|
| Less than 3,000 | 1 | 25 | 10 | 10 | 10 |
| From 3,000 To 6,000 | 2 | 88 | 35.2 | 35.2 | 45.2 |
| From 6,001 To 9,000 | 3 | 76 | 30.4 | 30.4 | 75.6 |
| More than 9,000 | 4 | 61 | 24.4 | 24.4 | 100 |
| TOTAL | | 250 | 100 | 100 | |



The first group consisting of only twenty-five respondents (10% of the survey population), had a monthly income of less than SR 3,000.

The second group consisting of eighty-eight respondents (35.2% of the survey population), had a monthly income of between SR 3,000 and SR 6,000.

The third group consisting of seventy-six respondents (30.4% of the survey population), had a monthly income of between SR 6,001 and SR 9,000.

The fourth group consisting of sixty-one respondents (24.4% of the survey population), had a monthly income of more than SR 9,000.

As Table and Figure 6.3 show, the number of cases in the third group (76) is almost three times the number in the first group (25). However, the first group is the minority group, whereas, the greatest number of respondents is in the second group. This means that the greatest number of respondents (65.6% of the survey population) had a monthly income of between SR 3,000 and SR 9,000. The third group is in second position with 30.4%. Nearly a quarter of the survey population (24.4% of the survey population) were in the top income bracket (more than SR 9,000).

The above findings show that respondents from all income groups are interested in seeking REDF loans. Furthermore, these findings support the claim that this survey has been conducted in such a way that all economic groups were represented in the sample.

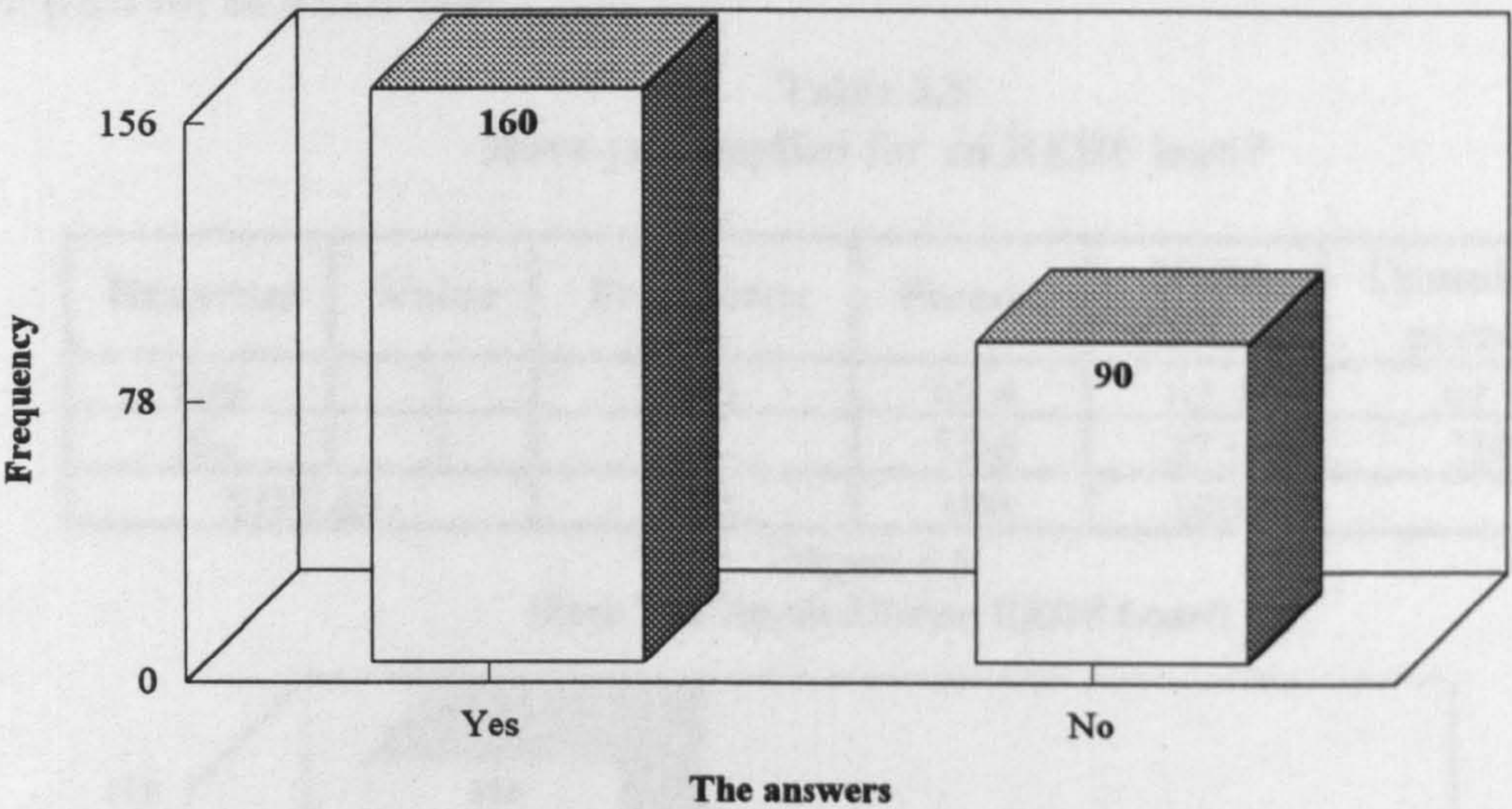
6.1.4 FACING A HOUSING PROBLEM

The REDF loan seekers were asked whether or not they were facing any housing problems. From Table and Figure 6.4 it can be seen that the answers were combined in two groups as follows:

Table 6.4
Are you facing a housing problem?

| Response | Value | Frequency | Percent | Valid percent | Cumulative percent |
|----------|-------|-----------|---------|---------------|--------------------|
| Yes | 1 | 160 | 64 | 64 | 64 |
| No | 2 | 90 | 36 | 36 | 100 |
| TOTAL | | 250 | 100 | 100 | |

Figure 6.4
Are You Facing a Housing Problem?



The first group consists of one hundred and sixty respondents, 64% of the survey population who said 'yes'. This group represents over three-fifths of the survey population, that is, the majority of respondents.

It should be pointed out that housing problems can take one of the following forms:

- (a) The housing unit is too small.
- (b) The housing unit is too old.
- (c) The housing unit does not have the necessary facilities, e.g. modern toilet and sewage network, etc.
- (d) The rent of the housing unit is too high.

The above findings are probably due to the increased housing demand over the last few years, especially since the waiting period has become very long. The REDF's policy

should be adapted to take this situation into account, reduce the waiting period for obtaining a loan, and thus help meet the country's demand for housing.

The second group consists of ninety respondents (36% of the survey population) who said 'no'. However, this does not necessarily mean that they do not wish to take advantage of an REDF loan. It could mean that the majority of them are single and live with their parents, in which case they will be planning to marry in the near future. Another possible explanation for the above findings could be that most of the people who answered negatively had fewer dependants than the others or had a monthly income high enough to enable them to rent a suitable house.

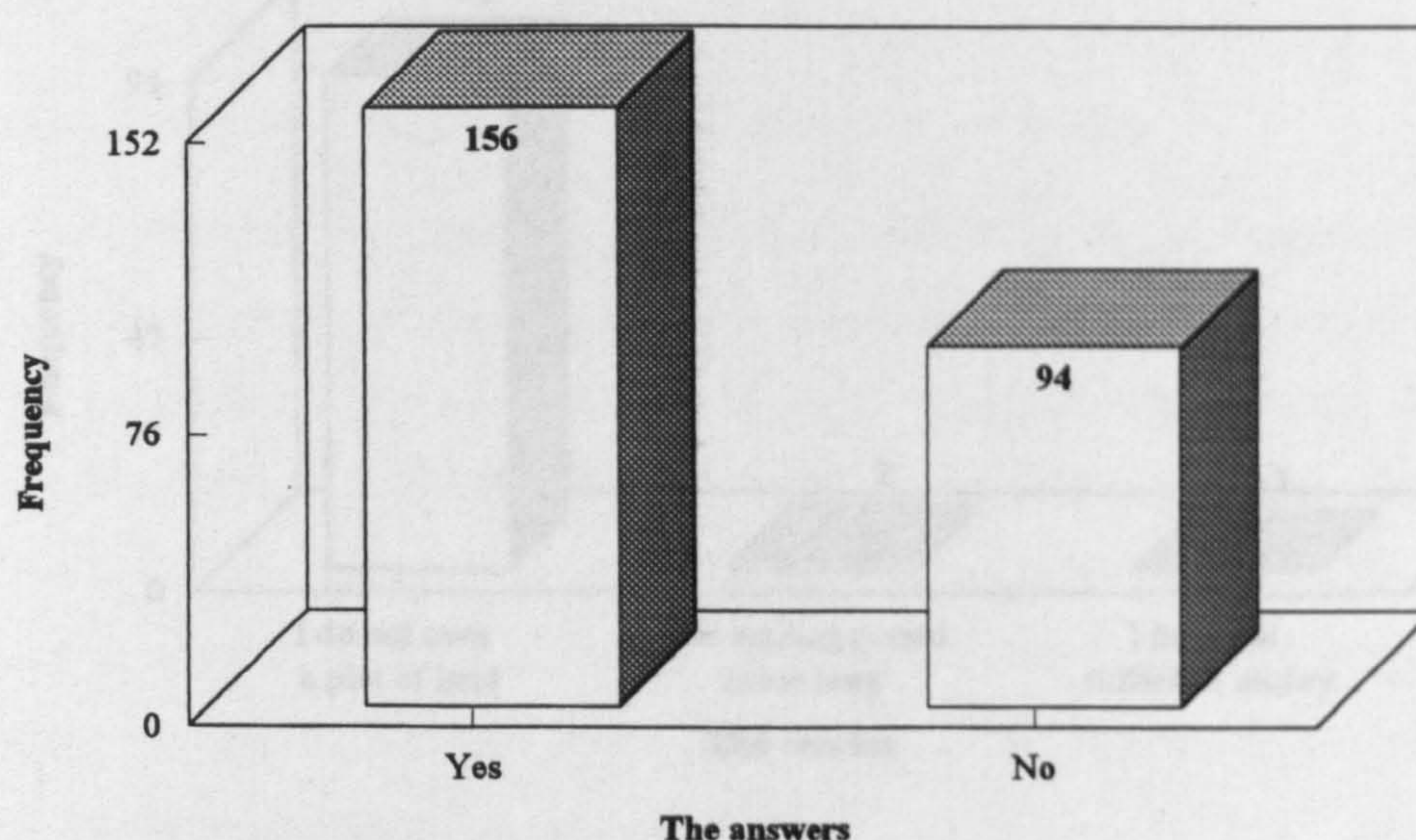
6.1.5 APPLICATION FOR AN REDF LOAN

The questionnaire, then, asked the respondents to indicate whether or not they had applied for an REDF loan.

Table 6.5
Have you applied for an REDF loan?

| Response | Value | Frequency | Percent | Valid percent | Cumulative percent |
|--------------|-------|------------|------------|---------------|--------------------|
| Yes | 1 | 156 | 62.4 | 62.4 | 62.4 |
| No | 2 | 94 | 37.6 | 37.6 | 100 |
| TOTAL | | 250 | 100 | 100 | |

Figure 6.5
Have You Applied for an REDF Loan?



From Table and Figure 6.5 it can be seen that the answers were divided into two groups, as follows:

The first group consists of one hundred and fifty-six respondents (62.4% of the survey population) who had already applied.

The second group consists of ninety-four respondents (37.6% of the survey population) who had not applied. In other words, the majority of the respondents had already applied for an REDF loan and were on the waiting list.

Cases where the answer was 'no', were sub-divided into three groups as can be seen in Table and Figure 6.5A.

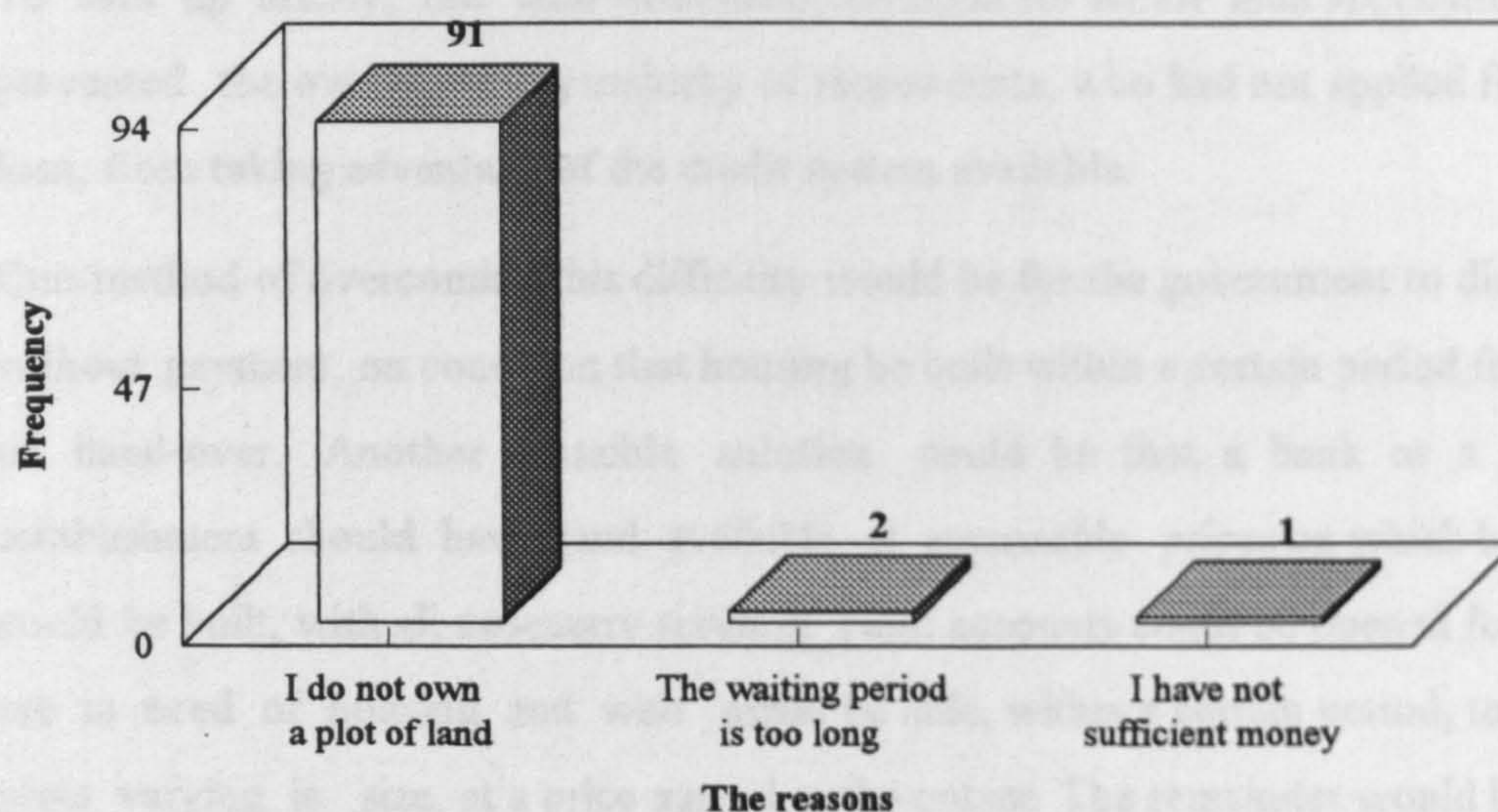
6.1.5.1 REASONS FOR NOT APPLYING FOR AN REDF LOAN

Question 5A is important since it relates to the reason for not applying for an REDF loan. The responses are presented in Table and Figure 6.5A, as follows:

Table 6.5A
Why have you not applied for an REDF loan?

| Response | Value | Frequency | Percent | Valid percent | Cumulative percent |
|--------------------------------|-------|-----------|------------|---------------|--------------------|
| I do not own a plot of land | 1 | 91 | 96.8 | 96.8 | 96.8 |
| The waiting period is too long | 2 | 2 | 2.1 | 2.1 | 98.9 |
| Insufficient money | 3 | 1 | 1.1 | 1.1 | 100 |
| TOTAL | | 94 | 100 | 100 | |

Figure 6.5A
Why Have You not Applied for an REDF Loan?



The first group consists of ninety-one respondents (96.8% of those who had not applied for an REDF loan). They had not applied for a loan because they did not own a plot of land.

The second group is composed of two respondents (2.1% of those who had not applied for an REDF loan). They had not applied for a loan because the waiting period for obtaining a loan is too long.

The third group included only one respondent (1.1% of those who had not applied for an REDF loan). He had not applied for a loan because he did not have sufficient money.

As the REDF grants up to 70% of the estimated home construction cost, to a maximum of SR 300,000, the choice of the third reason implies that the respondent cannot save, or arrange to borrow privately, the remaining 30% of the construction cost.

According to Table 6.5A, almost all the respondents who had not applied for an REDF loan said they had not done so because they did not own a plot of land. Hence, they did not meet the condition for an REDF loan application. This was due to the fact that a potential borrower must own a plot of land upon which to build, with a municipal permit within the city boundaries. In other words, the REDF loan programme is limited to land owners with a municipal permission to build (see page 20).

One possible reason for not owning a plot of land could be the considerable rise in the price of residential land in the cities, which prevents many poor individuals from buying land and thus taking advantage of this programme.

To sum up briefly, the land ownership condition for REDF loan application was what prevented the overwhelming majority of respondents, who had not applied for an REDF loan, from taking advantage of the credit system available.

One method of overcoming this difficulty would be for the government to distribute land without payment, on condition that housing be built within a certain period from the date of hand-over. Another possible solution could be that a bank or a government establishment should have land available at reasonable prices on which housing units could be built, with all necessary services. Fund accounts could be opened for those who are in need of housing and who might be able, within a certain period, to obtain land plots varying in size, at a price agreed at the outset. The remainder would be repayable in the form of monthly repayments.

It should be mentioned in this context that some citizens have been forced to seek cheap residential plots outside the municipality boundaries which lack most essential public services, in the hope of utilities being provided for them at a later date. This was due to the following:

1. Requirement of land ownership to qualify for an REDF loan application.
2. Prices of residential land in the cities have increased substantially in recent years and land speculation is growing.

This has caused some difficulties for the municipality, a major one being rapid expansion of government expenditure on physical infrastructure projects such as provision of public services and basic networks. Therefore, during the Second Five-Year Development Plan (1975-1980) the Saudi economy substantially improved its infrastructure through massive investments in physical and social overhead capital for sustained economic growth.

At this point, it should be stressed that there is vacant land within the city boundaries. Possible explanations for this could be the following:

1. There is no compulsion on a land owner to develop his land within a certain time.
2. There are no taxes imposed on vacant lots within the city boundaries.

It is also worth mentioning that, in an attempt to overcome this difficulty, the MMRA has envisaged the preparation of plots of land with all the necessary services for distribution to those who are in need of housing in various parts of the Kingdom. This would enable them to build houses for themselves. This has yet to be implemented, however, as the necessary infrastructure is not yet in place.

Returning to the reasons given for not applying for an REDF loan, Table 6.5A shows that two respondents said the waiting period for obtaining a loan is too long, as they would have to wait for more than nine years to obtain the loan. In contrast, when the REDF began operating in 1975, it took less than six months for applicants to obtain a loan. For this reason, the number of private loans taken out registered a notable decline of about 81% from 47,063 loans in 1976 to 8,867 loans in 1992.

However, from the above findings it can be seen that the overwhelming majority of respondents (ninety-two respondents, 97.9% of the survey population who had not applied for an REDF loan) were not immediately concerned about the waiting period. One possible explanation could be that REDF loans are extended without bearing costs or charges. In addition, these loans are repayable in twenty-five annual instalments. This means the amount paid annually to cover the cost of building a house to one's own specification is less than the annual rental value of a similar house.

The third reason given for not applying for a REDF loan was insufficient money. However, only one respondent chose this answer, as the table shows. It should also be noted here that the overwhelming majority of respondents who had not applied for an REDF loan were not primarily concerned about the third reason. This is probably due to the fact that:

1. The waiting period for obtaining an REDF loan is very long, so potential applicants do not know how much they would be able to save during this period.
2. The REDF loans are extended without bearing costs or charges and are repayable in twenty-five annual instalments.
3. There is no action taken if an applicant decides not to obtain the loan.

In conclusion, the main reason given for not applying for a REDF loan was not owning a plot of land.

6.2 ABILITY TO INCREASE REPAYMENT

If applicants were willing and able to increase payments in exchange for some benefit, the availability of capital to the REDF would be greatly improved, enabling it to serve more applicants. Accordingly, applicants were asked about this possibility.

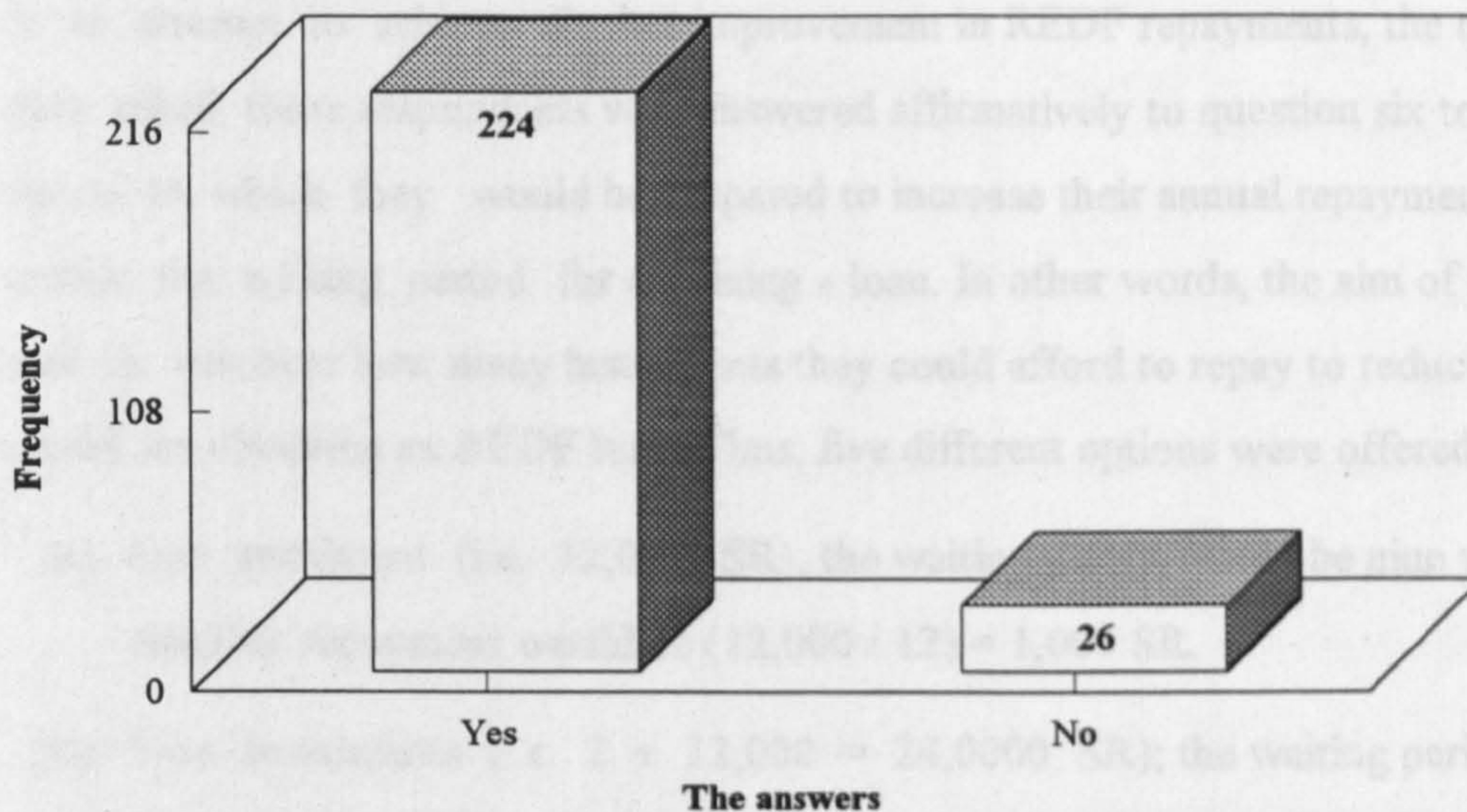
6.2.1 ABILITY TO REPAY THE ANNUAL REPAYMENT WITHOUT DISCOUNT

The respondents were asked if they could repay the annual instalment without discount in order to reduce the waiting period for obtaining the REDF loan. The answers were divided into two groups, as follows:

Table 6.6
Could you repay the annual instalment (SR. 12,000) without discount in order to reduce the waiting period for obtaining the loan?

| Response | Value | Frequency | Percent | Valid percent | Cumulative percent |
|-----------------|--------------|------------------|----------------|----------------------|---------------------------|
| Yes | 1 | 224 | 89.6 | 89.6 | 89.6 |
| No | 2 | 26 | 10.4 | 10.4 | 100 |
| TOTAL | | 250 | 100 | 100 | |

Figure 6.6
Could You Repay the Annual Instalment (SR 12,000) without Discount
in order to Reduce the Waiting Period for Obtaining the Loan?



The first group consisting of two hundred and twenty-four respondents (89.6% of the survey population) said that they could.

The second group consisting of twenty-six respondents (10.4% of the survey population) said that they could not. A possible explanation for this could be one of the following:

- (a) They could not repay without discount since they belonged to the low income category or they had heavy financial obligations, such as a large number of dependants.
- (b) They could wait in order to get discount since they:
 1. were single and lived with their parents;
 2. had fewer dependants than the others; therefore, their housing problems were not so urgent.

To sum up briefly, it was found that the vast majority of the respondents preferred to repay the annual instalment without discount in order to reduce the waiting period for obtaining an REDF loan (see Table and Figure 6.6). This could be taken as evidence that current REDF policies are not adequate for today's societal conditions. In addition, many of these policies appear to be out of date and were intended to meet conditions that may no longer exist.

The group of respondents who answered yes to question six were then sub-divided into five groups, according to their responses to questions 6A and 6B. These responses are analysed in the following sub-section.

6.2.2 ABILITY TO INCREASE ANNUAL REPAYMENT IN ORDER TO REDUCE THE WAITING PERIOD

In an attempt to achieve further improvement in REDF repayments, the questionnaire then asked those respondents who answered affirmatively to question six to indicate the extent to which they would be prepared to increase their annual repayment in order to reduce the waiting period for obtaining a loan. In other words, the aim of this question was to discover how many instalments they could afford to repay to reduce the waiting period for obtaining an REDF loan. Thus, five different options were offered:

- (a) One instalment (i.e. 12,000 SR); the waiting period would be nine years and the monthly repayment would be $(12,000 / 12) = 1,000$ SR.
- (b) Two instalments (i.e. $2 \times 12,000 = 24,000$ SR); the waiting period would be seven years and the monthly repayment would be $(24,000 / 12) = 2,000$ SR.
- (c) Three instalments (i.e. $3 \times 12,000 = 36,000$ SR); the waiting period would be five years and the monthly repayment would be $(36,000 / 12) = 3,000$ SR.
- (d) Four instalments (i.e. $4 \times 12,000 = 48,000$ SR); the waiting period would be three years and the monthly repayment would be $(48,000 / 12) = 4,000$ SR.
- (e) Five instalments (i.e. $5 \times 12,000 = 60,000$ SR); the waiting period would be one year and the monthly repayment would be $(60,000 / 12) = 5,000$ SR.

However, it may be noted that in the questionnaire sheet (Appendix A) the question was phrased differently in order to overcome the difficulties of calculation and to be more specific. Hence, the question was: how much could you repay in order to reduce the waiting period for obtaining the loan as follows:

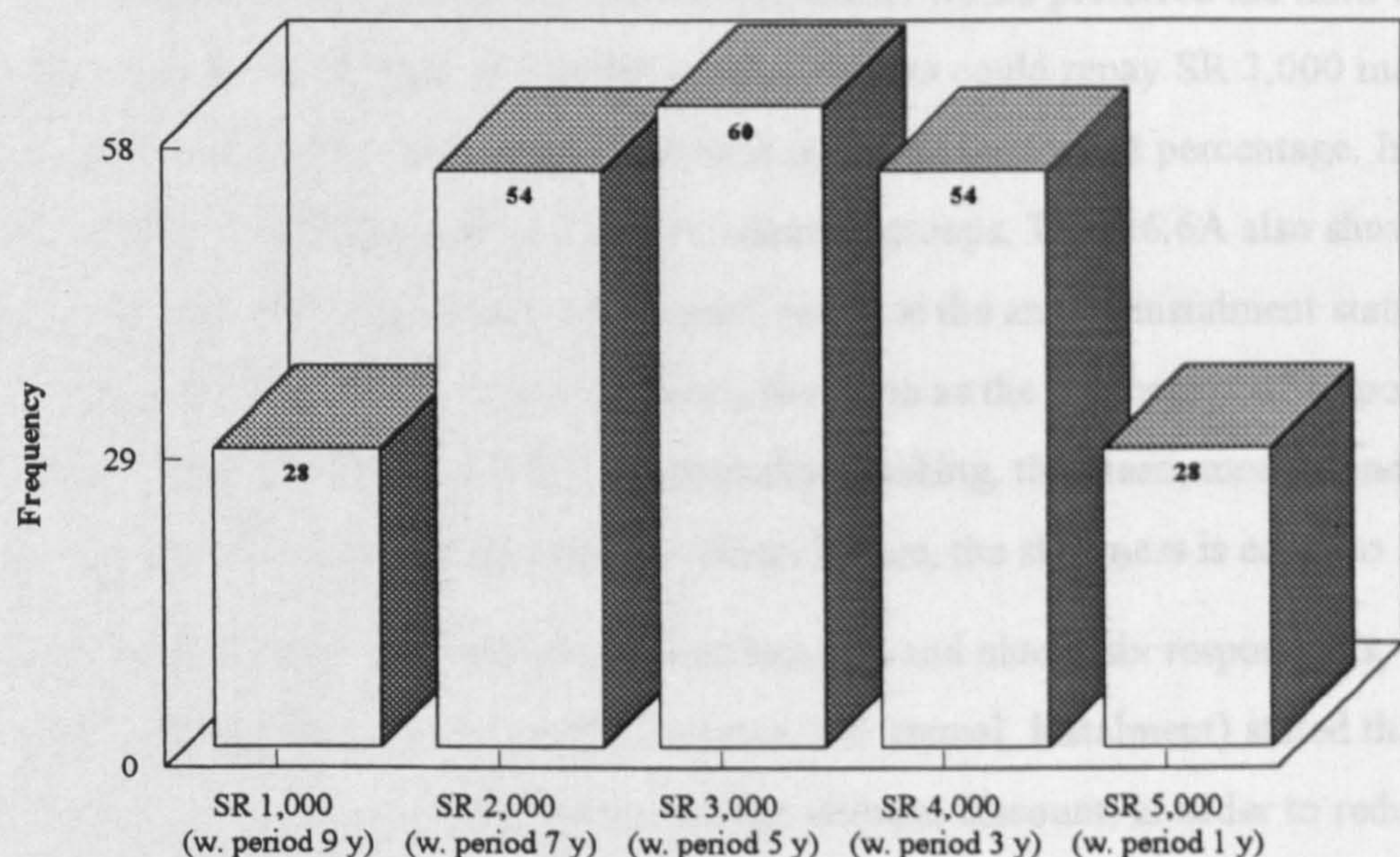
- (a) SR 1,000 monthly and the waiting period = 9 years.
- (b) SR 2,000 monthly and the waiting period = 7 years.
- (c) SR 3,000 monthly and the waiting period = 5 years.
- (d) SR 4,000 monthly and the waiting period = 3 years.
- (e) SR 5,000 monthly and the waiting period = 1 year.

From Table and Figure 6.6A it can be seen that the answers were combined in five groups, as follows:

Table 6.6A
How much could you repay in order to reduce
the waiting period of the loan, as follows:

| Response | Value | Frequency | Percent | Valid percent | Cumulative percent |
|--|-------|------------|------------|---------------|--------------------|
| SR 1,000 monthly, the waiting period = 9 years | 1 | 28 | 12.5 | 12.5 | 12.5 |
| SR 2,000 monthly, the waiting period = 7 years | 2 | 54 | 24.1 | 24.1 | 36.6 |
| SR 3,000 monthly, the waiting period = 5 years | 3 | 60 | 26.8 | 26.8 | 63.4 |
| SR 4,000 monthly, the waiting period = 3 years | 4 | 54 | 24.1 | 24.1 | 87.5 |
| SR 5,000 monthly, the waiting period = 1 year | 5 | 28 | 12.5 | 12.5 | 100 |
| TOTAL | | 224 | 100 | 100 | |

Table 6.6A
How much could you repay in order to reduce
the waiting period of the loan, as follows:



The first group consisted of twenty-eight respondents (12.5% of the survey population who could increase the annual instalment). These respondents stated that they could repay SR 1,000 monthly, in order to obtain the loan nine years after the date of receipt of the application form.

The second group consisted of fifty-four respondents (24.1% of the survey population who could increase the annual instalment). These respondents stated that they could repay SR 2,000 monthly, in order to obtain the loan seven years after the date of receipt of the application form.

The third group included sixty respondents (26.8% of the survey population who could increase the annual instalment). These respondents stated that they could repay SR 3,000. monthly, in order to obtain the loan five years after the date of receipt of the application form.

The fourth group contained fifty-four respondents (24.1% of the survey population who could increase the annual instalment). These respondents stated that they could repay SR 4,000 monthly, in order to obtain the loan three years after the date of receipt of the application form.

The fifth group consisted of twenty-eight respondents (12.5% of the survey population who could increase the annual instalment). These respondents stated that they could repay SR 5,000 monthly, in order to obtain the loan one year after the date of receipt of the application form.

As Table 6.6A shows, the majority of the respondents would preferred the third option. This means that the highest percentage of respondents could repay SR 3,000 monthly. On the other hand, the first and fifth groups represent the lowest percentage. In other words, the first and fifth groups were the minority groups. Table 6.6A also shows that almost a quarter of respondents who could increase the annual instalment stated that they could repay SR 2,000 monthly. This is the same as the percentage of respondents who could repay SR 4,000 monthly. Statistically speaking, the mean, median and mode of the answers to this question are equal to three. Hence, the skewness is equal to zero.

In conclusion, most of the respondents (one hundred and ninety-six respondents, 87.5% of the survey population who could increase the annual instalment) stated that they could repay more than one instalment annually, without discount, in order to reduce the waiting period for obtaining an REDF loan. However, the amount of monthly repayment preferred varied from SR 1,000 to SR 5,000 at intervals of SR 1,000 for each group. These differences may be explained by the variations of income and the size of the housing problem being faced.

The above breakdown shows how the repayment could be collected if the REDF used this policy rather than the present one. It is clear that the proposed policy would be advantageous for the REDF since the total repayments would be increased. Hence, the present policy should be revised so as to enable every applicant to decide how much he wishes to repay in order to reduce the waiting period for obtaining the loan. Moreover, this policy is in line with the long-term goal of the REDF to become a self-sustaining programme in which the loan repayments would be used as paid-in capital in order to continue financing new borrowers.

6.2.3 ABILITY TO INCREASE ANNUAL REPAYMENT IN ORDER TO OBTAIN DIFFERENT LEVELS OF DISCOUNT

Along the same line as the previous question, question 6B explored another way of achieving further improvement in REDF services by increasing the number of payment options offered, in order to increase the amount of repayments. The questionnaire, then, asked the respondents who could repay the annual instalment without discount in order to reduce the waiting period for obtaining an REDF loan, to indicate their attitudes towards increasing their repayment by varying amounts, in order to obtain different levels of discount. The following options were given:

- (a) One instalment (SR 12,000 annually) without discount. Consequently, the monthly repayment would be $(12,000 / 12) = 1,000$ SR.
- (b) Two instalments ($2 \times 12,000 = 24,000$ SR) to get 5% discount (i.e. $24,000 \times 0.05 = 1,200$ SR). Therefore, the annual repayment would be $24,000 - 1,200 = 22,800$ SR. Consequently, the monthly repayment would be $(22,800 / 12) = 1,900$ SR.
- (c) Three instalments ($3 \times 12,000 = 36,000$ SR) to get 10% discount (i.e. $36,000 \times 0.1 = 3,600$ SR). Therefore, the annual repayment would be $36,000 - 3,600 = 32,400$ SR. Consequently, the monthly repayment would be $(32,400 / 12) = 2,700$ SR.
- (d) Four instalments ($4 \times 12,000 = 48,000$ SR) to get 15% discount (i.e. $48,000 \times 0.15 = 7,200$ SR). Therefore, the annual repayment would be $48,000 - 7,200 = 40,800$ SR. Consequently, the monthly repayment would be $(40,800 / 12) = 3,400$ SR.
- (e) Five instalments ($5 \times 12,000 = 60,000$ SR) to get 20% discount (i.e. $60,000 \times 0.2 = 12,000$ SR). Therefore, the annual repayment would be $60,000 - 12,000 =$

48,000 SR.. Consequently, the monthly repayment would be $(48,000 / 12) = 4,000$ SR.

It should be noted at this point that the repayment amounts, that is, the annual instalments, were calculated specifically on the questionnaire sheet (Appendix A). This was done in order to overcome difficulties of calculation and to be more specific. Hence, the question was, "How many instalments could you repay together in order to get discount as follows:"

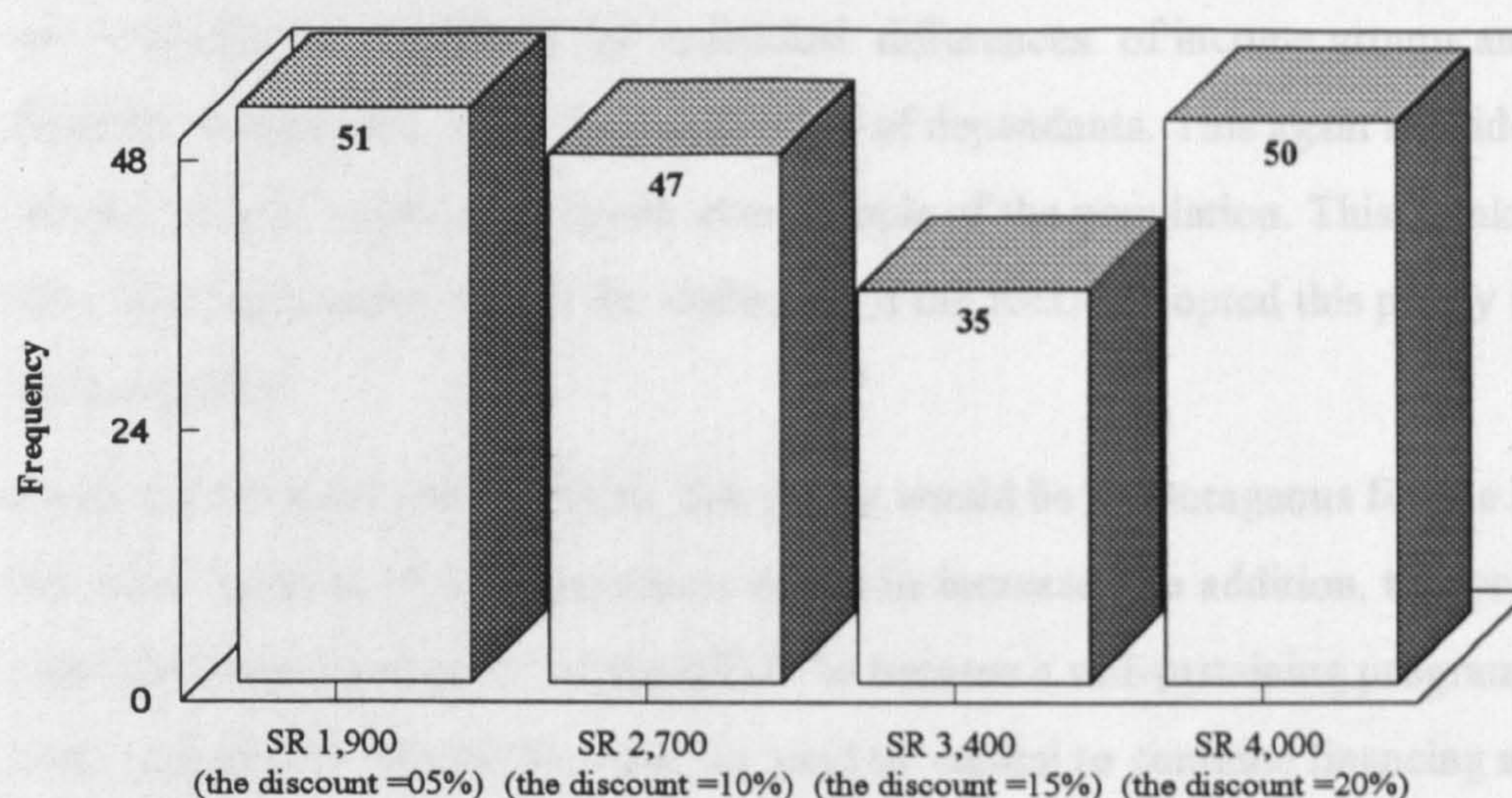
- (a) One instalment = SR 1,000 monthly (i.e. 0% discount).
- (b) Two instalments = SR 1,900 monthly (i.e. 5% discount).
- (c) Three instalments = SR 2,700 monthly (i.e. 10% discount).
- (d) Four instalments = SR 3,400 monthly (i.e. 15% discount).
- (e) Five instalments = SR 4,000 monthly (i.e. 20% discount).

From Table and Figure 6.6B it can be seen that the answers were combined in five groups as follows:

Table 6.6B
How many instalments could you repay together in order to obtain discount, as follows?

| Response | Value | Frequency | Percent | Valid percent | Cumulative percent |
|-----------------------------------|-------|------------|------------|---------------|--------------------|
| SR 1,000 monthly (discount = 0%) | 1 | 41 | 18.3 | 18.3 | 18.3 |
| SR 1,900 monthly (discount = 5%) | 2 | 51 | 22.8 | 22.8 | 41.1 |
| SR 2,700 monthly (discount = 10%) | 3 | 47 | 21 | 21 | 62.1 |
| SR 3,400 monthly (discount = 15%) | 4 | 35 | 15.6 | 15.6 | 77.7 |
| SR 4,000 monthly (discount = 20%) | 5 | 50 | 22.3 | 22.3 | 100 |
| TOTAL | | 224 | 100 | 100 | |

Figure 6.6B
How Many Instalments Could You
Repay Together in order to Obtain Discount as Follows?



The answers

The first group consisted of forty-one respondents (18.3% of the relevant population). They stated that they could repay SR 1,000 monthly. In other words, they could repay one annual instalment without discount.

The second group consisted of fifty-one respondents (22.8% of the relevant population). They stated that they could repay SR 1,900 monthly. Therefore, they could repay two annual instalments in order to obtain a discount of 5%.

The third group included forty-seven respondents (21% of the relevant population). They stated that they could repay SR 2,700 monthly. Therefore, they could repay three annual instalments in order to obtain a discount of 10%.

The fourth group contained thirty-five respondents (15.6% of the relevant population). They stated that they could repay SR 3,400 monthly. In other words, they could repay four annual instalments in order to obtain a discount of 15%.

The fifth group consisted of fifty respondents (22.3% of the relevant population). They stated that they could repay SR 4,000 monthly. In other words, they could repay five annual instalments in order to obtain a discount of 20%.

It is clear from the above table that the second option (SR 1,900 monthly) has the largest number in the frequency column. In addition, this number (fifty-one cases) is marginally bigger than the number of cases that chose the fifth option (fifty cases). To put it more simply, it was found that the highest percentage of respondents was in the second and fifth groups respectively. The first group (forty-one cases) held the third position,

followed by the third group (forty cases). The fourth group occupied the last position (thirty-five cases). There was a fairly even spread of respondents in each group which can probably be explained by individual differences of income groups and the size of financial obligations, such as the number of dependants. This again is evidence that the survey sample contained a good, even sample of the population. This breakdown shows how the repayments could be collected if the REDF adopted this policy instead of its current policy.

From the financial point of view, this policy would be advantageous for the REDF, since the total amount of the repayments would be increased. In addition, this policy is in line with the long-term goal of the REDF to become a self-sustaining programme in which loan repayments would be used as paid-in capital to continue financing new loans, as previously stated. From this point of view, the current policy of repayment should be revised so as to enable every borrower to decide how much he wishes to repay in order to obtain the discount he can afford.

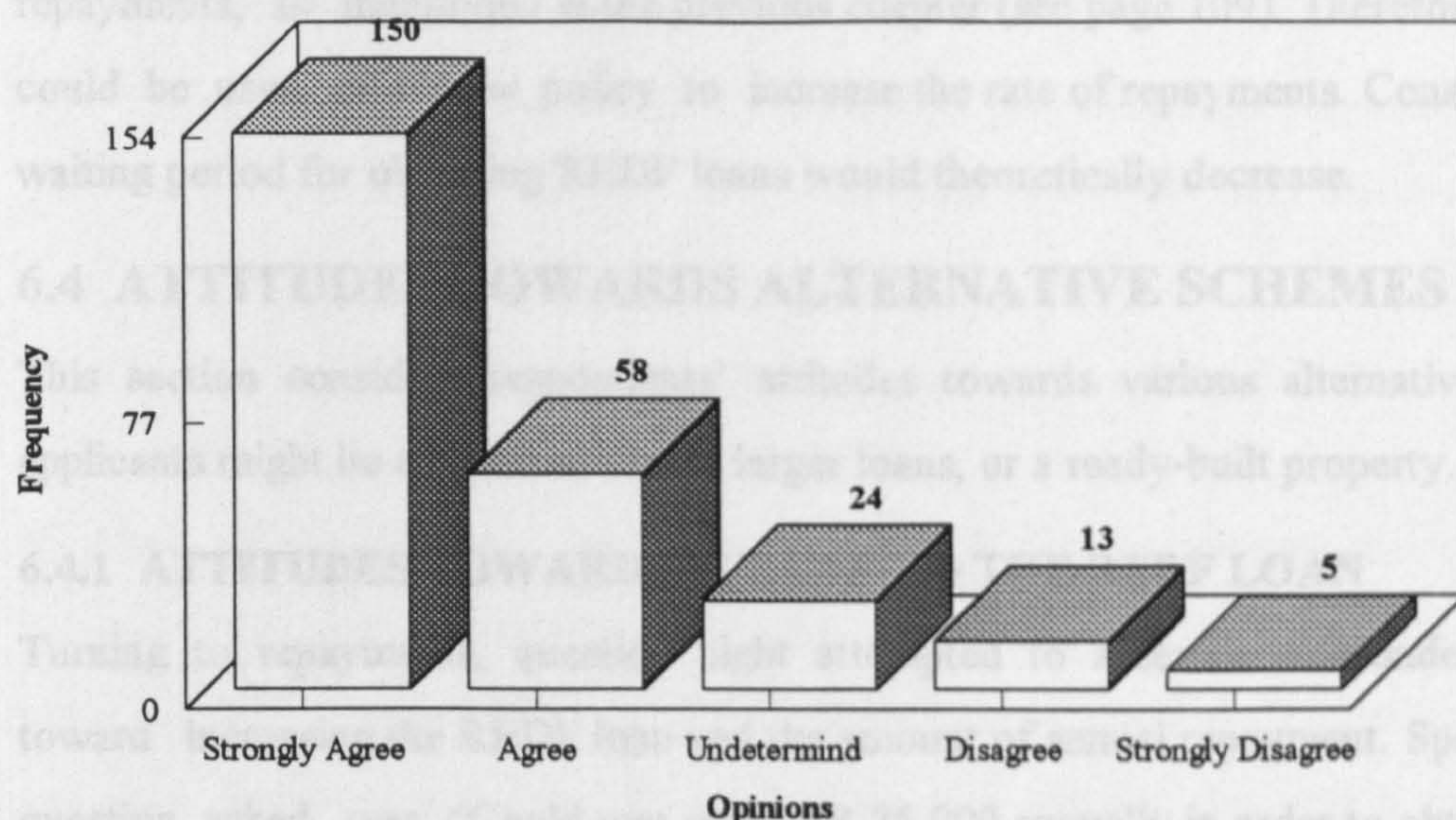
6.3 ATTITUDES TOWARDS ACTION AGAINST OVERDUE REPAYMENTS

The respondents were asked to indicate their opinions regarding strong action being taken against those who are late in repaying their annual repayments, in order to reduce the waiting period for obtaining a loan. From Table and Figure 6.7 it can be seen that the answers were split into five groups as follows:

Table 6.7
Respondents' opinions on the following statement:
Strong action should be taken to prevent overdue annual
repayments in order to reduce the waiting period for obtaining a loan.

| Response | Value | Frequency | Percent | Valid percent | Cumulative percent |
|-------------------|-------|-----------|---------|---------------|--------------------|
| Strongly agree | 1 | 150 | 60 | 60 | 60 |
| Agree | 2 | 58 | 23.2 | 23.2 | 83.2 |
| Undetermined | 3 | 24 | 9.6 | 9.6 | 92.8 |
| Disagree | 4 | 13 | 5.2 | 5.2 | 98 |
| Strongly disagree | 5 | 5 | 2 | 2 | 100 |
| TOTAL | | 250 | 100 | 100 | |

Figure 6.7
 Respondents' Opinions Regarding the Following Statement:
 Strong Action Should be Taken to Prevent Overdue Annual Repayments
 in order to Reduce the Waiting Period for Obtaining a Loan.



The first group consisted of three-fifths of the respondents (one hundred and fifty respondents, 60% of the survey population) who stated that they strongly agreed with the statement.

The second group comprised fifty-eight respondents (23.2% of the survey population) who stated that they agreed with the statement.

The third group included twenty-four respondents (9.6% of the survey population) who stated that they had no opinion; so they were marked "undetermined".

The fourth group: contained thirteen respondents (5.2% of the survey population) who stated that they disagreed with the statement.

The fifth group consisted of five respondents (2% of the survey population) who stated that they strongly disagreed with the statement.

The findings show that the number of respondents who strongly agreed or agreed with the statement is substantially higher than the number of respondents who disagreed, or strongly disagreed, with the statement. In other words, the vast majority of respondents (two hundred and eight respondents, 83.2% of the survey population) stated that they strongly agreed or agreed with strong action being taken (see Table and Figure 6.7). It seems that most of the respondents consider there to be a responsibility, or duty, to repay the loan in the stipulated time in order to reduce the waiting period for obtaining their loan. This response could be taken as evidence of the acceptance of any reasonable action introduced to prevent overdue annual instalments.

At this point, it is important to stress that a total of 159 borrowers out of 250 (63.6% of the survey population) stated that they had not always been on time with their annual repayments, as mentioned in the previous chapter (see page 109). Therefore, this action could be used as a new policy to increase the rate of repayments. Consequently, the waiting period for obtaining REDF loans would theoretically decrease.

6.4 ATTITUDES TOWARDS ALTERNATIVE SCHEMES

This section considers respondents' attitudes towards various alternatives by which applicants might be enabled to obtain larger loans, or a ready-built property.

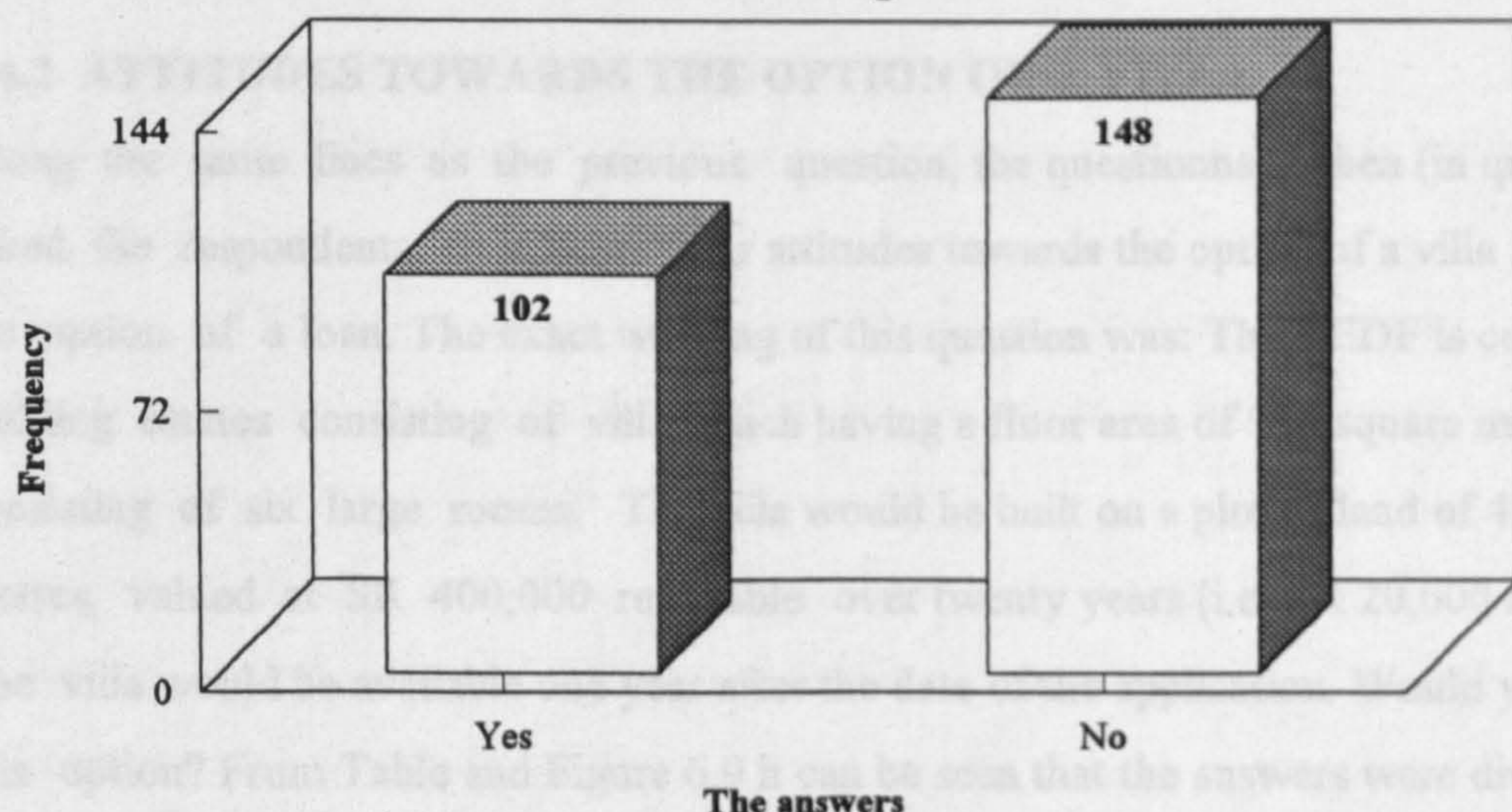
6.4.1 ATTITUDES TOWARD INCREASING THE REDF LOAN

Turning to repayments, question eight attempted to ascertain respondents' attitudes toward increasing the REDF loan and the amount of annual repayment. Specifically, the question asked was, "Could you repay SR 25,000 annually in order to obtain a housing loan of SR 500,000?". The answers were combined in two groups as follows:

Table 6.8
Could you repay SR 25,000 annually in order to obtain a housing loan of SR 500,000?

| Response | Value | Frequency | Percent | Valid percent | Cumulative percent |
|--------------|-------|------------|------------|---------------|--------------------|
| Yes | 1 | 102 | 40.8 | 40.8 | 40.8 |
| No | 2 | 148 | 59.2 | 59.2 | 100 |
| TOTAL | | 250 | 100 | 100 | |

Figure 6.8
Could You Repay SR 25,000 Annually in order to Obtain a Housing Loan of SR. 500,000?



The positive answer was given by one hundred and two respondents (40.8% of the survey population). This could be because the present loan of SR 300,000 is not sufficient to cover 70% of the construction cost, as mentioned in the previous chapter.

The negative answer was given by one hundred and forty-eight respondents (59.2% of the survey population). This could be due to either of the following reasons:

- (a) They could not afford to repay SR 25,000 per year.
- (b) They wanted to take advantage of the discounts available for the present loan (i.e. 30% and 20%).

In brief, among opinions regarding the repayment of loan procedure in question eight, some (40.8%) respondents stated that they agreed. These findings indicate that there is a good degree of acceptance of this idea, which could, therefore, be introduced as a new method. Furthermore, the above findings also support the notion that there is a willingness to repay more if this will provide some advantage such as a reduced waiting period for obtaining a loan or a higher discount, as previously mentioned.

It should be mentioned in this context that using the current method, that is for the REDF loan of SR 300,000, the total repayment for a loan of SR 500,000 would be SR 400,000 due to the discount of 20% which equals SR 100,000 ($500,000 \times 0.2 = 100,000$ SR). This would be repayable over a forty-one year period, since the annual repayment is SR 9,600 ($400,000/9,600 = 41.67$ year). On the other hand, in the case of the new method proposed in question eight, the total repayments would be equal to SR 500,000 repayable over a twenty year period since the annual repayment would be SR 25,000 ($500,000/25,000 = 20$ year). For this reason, this method would be advantageous for the REDF, since the loan would be repayable over a shorter period, without any discount.

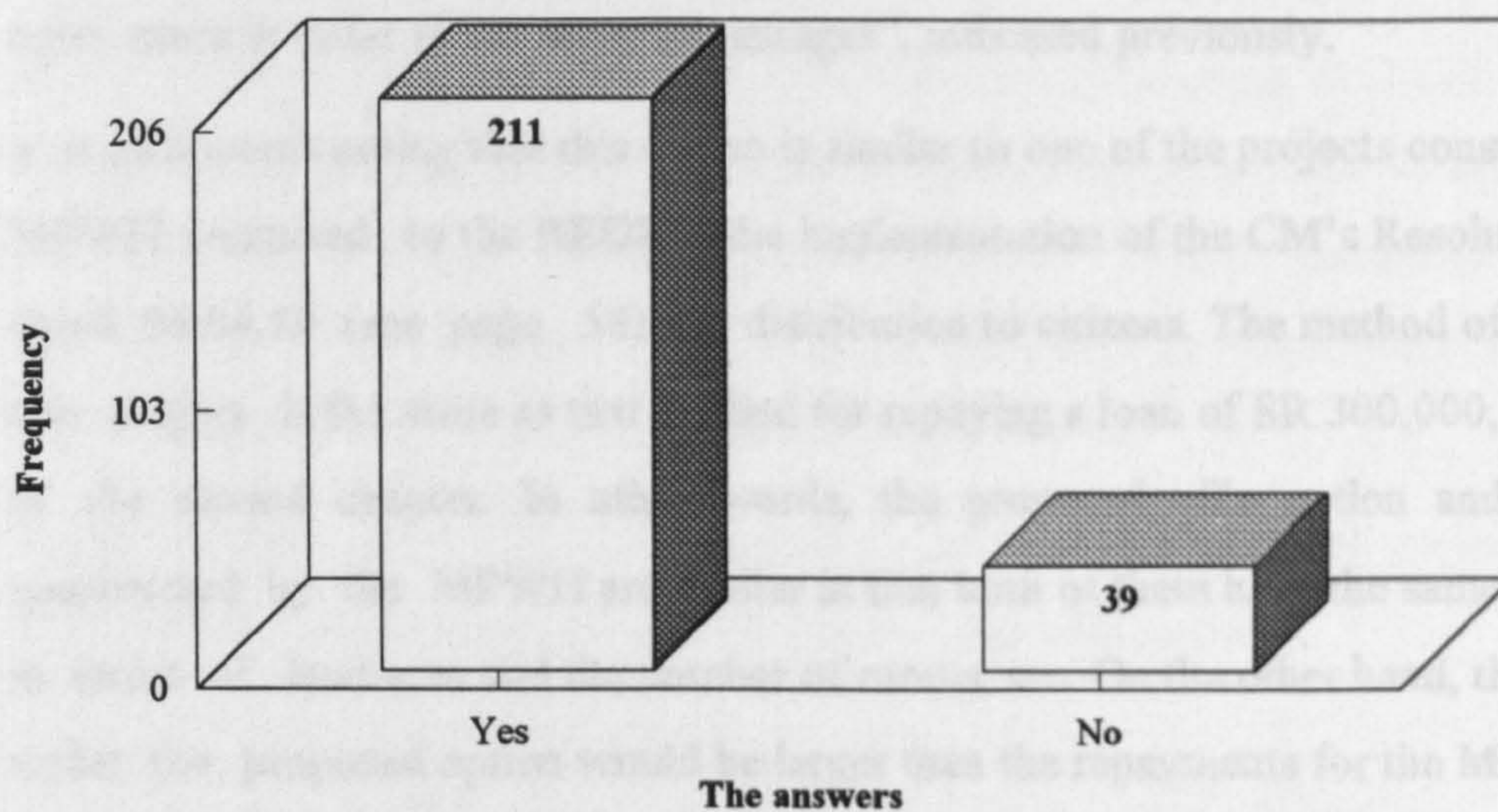
6.4.2 ATTITUDES TOWARDS THE OPTION OF A VILLA

Along the same lines as the previous question, the questionnaire then (in question 9) asked the respondents to indicate their attitudes towards the option of a villa instead of the option of a loan. The exact wording of this question was: The REDF is considering building estates consisting of villas, each having a floor area of 230 square metres, and consisting of six large rooms. The villa would be built on a plot of land of 400 square metres, valued at SR 400,000 repayable over twenty years (i.e. SR 20,000 annually). The villa would be available one year after the date of the application. Would you prefer this option? From Table and Figure 6.9 it can be seen that the answers were divided into two groups, as follows:

Table 6.9
Would you prefer the option of a villa?

| Response | Value | Frequency | Percent | Valid percent | Cumulative percent |
|--------------|-------|------------|------------|---------------|--------------------|
| Yes | 1 | 211 | 84.4 | 84.4 | 84.4 |
| No | 2 | 39 | 15.6 | 15.6 | 100 |
| TOTAL | | 250 | 100 | 100 | |

Figure 6.9
Would You Prefer the Option of a Villa?



The first group consisting of two hundred and eleven respondents (84.4% of the survey population) stated that they would prefer the option of a villa. In other words, the vast majority of the respondents preferred this option. This could be explained by any of the following reasons:

- (a) The villa option meets the immediate need for a house.
- (b) The present loan of SR 300,000 is not sufficient for the construction cost of one housing unit, as previously mentioned (see page 108).
- (c) Some people would prefer to live on an estate like this (i.e. where all villas are the same).
- (d) It would be cheaper not to have to pay an architect to design the house.
- (e) Respondents were confident that the construction standard required by the government would be high.

The second group consisting of thirty-nine respondents (15.6% of the survey population) stated that they would not prefer the option of a villa. This could be explained by any of the following:

- (a) They could not repay SR 20,000 per year.

(b) They wished to take advantage of the discount of the present loan scheme (i.e. 30% and 20%).

(c) They wanted to design their own homes.

It is evident that the number of respondents who answered 'yes' to question nine is significant. This could be taken as evidence that the option of a villa would be acceptable to many REDF loan seekers. Accordingly, this option could be used by the REDF as a new approach to addressing housing problems.

An important aspect of the above findings is that it also supports the notion of "ability to repay more in order to get some advantages", indicated previously.

It is also worth noting that this option is similar to one of the projects constructed by the MPWH entrusted to the REDF in the implementation of the CM's Resolution No. 130, dated 06.04.89 (see page 58), for distribution to citizens. The method of repayment in that project is the same as that applied for repaying a loan of SR 300,000, as mentioned in the second chapter. In other words, the proposed villa option and the projects constructed by the MPWH are similar in that both of them have the same specification, in terms of land area and the number of rooms, etc. On the other hand, the repayments under the proposed option would be larger than the repayments for the MPWH project. This is because in the case of the method currently in operation, the repayment on a loan of SR 400,000 would be SR 320,000 due to the discount of 20% which equals SR 80,000 ($400,000 \times 0.2 = 80,000$ SR). The total repayments, i.e. SR 320,000, would be repayable over a thirty-three year period, since the annual repayment is SR 9,600 ($320,000/9,600 = 33.33$ years). In contrast, in the case of the new proposal, the total repayments would be SR 400,000 which would be repayable over a twenty year period, since the annual repayment is SR 20,000 ($400,000/20,000 = 20$ years). Therefore, the new option would be advantageous for the REDF, as the loan would be repayable over a shorter period without any discount.

In addition, through the new option, cost minimisation may be achieved, as this is one of the main features of the economics of mass production. In other words, the construction cost of each housing unit of the proposed option would decrease. To speed up this project, the pre-fabricated and half-finished system of construction could be used.

Furthermore, the following should be considered:

- (a) strict privacy and simple design;
- (b) the protection of householders from sudden exposure, i.e. the sudden entrance of a stranger into the house without warning;
- (c) recognition of the segregation of visitors from the family;
- (d) abundant space, i.e. enough space for the family and a variety of controlled spaces for children to play in;
- (e) opportunity for separate social interaction for males and females.

Above all, the estate should include all essential facilities such as electricity, water and sewerage networks, schools, mosques, public parks and playgrounds. In other words, the project should not only consist of housing facilities as such, but should also include a wide variety of educational, religious and social buildings which enhance a community and would make the estate a worthwhile place to live in.

The following question now arises: which option is more acceptable, the cash option (SR 500,000) of question eight, or the villa option of question nine?

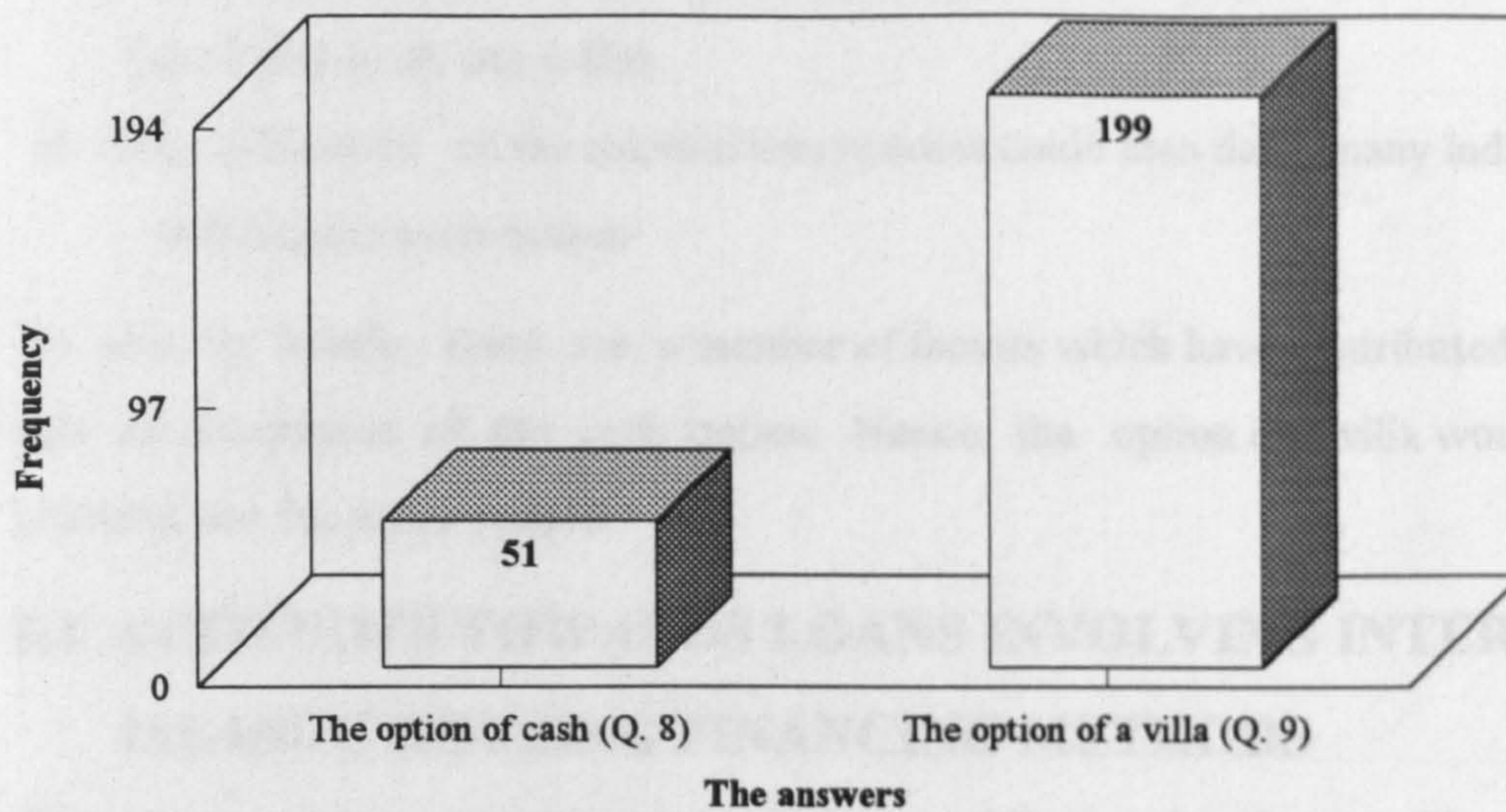
6.4.3 PREFERENCE FOR CASH OR VILLA

According to Table and Figure 6.10 it can be seen that the answers to question ten were as follows:

Table 6.10
Which option would you prefer?

| Response | Value | Frequency | Percent | Valid percent | Cumulative percent |
|-------------------------------|-------|-----------|---------|---------------|--------------------|
| The option of cash (of Q. 8) | 1 | 51 | 20.4 | 20.4 | 20.4 |
| The option of villa (of Q. 9) | 2 | 199 | 79.6 | 79.6 | 100 |
| TOTAL | | 250 | 100 | 100 | |

Figure 6.10
Which Option Would You Prefer?



The first group consisting of nearly a fifth of the respondents (fifty-one respondents, 20.4% of the survey population), stated that they would prefer the cash option.

The second group consisting of nearly four-fifths of the respondents (one hundred and ninety-nine respondents, 79.6% of the survey population), stated that they would prefer the villa option.

As expected from the previous findings, the number of respondents who chose the villa option is much larger than the number of respondents who chose the cash option. This result could be explained by the following:

- (a) The annual repayment for the villa option is less than the annual repayment for the cash option. Specifically, the annual repayment for the villa option is exactly four-fifths of the annual repayment for the cash option. This may prevent many low income people from taking advantage of the cash option but enable them to take advantage of the villa option.
- (b) The cash option is limited to land owners and thus excludes many individuals who do not own a plot of land from utilising this programme.

At this point it is also important to remember that: Over one-third of the respondents (ninety-one respondents, 36.4% of the survey population) do not own a plot of land (see Table 6.5A).

- (c) The villa option is suitable for those who can afford to repay more than one instalment at a time but do not own a plot of land.

At this point it is also important to remember that: Over 69% of respondents could repay more than one annual instalment at a time in order to obtain some advantage (see Table 6.6A and 6.6B).

- d. The difficulties of the construction process could also deter many individuals from utilising the cash option.

To sum up briefly, there are a number of factors which have contributed to the lower rate of acceptance of the cash option. Hence, the option of a villa would be a more practical one for many people.

6.5 ATTITUDES TOWARDS LOANS INVOLVING INTEREST AND ISLAMIC HOUSING FINANCING METHODS

There are a variety of options that could be used for housing finance. These options can be classified, according to Islamic law (*shari'ah*) into prohibited and permissible. The prohibited options may be defined as any financing methods which involve a loan on which interest is charged (usury). In contrast, the permissible options may be defined as any financing methods not involving interest. Consequently, the questionnaire attempted to determine the degree of acceptance of these options among REDF loan seekers.

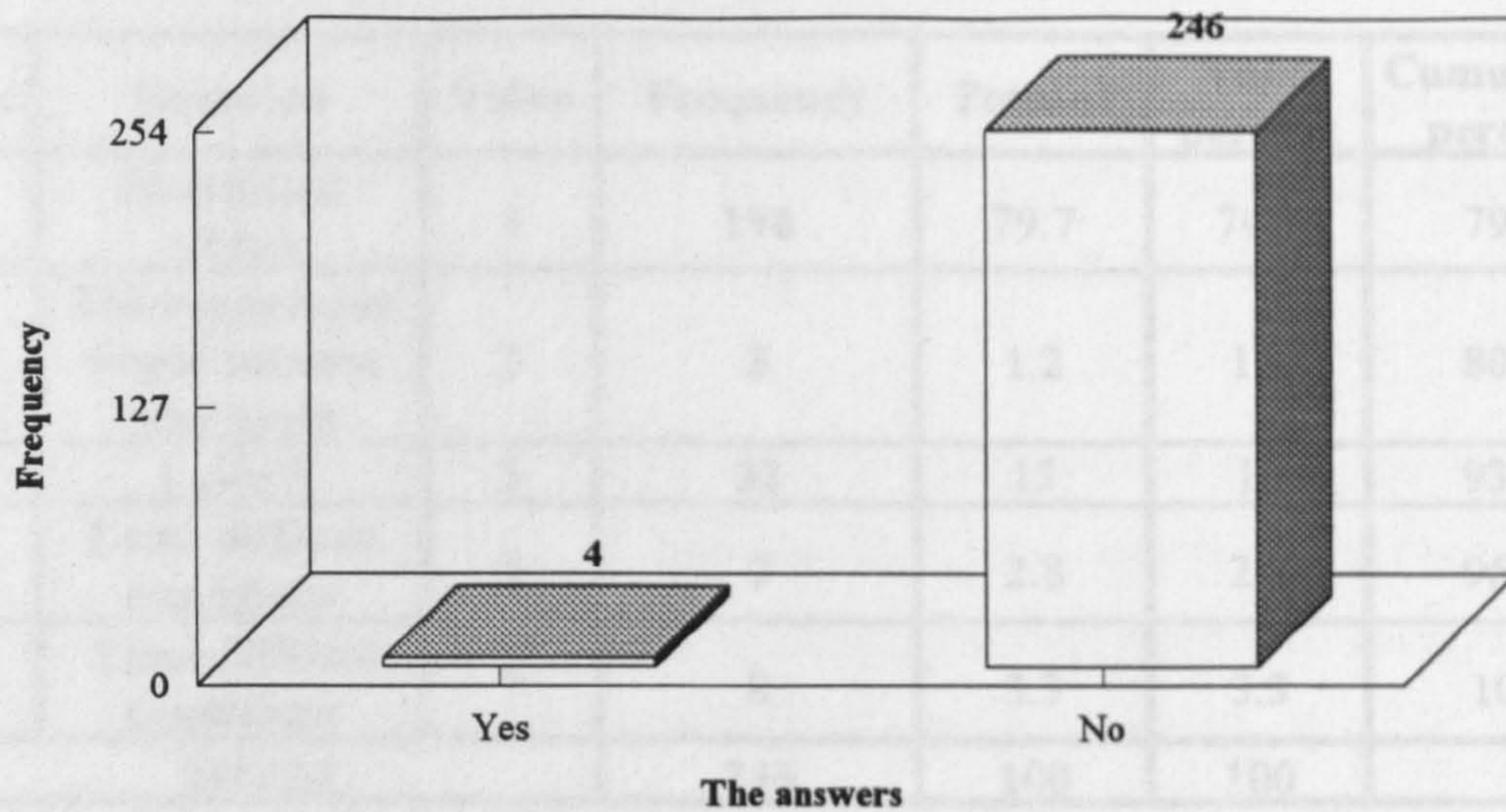
6.5.1 ATTITUDES TOWARDS INTEREST LOANS

The respondents were asked to indicate their attitudes towards the first option. The question was phrased as follows: "If there were no REDF loans, would you take out a loan on which interest is charged in order to build your house?" From Table and Figure 6.11 it can be seen that the answers were combined in two groups, as follows:

Table 6.11
Would you take out a loan on which interest is charged
in order to build your house?

| Response | Value | Frequency | Percent | Valid percent | Cumulative percent |
|--------------|-------|------------|------------|---------------|--------------------|
| Yes | 1 | 4 | 1.6 | 1.6 | 1.6 |
| No | 2 | 246 | 98.4 | 98.4 | 100 |
| TOTAL | | 250 | 100 | 100 | |

Figure 6.11
Would You Take out a Loan on which Interest is Charged
in order to Build Your House?



The first group consisting of only four respondents (1.6% of the survey population), stated that they would. However, this number (four cases) is insignificant.

The second group consisting of nearly all the respondents (two hundred and forty-six respondents, 98.4% of the survey population), stated that they would not take out a loan on which interest is charged in order to build their houses. An explanation for the overwhelming rejection of interest loans is given by the responses to the next question in the survey, as discussed below.

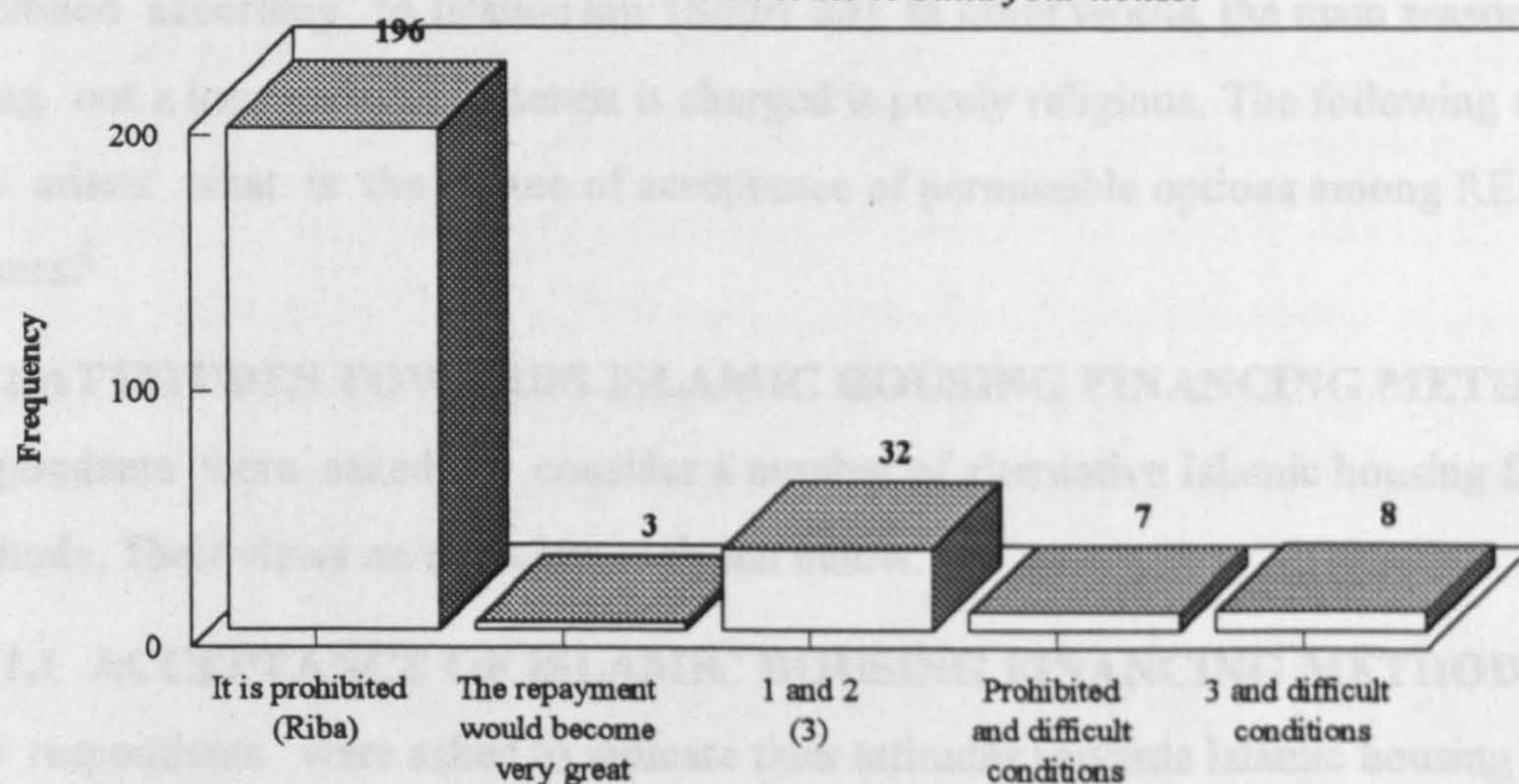
6.5.1.1 REASONS FOR NOT TAKING OUT THE INTEREST LOANS

The respondents, who stated that they would not take out a loan on which interest is charged in order to build their houses, were asked (in question 11A) to state their reasons. From Table and Figure 6.11A, it can be seen that the answers were divided into five groups, as follows:

Table 6.11A
Why would you refuse a loan on which interest is charged
in order to build your house?

| No. | Response | Value | Frequency | Percent | Valid percent | Cumulative percent |
|--------------|---|-------|------------|------------|---------------|--------------------|
| 1 | Prohibited (<i>Riba</i>) | 1 | 196 | 79.7 | 79.7 | 79.7 |
| 2 | The repayment would become very great | 2 | 3 | 1.2 | 1.2 | 80.9 |
| 3 | 1 and 2 | 5 | 32 | 13 | 13 | 93.9 |
| 4 | 1 and difficult conditions | 6 | 7 | 2.8 | 2.8 | 96.7 |
| 5 | 3 and difficult conditions | 7 | 8 | 3.3 | 3.3 | 100 |
| TOTAL | | | 246 | 100 | 100 | |

Figure 6.11A
Why Would You Refuse a Loan on which Interest is Charged
in order to build your house?



The answers

The first group consisting of nearly four-fifths of respondents (one hundred and ninety-six respondents, 79.7% of the survey population who would not take out an interest loan) who refused interest because it is prohibited.

The second group contained only three respondents (1.2% of the survey population who would not take out an interest loan) who refused interest because the repayment would become very great.

The third group included thirty-two respondents (13% of the survey population who would not take out an interest loan) who refused interest because of reasons one and two combined (it is prohibited and the repayment would become very great).

The fourth group contained only seven respondents (2.8% of the survey population who would not take out an interest loan) who refused interest because it is prohibited and because of the difficult conditions of obtaining the loan.

The fifth group consisting of eight respondents (3.3% of the survey population who would not take out an interest loan) who refused interest because it is prohibited, the repayment would become very great and because of the difficult conditions of obtaining the loan.

Careful observation of this table shows that the common factor among the first, third, fourth and fifth reasons is that of prohibition. Thus, this reason prevented two hundred and forty-three respondents (98.8% of the survey population who would not take out an interest loan) from considering any housing finance involving interest.

To summarise, the degree of acceptance of the option of a loan involving interest in order to build their house among REDF loan seekers is 1.6% (see Table 6.11), since it is prohibited according to Islamic law (*Shari'ah*). In other words, the main reason for not taking out a loan on which interest is charged is purely religious. The following question now arises: what is the degree of acceptance of permissible options among REDF loan seekers?

6.5.2 ATTITUDES TOWARDS ISLAMIC HOUSING FINANCING METHODS

Respondents were asked to consider a number of alternative Islamic housing financing methods. Their views on these are analysed below.

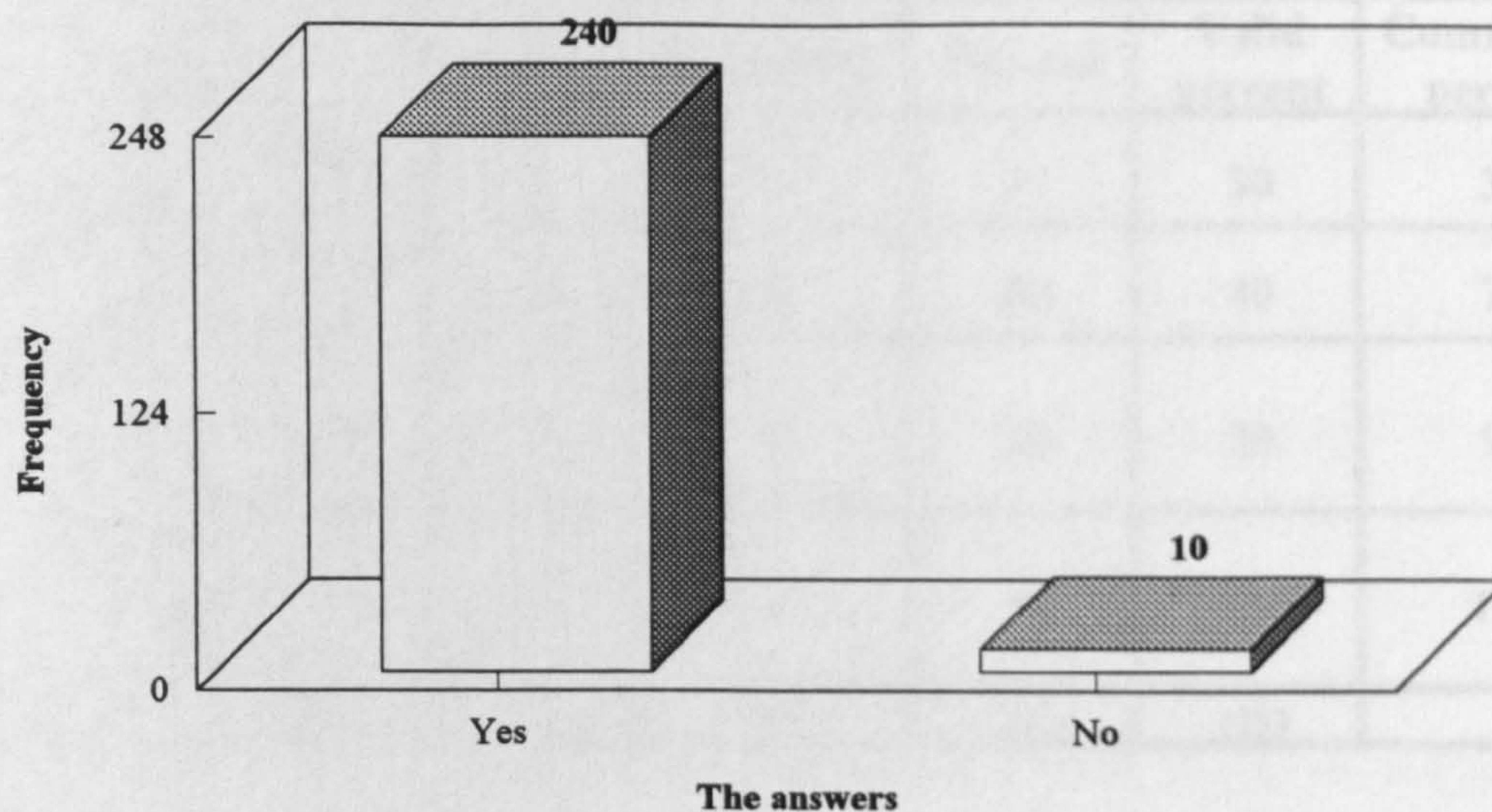
6.5.2.1 ACCEPTANCE OF ISLAMIC HOUSING FINANCING METHODS

The respondents were asked to indicate their attitudes towards Islamic housing finance. The question posed was: If Islamic housing financing methods were available, would you prefer them? The responses are presented in Table and Figure 6.12 as follows:

Table 6.12
If Islamic housing financing methods were available,
would you prefer them?

| Response | Value | Frequency | Percent | Valid percent | Cumulative percent |
|--------------|-------|------------|------------|---------------|--------------------|
| Yes | 1 | 240 | 96 | 96 | 96 |
| No | 2 | 10 | 4 | 4 | 100 |
| TOTAL | | 250 | 100 | 100 | |

Figure 6.12
If Islamic Housing Financing Methods were Available,
Would You Prefer Them?



The first group consisting of a very high percentage of respondents (two hundred and forty respondents, 96% of the survey population) said 'yes'.

The second group consisting of a very low percentage of respondents (ten respondents, 4% of the survey population) said 'no'. However, this number (ten cases) is insignificant. In other words, the degree of acceptance of permissible finance among REDF loan seekers is 96%. It is reasonable to assume that this acceptance is because the methods described are based on Islamic principles. Thus, they will gain a wide acceptance among Saudi citizens who are deeply attached to their religious beliefs and also wish to own their houses.

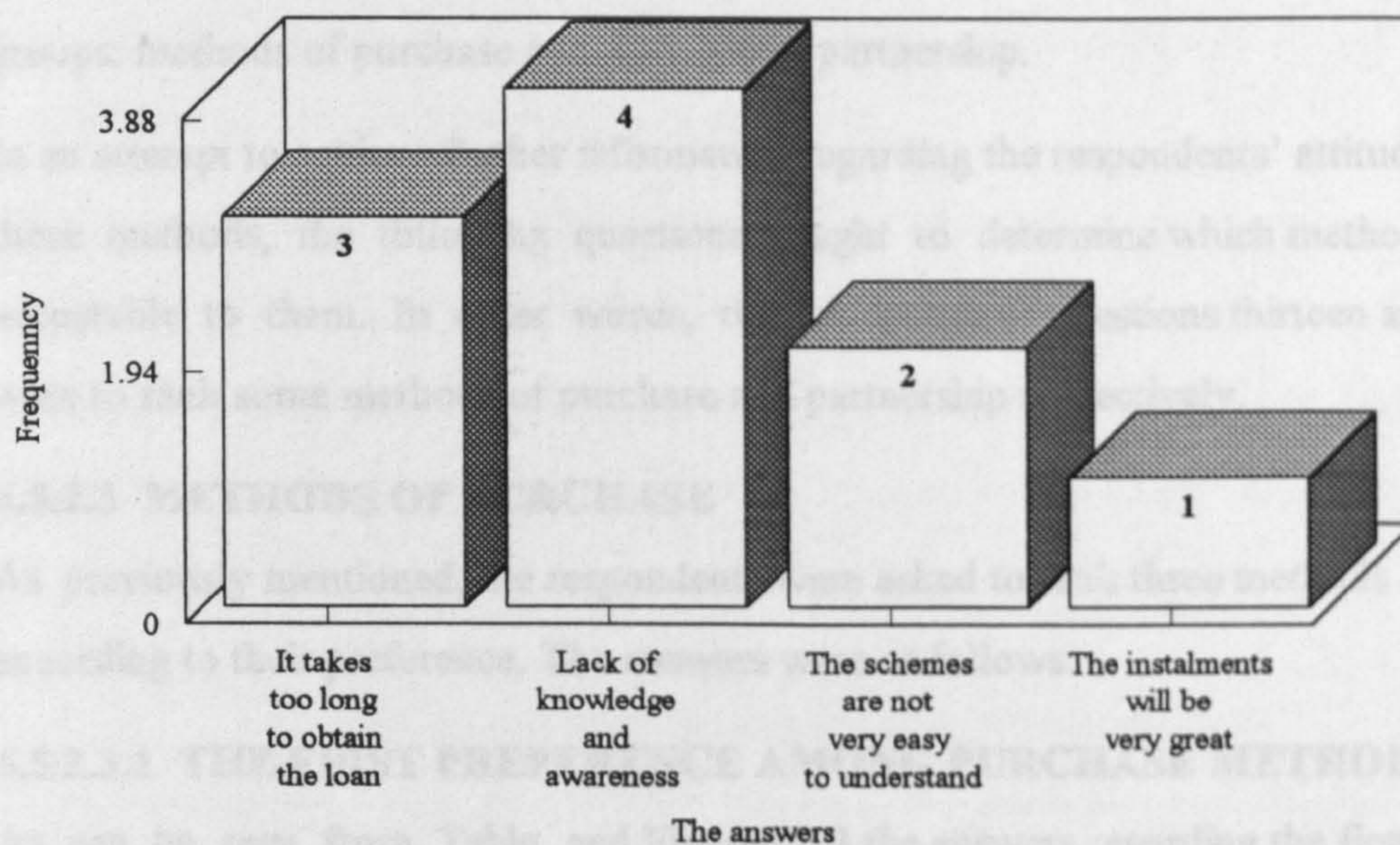
6.5.2.2 REASONS FOR NOT FAVOURING ISLAMIC HOUSING FINANCING METHODS

Those respondents who did not favour the Islamic housing financing methods were asked to indicate their reasons. From Table and Figure 6.12A, it can be seen that the answers were combined in four groups, as follows:

Table 6.12A
Why would you not prefer Islamic housing financing methods?

| Response | Value | Frequency | Percent | Valid percent | Cumulative percent |
|---|-------|-----------|------------|---------------|--------------------|
| It takes too long to obtain the loan | 1 | 3 | 30 | 30 | 30 |
| Lack of knowledge and awareness | 2 | 4 | 40 | 40 | 70 |
| The schemes are not very easy to understand | 3 | 2 | 20 | 20 | 90 |
| The instalments would be very great | 4 | 1 | 10 | 10 | 100 |
| TOTAL | | 10 | 100 | 100 | |

Figure 6.12A
Why Would You not Prefer Islamic Housing Finance Methods?



The first group consisting of three respondents (30% of the survey population who would not prefer Islamic housing financing methods) who said that they would not prefer Islamic housing financing methods because it takes too long to obtain the loan.

The second group comprised four respondents (40% of the survey population who would not prefer Islamic housing financing methods) who said that they would not prefer Islamic housing financing methods because of their lack of knowledge and awareness.

The third group included two respondents (20% of the survey population who would not prefer Islamic housing financing methods) who said that they would not prefer Islamic housing financing methods because the schemes are not very easy to understand.

The fourth group contained only one respondent (10% of the survey population who would not prefer Islamic housing financing methods) who said he would not prefer Islamic housing financing methods because the instalments would be very great.

Finally, and most importantly for this research, these reasons should be taken into consideration when Islamic housing financing methods are adopted, in order to increase the degree of their acceptance among REDF loan seekers. From this point of view, various policies may be suggested. The mass media, audio and visual, newspapers, magazines, etc. should be utilised in order to make the goals, operations and rules of the Islamic housing financing methods better known to all citizens.

It should be noted that the Islamic housing financing methods may be divided into two groups: methods of purchase and methods of partnership.

In an attempt to achieve further information regarding the respondents' attitudes towards these methods, the following questions sought to determine which method was most acceptable to them. In other words, the objectives of questions thirteen and fourteen were to rank some methods of purchase and partnership respectively.

6.5.2.3 METHODS OF PURCHASE

As previously mentioned, the respondents were asked to rank three methods of purchase according to their preference. The answers were as follows:

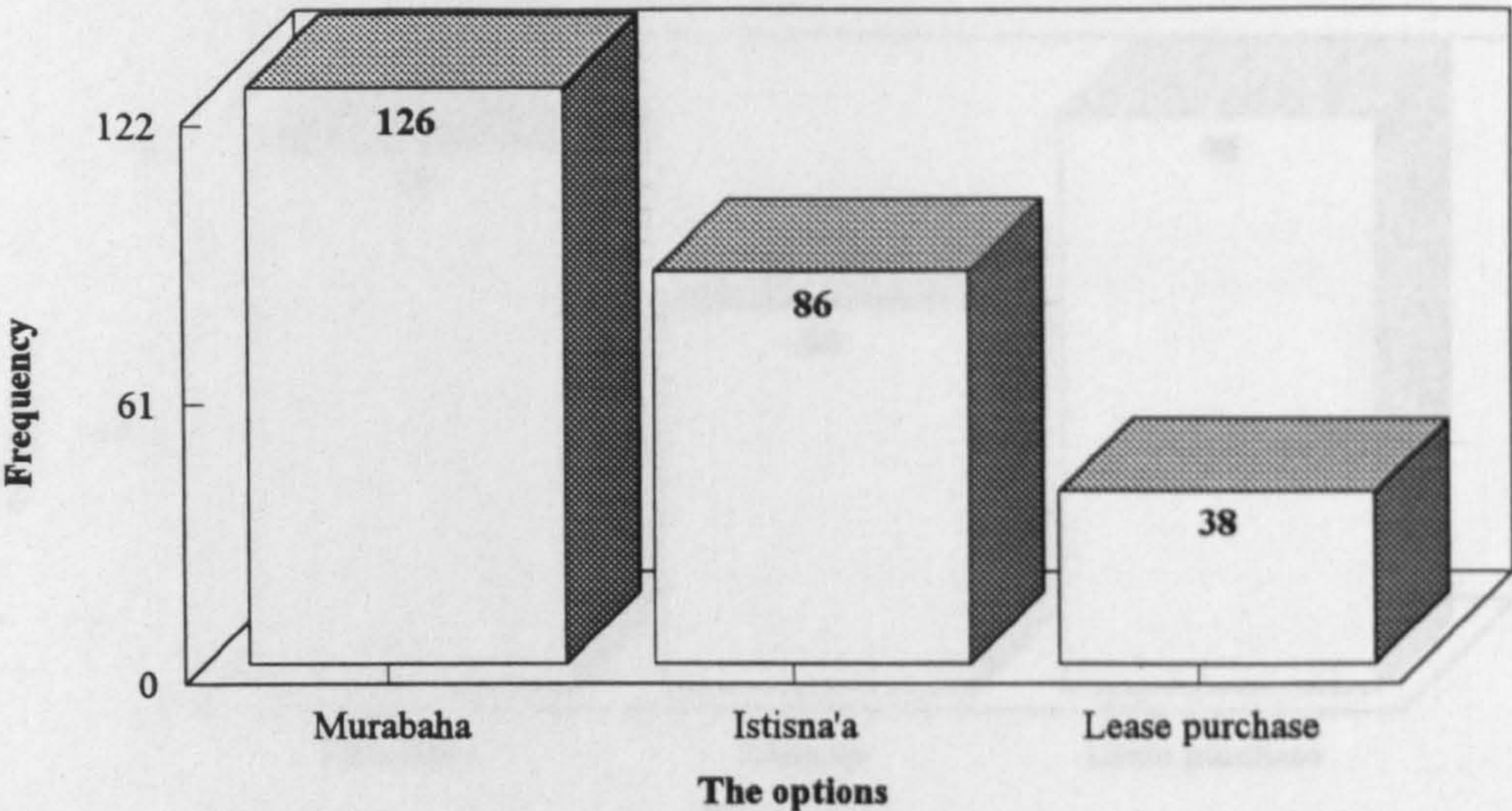
6.5.2.3.1 THE FIRST PREFERENCE AMONG PURCHASE METHODS

As can be seen from Table and Figure 6.13 the answers regarding the first preference were divided into three groups, as follows:

Table 6.13
The first preference among purchase methods

| Response | Value | Frequency | Percent | Valid percent | Cumulative percent |
|------------------|-------|-----------|---------|---------------|--------------------|
| <i>Murabaha</i> | 1 | 126 | 50.4 | 50.4 | 50.4 |
| <i>Istisna'a</i> | 2 | 86 | 34.4 | 34.4 | 84.8 |
| Lease purchase | 3 | 38 | 15.2 | 15.2 | 100 |
| TOTAL | | 250 | 100 | 100 | |

Figure 6.13
The First Preference of Purchase Methods



The first group consists of one hundred and twenty-six respondents (50.4% of the survey population) whose first preference was *Murabaha*.

The second group is composed of eighty-six respondents (34.4% of the survey population) whose first preference was *Istisna'a*.

The third group includes thirty-eight respondents (15.2% of the survey population) whose first preference was Lease purchase.

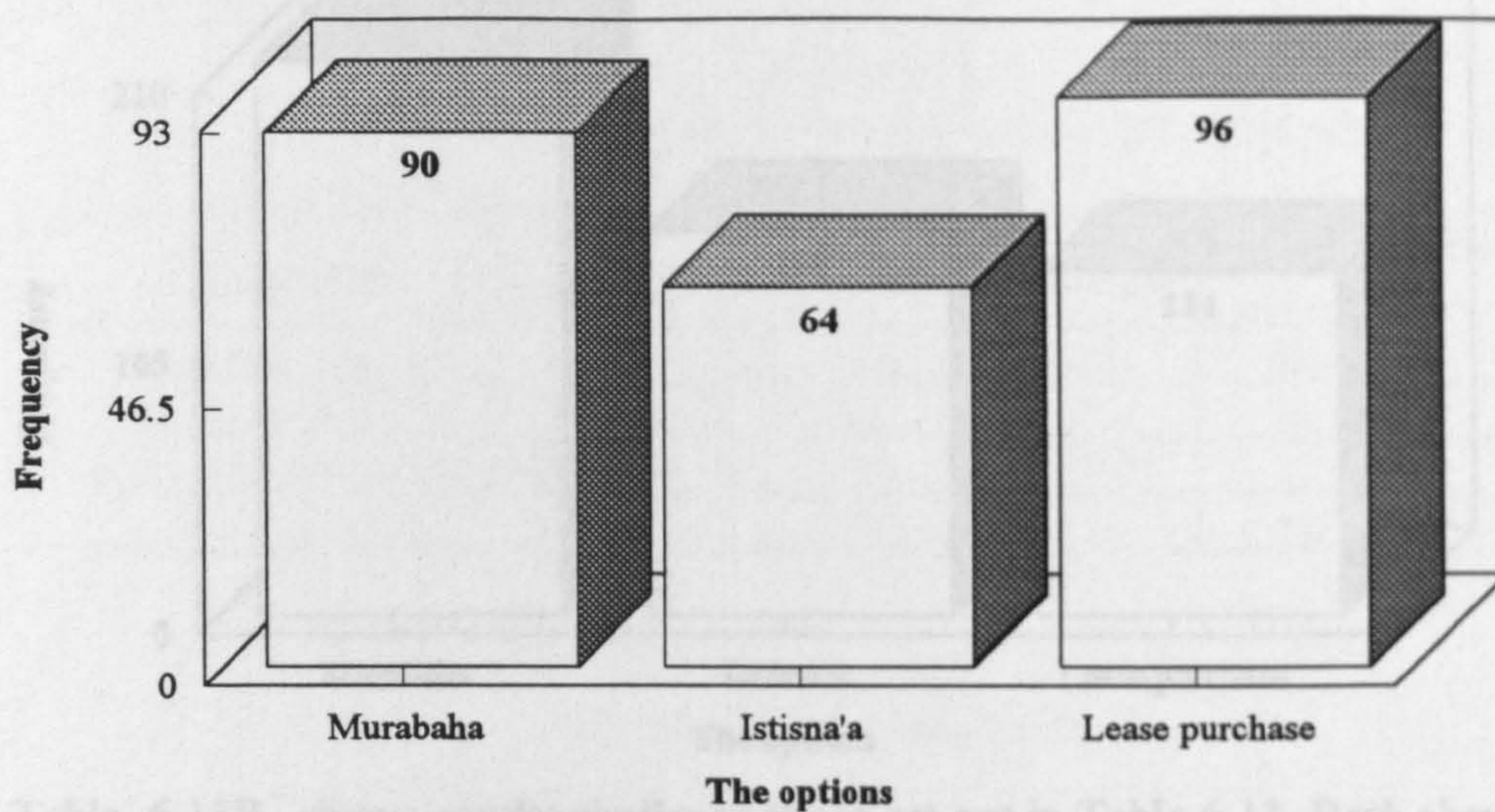
6.5.2.3.2 THE SECOND PREFERENCE AMONGPURCHASE METHODS

Regarding the second preference, Table 6.13A gives details of the respondents' answers which were as follows:

Table 6.13A
The second preference among purchase methods

| Response | Value | Frequency | Percent | Valid percent | Cumulative percent |
|------------------|-------|------------|------------|---------------|--------------------|
| <i>Murabaha</i> | 1 | 90 | 36 | 36 | 36 |
| <i>Istisna'a</i> | 2 | 64 | 25.6 | 25.6 | 61.6 |
| Lease purchase | 3 | 96 | 38.4 | 38.4 | 100 |
| TOTAL | | 250 | 100 | 100 | |

Figure 5.13A
The Second Preference of Purchase Methods



The first group consists of ninety respondents (36% of the survey population) whose second preference was *Murabaha*.

The second group is composed of sixty-four respondents (25.6% of the survey population) whose second preference was *Istisna'a*.

The third group consists of ninety-six respondents (38.4% of the survey population) whose second preference was Lease purchase.

Combining the third columns of Tables 6.13 and 6.13A will show the total frequency of each method as shown in Table 6.13B. Consequently, the number of valid cases in Table 6.13B is twice that in Table 6.13 or 6.13A. To put it more simply, Table 6.13B is derived from Tables 6.13 and 6.13A and the number of valid cases in Table 6.13B is 500.

Table 6.13B
Summary of preferences among purchase responses

| Response | Code | Count | Percentage of responses | Percentage of Cases |
|------------------|------|------------|-------------------------|---------------------|
| <i>Murabaha</i> | 1 | 216 | 43.2 | 86.4 |
| <i>Istisna'a</i> | 2 | 150 | 30 | 60 |
| Lease purchase | 3 | 134 | 26.8 | 53.6 |
| TOTAL | | 500 | 100 | 200 |

Figure 6.13B
Summary of Preference of Purchase Responses

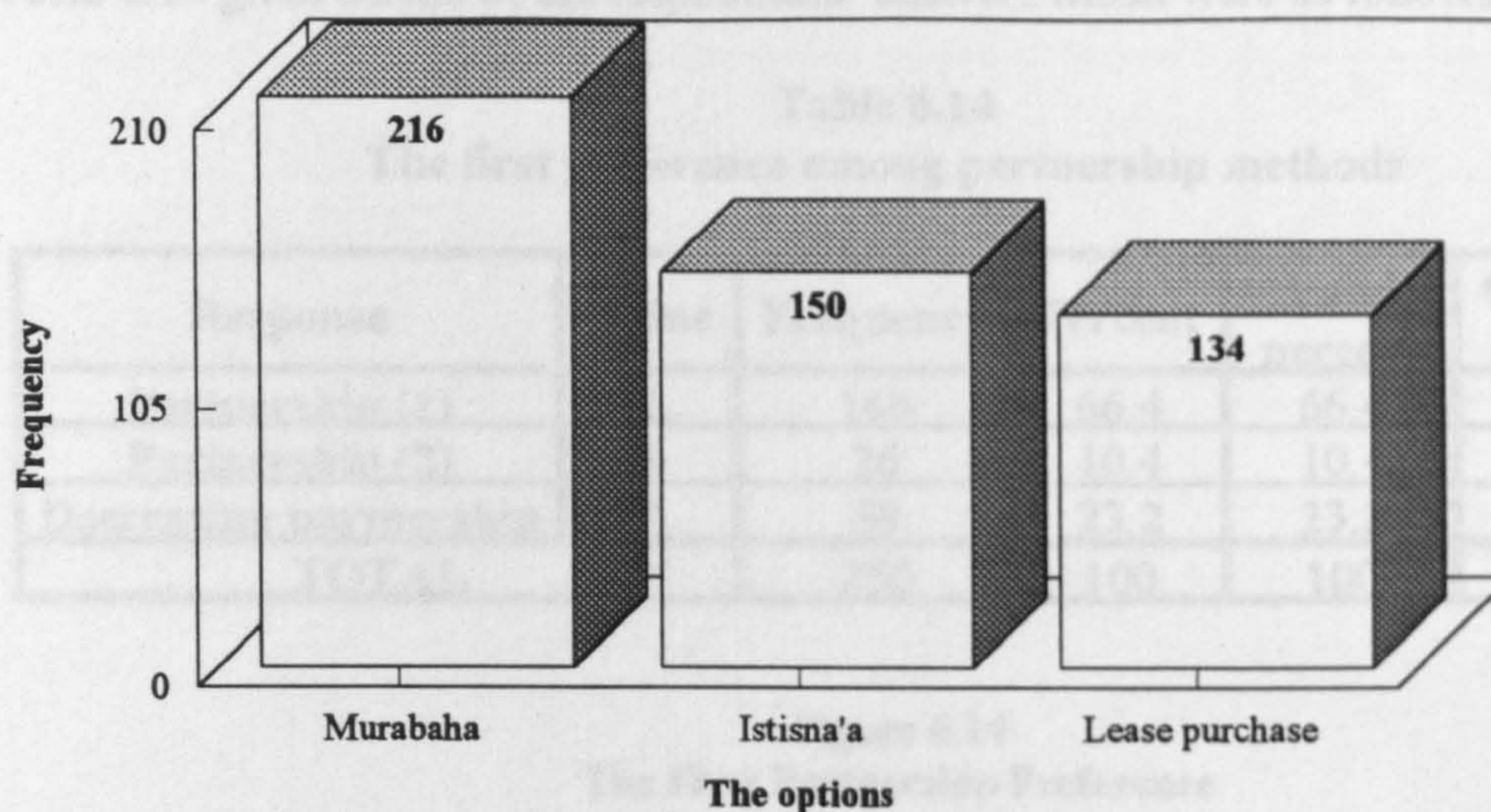


Table 6.13B shows results similar to those set out in Table 6.13. Both show the highest percentage of cases in the first row. This means that *Murabahah* is the preferred method of financing among the Islamic purchase methods with 43.2%. The relative significance of *Murabahah* has been presented in Table 6.13B which is self-explanatory. *Istisna'a* occupied the second position with 30%. Lease purchase occupied the last position with 26.8%.

It is worth mentioning that *Murabahah* is based on the first price. In addition, original price, manner of payment and final profit margin should be known. Such information is very helpful in explaining why this method occupied the first position among the Islamic purchase housing financing methods.

6.5.2.4 METHODS OF PARTNERSHIP

Regarding the second group of Islamic housing financing methods, that is methods of partnership, the respondents were again asked to rank three methods according to their preference. The respondents' answers were as follows:

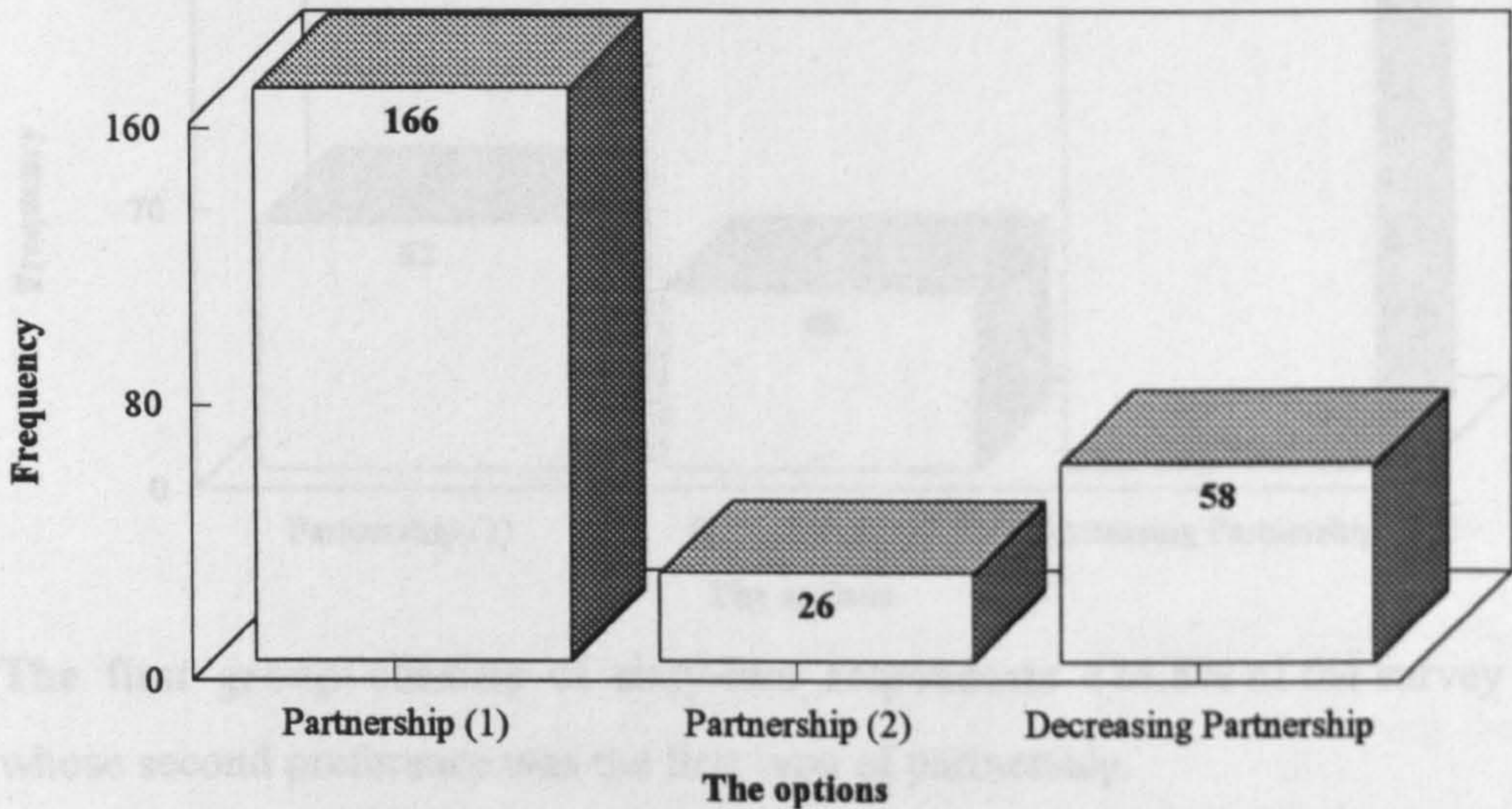
6.5.2.4.1 THE FIRST PREFERENCE AMONG PARTNERSHIP METHODS

Table 6.14 gives details of the respondents' answers which were as follows:

Table 6.14
The first preference among partnership methods

| Response | Value | Frequency | Percent | Valid percent | Cumulative percent |
|------------------------|-------|-----------|---------|---------------|--------------------|
| Partnership (1) | 1 | 166 | 66.4 | 66.4 | 66.4 |
| Partnership (2) | 2 | 26 | 10.4 | 10.4 | 76.8 |
| Decreasing partnership | 3 | 58 | 23.2 | 23.2 | 100 |
| TOTAL | | 250 | 100 | 100 | |

Figure 6.14
The First Partnership Preference



The first option was chosen by the majority of respondents. In other words, more than three-fifths of the respondents (one hundred and sixty-six respondents, 66.4% of the survey population) chose the first type of partnership as their first preference.

The second option was chosen by the minority of respondents. In other words, just over one-tenth of the respondents (twenty-six respondents, 10.4% of the survey population) chose the second type of partnership as their first preference.

The third option was chosen by nearly a quarter of the survey population (fifty-eight respondents, 23.2% of the survey population) whose first preference was decreasing partnership.

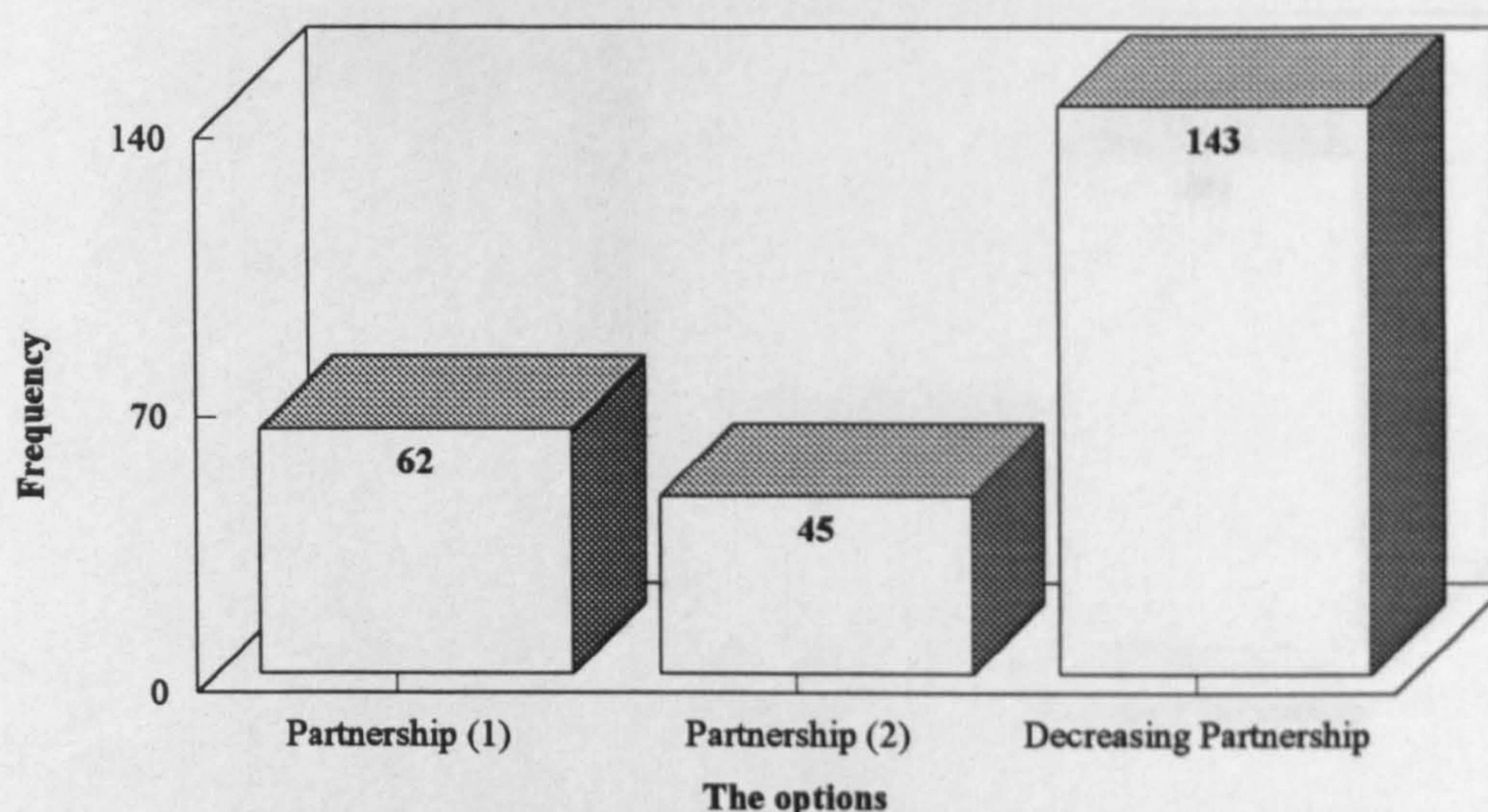
6.5.2.4.2 THE SECOND PREFERENCE AMONG PARTNERSHIP METHODS

Regarding the second preference, as can be seen from Table 6.14A the answers were divided into three groups, as follows:

Table 6.14A
The second preference among partnership methods

| Response | Value | Frequency | Percent | Valid percent | Cumulative percent |
|------------------------|-------|------------|------------|---------------|--------------------|
| Partnership (1) | 1 | 62 | 24.8 | 24.8 | 24.8 |
| Partnership (2) | 2 | 45 | 18 | 18 | 42.8 |
| Decreasing partnership | 3 | 143 | 57.2 | 57.2 | 100 |
| TOTAL | | 250 | 100 | 100 | |

Figure 6.14A
The Second Partnership Preference



The first group consists of sixty-two respondents (24.8% of the survey population) whose second preference was the first type of partnership.

The second group is composed of a minority of respondents (forty-five respondents, 18% of the survey population) whose second preference was the second type of partnership.

The third group consists of the majority of respondents (one hundred and forty-three respondents 57.2% of the survey population) whose second preference was decreasing partnership.

Combining the third columns of Tables 6.14 and 6.14A gives the total frequency for each method, as shown in Table 6.14B. Consequently, as in the case of Table 6.13B, the number of valid cases in Table 6.14B is 500.

Table 6.14B
Summary of preferences among partnership methods

| Response | Code | Count | Percentage of responses | Percentage of Cases |
|------------------------|------|------------|-------------------------|---------------------|
| Partnership (1) | 1 | 228 | 45.6 | 91.2 |
| Partnership (2) | 2 | 71 | 14.2 | 14.2 |
| Decreasing partnership | 3 | 201 | 40.2 | 80.4 |
| TOTAL | | 500 | 100 | 200 |

Figure 6.14B
Summary of Preference of Partnership Responses

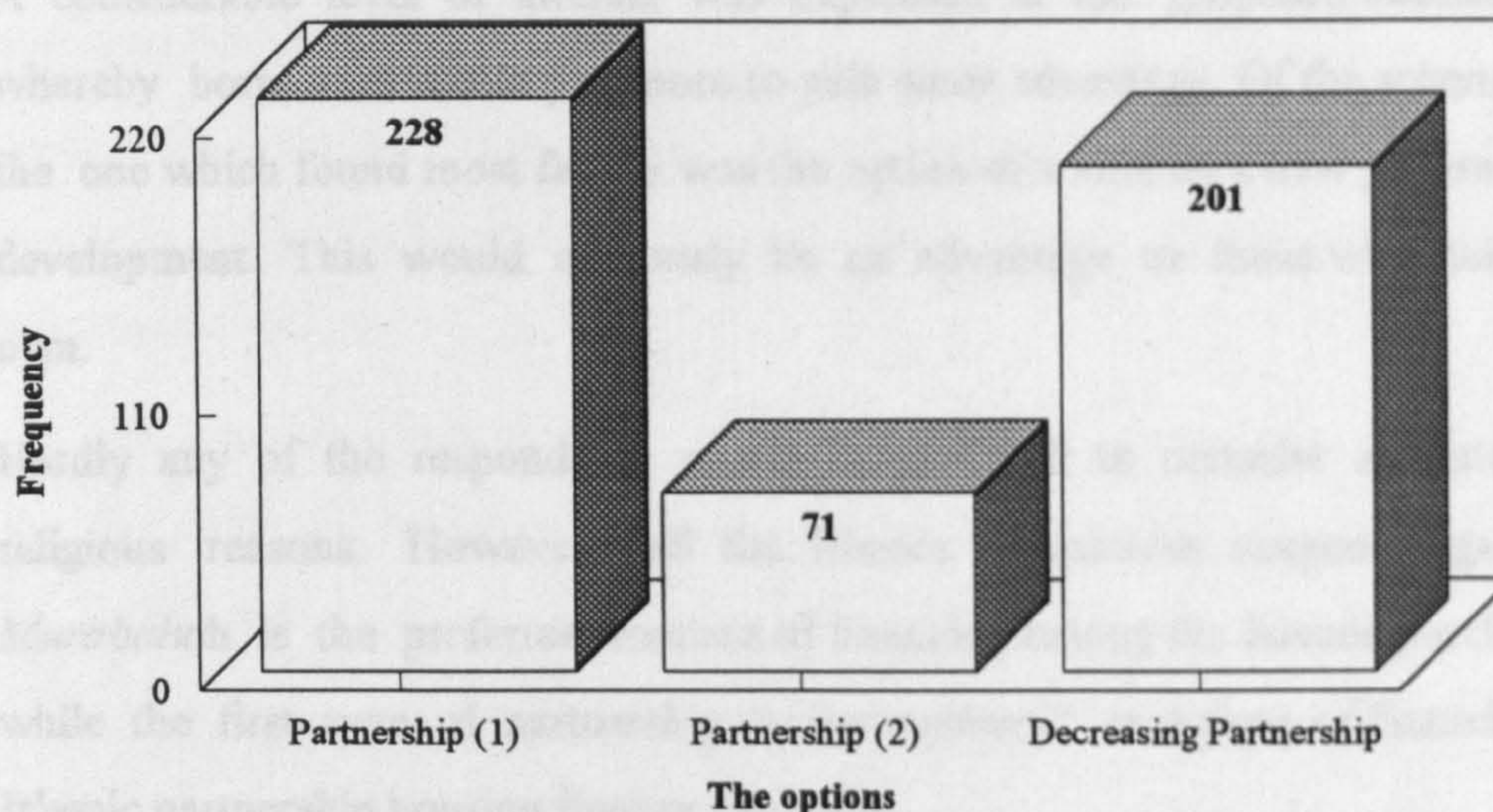


Table 6.14B shows very similar results to those of Table 6.14. Both of them show that the highest percentage of cases is in the first row. This means that the first type of partnership is the most preferred method of financing among the Islamic partnership housing finance methods, with 45.6%. In contrast, the second type of partnership occupies the last position with 14.2%. Thus, decreasing partnership occupies the second position with 40.2%.

6.6 CONCLUSION

The data analysed in this chapter revealed that over three quarters (76.4%) of the loan seekers group were married. On average, this group had fewer dependants than the borrowers group. They were spread across all income groups. More than three-fifths (64%) of the survey population were facing housing problems of one kind or another. The majority of the respondents (62.4) had already applied for an REDF loan and were on the waiting list. Those who had not, were prevented from doing so, mainly because they did not own a plot of land on which to build.

The vast majority (89.6%) of the respondents were prepared to repay the annual instalment without discount in order to reduce the waiting period for obtaining an REDF loan, the preferred option being to repay SR 3,000 monthly in order to bring the waiting period down to five years. Many of the respondents would also be prepared to repay multiple instalments to obtain varying levels of discount.

Widespread acceptance was expressed of the suggestion to implement strong action in order to prevent overdue annual repayments.

A considerable level of interest was expressed in the proposed alternative schemes, whereby borrowers would pay more to gain some advantage. Of the schemes suggested, the one which found most favour was the option of a villa on a new government housing development. This would obviously be an advantage to those who lack land of their own.

Hardly any of the respondents would be prepared to consider an interest loan, for religious reasons. However, all the Islamic alternatives suggested gained support. *Murabahah* is the preferred method of financing among the Islamic purchase methods, while the first type of partnership is the preferred technique of financing among the Islamic partnership housing finance methods

Thus, there is ample evidence from the responses that a more varied and flexible approach to housing finance, which would reduce the burden on the REDF, would be welcomed by both existing and potential loan applicants.

CHAPTER SEVEN

HYPOTHESES RELATED TO BORROWERS' QUESTIONS

7.0 INTRODUCTION

This chapter will consider the hypotheses related to borrowers' questions, the type of the test which was used and the aim of hypothesis will be indicated, the result will be presented. These hypotheses may be divided into two groups, namely, the descriptive and analytical hypotheses.

This chapter is, therefore, divided into two sections, corresponding to these groups of hypotheses. The final section will present the conclusion. Therefore, the main sections of this chapter are:

1. The descriptive hypotheses
2. The analytical hypotheses
3. Conclusion.

7.1 THE DESCRIPTIVE HYPOTHESES

The descriptive hypotheses can be divided into two groups, namely, the hypotheses which have been rejected and the hypotheses which have not been rejected. Hence, this section is divided into two parts. The first presents the hypotheses which have been rejected, while the second presents the hypotheses which have not.

7.1.1 THE DESCRIPTIVE HYPOTHESES WHICH HAVE BEEN REJECTED HYPOTHESIS NO. 1

SR 300,000 is equal to 70% (or more) of the construction cost of one housing unit.

Aims to discuss whether the existing loan maximum (SR 300,000) is equal to (or more than) 70% of the construction cost of one housing unit.

Type of test: Binomial test (Table 7.1)

Table 7.1
Was the construction cost more than SR 429,000?

| Value Label | Value | Frequency |
|--------------|-------|-----------|
| Yes | 1 | 55 |
| No | 2 | 20 |
| TOTAL | | 75 |

The null hypothesis: $p \leq 0.55$

Proportion test for $p = 0.55$

H0: $p \leq 0.55$

H1: $p > 0.55$ for those who said SR 300,000 is less than 70% of the construction cost of one housing unit.

Test proportion = 0.55

Observation proportion = 0.7333

Normal approximation.

1- tailed $p = 0.0011$

The p -value = 0.0011 which is less than 0.05. Thus, the null hypothesis has been rejected and the alternative hypothesis has been accepted. We can say that we are 95% confident that SR 300,000 is less than 70% of the construction cost of one housing unit.

HYPOTHESIS NO. 2

The borrowers have always been on time with their annual repayments of SR 9,600.

Aims to assess whether the annual repayments (SR 9,600) are ever delayed.

Type of test: Binomial test (Table 7.2)

Table 7.2
Did your annual repayment (SR 9,600) ever get delayed?

| Value label | Value | Frequency |
|--------------|-------|------------|
| Yes | 1 | 159 |
| No | 2 | 91 |
| TOTAL | | 250 |

The null hypothesis: $p \leq 0.55$

Proportion test for $p = 0.55$

H0: $p \leq 0.55$

H1: $p > 0.55$ for those who have not been on time with their annual repayments of SR 9,600.

Test proportion = 0.55

Observation proportion = 0 .636

Normal approximation.

1- tailed p = 0.0038

The p-value = 0.0038 which is less than 0.05. Thus, the null hypothesis has been rejected and the alternative hypothesis has been accepted. We can say that we are 95% confident that more than 55% of borrowers have not been on time with their annual repayments of SR 9,600.

HYPOTHESIS NO. 3

There is no main reason for the delayed repayment of an annual instalment.

Aims to study the reasons why some annual repayments (SR 9,600) might be delayed, in an attempt to overcome any difficulties.

Type of test: Binomial test (Table 7.3)

Table 7.3
Why did you delay?

| Value label | Value | Frequency |
|-------------------|-------|-----------|
| I could not repay | 1 | 38 |
| I forgot to repay | 2 | 95 |
| TOTAL | | 133 |

The null hypothesis: $p \leq 0.55$

Proportion test for $p = 0.55$

H0: $p \leq 0.55$

H1: $p > 0.55$ for those who forgot to repay.

Test proportion = 0.55

Observation proportion = 0 .7143

Normal approximation.

1- tailed p = 0.0001

The p-value = 0.0001 which is less than 0.05. Thus, the null hypothesis has been rejected and the alternative hypothesis has been accepted. We can say that we are 95% confident that more than 55% of borrowers have not always been on time with their annual repayments of SR 9,600 because they forgot to repay. In other words, the main reason for delayed repayment of an annual instalment is forgetting to repay.

HYPOTHESIS NO. 4

The borrowers would not prefer to repay the annual instalment (SR 9,600) by monthly direct debit.

Aims to identify borrowers' preferences regarding the various methods of loan repayment in order to increase the repayments.

Type of test: Binomial test (Table 7.4)

Table 7.4
Would you prefer to repay your annual instalment by monthly direct debit?

| Value label | Value | Frequency |
|-------------|-------|-----------|
| Yes | 1 | 241 |
| No | 2 | 9 |
| TOTAL | | 250 |

The null hypothesis: $p \leq 0.55$

Proportion test for $p = 0.55$

$H_0: p \leq 0.55$

$H_1: p > 0.55$ for those who would prefer to repay the annual instalment by monthly direct debit.

Test proportion = 0.55

Observation proportion = 0.964

Normal approximation.

1- tailed $p = 0$

The p -value = 0 which is less than 0.05. Thus, the null hypothesis has been rejected and the alternative hypothesis has been accepted. We can say that we are 95% confident that more than 55% of borrowers would prefer to repay the annual instalment by monthly direct debit.

HYPOTHESIS NO. 5

The borrowers would not prefer to repay the annual instalment (SR 9,600) and the value of one instalment prior to the due date (SR 8,400) by monthly direct debit.

Aims to identify borrowers' preferences regarding the various methods of loan repayment in order to increase the repayments.

Type of test : Binomial test (Table 7.5)

Table 7.5
Would you prefer to repay your annual instalment (SR 9,600)
and the value of one instalment prior to
the due date (SR 8,400) by monthly direct debit?

| Value label | Value | Frequency |
|-------------|-------|-----------|
| Yes | 1 | 207 |
| No | 2 | 43 |
| TOTAL | | 250 |

The null hypothesis: $p \leq 0.55$

Proportion test for $p = 0.55$

H0: $p \leq 0.55$

H1: $p > 0.55$ for those who would prefer to repay the annual instalment (SR 9,600) and the value of one instalment prior to the due date (SR 8,400) by monthly direct debit.

Test proportion = 0.55

Observation proportion = 0.828

Normal approximation.

1- tailed $p = 0$

The p -value = 0 which is less than 0.05. Thus, the null hypothesis has been rejected and the alternative hypothesis has been accepted. We can say that we are 95% confident that more than 55% of borrowers would prefer to repay the annual instalment (SR 9,600) and the value of one instalment prior to the due date (SR 8,400) by monthly direct debit.

7. 1. 1. 1 SUMMARY OF THE RESULTS OF THE DESCRIPTIVE NULL HYPOTHESES RELATED TO BORROWERS' QUESTIONS, WHICH HAVE BEEN REJECTED

Table 7.6
Summary of the Results of the Descriptive Null Hypotheses Related to Borrowers' Questions, which have been Rejected

| No. | The Null Hypotheses |
|-----|---|
| 1 | SR 300,000 is equal to 70% (or more) of the construction cost of one housing unit. |
| 2 | The borrowers have always been on time with their annual repayments of SR 9,600. |
| 3 | There is no main reason for the delayed repayment of an annual instalment. |
| 4 | The borrowers would not prefer to repay the annual instalment (SR 9,600) by monthly direct debit. |
| 5 | The borrowers would not prefer to repay the annual instalment (SR 9,600) and the value of one instalment prior to the due date (SR 8,400) by monthly direct debit |

7. 1. 2 THE DESCRIPTIVE HYPOTHESES WHICH HAVE NOT BEEN REJECTED

HYPOTHESIS NO. 6

The borrowers are aware of the fact that their repayments would reduce the waiting period for obtaining loans for those who seek REDF loans.

Or

The different responses of the borrowers regarding the fact that their repayments would reduce the waiting period for obtaining loans for those who seek REDF loans are equally likely.

Aims to ascertain borrowers' views as to whether their prompt repayment would reduce the waiting period for those who seek loans.

Type of test: Chi-square of the observations and expectations of the answers to question 8 (see Table 7.7)

Table 7.7
The Observations and Expectations of the Answers to Question 8

| Value label | Value | Cases observed | Exnected | Residual |
|--|-------|----------------|----------|----------|
| Strongly agree and agree | 1 | 110 | 125 | -15 |
| Undetermined, disagree and strongly disagree | 2 | 140 | 125 | 15 |
| TOTAL | | 250 | 250 | |

Chi-square = 3.6, degrees of freedom = 1 and p-value = 0.0578 which is greater than 0.05. Thus, the null hypothesis has not been rejected. However, p-value is very close to 0.05. Thus, the null hypothesis has been rejected at the 0.1 level.

7. 1. 2. 1 SUMMARY OF THE RESULTS OF THE DESCRIPTIVE NULL HYPOTHESES RELATED TO BORROWERS' QUESTIONS, WHICH HAVE NOT BEEN REJECTED

Table 7.8
Summary of the Results of the Descriptive Null Hypotheses Related to Borrowers' Questions, which have not been Rejected

| No. | The Null Hypotheses |
|-----|---|
| 1 | The borrowers are aware of the fact that their repayments would reduce the waiting period for obtaining loans for those who seek REDF loans. |
| 1A | The different responses of the borrowers regarding the fact that their repayments would reduce the waiting period for obtaining loans for those who seek REDF loans are equally likely. |

7. 2 THE ANALYTICAL HYPOTHESES

The analytical hypotheses can be divided into two groups, namely, the hypotheses which have been rejected and the hypotheses which have not been rejected. Hence, this section is divided into two parts. The first presents the hypotheses which have been rejected, while the second presents the hypotheses which have not.

7. 2. 1 THE ANALYTICAL HYPOTHESES WHICH HAVE BEEN REJECTED
HYPOTHESIS NO. 7

There is no significant association between repaying the annual instalment regularly and monthly income.

The correlation between the answers to question 5 and the answers to question 3.

Aims to ascertain the socio-economic status of those who have taken out loans (borrowers).

Type of test: Chi-square of the cross-tabulation of the answers to question 5 and the answers to question 3 (see Table 7.9).

Table 7.9
Cross-Tabulation of the Answers to Question 5
and the Answers to Question 3

| Q. 5 Did your annual repayment (SR 9,600) ever get delayed? | Q. 3 Monthly income of REDF loan borrowers (SR) (count and row percentages) | | | |
|---|---|---------------------------|---------------------------|-----------------------|
| | less than 3,000 | from 3,000 to 6,000 | from 6,001 to 9,000 | more than 9,000 |
| | | | | |
| Yes | 21 29.6% | 47 31.4% | 50 31.4% | 41 25.8% |
| No | 2 2.2% | 21 23.1% | 30 33% | 38 41.8% |

Minimum expected frequency: 8.372
Number of missing observations: 0

Chi-square = 13.23385, degrees of freedom = 3 and p-value = 0.00416 which is less than 0.05. Hence, the null hypothesis has been rejected.

The table also shows the percentages for each group. As monthly income rises, the percentage of respondents failing to repay the annual instalment on time falls.

HYPOTHESIS NO. 8

There is no significant association between preference to repay the annual instalment (SR 9,600) and the value of one instalment prior to the due date (SR 8,400) by monthly direct debit and monthly income.

The correlation between the answers to question 7 and the answers to question 3.

Aims to identify borrowers’ preferences regarding the various methods of loan repayment in order to increase the repayments.

Type of test: Chi-square of the cross-tabulation of the answers to question 7 and the answers to question 3 (see Table 7.10).

Table 7.10
Cross-Tabulation of the Answers to Question 7
and the Answers to Question 3

| Q. 7 Would you prefer to repay your annual instalment (SR 9,600) and the value of one instalment prior to the due date (SR 8,400) by monthly direct debit? | Q. 3 Monthly income of REDF loan borrowers (SR) (count and row percentages) | | | |
|---|--|------------------------------|------------------------------|-----------------------|
| | less than 3,000 | from 3,000 to 6,000 | from 6,001 to 9,000 | more than 9,000 |
| Yes | 8 3.9% | 62 30% | 68 32.9% | 69 33.3% |
| No | 15 34.9% | 6 14% | 12 27.9% | 10 23.3% |

Minimum expected frequency: 3.956
Cells with expected frequency less than 5: 1 of 8 (12.5%)
Number of missing observations: 0

Chi-square = 42.00261, degrees of freedom = 3 and p-value = 0 which is less than 0.05.
Hence, the null hypothesis has been rejected.

From Table 7.10 it can be seen that as income increases the percentage of respondents who would prefer to repay the annual instalment (SR 9,600) and the value of one instalment prior to the due date (SR 8,400) by monthly direct debit also increases.

HYPOTHESIS NO. 9

There is no significant association between repaying the annual instalment regularly and awareness of the fact that the repayments would reduce the waiting period for obtaining loans for those who seek REDF loans.

The correlation between the answers to question 5 and the answers to question 8.

Aims to:

- ascertain borrowers’ views as to whether their prompt or even early repayment would reduce the waiting period for those who seek loans;
- study the reasons why some annual repayments (SR 9,600) might be delayed, in an attempt to overcome any difficulties.

Type of test: Chi-square of the cross-tabulation of the answers to question 5 and the answers to question 8 (see Table 7.11).

Table 7.11
Cross-Tabulation of the Answers to Question 8
and the Answers to Question 5

| Q. 5 Did your annual repayment (SR 9,600) ever get delayed? | Q. 8 Respondents' opinions regarding the following statement: Your prompt repayment would reduce the waiting period for those who seek loans (count and row percentages) | | | | |
|--|--|-------------|--------------|-------------|----------------------|
| | Strongly agree | Agree | Undetermined | Disagree | Strongly disagree |
| | | | | | |
| Yes | 12 7.5% | 52 32.7% | 44 27.7% | 44 27.7% | 7 4.4% |
| No | 21 23.1% | 25 27.5% | 19 20.9% | 19 20.9% | 7 7.7% |

Minimum expected frequency: 5.096
Number of missing observations: 0

Chi-square = 14.32734, degrees of freedom = 4 and p-value = 0.00632 which is less than 0.05. Hence, the null hypothesis has been rejected.

**7. 2. 1. 1 SUMMARY OF THE RESULTS OF THE ANALYTICAL NULL
HYPOTHESES RELATED TO BORROWERS' QUESTIONS,
WHICH HAVE BEEN REJECTED**

Table 7.12
Summary of the Results of the Analytical Null Hypotheses Related to
Borrowers' Questions, which have been Rejected

| No. | The Null Hypotheses |
|-----|---|
| 1 | There is no significant association between repaying the annual instalment regularly and monthly income. |
| 2 | There is no significant association between preference to repay the annual instalment (SR 9,600) and the value of one instalment prior to the due date (SR 8,400) by monthly direct debit and monthly income. |
| 3 | There is no significant association between repaying the annual instalment regularly and awareness of the fact that the repayments would reduce the waiting period for obtaining loans for those who seek REDF loans. |

7. 2. 2 THE ANALYTICAL HYPOTHESES WHICH HAVE NOT BEEN REJECTED

HYPOTHESIS NO. 10

There is no significant association between repaying the annual instalment regularly and marital status.

The correlation between the answers to question 5 and the answers to question 1.

Aims to ascertain the socio-economic status of those who have taken out loans (borrowers).

Type of test: Fisher’s exact test is used instead of Chi-square since some of the expectations are less than 5 and the table is a 2x2 table (contingency table) (see Table 7.13).

Table 7.13
Cross-Tabulation of the Answers to Question 5
and the Answers to Question 1

| Q. 5 Did your annual repayment (SR 9,600) ever get delayed? | Q.1 Marital status of REDF loan borrowers (count and row percentages) | |
|--|--|----------------|
| | Single | Married |
| Yes | 1 0.6% | 158 99.4% |
| No | 2 2.2% | 89 97.8% |

Minimum expected frequency: 1.092
Cells with expected frequency less than 5: 2 of 4 (50%)
Number of missing observations: 0

Fisher’s exact test gives a p-value of 0.30027 which is greater than 0.05. Hence, the null hypothesis has not been rejected. This result is probably due to the small number of single respondents.

HYPOTHESIS NO. 11

There is no significant association between repaying the annual instalment regularly and number of dependants.

Aims to ascertain the socio-economic status of those who have taken out loans (borrowers).

Type of test: Chi-square of the cross-tabulation of the answers to question 5 and the answers to question 2 (see Table 7.14).

Table 7.14
Cross-Tabulation of the Answers to Question 5
and the Answers to Question 2

| Q. 2 Number of Dependants | Q. 5 Did your annual repayment (SR 9,600) ever get delayed? (count and row percentages) | |
|------------------------------|---|-------------|
| | Yes | No |
| 0 | 1 33.3% | 2 66.7% |
| 2 | 12 75% | 4 25% |
| 3 | 23 59% | 16 41% |
| 4 | 36 65.5% | 19 34.5% |
| 5 | 36 64.3% | 20 35.7% |
| 6 | 28 66.7% | 14 33.3% |
| 7 | 17 63% | 10 37% |
| 8 | 6 50% | 6 50% |

Minimum expected frequency: 1.092

Cells with expected frequency less than 5: 3 of 16 (18.8%)

Number of missing observations: 0

Chi-square = 3.67294, degrees of freedom = 7 and p-value = 0.81658 which is greater than 0.05. Hence, the null hypothesis has not been rejected.

HYPOTHESIS NO. 12

There is no significant association between preference to repay the annual instalment (SR 9,600) by monthly direct debit and number of dependants.

The correlation between the answers to question 6 and the answers to question 2.

Aims to ascertain the socio-economic status of those who have taken out loans (borrowers).

Type of test: Fisher's exact test is used instead of Chi-square since some of the expectations are less than 5 and the table is a 2x2 table (contingency table) (Table 7.15).

Table 7.15
Cross-Tabulation of the Answers to Question 6
and the Answers to Question 2

| Q. 6 Would you prefer to repay your annual instalment (SR 9,600) by monthly direct debit? | Q. 2 Number of Dependants (count and row percentages) | |
|--|---|--------------|
| | 0 -4 | 5 - 8 |
| Yes | 110 45.6% | 131 54.4% |
| No | 3 33.3% | 6 66.7% |

Minimum expected frequency: 4.068

Cells with expected frequency less than 5: 2 of 4 (50%)

Number of missing observations: 0

Fisher's exact test gives a p-value of 0.35387 which is greater than 0.05. Hence, the null hypothesis has not been rejected.

HYPOTHESIS NO. 13

There is no significant association between preference to repay the annual instalment (SR 9,600) by monthly direct debit and monthly income.

The correlation between the answers to question 6 and the answers to question 3.

Aims to identify borrowers' preferences regarding the various methods of loan repayment in order to increase the repayments.

Type of test: Fisher's exact test is used instead of Chi-square since some of the expectations are less than 5 and the table is a 2x2 table (contingency table) (Table 7.16).

Table 7.16
Cross-Tabulation of the Answers to Question 6
and the Answers to Question 3

| Q. 6 Would you prefer to repay your annual instalment (SR 9,600) by monthly direct debit? | Q. 3 Monthly income of REDF loan borrowers (SR) (count and row percentages) | |
|---|---|--------------------|
| | to 6,000 | more than 6,000 |
| Yes | 90 37.3% | 151 62.7% |
| No | 1 11.1% | 8 88.9% |

Minimum expected frequency: 3.276
Cells with expected frequency less than 5: 1 of 4 (25%)
Number of missing observations: 0

Fisher’s exact test gives a p-value of 0.10047 which is greater than 0.05. Hence, the null hypothesis has not been rejected.

HYPOTHESIS NO. 14

There is no significant association between preference to repay the annual instalment (SR 9,600) and the value of one instalment prior to the due date (SR 8,400) by monthly direct debit and number of dependants.

The correlation between the answers to question 7 and the answers to question 2.
Aims to identify borrowers’ preferences regarding the various methods of loan repayment in order to increase the repayments.

Type of test: Chi-square of the cross-tabulation of the answers to question 7 and the answers to question 2 (see Table 7.17).

Table 7.17
Cross-Tabulation of the Answers to Question 7
and the Answers to Question 2

| Q. 7 Would you prefer to repay your annual instalment (SR 9,600) and the value of one instalment prior to the due date (SR 8,400) by monthly direct debit? | Q. 2 Number of Dependants (count and row percentages) | | |
|---|--|-------------|-------------|
| | 0 - 3 | 4 - 5 | 6 - 8 |
| | 50 24.2% | 96 46.4% | 61 29.5% |
| Yes | | | |
| No | 6 18.6% | 15 34.9% | 20 46.5% |

Minimum expected frequency: 9.976
 Number of missing observations: 0
 Chi-square = 4.72382, degrees of freedom = 2 and p-value = 0.09424 which is greater than 0.05. Hence, the null hypothesis has not been rejected. The majority of each group (with 0-3, 4-5 and 6-8 dependants) seem to respond positively.

7. 2. 2. 1 SUMMARY OF THE RESULTS OF THE ANALYTICAL NULL HYPOTHESES RELATED TO BORROWERS' QUESTIONS, WHICH HAVE NOT BEEN REJECTED

Table 7.18
Summary of the Results of the Analytical Null Hypotheses Related to Borrowers' Questions, which have not been Rejected

| No. | The Null Hypotheses |
|-----|---|
| 1 | There is no significant association between repaying the annual instalment regularly and marital status. |
| 2 | There is no significant association between repaying the annual instalment regularly and number of dependants. |
| 3 | There is no significant association between preference to repay the annual instalment (SR 9,600) by monthly direct debit and number of dependants. |
| 4 | There is no significant association between preference to repay the annual instalment (SR 9,600) by monthly direct debit and monthly income. |
| 5 | There is no significant association between preference to repay the annual instalment (SR 9,600) and the value of one instalment prior to the due date (SR 8,400) by monthly direct debit and number of dependants. |

7.3 CONCLUSION

Table 7.19
Summary of the Results of the Null Hypotheses Related to
Borrowers' Questions

| No. | The Null Hypotheses | The Result |
|-----|---|-----------------------|
| 1 | There is no significant association between repaying the annual instalment regularly and marital status. | has not been rejected |
| 2 | There is no significant association between repaying the annual instalment regularly and number of dependants. | has not been rejected |
| 3 | There is no significant association between repaying the annual instalment regularly and monthly income. | has been rejected |
| 4 | SR 300,000 is equal to 70% (or more) of the construction cost of one housing unit. | has been rejected |
| 5 | The borrowers have always been on time with their annual repayments of SR 9,600. | has been rejected |
| 6 | There is no main reason for the delayed repayment of an annual instalment. | has been rejected |
| 7 | The borrowers would not prefer to repay the annual instalment (SR 9,600) by monthly direct debit. | has been rejected |
| 8 | There is no significant association between preference to repay the annual instalment (SR 9,600) by monthly direct debit and number of dependants. | has not been rejected |
| 9 | There is no significant association between preference to repay the annual instalment (SR 9,600) by monthly direct debit and monthly income | has not been rejected |
| 10 | The borrowers would not prefer to repay the annual instalment (SR 9,600) and the value of one instalment prior to the due date (SR 8,400) by monthly direct debit. | has been rejected |
| 11 | There is no significant association between preference to repay the annual instalment (SR 9,600) and the value of one instalment prior to the due date (SR 8,400) by monthly direct debit and number of dependants. | has not been rejected |
| 12 | There is no significant association between preference to repay the annual instalment (SR 9,600) and the value of one instalment prior to the due date (SR 8,400) by monthly direct debit and monthly income. | has been rejected |

| | | |
|-----|---|-----------------------|
| 13 | The borrowers are aware of the fact that their repayments would reduce the waiting period for obtaining loans for those who seek REDF loans. | has not been rejected |
| 13A | The different responses of the borrowers regarding the fact that their repayments would reduce the waiting period for obtaining loans for those who seek REDF loans are equally likely. | has been rejected |
| 14 | There is no significant association between repaying the annual instalment regularly and awareness of the fact that the repayments would reduce the waiting period for obtaining loans for those who seek REDF loans. | has been rejected |

- a) There is a significant association between repaying the annual instalment regularly and monthly income; and awareness of the fact that the repayments would reduce the waiting period for obtaining loans for those who seek REDF loans.
- b) There is a significant association between preference to repay the annual instalment (SR 9,600) and the value of one instalment prior to the due date (SR 8,400) by monthly direct debit and monthly income.
- c) SR 300,000 is less than 70% of the construction cost of one housing unit.
- d) There is a main reason for the delayed repayment of an annual instalment.
- e) The borrowers:
 - have not been on time with their annual repayments of SR 9,600;
 - would prefer to repay the annual instalment (SR 9,600) by monthly direct debit;
 - would prefer to repay the annual instalment (SR 9,600) and the value of one instalment prior to the due date (SR 8,400) by monthly direct debit;
 - are aware of the fact that their repayments would reduce the waiting period for obtaining loans for those who seek REDF loans.
- f) There is no significant association between repaying the annual instalment regularly and marital status; number of dependants.
- g) There is no significant association between preference to repay the annual instalment (SR 9,600) by monthly direct debit and number of dependants; monthly income.
- h) There is no significant association between preference to repay the annual instalment (SR 9,600) and the value of one instalment prior to the due date (SR 8,400) by monthly direct debit and number of dependants.

CHAPTER EIGHT

HYPOTHESES RELATED TO LOAN SEEKERS' QUESTIONS

8.0 INTRODUCTION

This chapter will consider the hypotheses related to those who seek REDF loans questions, the type of the test which was used and the aim of hypothesis will be indicated, the result will be presented. These hypotheses may be divided into two groups, namely, the descriptive and analytical hypotheses.

This chapter is, therefore, divided into two sections, corresponding to these groups of hypotheses. The final section will present the conclusion. Therefore, the main sections of this chapter are:

1. The descriptive hypotheses
2. The analytical hypotheses
3. Conclusion.

8.1 THE DESCRIPTIVE HYPOTHESES

The descriptive hypotheses can be divided into two groups, namely, the hypotheses which have been rejected and the hypotheses which have not been rejected. Hence, this section is divided into two parts. The first presents the hypotheses which have been rejected, while the second presents the hypotheses which have not.

8.1.1 THE DESCRIPTIVE HYPOTHESES WHICH HAVE BEEN REJECTED

HYPOTHESIS NO. 15

There is no main reason for not applying for an REDF loan.

Aims to study the reasons why some people who say they are interested in REDF loans do not apply for them.

Type of test: Chi-square of the the observations and expectations of the answers to question 5A (see Table 8.1 and 8.1A).

Table 8.1
The Observations and Expectations
of the Answers to Question 5A

| Response | Value | Cases observed | Expected | Residual |
|-----------------------------------|-------|-------------------|-----------|----------|
| I do not own a plot of land | 1 | 91 | 31.33 | 59.67 |
| The waiting period is too long | 2 | 2 | 31.33 | -29.33 |
| I have insufficient money | 3 | 1 | 31.33 | -30.33 |
| TOTAL | | 94 | 94 | |

Chi-square = 170.4468, degrees of freedom = 2 and p-value = 0 which is less than 0.05.
Thus, the null hypothesis has been rejected. We can say that we are 95% confident that there is a main reason for not applying for an REDF loan.

Table 8.1A
The Observations and Expectations
of the Answers to Question 5A

| Response | Value | Cases observed | Expected | Residual |
|---|-------|-------------------|-----------|----------|
| I do not own a plot of land | 1 | 91 | 47 | 44 |
| The waiting period is too long and I have insufficient money | 2 | 3 | 47 | -44 |
| TOTAL | | 94 | 94 | |

Chi-square = 82.3830, degrees of freedom = 1 and p-value = 0 which is less than 0.05.
Thus, the null hypothesis has been rejected. We can say that we are 95% confident that there is a main reason for not applying for an REDF loan.

Type of test: Binomial test (see Table 8.1B)

Table 8.1B

Why have you not applied for an REDF loan?

| Response | Value | Frequency |
|--|-------|-----------|
| I do not own a plot of land | 1 | 91 |
| The waiting period is too long and I have insufficient money | 2 | 3 |
| TOTAL | | 94 |

The null hypothesis: $p \leq 0.55$

$H_0: p \leq 0.55$

$H_1: p > 0.55$ for those who say "I do not own a plot of land".

Test proportion = 0.55

Observation proportion = 0.9681

Normal approximation

1-tailed $p = 0$

The p -value = 0 which is less than 0.05. Thus, the null hypothesis has been rejected and the alternative hypothesis has been accepted. We can say that we are 95% confident that the proportion who say "I do not own a plot of land" is more than 55% of the survey population who have not applied for an REDF loan. Hence, there is a main reason for not applying for an REDF loan.

HYPOTHESIS NO. 16

Loan seekers could not repay the annual instalment without discount in order to reduce the waiting period for obtaining an REDF loan.

Aims to review REDF regulations and policies which appear to be out of date and were intended to meet conditions that may no longer exist.

Type of test: Binomial test (see Table 8.2)

Table 8.2
Could you repay the annual instalment (SR 12,000) without discount in order to reduce the waiting period for obtaining the loan?

| Response | Value | Frequency |
|--------------|-------|------------|
| Yes | 1 | 224 |
| No | 2 | 26 |
| TOTAL | | 250 |

The null hypothesis: $p \leq 0.55$

H0: $p \leq 0.55$

H1: $p > 0.55$ for those who could repay the annual instalment without discount in order to reduce the waiting period for obtaining an REDF loan.

Test proportion = 0.55

Observation proportion = 0.896

Normal approximation

1- tailed $p = 0$

The p -value = 0 which is less than 0.05. Thus, the null hypothesis has been rejected and the alternative hypothesis has been accepted. We can say that we are 95% confident that more than 55% of loan seekers could repay the annual instalment without discount in order to reduce the waiting period for obtaining an REDF loan.

HYPOTHESIS NO. 17

Loan seekers do not agree that strong action should be taken to prevent overdue annual repayments in order to reduce the waiting period for obtaining a loan.

Aims to suggest methods by which the repayments to the REDF might be increased.

Type of test: Binomial test (see Table 8.3)

Table 8.3
Respondents' opinions on the following statement:
Strong action should be taken to prevent overdue annual repayments in order to reduce the waiting period for obtaining a loan

| Response | Value | Frequency |
|--|-------|------------|
| Strongly agree and agree | 1 | 208 |
| Undetermined, disagree and strongly disagree | 2 | 42 |
| TOTAL | | 250 |

The null hypothesis: $p \leq 0.55$

$H_0: p \leq 0.55$

$H_1: p > 0.55$ for those who strongly agree or agree that strong action should be taken to prevent overdue annual repayments in order to reduce the waiting period for obtaining a loan.

Test proportion = 0.55

Observation proportion = 0.832

Normal approximation

1-tailed $p = 0$

The p -value = 0 which is less than 0.05. Thus, the null hypothesis has been rejected and the alternative hypothesis has been accepted. We can say that we are 95% confident that more than 55% of loan seekers strongly agree or agree that strong action should be taken to prevent overdue annual repayments in order to reduce the waiting period for obtaining a loan.

HYPOTHESIS NO. 18

Loan seekers would not prefer to repay SR 20,000 annually in order to obtain a villa.

Aims to suggest methods by which the repayments to REDF might be increased.

Type of test: Binomial test (see Table 8.4)

Table 8.4
Would you prefer the option of a villa?

| Response | Value | Frequency |
|-----------------|--------------|------------------|
| Yes | 1 | 211 |
| No | 2 | 39 |
| TOTAL | | 250 |

The null hypothesis: $p \leq 0.55$

Proportion test for $p = 0.55$

$H_0: p \leq 0.55$

$H_1: p > 0.55$ for those who would prefer to repay SR 20,000 annually in order to obtain a villa.

Test proportion = 0.55

Observation proportion = 0.844

Normal approximation

1- tailed $p = 0$

The p -value = 0 which is less than 0.05. Thus, the null hypothesis has been rejected and the alternative hypothesis has been accepted. We can say that we are 95% confident that more than 55% of loan seekers would prefer to repay SR 20,000 annually in order to obtain a villa.

HYPOTHESIS NO. 19

The degree of acceptance of the option of a loan of SR 500,000 is equal to the degree of acceptance of the option of a villa among REDF loan seekers.

OR

The acceptance of the option of a loan of SR 500,000 and the acceptance of the option of a villa among REDF loan seekers are equally likely.

Aims to suggest methods by which the repayments to the REDF might be increased.

Type of test: Chi-square of the observations and expectations of the answers to question 10 (Table 8.5).

Table 8.5
The Observations and Expectations
of the Answers to Question 10

| Response | Value | Cases observed | Expected | Residual |
|------------------------------------|-------|-------------------|----------|----------|
| The option of cash (of Q. 8) | 1 | 51 | 125 | -74 |
| The option of a villa (of Q. 9) | 2 | 199 | 125 | 74 |
| TOTAL | | 250 | 250 | 0 |

Chi-square = 87.616, degrees of freedom = 1 and p -value = 0 which is less than 0.05. Thus, the null hypothesis has been rejected. We can say that we are 95% confident that the acceptance of the option of a loan of SR 500,000 and the acceptance of the option of a villa among REDF loan seekers are not equally likely.

HYPOTHESIS NO. 20

Loan seekers would take out a loan on which interest is charged in order to build their houses.

Aims to evaluate REDF loan seekers' views on being offered a loan on which interest is charged in order to build their houses.

Type of test : Binomial test (Table 8.6)

Table 8.6
If there were no REDF's loan, would you take out a loan on which interest is charged in order to build your house?

| Response | Value | Frequency |
|----------|-------|-----------|
| Yes | 1 | 4 |
| No | 2 | 246 |
| TOTAL | | 250 |

The null hypothesis: $p \leq 0.55$

H0: $p \leq 0.55$

H1: $p > 0.55$ for those who would not take out a loan on which interest is charged in order to build their houses.

Test proportion = 0.55

Observation proportion = 0.984

Normal approximation

1- tailed $p = 0$

The p-value = 0 which is less than 0.05. Thus, the null hypothesis has been rejected and the alternative hypothesis has been accepted. We can say that we are 95% confident that more than 55% of loan seekers would not take out a loan on which interest is charged in order to build their houses.

HYPOTHESIS NO. 21

The main reason for not taking out a loan on which interest is charged is not purely religious.

Aims to evaluate REDF loan seekers' views on being offered a loan on which interest is charged in order to build their houses.

Type of test : Binomial test (Table 8.7)

Table 8.7
**Why would you refuse a loan on which interest is charged
in order to build your house?**

| No. | Response | Value | Frequency |
|-------|------------------|-------|-----------|
| 1 | It is prohibited | 1 | 196 |
| 2 | Other reasons | 2 | 50 |
| TOTAL | | | 246 |

The null hypothesis: $p \leq 0.55$

H0: $p \leq 0.55$

H1: $p > 0.55$ for those who would not take out a loan on which interest is charged in order to build their houses because it is prohibited.

Test proportion = 0.55

Observation proportion = 0.7967

Normal approximation

1- tailed $p = 0$

The p -value = 0 which is less than 0.05. Thus, the null hypothesis has been rejected and the alternative hypothesis has been accepted. We can say that we are 95% confident that more than 55% of the survey population who would not take out an interest loan (246 respondents) would not do so because it is prohibited.

HYPOTHESIS NO. 22

Loan seekers would not prefer Islamic housing financing methods.

Aims to evaluate REDF loan seekers' views on being offered various Islamic housing financing methods in order to meet the increased demand for housing.

Type of test : Binomial test (Table 8.8)

Table 8.8
**If Islamic housing financing methods were
available, would you prefer them?**

| Response | Value | Frequency |
|----------|-------|-----------|
| Yes | 1 | 240 |
| No | 2 | 10 |
| TOTAL | | 250 |

The null hypothesis: $p \leq 0.55$

H0: $p \leq 0.55$

H1: $p > 0.55$ for those who would prefer Islamic housing financing methods.

Test proportion = 0.55

Observation proportion = 0.96

Normal approximation

1- tailed $p = 0$

The p -value = 0 which is less than 0.05. Thus, the null hypothesis has been rejected and the alternative hypothesis has been accepted. We can say that we are 95% confident that more than 55% of loan seekers would prefer Islamic housing financing methods.

HYPOTHESIS NO. 23

The three purchase methods are equally acceptable to REDF loan seekers.

Aims to evaluate REDF loan seekers' views on being offered various Islamic housing financing methods in order to meet the increased demand for housing.

Type of test: Chi-square of the observations and expectations of the answers to question 13 (Table 8.9).

Table 8.9
The Observations and Expectations
of the Answers to Question 13

| | <i>Murabaha</i> | <i>Istisna'a</i> | Lease purchase | TOTAL |
|-----------------|-----------------|------------------|----------------|-------|
| Observed | 126 | 86 | 38 | 250 |
| Expected | 83.33 | 83.33 | 83.33 | 250 |
| Residual | 42.67 | 2.67 | -45.33 | |

Chi-square = 46.592, degrees of freedom = 2 and p -value = 0 which is less than 0.05.

Thus, the null hypothesis has been rejected. We can say that we are 95% confident that the three purchase methods are not equally acceptable to REDF loan seekers.

Type of test: Chi-square of the observations and expectations of the answers to question 13A (Table 8.9A).

Table 8.9A
The Observations and Expectations
of the Answers to Question 13A

| | <i>Murabaha</i> | <i>Istisna'a</i> | Lease purchase | TOTAL |
|-----------------|-----------------|------------------|----------------|-------|
| Observed | 90 | 64 | 96 | 250 |
| Expected | 83.3 | 83.33 | 83.33 | 250 |
| Residual | 6.67 | -19.33 | 12.67 | |

Chi-square = 6.944, degrees of freedom = 2 and p-value = 0.0311 which is less than 0.05. Thus, the null hypothesis has been rejected. We can say that we are 95% confident that the three purchase methods are not equally acceptable to REDF loan seekers.

Table 8.9B
Summary of Preference of Purchase Responses

| Response | Code | Count | Percentage of responses | Percentage of cases |
|------------------------|------|------------|-------------------------|---------------------|
| <i>Murabaha</i> | 1 | 216 | 43.2 | 86.4 |
| <i>Istisna'a</i> | 2 | 150 | 30 | 60 |
| Lease purchase | 3 | 134 | 26.8 | 53.6 |
| TOTAL RESPONSES | | 500 | 100 | 200 |

43.2% preferred *Murabaha*, 30% *Istisna'a* and only 26.8% lease purchase (Table 8.9B). Hence, the three purchase methods are not equally acceptable to REDF loan seekers.
Type of test: Chi-square of the observations and expectations of the answers to questions 13 and 13A (Table 8.9C).

Table 8.9C
**The Observations and Expectations
of the Answers to Questions 13 and 13A**

| | <i>Murabaha</i> | <i>Istisna'a</i> | Lease purchase | TOTAL |
|-----------------|-----------------|------------------|----------------|--------------|
| Observed | 216 | 150 | 134 | 500 |
| Expected | 166.67 | 166.67 | 166.67 | 500 |
| Residual | 49.33 | -16.67 | -32.67 | |

Chi-square = 22.672, degrees of freedom = 2 and p-value = 0 which is less than 0.05. Thus, the null hypothesis has been rejected. We can say that we are 95% confident that the three purchase methods are not equally acceptable to REDF loan seekers.

HYPOTHESIS NO. 24

The three partnership methods are equally acceptable to REDF loan seekers.
Aims to evaluate REDF loan seekers' views on being offered various Islamic housing financing methods in order to meet the increased demand for housing.
Type of test: Chi-square of the observations and expectations of the answers to question 14 (Table 8.10).

Table 8.10
The Observations and Expectations
of the Answers to Question 14

| | Partnership ending with sale | Partnership (2) | Diminishing partnership | TOTAL |
|----------|---------------------------------|--------------------|----------------------------|-------|
| Observed | 166 | 26 | 58 | 250 |
| Expected | 83.33 | 83.33 | 83.33 | 250 |
| Residual | 82.67 | -57.33 | -25.33 | |

Chi-square = 129.152, degrees of freedom = 2 and p-value = 0 which is less than 0.05. Thus, the null hypothesis has been rejected. We can say that we are 95% confident that the three partnership methods are not equally acceptable to REDF loan seekers.

Type of test: Chi-square of the observations and expectations of the answers to question 14A (Table 8.10A).

Table 8.10A
The Observations and Expectations
of the Answers to Question 14A

| | Partnership ending with sale | Partnership (2) | Diminishing Partnership | TOTAL |
|----------|---------------------------------|--------------------|----------------------------|-------|
| Observed | 62 | 45 | 143 | 250 |
| Expected | 83.33 | 83.33 | 83.33 | 250 |
| Residual | -21.33 | -38.33 | 59.67 | |

Chi-square = 65.816, degrees of freedom = 2 and p-value = 0 which is less than 0.05. Thus, the null hypothesis has been rejected. We can say that we are 95% confident that the three partnership methods are not equally acceptable to REDF loan seekers.

Table 8.10B
Summary of Preferences among Partnership methods

| Category label | Code | Count | Percentage of rsponses | Percentage of cases |
|---------------------------------|------|-------|---------------------------|------------------------|
| Partnership ending with sale | 1 | 228 | 45.6 | 91.2 |
| Partnership (2) | 2 | 71 | 14.2 | 28.4 |
| Diminishing partnership | 3 | 201 | 40.2 | 80.4 |
| TOTAL RESPONSES | | 500 | 100 | 200 |

45.6% preferred Partnership ending with sale, 14.2% preferred Partnership (2) and 40.2% preferred Diminishing Partnership. Hence, the three Partnership methods are not equally acceptable to REDF loan seekers.

Type of test: Chi-square of the observations and expectations of the answers to questions 14 and 14A (Table 8.10C).

Table 8.10C
The Observations and Expectations
of the Answers to Questions 14 and 14A

| | Partnership ending with sale | Partnership (2) | Diminishing partnership | TOTAL |
|-----------------|---------------------------------|--------------------|----------------------------|-------|
| Observed | 228 | 71 | 201 | 500 |
| Expected | 166.67 | 166.67 | 166.67 | 500 |
| Residual | 61.33 | -95.67 | 34.33 | |

Chi-square = 84.556, degrees of freedom = 2 and p-value = 0 which is less than 0.05. Thus, the null hypothesis has been rejected. We can say that we are 95% confident that the three partnership methods are not equally acceptable to REDF loan seekers.

8. 1. 1. 1 SUMMARY OF THE RESULTS OF THE DESCRIPTIVE NULL HYPOTHESES RELATED TO LOAN SEEKERS' QUESTIONS, WHICH HAVE BEEN REJECTED

Table 8.11
Summary of the Results of the Descriptive Null Hypotheses Related to Loan Seekers' Questions, which have been Rejected

| No. | The Null Hypotheses |
|-----|---|
| 1 | <u>There is no main reason for not applying for an REDF loan.</u> |
| 2 | <u>Loan seekers could not repay the annual instalment without discount in order to reduce the waiting period for obtaining an REDF loan.</u> |
| 3 | <u>Loan seekers do not agree that strong action should be taken to prevent overdue annual repayments in order to reduce the waiting period for obtaining a loan.</u> |
| 4 | <u>Loan seekers would not prefer to repay SR 20,000 annually in order to obtain a villa.</u> |
| 5 | <u>The degree of acceptance of the option of a loan of SR 500,000 is equal to the degree of acceptance of the option of a villa among REDF loan seekers.</u> <u>The acceptance of the option of a loan of SR 500,000 and the acceptance of the option of a villa among REDF loan seekers are equally likely.</u> |
| 6 | <u>Loan seekers would take out a loan on which interest is charged in order to build their houses.</u> |
| 7 | <u>The main reason for not taking out a loan on which interest is charged is not purely religious.</u> |
| 8 | <u>Loan seekers would not prefer Islamic housing financing methods.</u> |
| 9 | <u>The three purchase methods are equally acceptable to REDF loan seekers.</u> |
| 10 | <u>The three partnership methods are equally acceptable to REDF loan seekers.</u> |

8. 1. 2 THE DESCRIPTIVE HYPOTHESES WHICH HAVE NOT BEEN REJECTED

HYPOTHESIS NO. 25

Loan seekers could not repay SR 25,000 annually in order to obtain a housing loan of SR 500,000.

Aims to:

- 1. consider loan seekers' views on being offered a flexible method of borrowing money to suit their specific needs;**
- 2. suggest methods by which the repayments to REDF might be increased.**

Type of test : Binomial test (Table 8.12).

Table 8.12
Could you repay SR 25,000 annually in order to obtain a housing loan of SR 500,000?

| Response | Value | Erequency |
|-----------------|--------------|------------------|
| Yes | 1 | 102 |
| No | 2 | 148 |
| TOTAL | | 250 |

The null hypothesis: $p \leq 0.55$

Proportion test for $p = 0.55$.

$H_0: p \leq 0.55$

$H_1: p > 0.55$ for those who could repay SR 25,000 annually in order to obtain a housing loan of SR 500,000.

Test proportion = 0.55

Observation proportion = 0.408

Normal approximation

1- tailed $p = 0.1985$

The p -value = 0.1985 which is greater than 0.05. Thus, the null hypothesis has not been rejected and the alternative hypothesis has been accepted. We can say that we are 95% confident that more than 55% of loan seekers could not repay SR 25,000 annually in order to obtain a housing loan of SR 500,000.

8. 1. 2. 1 SUMMARY OF THE RESULTS OF THE DESCRIPTIVE NULL HYPOTHESES RELATED TO LOAN SEEKERS' QUESTIONS, WHICH HAVE NOT BEEN REJECTED

Table 8.13
Summary of the Results of the Descriptive Null Hypotheses Related to Loan Seekers' Questions, which have not been Rejected

| No. | The Null Hypotheses |
|-----|--|
| 1 | Loan seekers could not repay SR 25,000 annually in order to obtain a housing loan of SR 500,000. |

8. 2 THE ANALYTICAL HYPOTHESES

The analytical hypotheses can be divided into two groups, namely, the hypotheses which have been rejected and the hypotheses which have not been rejected. Hence, this section is divided into two parts. The first presents the hypotheses which have been rejected, while the second presents the hypotheses which have not.

8. 2. 1 THE ANALYTICAL HYPOTHESES WHICH HAVE BEEN REJECTED
HYPOTHESIS NO. 26

There is no significant association between the ability to increase the amount of annual repayment (depending on the waiting period) and number of dependants. The correlation between the answers to question 6A and the answers to question 2.

Aims to:

- 1. consider loan seekers' views on being offered a flexible method of borrowing money to suit their specific needs;
- 2. suggest methods by which the repayments to the REDF might be increased.

Type of test: Chi-square of the cross-tabulation of the answers to question 6A and the answers to question 2 (see the following Table).

Table 8.14
Cross-Tabulation of the Answers to Question 6A
and the Answers to Question 2

| Q.2 Number of dependants | Q. 6A How much could you repay in order to reduce the waiting period of the loan, as follows? (count and row percentages) | | | | |
|---------------------------------------|--|--|--|--|---|
| | SR 1,000 monthly, the waiting period = 9 years | SR 2,000 monthly, the waiting period = 7 years | SR 3,000 monthly, the waiting period = 5 years | SR 4,000 monthly, the waiting period = 3 years | SR 5,000 monthly, the waiting period = 1 year |
| 0 and 1 | 9 15.8% | 19 33.3% | 16 28.1% | 9 15.8% | 4 7% |
| 2 - 4 | 2 2.2% | 17 18.7% | 23 25.3% | 27 29.7% | 22 24.2% |
| 5 - 9 | 17 22.4% | 18 23.7% | 21 27.6% | 18 23.7% | 2 2.6% |

Missing = 26 cases (answer not required).

Minimum expected frequency: 7.125

Number of missing observations: 26

Chi-square = 37.42953, degrees of freedom = 8 and p-value = 0.00001 which is less than 0.05. Hence, the null hypothesis has been rejected. We can say that we are 95% confident that there is a significant association between the ability to increase the amount of annual repayment (depending on the waiting period) and number of dependants.

HYPOTHESIS NO. 27

There is no significant association between the ability to increase the amount of annual repayment (depending on the discount) and number of dependants.

The correlation between the answers to question 6B and the answers to question 2.

Aims to:

1. consider loan seekers' views on being offered a flexible method of borrowing money to suit their specific needs;
2. suggest methods by which the repayments to the REDF might be increased.

Type of test: Chi-square of the cross-tabulation of the answers to question 6B and the answers to question 2 (see the following Table).

Table 8.15
Cross-Tabulation of the Answers to Question 6B
and the Answers to Question 2

| Q.2 Number of dependants | Q. 6B How many instalments could you repay together in order to obtain discount, as follows? (count and row percentages) | | | | |
|-----------------------------------|---|--|---|---|---|
| | SR 1,000 monthly (discount = 0%) | SR 1,900 monthly (discount = 5%) | SR 2,700 monthly (discount = 10%) | SR 3,400 monthly (discount = 15%) | SR 4,000 monthly (discount = 20%) |
| 0 and 1 | 15 26.3% | 11 19.3% | 16 28.1% | 6 10.5% | 9 15.8% |
| 2 - 4 | 8 8.8% | 20 22% | 18 19.8% | 18 19.8% | 27 29.7% |
| 5 - 9 | 18 23.7% | 20 26.3% | 13 17.1% | 11 14.5% | 14 18.4% |

Missing = 26 cases (answer not required)

Minimum expected frequency: 8.906

Number of missing observations: 26

Chi-square = 16.24592, degrees of freedom = 8 and p-value = 0.03899 which is less than 0.05. Hence, the null hypothesis has been rejected. We can say that we are 95% confident that there is a significant association between the ability to increase the amount of annual repayment (depending on the discount) and number of dependants.

HYPOTHESIS NO. 28

There is no significant association between the ability to repay the annual instalment without discount and monthly income.

The correlation between the answers to question 6 and the answers to question 3.

Aims to ascertain the socio-economic status of those who seek REDF loans (loan seekers).

Type of test: Chi-square of the cross-tabulation of the answers to question 6 and the answers to question 3 (see Table 8.16).

Table 8.16
Cross-Tabulation of the Answers to Question 6
and the Answers to Question 3

| Q. 6 Could you repay the annual instalment without discount in order to reduce the waiting period for obtaining the loan? | Q.3 Monthly income of REDF loan seekers (SR) | | | |
|--|--|------------------------------|------------------------------|-----------------------|
| | less than 3,000 | from 3,000 to 6,000 | from 6,001 to 9,000 | more than 9,000 |
| Yes | 12 5.4% | 78 34.8% | 74 33% | 60 26.8% |
| No | 13 50% | 10 38.5% | 2 7.7% | 1 3.8% |

Minimum expected frequency: 2.6
Cells with expected frequency less than 5: 1 of 8 (12.5%)
Number of missing observations: 0

Chi-square = 56.46236, degrees of freedom = 3 and p-value = 0 which is less than 0.05.
Hence, the null hypothesis has been rejected. We can say that we are 95% confident that
there is a significant association between the ability to repay the annual instalment
without discount and monthly income.

HYPOTHESIS NO. 29

There is no significant association between the ability to increase the amount of
annual repayment (depending on the waiting period) and monthly income.
The correlation between the answers to question 6A and the answers to question 3.

Aims to:

1. consider loan seekers' views on being offered a flexible method of borrowing money
to suit their specific needs;
2. suggest methods by which the repayments to the REDF might be increased.

Type of test: Chi-square of the cross-tabulation of the answers to question 6A and the
answers to question 3 (see Table 8.17).

Table 8.17
Cross-Tabulation of the Answers to Question 6A
and the Answers to Question 3

| Q.3 Monthly income of REDF loan seekers (SR) | Q. 6A How much could you repay in order to reduce the waiting period of the loan, as follows? (count and row percentages) | | |
|--|--|--|--|
| | SR 1,000 monthly, the waiting period = 9 years and SR 2,000 monthly, the waiting period = 7 years | SR 3,000 monthly, the waiting period = 5 years | SR 4,000 monthly, the waiting period = 3 years and SR 5,000 monthly, the waiting period = 1 year |
| less than 6,000 | 67 75.3% | 21 23.6% | 1 1.1% |
| from 6,001 to 9,000 | 8 10.7% | 30 40% | 37 49.3% |
| more than 9,000 | 7 11.7% | 9 15% | 44 73.3% |

Missing = 26 cases (answer not required)

Minimum expected frequency: 16.071

Number of missing observations: 26

Chi-square = 124.71978, degrees of freedom = 4 and p-value = 0 which is less than 0.05. Consequently, the null hypothesis has been rejected. We can say that we are 95% confident that there is a significant association between the ability to increase the amount of annual repayment (depending on the waiting period) and monthly income.

HYPOTHESIS NO. 30

There is no significant association between the ability to increase the amount of annual repayment (depending on the discount) and monthly income.

The correlation between the answers to question 6B and the answers to question 3.

Aims to:

1. consider loan seekers' views on being offered a flexible method of borrowing money to suit their specific needs;
2. suggest methods by which the repayments to the REDF might be increased.

Type of test: Chi-square of the cross-tabulation of the answers to question 6B and the answers to question 3 (see Table 8.18).

Table 8.18
Cross-Tabulation of the Answers to Question 6B
and the Answers to Question 3

| Q.3 Monthly income of REDF loan seekers (SR) | Q. 6B How many instalments could you repay together in order to obtain discount, as follows? (count and row percentages) | | |
|--|---|--|---|
| | SR 1,000 monthly (discount = 0%) and SR 1,900 monthly (discount = 5%) | SR 2,700 monthly (discount = 10%) | SR 3,400 monthly (discount = 15%) and SR 4,000 monthly (discount = 20%) |
| less than 6,000 | 63 70.8% | 20 22.5% | 6 6.7% |
| from 6,001 to 9,000 | 21 28% | 13 17.3% | 41 54.7% |
| more than 9,000 | 8 13.3% | 14 23.3% | 38 63.3% |

Missing = 26 cases (answer not required)
Minimum expected frequency: 12.589
Number of missing observations: 26

Chi-square = 72.77654, degrees of freedom = 4 and p-value = 0 which is less than 0.05.
 Thus, the null hypothesis has been rejected. We can say that we are 95% confident that there is a significant association between the ability to increase the amount of annual repayment (depending on the discount) and monthly income.

HYPOTHESIS NO. 31

There is no significant association between the ability to increase the amount of the annual repayment (depending on the waiting period) and facing a housing problem.

The correlation between the answers to question 6A and the answers to question 4.

Aims to:

- 1. consider loan seekers' views on being offered a flexible method of borrowing money to suit their specific needs;**
- 2. suggest methods by which the repayments to the REDF might be increased.**

Type of test: Chi-square of the cross-tabulation of the answers to question 6A and the answers to question 4 (see Table 8.19).

Table 8.19
Cross-Tabulation of the Answers to Question 6A
and the Answers to Question 4

| Q. 6A How much could you repay in order to reduce the waiting period of the loan, as follows? | Q. 4 Are you facing a housing problem? (count and row percentages) | |
|---|--|-------------|
| | Yes | No |
| SR 1,000 monthly, the waiting period = 9 years | 27 96.4% | 1 3.6% |
| SR 2,000 monthly, the waiting period = 7 years | 39 72.2% | 15 27.8% |
| SR 3,000 monthly, the waiting period = 5 years | 37 61.7% | 23 38.3% |
| SR 4,000 monthly, the waiting period = 3 years | 30 55.6% | 24 44.4% |
| SR 5,000 monthly, the waiting period = 1 year | 8 28.6% | 20 71.4% |

Missing = 26 cases (answer not required)

Minimum expected frequency: 10.375

Number of missing observations: 26

Chi-square = 30.94236, degrees of freedom = 4 and p-value = 0 which is less than 0.05. Thus, the null hypothesis has been rejected. We can say that we are 95% confident that there is a significant association between the ability to increase the amount of the annual repayment (depending on the waiting period) and facing a housing problem.

HYPOTHESIS NO. 32

There is no significant association between the ability to increase the amount of annual repayment (depending on the discount) and facing a housing problem.

The correlation between the answers to question 6B and the answers to question 4.

Aims to:

1. consider loan seekers' views on being offered a flexible method of borrowing money to suit their specific needs;
2. suggest methods by which the repayments to the REDF might be increased.

Type of test: Chi-square of the cross-tabulation of the answers to question 6B and the answers to question 4 (see Table 8.20).

Table 8.20
Cross-Tabulation of the Answers to Question 6B
and the Answers to Question 4

| Q. 6B How many instalments could you repay together in order to obtain discount, as follows? | Q. 4 Are you facing a housing problem? (count and row nercentages) | |
|---|---|-------------|
| | Yes | No |
| | | |
| SR 1,000 monthly (discount = 0%) | 36 87.8% | 5 12.2% |
| SR 1,900 monthly (discount = 5%) | 36 70.6% | 15 29.4% |
| SR 2,700 monthly (discount = 10%) | 29 61.7% | 18 38.3% |
| SR 3,400 monthly (discount = 15%) | 19 54.3% | 16 45.7% |
| SR 4,000 monthly (discount = 20%) | 21 42% | 29 58% |

Missing = 26 cases (answer not required)
Minimum expected frequency: 12.969
Number of missing observations: 26

Chi-square = 22.70186, degrees of freedom = 4 and p-value = 0.00015 which is less than 0.05. Thus, the null hypothesis has been rejected. We can say that we are 95% confident that there is a significant association between the ability to increase the amount of annual repayment (depending on the discount) and facing a housing problem.

HYPOTHESIS NO. 33

There is no significant association between the ability to repay the annual instalment without discount and having already applied for an REDF loan.
The correlation between the answers to question 6 and the answers to question 5.
Aims to ascertain the socio-economic status of those who seek REDF loans (loan seekers).

Type of test: Chi-square of the cross-tabulation of the answers to question 6 and the answers to question 5 (see Table 8.21).

Table 8.21
Cross-Tabulation of the Answers to Question 6
and the Answers to Question 5

| Q. 6 Could you repay the annual instalment without discount in order to reduce the waiting period for obtaining the loan? | Q. 5 Have you applied for an REDF loan? (count and row percentages) | |
|---|---|-------------|
| | Yes | No |
| Yes | 147 94.2% | 9 5.8% |
| No | 77 81.9% | 17 18.1% |

Minimum expected frequency: 9.776

Number of missing observations: 0

Chi-square = 9.54776, degrees of freedom = 1 and p-value = 0.002 which is less than 0.05. Thus, the null hypothesis has been rejected. We can say that we are 95% confident that there is a significant association between the ability to repay the annual instalment without discount and having already applied for an REDF loan.

HYPOTHESIS NO. 34

The policy of reducing the waiting period for obtaining the loan would be advantageous for the REDF, as would be the policy of choosing how much one wishes to repay in order to obtain the discount one can afford.

Aims to suggest methods by which the repayments to the REDF might be increased.

Type of test : t-test for paired samples.

The aim is to see whether there is a difference between the two policies. It can be seen that the average repayment under the policy of reducing the waiting period for obtaining a loan is SR 3,000, whereas the average repayment under the policy of choosing how much one wishes to repay in order to obtain the discount one can afford is SR 2,606.

A t-test was applied to see if the means of the repayment amount are significantly different.

The p-value = 0 which is less than 0.05. Thus, the null hypothesis has been rejected and the alternative hypothesis has been accepted.

Hence, the result is highly significant, and we can say that there is a difference between the two policies.

Table 8.22
T-test for paired samples

| Variable | Number of pairs | Correlation | p value | Mean | Standard deviation | Standard error of mean |
|--|-----------------|-------------|---------|----------|--------------------|------------------------|
| Q. 6A How much could you repay in order to reduce the waiting period of the loan? | 224 | 0.814 | 0.000 | 3,000 | 1,220.16 | 81.525 |
| Q. 6B How many instalments could you repay together in order to obtain discount? | | | | 2,606.25 | 1,060.525 | 70.859 |

Table 8.22A
Paired Differences

| Mean | Standard | Standard error of mean |
|---|----------|------------------------|
| 393.75 | 711.252 | 47.523 |
| 95% Confidence interval for difference (300.099, 487.401) | | |

Table 8.22B

| t-value | Degrees of freedom | p-value |
|---------|--------------------|---------|
| 8.29 | 223 | 0.000 |

8. 2. 1. 1 SUMMARY OF THE RESULTS OF THE ANALYTICAL NULL HYPOTHESES RELATED TO LOAN SEEKERS' QUESTIONS, WHICH HAVE BEEN REJECTED

Table 8.23
Summary of the Results of the Analytical Null Hypotheses Related to Loan Seekers' Questions, which have been Rejected

| No. | The Null Hypotheses |
|-----|--|
| 1 | There is no significant association between the ability to increase the amount of annual repayment (depending on the waiting period) and number of dependants. |
| 2 | There is no significant association between the ability to repay the annual instalment without discount and monthly income. |
| 3 | There is no significant association between the ability to increase the amount of annual repayment (depending on the waiting period) and monthly income. |
| 4 | There is no significant association between the ability to increase the amount of annual repayment (depending on the discount) and monthly income. |
| 5 | There is no significant association between the ability to increase the amount of the annual repayment (depending on the waiting period) and facing a housing problem. |
| 6 | There is no significant association between the ability to increase the amount of annual repayment (depending on the discount) and number of dependants. |
| 7 | There is no significant association between the ability to increase the amount of annual repayment (depending on the discount) and facing a housing problem. |
| 8 | There is no significant association between the ability to repay the annual instalment without discount and having already applied for an REDF loan. |
| 9 | The policy of reducing the waiting period for obtaining the loan would be advantageous for the REDF, as would be the policy of choosing how much one wishes to repay in order to obtain the discount one can afford. |

8. 2. 2 THE ANALYTICAL HYPOTHESES WHICH HAVE NOT BEEN REJECTED

HYPOTHESIS NO. 35

There is no significant association between the ability to repay the annual instalment without discount and marital status.

The correlation between the answers to question 6 and the answers to question 1.

Aims to ascertain the socio-economic status of those who seek REDF loans (loan seekers).

Type of test: Chi-square of the cross-tabulation of the answers to question 6 and the answers to question 1, as shown in Table 8.24.

Table 8.24
Cross-Tabulation of the Answers to Question 6
and the Answers to Question 1

| Q. 6 Could you repay the annual instalment without discount in order to reduce the waiting period for obtaining the loan? | Q.1 Marital status of REDF loan seekers (count and row percentages) | |
|--|--|--------------|
| | Single | Married |
| | Yes | No |
| Yes | 52 23.2% | 172 76.8% |
| No | 7 26.9% | 19 73.1% |

Minimum expected frequency: 6.136
Number of missing observations: 0

Chi-square = 0.17772, degrees of freedom = 1 and p-value = 0.67334 which is greater than 0.05. Hence, the null hypothesis has not been rejected. We can say that we are 95% confident that there is no significant association between the ability to repay the annual instalment without discount and marital status.

HYPOTHESIS NO. 36

There is no significant association between the ability to increase the amount of annual repayment (depending on the waiting period) and marital status.

The correlation between the answers to question 6A and the answers to question 1.

Aims to:

1. consider loan seekers' views on being offered a flexible method of borrowing money to suit their specific needs;
2. suggest methods by which the repayments to the REDF might be increased.

Type of test: Chi-square of the cross-tabulation of the answers to question 6A and the answers to question 1 (see Table 8.25).

Table 8.25
Cross-Tabulation of the Answers to Question 6A
and the Answers to Question 1

| Q.1 Marital status of REDF loan seekers | Q. 6A How much could you repay in order to reduce the waiting period of the loan, as follows? (count and row percentages) | | | | |
|---|--|--|--|--|---|
| | SR 1,000 monthly, the waiting period = 9 years | SR 2,000 monthly, the waiting period = 7 years | SR 3,000 monthly, the waiting period = 5 years | SR 4,000 monthly, the waiting period = 3 years | SR 5,000 monthly, the waiting period = 1 year |
| Single | 8 15.4% | 15 28.8% | 16 30.8% | 9 17.3% | 4 7.7% |
| Married | 20 11.6% | 39 22.7% | 44 25.6% | 45 26.2% | 24 14% |

Missing = 26 cases (answer not required).

Minimum expected frequency: 6.5

Number of missing observations: 26

Chi-square = 4.03387, degrees of freedom = 4 and p-value = 0.40144 which is greater than 0.05. Hence, the null hypothesis has not been rejected. We can say that we are 95% confident that there is no significant association between the ability to increase the amount of annual repayment (depending on the waiting period) and marital status.

HYPOTHESIS NO. 37

There is no significant association between the ability to increase the amount of annual repayment (depending on the discount) and marital status.

The correlation between the answers to question 6B and the answers to question 1.

Aims to:

1. consider loan seekers' views on being offered a flexible method of borrowing money to suit their specific needs;
2. suggest methods by which the repayments to the REDF might be increased.

Type of test: Chi-square of the cross-tabulation of the answers to question 6B and the answers to question 1 (see Table 8.26).

FTable 8.26
Cross-Tabulation of the Answers to Question 6B
and the Answers to Question 1

| Q.1 Marital status of REDF loan seekers | Q. 6B How many instalments could you repay together in order to obtain discount, as follows? (count and row percentages) | | | | |
|---|---|--|---|---|---|
| | SR 1,000 monthly (discount = 0%) | SR 1,900 monthly (discount = 5%) | SR 2,700 monthly (discount = 10%) | SR 3,400 monthly (discount = 15%) | SR 4,000 monthly (discount = 20%) |
| | | | | | |
| Single | 14 26.9% | 10 19.2% | 13 25% | 6 11.5% | 9 17.3% |
| Married | 27 15.7% | 41 23.8% | 34 19.8% | 29 16.9% | 41 23.8% |

Missing = 26 cases (answer not required).
Minimum expected frequency: 8.125
Number of missing observations: 26

Chi-square = 5.12845, degrees of freedom = 4 and p-value = 0.27437 which is greater than 0.05. Hence, the null hypothesis has not been rejected. We can say that we are 95% confident that there is no significant association between the ability to increase the amount of annual repayment (depending on the discount) and marital status.

HYPOTHESIS NO. 38

There is no significant association between the ability to repay the annual instalment without discount and number of dependants.

The correlation between the answers to question 6 and the answers to question 2.

Aims to ascertain the socio-economic status of those who seek REDF loans (loan seekers).

Type of test: Chi-square of the cross-tabulation of the answers to question 6 and the answers to question 2 (see Table 8.27).

Table 8.27
Cross-Tabulation of the Answers to Question 6
and the Answers to Question 2

| Q. 6 Could you repay the annual instalment without discount in order to reduce the waiting period for obtaining the loan? | Q.2 Number of dependants (count and row percentages) | | |
|--|---|--------------|--------------|
| | 0 and 1 | 2 - 4 | 5 - 9 |
| | | | |
| Yes | 57 25.4% | 90 40.2% | 77 34.4% |
| No | 6 23.1% | 9 34.6% | 11 42.3% |

Minimum expected frequency: 6.552
Number of missing observations: 0

Chi-square = 0.65044, degrees of freedom = 2 and p-value = 0.72237 which is greater than 0.05. Hence, the null hypothesis has not been rejected. We can say that we are 95% confident that there is no significant association between the ability to repay the annual instalment without discount and number of dependants.

HYPOTHESIS NO. 39

There is no significant association between the ability to repay the annual instalment without discount and facing a housing problem.

The correlation between the answers to question 6 and the answers to question 4.

Aims to ascertain the socio-economic status of those who seek REDF loans (loan seekers).

Type of test: Chi-square of the cross-tabulation of the answers to question 6 and the answers to question 4 (see Table 8.28).

Table 8.28
Cross-Tabulation of the Answers to Question 6
and the Answers to Question 4

| Q. 6 Could you repay the annual instalment without discount in order to reduce the waiting period for obtaining the loan? | Q. 4 Are you facing a housing problem? (count and row percentages) | |
|--|--|-------------|
| | Yes | No |
| Yes | 141 62.9% | 83 37.1% |
| No | 19 73.1% | 7 26.9% |

Minimum expected frequency: 9.36
Number of missing observations: 0

Chi-square = 1.03767, degrees of freedom = 1 and p-value = 0.30836 which is greater than 0.05. Thus, the null hypothesis has not been rejected. We can say that we are 95% confident that there is no significant association between the ability to repay the annual instalment without discount and facing a housing problem.

HYPOTHESIS NO. 40

There is no significant association between the ability to increase the amount of annual repayment (depending on the waiting period) and having already applied for an REDF loan.

The correlation between the answers to question 6A and the answers to question 5.

Aims to suggest methods by which the repayments to the REDF might be increased.

Type of test: Chi-square of the cross-tabulation of the answers to question 6A and the answers to question 5 (see Table 8.29).

Table 8.29
Cross-Tabulation of the Answers to Question 6A
and the Answers to Question 5

| Q. 5 Have you applied for an REDF loan? | Q. 6A How much could you repay in order to reduce the waiting period of the loan, as follows? (count and row percentages) | | | | |
|---|--|--|--|--|---|
| | SR 1,000 monthly, the waiting period = 9 years | SR 2,000 monthly, the waiting period = 7 years | SR 3,000 monthly, the waiting period = 5 years | SR 4,000 monthly, the waiting period = 3 years | SR 5,000 monthly, the waiting period = 1 year |
| | Yes | No | Yes | No | Yes |
| Yes | 17 11.5% | 31 20.9% | 39 26.4% | 38 25.7% | 23 15.5% |
| No | 11 14.5% | 23 30.3% | 21 27.6 | 16 21.1% | 5 6.6% |

Missing = 26 cases (answer not required).
 Minimum expected frequency: 9.5
 Number of missing observations: 26

Chi-square = 5.86877, degrees of freedom = 4 and p-value = 0.20916 which is greater than 0.05. Thus, the null hypothesis has not been rejected. We can say that we are 95% confident that there is no significant association between the ability to increase the amount of annual repayment (depending on the waiting period) and having already applied for an REDF loan.

HYPOTHESIS NO. 41

There is no significant association between the ability to increase the amount of annual repayment (depending on the discount) and having already applied for an REDF loan.

The correlation between the answers to question 6B and the answers to question 5.

Aims to suggest methods by which the repayments to the REDF might be increased.

Type of test: Chi-square of the cross-tabulation of the answers to question 6B and the answers to question 5 (see Table 8.30).

Table 8.30
Cross-Tabulation of the Answers to Question 6B
and the Answers to Question 5

| Q. 5 Have you applied for an REDF loan? | Q. 6B How many instalments could you repay together in order to obtain discount, as follows? (count and row percentages) | | | | |
|---|---|--|---|---|---|
| | SR 1,000 monthly (discount = 0%) | SR 1,900 monthly (discount = 5%) | SR 2,700 monthly (discount = 10%) | SR 3,400 monthly (discount = 15%) | SR 4,000 monthly (discount = 20%) |
| Yes | 26 17.6% | 31 20.9% | 32 21.6% | 24 16.2% | 35 23.6% |
| No | 15 19.7% | 20 26.3% | 15 19.7% | 11 14.5% | 15 19.7% |

Missing = 26 cases (answer not required).

Minimum expected frequency: 11.875

Number of missing observations: 26

Chi-square = 1.29189, degrees of freedom = 4 and p-value = 0.86275 which is greater than 0.05. Thus, the null hypothesis has not been rejected. We can say that we are 95% confident that there is no significant association between the ability to increase the amount of annual repayment (depending on the discount) and having already applied for an REDF loan.

8. 2. 2. 1 SUMMARY OF THE RESULTS OF THE ANALYTICAL NULL HYPOTHESES RELATED TO LOAN SEEKERS' QUESTIONS, WHICH HAVE NOT BEEN REJECTED

Table 8.31
Summary of the Results of the Analytical Null Hypotheses Related to
Loan Seekers' Questions, which have not been Rejected

| No. | The Null Hypotheses |
|-----|--|
| 1 | There is no significant association between the ability to repay the annual instalment without discount and marital status. |
| 2 | There is no significant association between the ability to increase the amount of annual repayment (depending on the waiting period) and marital status. |
| 3 | There is no significant association between the ability to increase the amount of annual repayment (depending on the discount) and marital status. |
| 4 | There is no significant association between the ability to repay the annual instalment without discount and number of dependants. |

| | |
|---|---|
| 5 | There is no significant association between the ability to repay the annual instalment without discount and facing a housing problem. |
| 6 | There is no significant association between the ability to increase the amount of annual repayment (depending on the waiting period) and having already applied for an REDF loan. |
| 7 | There is no significant association between the ability to increase the amount of annual repayment (depending on the discount) and having already applied for an REDF loan. |

8.3 CONCLUSION

Table 8.32
Summary of the Results of the Null Hypotheses Related to
Loan Seekers' Questions

| No. | The Null Hypotheses | The Result |
|-----|--|-----------------------|
| 1 | There is no significant association between the ability to repay the annual instalment without discount and marital status. | has not been rejected |
| 2 | There is no significant association between the ability to increase the amount of annual repayment (depending on the waiting period) and marital status. | has not been rejected |
| 3 | There is no significant association between the ability to increase the amount of annual repayment (depending on the discount) and marital status. | has not been rejected |
| 4 | There is no significant association between the ability to repay the annual instalment without discount and number of dependants. | has not been rejected |
| 5 | There is no significant association between the ability to increase the amount of annual repayment (depending on the waiting period) and number of dependants. | has been rejected |
| 6 | There is no significant association between the ability to increase the amount of annual repayment (depending on the discount) and number of dependants. | has been rejected |
| 7 | There is no significant association between the ability to repay the annual instalment without discount and monthly income. | has been rejected |
| 8 | There is no significant association between the ability to increase the amount of annual repayment (depending on the waiting period) and monthly income. | has been rejected |
| 9 | There is no significant association between the ability to increase the amount of annual repayment (depending on the discount) and monthly income. | has been rejected |
| 10 | There is no significant association between the ability to repay the annual instalment without discount and facing a housing problem. | has not been rejected |

| | | |
|----|---|-----------------------|
| 11 | There is no significant association between the ability to increase the amount of the annual repayment (depending on the waiting period) and facing a housing problem. | has been rejected |
| 12 | There is no significant association between the ability to increase the amount of annual repayment (depending on the discount) and facing a housing problem. | has been rejected |
| 13 | There is no significant association between the ability to repay the annual instalment without discount and having already applied for an REDF loan. | has been rejected |
| 14 | There is no significant association between the ability to increase the amount of annual repayment (depending on the waiting period) and having already applied for an REDF loan. | has not been rejected |
| 15 | There is no significant association between the ability to increase the amount of annual repayment (depending on the discount) and having already applied for an REDF loan. | has not been rejected |
| 16 | There is no main reason for not applying for an REDF loan. | has been rejected |
| 17 | Loan seekers could not repay the annual instalment without discount in order to reduce the waiting period for obtaining an REDF loan. | has been rejected |
| 18 | The policy of reducing the waiting period for obtaining the loan would be advantageous for the REDF, as would be the policy of choosing how much one wishes to repay in order to obtain the discount one can afford. | has been rejected |
| 19 | Loan seekers do not agree that strong action should be taken to prevent overdue annual repayments in order to reduce the waiting period for obtaining a loan. | has been rejected |
| 20 | Loan seekers could not repay SR 25,000 annually in order to obtain a housing loan of SR 500,000. | has not been rejected |
| 21 | Loan seekers would not prefer to repay SR 20,000 annually in order to obtain a villa. | has been rejected |
| 22 | The degree of acceptance of the option of a loan of SR 500,000 is equal to the degree of acceptance of the option of a villa among REDF loan seekers. The acceptance of the option of a loan of SR 500,000 and the acceptance of the option of a villa among REDF loan seekers are equally likely. | has been rejected |
| 23 | Loan seekers would take out a loan on which interest is charged in order to build their houses. | has been rejected |

| | | |
|----|---|-------------------|
| 24 | Loan seekers would not prefer Islamic housing financing methods. | has been rejected |
| 25 | The main reason for not taking out a loan on which interest is charged is not purely religious. | has been rejected |
| 26 | The three purchase methods are equally acceptable to REDF loan seekers. | has been rejected |
| 27 | The three partnership methods are equally acceptable to REDF loan seekers. | has been rejected |

- a) There is a significant association between the ability to repay the annual instalment without discount and monthly income; and having already applied for an REDF loan.
- b) There is no significant association between the ability to repay the annual instalment without discount and marital status; number of dependants; and facing a housing problem.
- c) There is a significant association between the ability to increase the amount of annual repayment (depending on the waiting period) and number of dependants; monthly income; and facing a housing problem.
- d) There is no significant association between the ability to increase the amount of annual repayment (depending on the waiting period) and marital status; and having already applied for an REDF loan.
- e) There is a significant association between the ability to increase the amount of annual repayment (depending on the discount) and number of dependants; monthly income; and facing a housing problem.
- f) There is no significant association between the ability to increase the amount of annual repayment (depending on the discount) and marital status; and having already applied for an REDF loan.
- g) There is a main reason for not applying for an REDF loan.
- h) The policy of reducing the waiting period for obtaining the loan would be advantageous for the REDF, as would be the policy of choosing how much one wishes to repay in order to obtain the discount one can afford.
- i) Loan seekers:
 - could repay the annual instalment without discount in order to reduce the waiting period for obtaining an REDF loan.
 - agree that strong action should be taken to prevent overdue annual repayments in order to reduce the waiting period for obtaining a loan.

- could not repay SR 25,000 annually in order to obtain a housing loan of SR 500,000.
 - would prefer to repay SR 20,000 annually in order to obtain a villa.
 - would not take out a loan on which interest is charged in order to build their houses.
 - would prefer Islamic housing financing methods.
- j) The acceptance of the option of a loan of SR 500,000 and the acceptance of the option of a villa among REDF loan seekers are not equally likely.
- k) The main reason for not taking out a loan on which interest is charged is purely religious.
- l) The three purchase methods are not equally acceptable to REDF loan seekers.
- m) The three partnership methods are not equally acceptable to REDF loan seekers.

CHAPTER NINE

MULTIVARIATE APPROACH

9.0 INTRODUCTION

In previous chapters, two variables were examined at the same time. Here, more variables will be examined simultaneously, in an attempt to find a summary measurement of these variables. Specifically, this chapter aims to find out whether the sample individuals form any kind of groups or whether they are randomly scattered. Multivariate methods, such as Discriminant Analysis and Cluster Analysis, are available to serve this purpose.

Discriminant Analysis starts by finding a combination of variables that best distinguish between the groups. These combinations are defined as Discriminant functions. To separate “J” groups, “J-1” Discriminant functions are required.

This method is based on the assumption that all the variables have a normal distribution with the same standard deviation within each group. Departure of some of the variables from this assumption may be acceptable. However, there is no clear cut distinction between reliable and unreliable estimates of the Discriminant function in such situations. (For further details see Altman 1995, pp. 358-360, and Chatfield & Collins 1980, pp. 133-138).

Given these restrictions and since the data is generally categorical, the Discriminant method will not be used. The Cluster Analysis method, which is assumption-free, is more appropriate and will be used instead to identify groups, if there are any.

9.1 CLUSTER ANALYSIS

Cluster Analysis is a multivariate technique used to group objects of size “n” into classes, so that similar objects belong to the same class. The criteria used for classification are the characteristics of the “p” variables, associated with each object. This method does not determine the number of groups and it is the researcher's personal judgment which will do so. However, it has been found that by using this method, researchers are able to determine true groups. For example, in psychiatry there has been a great deal of disagreement over the classification of depressed patients and Cluster Analysis has been used to define objective groups (Manly, 1986). The method is also useful for data reduction. For example, in a study which involves the schools of a country, it may be impossible to include all the schools, but by finding clusters of similar schools, then a

sample may be drawn from each cluster to represent all the schools in that cluster. Such a sample would be representative and of a reasonable size.

Many algorithms are available for Cluster Analysis. The most commonly used are the Hierarchical technique and the Partition technique. The Hierarchical technique defines groups which overlap, while the other method identifies independent groups. (For details see Chatfield and Collins 1980).

In this research, the analysis will be confined to the partition approach, which is found to be more suitable to the purposes of the study. The method is defined as K-means by the SPSS program - a Statistical Package for Social Science - which is used in this analysis. The method allows objects to move in and out of groups at different stages of the analysis. It starts by taking arbitrary centres. Then, individuals are allocated to the nearest centre; in that way, new centres are created. These are the centres of the individuals within each group. Next, an individual is moved to another group if it is closer to that group's centre than it is to the centre of its present group. The process continues iteratively until stability is reached with the predetermined number of clusters.

The partition technique (K-means method) is able to work to identify groups for dichotomous variables if one of the two groups is coded zero. If the coding is of a binary form (i.e. 0, 1 form) for the two categories, then the final cluster centre can be expressed in terms of the percentage of the category which is coded as "1". To explain the idea more clearly, consider a binary response which is coded "1" for "Yes" and "0" for "No". In a sample of five individuals the response was found to be, as follows: 1,0, 1, 0, 0. The mean of the response is therefore: $1+0+1+0+0/5 = 2/5 = 0.4$. This answer may be expressed by saying that 40% of the respondents answered "Yes". In this study, the "0" and "1" codings have been used for the dichotomous variables.

9.2 ANALYSIS AND RESULTS

9.2.1 AIM

The aim of the following analysis is to identify clusters of individuals which are similar in some sense within groups but different between groups. Two data sets are examined: existing borrowers and seekers of REDF loans.

Since the cluster method is not appropriate for categorical variables with more than two categories, only dichotomous variables will be used.

9.2.2 BORROWERS

A few solutions were attempted here, to form two, three, four and five clusters. The second and third solutions (three and four clusters respectively) were found to be more meaningful than the others (two and five clusters) and will be discussed further in detail. The binary variables used here are:

- 1. Q.1 Marital status?
- 2. Q.4 Did you construct more than one housing unit?
- 3. Q.5 Did your annual repayment (SR 9,600) ever get delayed?
- 4. Q.6 Would you prefer to repay your annual repayment (SR 9,600) by monthly direct debit (i.e. SR 800 monthly)?
- 5. Q.7 Would you prefer to repay your annual repayment (SR 9,600) and the value of one instalment prior to the due date (SR 8,400) by monthly direct debit?

9.2.2.1 THREE CLUSTER SOLUTION

The outcome of the three-cluster analysis is presented in Tables 9.1 and 9.1A.

Table 9.1
Three Cluster Solution

| QUESTION NO. | 1 | 4 | 5 | 6 | 7 |
|--------------|--------|--------|--------|--------|--------|
| CLUSTER 1 | 0 | 1 | 0.6509 | 1 | 0.9527 |
| CLUSTER 2 | 0.1053 | 0.3158 | 0.1053 | 0.5263 | 0 |
| CLUSTER 3 | 0.0161 | 0 | 0.7581 | 1 | 0.7419 |

Table 9.1A
Number of Cases

| CLUSTER | NUMBER OF CASES |
|-----------|-----------------|
| CLUSTER 1 | 169 |
| CLUSTER 2 | 19 |
| CLUSTER 3 | 62 |
| TOTAL | 250 |

The following observations may be made in respect of this solution:

- 1. The variable Q.1: ‘Marital status?’, is not helpful for the classification, since the number of single individuals is very small (only three respondents, 1.2% of the survey population).
- 2. Considering Q.4: ‘Did you construct more than one housing unit?’, the response was as follows:

- a) the first cluster consists entirely (100%) (one hundred and sixty-nine members) of those who answered “Yes”;
- b) about 32% of second cluster answered “Yes”;
- c) the third cluster is comprised solely of those who answered “No” to the same question.

That is to say, there is a great difference between the first cluster and the second cluster with respect to their answers to Q.4.

3. Considering Q.5: ‘Did your annual repayment ever get delayed?’, the response was as follows:

- a) about 65% of the first cluster answered “Yes”;
- b) about 11% of the second cluster did so;
- c) about 76% of the third cluster did so.

In other words, there is a great difference between the first and the third clusters and the second cluster with respect to their answers to Q.5.

4. Considering Q.6: ‘Would you prefer to repay your annual repayment (SR 9,600) by monthly direct debit (i.e. SR 800 monthly)?’, the response was as follows:

- a) the first and third clusters consist entirely (100%) of individuals who answered “Yes”;
- b) about 53% of the second cluster answered “Yes”.

To summarise, there is a difference between the first and the third clusters and the second cluster with respect to their answers to Q.6. It should be mentioned in this context that the majority of the first and third clusters (65%, 76% respectively) had sometimes delayed their annual repayment (SR 9,600). Hence, one way to overcome the problem of repayments being overlooked would be to introduce a system of monthly repayment by direct debit.

5. The response to Q.7: ‘Would you prefer to repay your annual repayment (SR 9,600) and the value of one instalment prior to the due date (SR 8,400) by monthly direct debit?’, showed considerable difference between clusters. About 95% of the first cluster answered “Yes”, as did about 74% of the third cluster, whereas no one (0%) from the second cluster answered “Yes”.

As expected from the previous findings, the percentage of the second cluster who answered “Yes” to question seven was less than the percentage who replied

affirmatively (53%) to the previous question. In other words, there is a great difference between the first and the third clusters and the second cluster, with respect to their answers to Q.7.

9.2.2.2 FOUR CLUSTER SOLUTION

Tables 9.2 and 9.2A present the four-cluster analysis of borrowers' responses.

Table 9.2
Four Cluster Solution

| QUESTION NO. | 1 | 4 | 5 | 6 | 7 |
|--------------|--------|--------|--------|---|--------|
| CLUSTER 1 | 0 | 1 | 0.6335 | 1 | 1 |
| CLUSTER 2 | 0.04 | 0.08 | 0 | 1 | 0.6 |
| CLUSTER 3 | 0.1111 | 0.4444 | 0.2222 | 0 | 0 |
| CLUSTER 4 | 0.0182 | 0.1455 | 1 | 1 | 0.5636 |

Table 9.2A
Number of Cases

| CLUSTER | NUMBER OF CASES |
|-----------|-----------------|
| CLUSTER 1 | 161 |
| CLUSTER 2 | 25 |
| CLUSTER 3 | 9 |
| CLUSTER 4 | 55 |
| TOTAL | 250 |

The following observations may be made in respect of this solution:

1. The variable Q.1, for the reasons discussed earlier, is once again not very useful for classification.
2. With regard to Q.4 ‘Did you construct more than one housing unit?’, the response was as follows:
 - a) the first cluster consists entirely (100%) (one hundred and sixty-one individuals) of those who answered “Yes”;
 - b) the second cluster is dominated by those who answered “No”;
 - c) the third cluster contains about 44% who answered “Yes”;
 - d) the fourth cluster contains about 15% who answered “Yes”.

That is to say, there is a great difference between the first cluster and the second cluster with respect to their answers to Q.4.

3. With respect to Q.5: ‘Did your annual repayment (SR 9,600) ever get delayed?’, the response was as follows:

- a) about 63% of the first cluster answered “Yes”;
- b) the entire second cluster answered “No”;
- c) about 22% of the third cluster answered “Yes”;
- d) all members (100%) of the fourth cluster (fifty-five individuals) answered “Yes”.

In other words, with respect to Q.5, there is a clear difference between the first cluster and the second cluster. This means that those individuals who constructed more than one housing unit (the first cluster) may not be able to repay the annual repayments of SR 9,600 regularly. Hence, the REDF loan should be granted to:

- a) those who want to build one housing unit;
- b) those who want to build more than one housing unit, provided they are able to repay the annual repayments of SR 9,600 regularly.

4. With respect to Q.6: ‘Would you prefer to repay your annual repayment (SR 9,600) by monthly direct debit (i.e. SR 800 monthly)?’, the response was as follows:

- a) all members (100%) of the first, second and fourth clusters answered “Yes”;
- b) all members (100%) of the third cluster (nine individuals) answered “No”.

That is to say, there is a great difference between the first, second and fourth clusters and the third cluster with respect to their answers to Q.6.

It should be mentioned in this context that the majority of the first and fourth clusters had sometimes delayed their annual repayment (SR 9,600). Hence, one way to overcome the problem of repayments being overlooked would be to introduce a system of monthly repayment by direct debit.

5. The pattern of the clusters with respect to Q.7: ‘Would you prefer to repay your annual repayment (SR 9,600) and the value of one instalment prior to the due date (SR 8,400) by monthly direct debit?’, is as follows:

- a) all members (100%) of the first cluster (one hundred and sixty-one individuals) answered “Yes”;
- b) 60% of the second cluster did so;

- c) all members (100%) of the third cluster (nine individuals) answered “No”;
- d) about 56% of the fourth cluster answered “Yes”.

It was to be expected, from the previous findings, that the percentage of the third cluster who answered “Yes” to question seven would be 0% (the same as for the previous question). In other words, there is a great difference between the first, second and fourth clusters and the third cluster, with respect to their answers to Q.7.

It can also be seen clearly that the first cluster, which is fairly large as it is made up of one hundred and sixty-one individuals (see Table 9.2A), consists of individuals who constructed more than one housing unit; these people answered “Yes” to both questions 6 and 7 and about 63% of them answered “Yes” to Q.5 (see Table 9.2).

9.2.3 LOAN SEEKERS

Various numbers of clusters (two, three, four and five) were examined in an attempt to identify a sensible grouping. The first and second choices, i.e. the two - and three - cluster options, will be discussed in detail, as they produced the most meaningful solutions. As stated earlier, the number of clusters is not determined by the method but is a matter for the researcher’s discretion. The variables that are suitable for the present purposes are:

1. Q.1 Marital status.
2. Q.4 Are you facing a housing problem?
3. Q.5 Have you applied for an REDF loan?
4. Q.6 Could you repay the annual instalment (SR 12,000) without discount in order to reduce the waiting period for obtaining the loan?
5. Q.8 Could you repay SR 25,000 annually in order to obtain a housing loan of SR 500,000?
6. Q.9 The REDF is considering building estates consisting of villas, each having a floor area of 230 square metres, and consisting of six large rooms. The villa would be built on a plot of land of 400 square metres, valued at SR 400,000 repayable over 20 years (i.e. SR 20,000 annually). The villa would be available one year after the date of application. Would you prefer this option?
7. Q.10 Which option would you prefer?

9.2.3.1 TWO CLUSTER SOLUTION

Tables 9.3 and 9.3A respectively present the two-cluster analysis of seekers' responses and the size of the clusters so produced.

Table 9.3
Two Cluster Solution

| QUESTION NO. | 1 | 4 | 5 | 6 | 8 | 9 | 10 |
|--------------|--------|--------|--------|--------|--------|--------|--------|
| CLUSTER 1 | 0.8676 | 0.25 | 0.4265 | 0.8529 | 0.3971 | 0.8824 | 0.0882 |
| CLUSTER 2 | 0 | 0.7857 | 0.6978 | 0.9121 | 0.4121 | 0.8297 | 0.2473 |

Table 9.3A
Number of Cases

| CLUSTER | NUMBER OF CASES |
|-----------|-----------------|
| CLUSTER 1 | 68 |
| CLUSTER 2 | 182 |
| TOTAL | 250 |

The following observations may be made in respect of this analysis:

1. The first cluster consists of mostly single individuals, as answers to Q.1 show that about 87% of this cluster are singles. On the other hand, the second cluster is entirely (100%) made up of married individuals (one hundred and eighty-two members).

In brief, there is a great difference between the first cluster and the second cluster with respect to their answers to Q.1.

2. Considering Q.4: 'Are you facing a housing problem?', the response was as follows:
 - a) 25% of the first cluster answered "Yes";
 - b) about 79% of the second cluster answered "Yes".

As expected from the previous finding, the majority of the second cluster, who are all married, are facing housing problems. The above findings are probably due to the fact that most of the people who answered negatively had fewer dependants.

3. Considering Q.5: 'Have you applied for an REDF loan?', the response was as follows:
 - a) about 43% of the first cluster have applied for an REDF loan;

b) about 70% of the second cluster have done so.

A possible explanation for this could be one of the following:

1. The majority (79%) of the second cluster, who are all married, are facing housing problems, as previously stated.
2. The individuals of the first cluster are, on average, younger than those of the second cluster. Accordingly, they may not own a plot of land due to the considerable rise in price of residential land in the cities (see page 127). Hence, they do not meet the condition for REDF loan application.

4. Considering Q.6: 'Could you repay the annual instalment (SR 12,000) without discount in order to reduce the waiting period for obtaining the loan?', the response was as follows:

- a) about 85% of the first cluster answered "Yes";
- b) about 91% of the second cluster answered "Yes".

In other words, the proportion who answered "Yes" to Q.6 is very similar for both clusters; it is over 85%. However, the proportion of the second cluster who answered "Yes" to Q.6 is larger than that of the first cluster, since the majority (79%) of the second cluster, who are all married, are facing housing problems, as previously mentioned.

5. Considering Q.8: 'Could you repay SR 25,000 annually in order to obtain a housing loan of SR 500,000?', the response was as follows:

- a) about 40% of the first cluster answered "Yes";
- b) about 41% of the second cluster answered "Yes".

In other words, in each cluster only about 40% answered affirmatively. That is to say, there is very little difference between the two groups with respect to their answers to Q.8.

6. Considering Q.9: 'The REDF is considering building estates consisting of villas, each having a floor area of 230 square metres, and consisting of six large rooms. The villa would be built on a plot of land of 400 square metres, valued at SR 400,000 repayable over 20 years (i.e. SR 20,000 annually). The villa would be available one year after the date of application. Would you prefer this option?', the response was as follows:

- a) about 88% of the first cluster answered “Yes”;
- b) about 83% of the second cluster did so.

That is to say, the vast majority (over 82%) of each cluster answered “Yes” to this question. However, the proportion who answered “Yes” to Q.9 from the first cluster (the group of single individuals) is slightly larger than that of the second cluster (the married group). This finding may be explained by the fact that the individuals of the first cluster did not own a plot of land, as previously stated.

7. Considering Q.10: ‘Which option would you prefer?’, referring to the preference for the villa or cash option; in the first cluster only about 9% answered “Yes” for cash preference, while only about 25% of the second cluster did so. This shows, in general, that the villa option is more popular. In addition, this finding supports the previous finding.

The two cluster solution seems to have differentiated between the two clusters mainly with respect to the variables represented by questions 1, 4, 5 and 10.

9.2.3.2 THREE CLUSTER SOLUTION

Tables 9.4 and 9.4A present the outcomes of the three-cluster analysis of seekers’ responses.

Table 9.4
Three Cluster Solution

| QUESTION NO. | 1 | 4 | 5 | 6 | 8 | 9 | 10 |
|--------------|--------|--------|--------|--------|--------|--------|--------|
| CLUSTER 1 | 0 | 1 | 0.6446 | 0.876 | 0.2231 | 0.9091 | 0.0165 |
| CLUSTER 2 | 0.0377 | 0.434 | 0.7547 | 0.9811 | 0.9434 | 0.6038 | 0.8491 |
| CLUSTER 3 | 0.75 | 0.2105 | 0.5 | 0.8684 | 0.3289 | 0.9079 | 0.0526 |

Table 9.4A
Number of Cases

| CLUSTER | NUMBER OF CASES |
|-----------|-----------------|
| CLUSTER 1 | 121 |
| CLUSTER 2 | 53 |
| CLUSTER 3 | 76 |
| TOTAL | 250 |

This solution yields a good and sensible classification of individuals, since more distinguishable groups are created. Further details of smaller groups are displayed. The following observations may be made in respect of this solution:

1. The first two clusters are dominated by married couples (that is, they contain 0% and about 4% of single respondents respectively) while 75% of the third cluster are single individuals.
2. All members (100%) of the first cluster (one hundred and twenty-one individuals), who are all married, are facing housing problems, as are around 43% of the second cluster and about 21% of the third cluster.

As expected from the previous finding, all individuals of the first cluster, who are all married, are facing housing problems. It appears likely that, in general, the people who answered negatively to Q.4 had fewer dependants than those who answered affirmatively.

The difference with respect to Q.5: 'Have you applied for an REDF loan?', is not considerable: close to 64% of the first cluster, about 75% of the second cluster and 50% of the third cluster answered "Yes". Possible explanations for this could be the following:

1. All individuals of the first cluster, who are all married, are facing housing problems, as previously stated.
2. The individuals of the third cluster are on average younger than those of the first cluster. Accordingly, they may not own a plot of land as previously mentioned. Hence, they would not meet the condition for REDF loan application.
3. Considering Q.6: 'Could you repay the annual instalment (SR 12,000) without discount in order to reduce the waiting period for obtaining the loan?', close to 88% of the first cluster, compared with about 98% of the second cluster, and nearly 87% of the third cluster, answered "Yes" to the question.

In other words, the proportion who answered "Yes" to Q.6 is very similar for the three clusters; it is over 86%.

4. Considering Q.8: 'Could you repay SR 25,000 annually in order to obtain a housing loan of SR 500,000?', the response was as follows:
 - a) about 22% of the first cluster said they favoured the loan scheme;
 - b) about 94% of the second cluster did so;
 - c) about 33% of the third cluster did so.

To put it more simply, there is a difference between the second cluster and the third cluster with respect to their answers to Q.8. This finding supports the finding of Q.9 in the two cluster solution.

5. Considering Q.9: 'Would you prefer the villa option?', the response was as follows:

- a) about 91% of the first and third clusters answered "Yes";
- b) about 60% of the second cluster answered "Yes".

Thus, it can also be said that with respect to Q.9 that there is a clear difference between the first and the third clusters and the second cluster. However, the proportion who answered "Yes" to Q.9 from the third cluster (the group of single individuals) is larger than that of the second cluster (the married group). This finding may be explained by the fact that the individuals of the third cluster did not own a plot of land, as suggested previously.

6. Considering Q.10: 'Which option would you prefer?', the response was as follows:

- a) about 2% of the first cluster preferred the cash option;
- b) about 85% of the second cluster did so;
- c) about 5% of the third cluster did so.

In other words, Q.10 is another variable which shows a great deal of difference between the second cluster as compared with the other two clusters. The vast majority (over 94.7%) of the first and third clusters preferred the villa option. The responses to this question are very consistent with the relevant answers to Q.8. In addition, this finding supports the finding in relation to Q.10 in the two cluster solution.

9.3 CONCLUSIONS

The Cluster Analysis was found to be useful in identifying groups of individuals.

9.3.1 THE BORROWERS DATA SET

First, a three cluster solution was considered (Table 9.1). The first cluster is dominated by those who answered "Yes" to questions 4, 5, 6 and 7. This cluster is the biggest cluster as it consists of one hundred and sixty-nine members (see Table 9.1A). In the first cluster the pattern of answers to these questions is rather similar to that of the third cluster, with the exception of the answers to Q.4, to which all members (100%) of the

third cluster answered “No”. The second cluster is generally dominated by those who answered “No” to questions 4, 5 and 7, while just over 52% of them answered “Yes” to Q.6.

The four cluster solution (Table 9.2) yields another classification. Generally speaking, the first cluster is dominated by respondents who answered “Yes” to all questions considered, while the third cluster is dominated by “No” respondents. The second cluster is dominated by those who answered “No” to questions 4 and 5, while they answered “Yes” to questions 6 and 7. In the fourth cluster, all members (100%) (fifty-five individuals) answered “Yes” to questions 5 and 6, and about 56% of them answered “Yes” to question 7 while only about 15% of them answered “Yes” to question 4.

It was concluded from the first data set that:

1. one way to overcome the problem of repayments being overlooked, would be to introduce a system of monthly repayment by direct debit;
2. the REDF loan should be granted to:
 - a) those who want to build one housing unit;
 - b) those who want to build more than one housing unit and are capable of repaying the annual repayments of SR 9,600 regularly.

9.3.2 THE LOAN SEEKERS DATA SET

A two cluster solution (Table 9.3) was able to identify two distinguishable groups. The first cluster is comprised mainly of single individuals and the second cluster is made up mainly of married individuals.

The main feature of the singles group is that they are very likely to answer “Yes” regarding the preference of a villa option, as indicated by their answers to questions 8, 9 and 10.

The married group (one hundred and eighty-two members) was found to be more likely to:

1. face housing problems than the single group;
2. have applied for an REDF loan.

The rest of the variables (questions 6, 8 and 9) involved in this solution were found to be less important, as they were unable to reflect a clear difference between the two clusters.

On the other hand, the three cluster solution (Table 9.4) tends to give more details about smaller sub-groups. The main features of the married group are that they are:

1. facing more housing problems;
2. very likely to answer "Yes" regarding preference of a loan option, as indicated by their answers to questions 8, 9 and 10.

Finally, it is clear that the method has achieved a sensible grouping using the dichotomous variables only. It should be stated that more variables could be transformed to a binary form and could then be involved in the cluster solution. However, the loss of information which would be involved in the process of transformation for this purpose is not easily justifiable.

CHAPTER TEN

CONCLUSION

The economic boom which began in Saudi Arabia in the early 1970s led to urban migration on a large scale, a serious housing shortage and an escalation in the cost of rented accommodation. Thus, housing became an urgent priority to be addressed by the Saudi government's development plans.

The REDF provides long-term soft loans for the construction of houses and apartment blocks. In addition to alleviating the housing shortage, it is intended to serve capital formation and wealth redistribution objectives. The second and the third five-year development plans (1975-1985), witnessed considerable progress, exceeding the planned targets. However, in later plan periods, the number of housing units built with REDF assistance has been below planned levels. Government funding for the REDF has declined, the goal of becoming self-financing through loan repayments has not been achieved, and there is a long waiting period for loans. Hence, the housing provision in the Kingdom has witnessed some notable successes, but there have also been some unfortunate failures. The possibility of improving the situation by enhancing the effectiveness of the REDF is considered in this study.

It may be observed that Islamic financing techniques are far more interesting and complex than conventional banking. Even in the case of deposit mobilisation, Islamic financing techniques have been able to offer various novel kinds of financial products. However, it is in the area of assets rather than in liabilities that the practices of Islamic banks are more diverse and complex than those of conventional banks.

It is generally believed that *Murabahah* is the most widely-used technique and that the majority of the financing provided by Islamic banks goes to short-term trade and the financing of real estate.

There is no doubt that *Murabahah* was the most popular financing technique in the early stages of the development of Islamic banks. This was for several reasons, as follows:

First, *Murabahah* is simple to apply. In terms of the simplicity of application, the *Murabahah* financing technique may be best placed to compete with conventional interest based borrowing. All other Islamic financing techniques require more elaborate arrangements for their application.

Second, it was possible to get higher returns on depositors' money using this technique, and in their initial stages of establishment and development, Islamic banks required higher returns in order to build up their confidence (Ahmad, A. 1993).

However, it should be borne in mind that the dynamics of contemporary Islamic banking change at a fast rate under market pressure. Hence, it may be that the composition of the financing techniques used by Islamic banks is also undergoing a significant change.

These techniques offer a number of feasible alternatives to the western-style mortgage system, which can be used in the area of housing finance.

Nevertheless, there are disadvantages as well as advantages with each of these financing techniques. For instance, under *Murabahah* and *Bay'ajil* the capital provider would be wise to adopt extra precautionary measures, such as mortgages, since the client faces no penalties for delayed repayment.

Thus, each of the financing techniques has its own particular profile. This makes it possible to see that the capital provider must select his approved mode of financing according to the nature of the enterprise, and that the complexity and variety of banking techniques that have grown in response to Islam ensure him a great flexibility of choice.

At present, housing finance in Saudi Arabia is provided primarily through the REDF.

In Chapter Five, the study has revealed that the majority of REDF borrowers are married, with moderately large families. They are spread across all income groups, though middle and higher income groups appear to have benefited more than the low income groups. The majority of the respondents had built more than one housing unit, which means the REDF loans are being used to finance investment projects. Those who built only one unit were meeting a substantial portion of the cost from their own resources, raising the question of whether the loan should be increased (and fewer loans made) or whether the REDF should allow its share of construction cost per unit to fall, in order to serve more applicants. The majority of the respondents had failed to meet repayments on time due to a variety of reasons such as inability to repay, forgetfulness and carelessness. Some borrowers felt no responsibility to repay their loans on time, which has contributed to the low rate of repayment. Monthly direct debits could solve the first two problems, while clear information and warnings of strong action could help change the attitudes of borrowers. If these methods are used in combination, it should be possible for the waiting period for obtaining a loan to be reduced.

The study also revealed that the vast majority of the loan seekers respondents were married. They, too, were spread across all income groups. Most of them were facing housing problems and had already applied for an REDF loan. Those who had not, were prevented from doing so because they did not own a plot of land.

Most of the respondents were prepared to repay the annual instalment without discount in order to reduce the waiting period for obtaining an REDF loan, and would be prepared to repay multiple instalments to obtain varying levels of discount.

Widespread approval was expressed concerning the suggestion to implement strong action in order to prevent overdue annual repayments.

A considerable level of interest was expressed in the proposed alternative schemes, whereby borrowers would pay more to gain some advantage. Of the schemes suggested, the one which found most favour was the option of a villa. This would obviously be an advantage to those who lack land of their own.

Hardly any of the respondents would be prepared to consider an interest bearing loan, for religious reasons. However, all the Islamic alternatives suggested gained support. *Murabahah* is the preferred method of financing among the Islamic purchase methods, while the first type of partnership is the preferred technique of financing among the Islamic partnership housing finance methods.

Thus, there is ample evidence from the responses that a more varied and flexible approach to housing finance, which would reduce the burden on the REDF, would be welcomed by both existing and potential loan applicants.

The statistical analysis presented in Chapters Seven and Eight revealed that:

- a) SR 300,000 is less than 70% of the construction cost of one housing unit.
- b) Forgetting to repay is a main reason for the delayed repayment of an annual instalment.
- c) The borrowers:
 - have not been on time with their annual repayments of SR 9,600;
 - would prefer to repay the annual instalment (SR 9,600) by monthly direct debit;
 - would prefer to repay the annual instalment (SR 9,600) and the value of one instalment prior to the due date (SR 8,400) by monthly direct debit;
- d) The land ownership condition is a main reason for not applying for an REDF loan.

- e) The policy of reducing the waiting period for obtaining the loan would be more advantageous for the REDF than the policy of choosing how much one wishes to repay in order to obtain the discount one can afford.
- f) Loan seekers:
- could repay the annual instalment without discount in order to reduce the waiting period for obtaining an REDF loan.
 - agree that strong action should be taken to prevent overdue annual repayments in order to reduce the waiting period for obtaining a loan.
 - would prefer to repay SR 20,000 annually in order to obtain a villa.
 - would not take out a loan on which interest is charged in order to build their houses.
 - would prefer Islamic housing financing methods.
- g) The acceptance of the option of a loan of SR 500,000 is less than the acceptance of the option of a villa among REDF loan seekers.
- h) The main reason for not taking out a loan on which interest is charged is purely religious.
- i) The three purchase methods are not equally acceptable to REDF loan seekers.
- j) The three partnership methods are not equally acceptable to REDF loan seekers.

It was concluded from Chapter Nine that:

- One way to overcome the problem of repayments being overlooked, would be to introduce a system of monthly repayment by direct debit;
- The REDF loan should be granted to:
 1. those who want to build one housing unit;
 2. those who want to build more than one housing unit and are capable of repaying the annual repayments of SR 9,600 regularly.
- The married group was found to be more likely to:
 1. face housing problems than the single group;
 2. have applied for an REDF loan;
 3. answer "Yes" regarding preference of a loan option.

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APPENDIX A

QUESTIONNAIRES

Dear REDF Borrower

Dear REDF loan seeker

The purpose of this questionnaire is to obtain your opinions towards certain financial matters regarding the Real Estate Development Fund. The questionnaire responses will be used for my PhD thesis. Your co-operation will be greatly appreciated.

Please indicate your answer with a tick in front of the answer that you consider to be the most appropriate for each question. You do not need to write your name on this questionnaire.

Note: Your replies are anonymous and all information will be treated as strictly confidential.

Thank you.

Hamad Al-Tasan

Department of Economics

King Abdulaziz University

Questions for Borrowers

Please indicate your answer with a tick ☐.

Q.1 Marital status:

Single. ☐

Married. ☐

Q.2 Number of dependants:

Q.3 Monthly income group (from all sources):
(please tick the appropriate box)

Less than SR 3,000. ☐

From SR 3,000 - 6,000. ☐

From SR 6,001 - 9,000. ☐

More than SR 9,000. ☐ (please specify) SR

Q.4 Did you construct more than one housing unit?

Yes. ☐ (proceed to question 5)

No. ☐

Q.4A If no, was the construction cost more than SR 429,000?

Yes. ☐

No. ☐

Q.5 Did your annual repayment (SR 9,600) ever get delayed?

Yes. ☐

No. ☐ (proceed to question 6)

Q.5A If yes, why did you delay? (please tick all which apply)

I could not repay. ☐

I forgot to repay. ☐

I did not want to repay. ☐

Q.6 Would you prefer to repay your annual repayment (SR 9,600) by monthly direct debit (i.e. SR 800 monthly)?

Yes. ☐

No. ☐

Q.7 Would you prefer to repay your annual repayment (SR 9,600) and the value of one instalment prior to the due date (SR 8,400) by monthly direct debit?

Yes. ☐

No. ☐

**Q.8 Please indicate your opinion regarding the following statement:
Your prompt repayment would reduce the waiting period for those who seek loans. (please tick the appropriate box).**

Strongly agree. ☐

Agree. ☐

Undetermined. ☐

Disagree. ☐

Strongly disagree. ☐

Thank you for your co-operation.

Questions for those who seek REDF loans

Please indicate your answer by a tick ☐.

Q. 1 Your marital status:

Single. ☐

Married. ☐

Q. 2 Your number of dependants:

**Q. 3 Your monthly income group (from all sources):
(please tick appropriate box).**

Less than SR 3,000. ☐

From SR 3,000 - SR 6,000. ☐

From SR 6,001 - SR 9,000. ☐

More than SR 9,000. ☐ (please specify) SR

Q. 4 Are you facing a housing problem?

Yes. ☐

No. ☐

Q. 5 Have you applied for an REDF Loan?

Yes. ☐ (proceed to question no. 6)

No. ☐

Q. 5A If no, please state why? (please tick all which apply).

I do not own a plot of land. ☐

The waiting period for obtaining the loan is too long. ☐

I have insufficient money. ☐

Q. 6 Could you repay the annual instalment (SR 12,000) without discount in order to reduce the waiting period for obtaining the loan?

Yes. ☐

No. ☐ (proceed to question no. 7)

Q. 6A If yes, how much could you repay in order to reduce the waiting period for obtaining the loan as follows? (please tick appropriate box).

SR 1,000 monthly (the waiting period = 9 years). ☐

SR 2,000 monthly (the waiting period = 7 years). ☐

SR 3,000 monthly (the waiting period = 5 years). ☐

SR 4,000 monthly (the waiting period = 3 years). ☐

SR 5,000 monthly (the waiting period = 1 year). ☐

Q. 6B How many instalments could you repay together in order to obtain discount as follows? (please tick appropriate box).

1 instalment = SR 1,000 monthly (i.e. 00% discount). ☐

2 instalments = SR 1,900 monthly (i.e. 05% discount). ☐

3 instalments = SR 2,700 monthly (i.e. 10% discount). ☐

4 instalments = SR 3,400 monthly (i.e. 15% discount). ☐

5 instalments = SR 4,000 monthly (i.e. 20% discount). ☐

Q. 7 Please indicate your opinion about the following statement:

Strong action should be taken to prevent overdue annual repayments in order to reduce the waiting period for obtaining a loan. (please tick appropriate box).

Strongly agree. ☐

Agree. ☐

Undetermined. ☐

Disagree. ☐

Strongly disagree. ☐

Q. 8 Could you repay SR 25,000 annually in order to obtain a housing loan of SR 500,000?

Yes. ☐

No. ☐

Q. 9 The REDF is considering building estates consisting of villas, each having a floor area of 230 square metres, and consisting of six large rooms. The villa would be built on a plot of land of 400 square metres, valued at SR 400,000 repayable over 20 years (i.e. SR 20,000 annually). The villa would be available one year after the date of the application form. Would you prefer this option?

Yes. ☐

No. ☐

Q. 10 Which option would you prefer?

The option of cash (Q. 8). ☐

The option of a villa (Q. 9). ☐

Q. 11 If there were no REDF's loan, would you take out a loan on which interest is charged in order to build your house?

Yes. ☐ (proceed to question no. 12)

No. ☐

Q. 11A If no, please state why? (please tick all which apply).

It is prohibited. ☐

The repayments would become very heavy. ☐

It is difficult to meet the required conditions. ☐

Q. 12 If Islamic housing financing methods were available, would you prefer them?

Yes. ☐ (proceed to question no. 13)

No. ☐

Q. 12A If no, please state why? (please tick all which apply).

It takes too long to obtain the loan. ☐

Lack of knowledge and awareness. ☐

The schemes are not very easy to understand. ☐

The instalments would be very great. ☐

13- Here are three options. Please read each carefully. Then, rank them according to your own preference:

- A. Murabaha:** The financier purchases the house according to specifications determined by the beneficiary. The house ownership is then transferred to the beneficiary by instalment plan according to a pre-agreed schedule. The contract states that the financier is entitled to a specific profit margin. As security for the deferred payments, the financier is entitled to ask the beneficiary for collateral, such as the deeds of the house.
- B. Istisna:** The financier provides building materials and constructs the property according to specifications determined by the beneficiary. The contract specifies price, delivery time and method of payment. After construction, the ownership is then transferred to the beneficiary by instalment plan according to a pre-agreed schedule. As security for the deferred payments, the financier is entitled to ask the beneficiary for collateral, such as the deeds of the house.
- C. Lease purchase: Leasing, leading to ownership:** The financier constructs or purchases the house according to specifications determined by the beneficiary. The house will be the property of the financier, who leases it to the beneficiary with a promise to transfer the ownership when and if all the leases are paid. The contract transfers from a leasing agreement to a sale agreement upon payment of the last instalment. Normally the financier will compute the total lease value of the property on the basis of cost plus profit.

Please indicate your first and second preferences:

- My first preference is: ()
- My second preference is: ()

14- Here are three options. Please read each carefully. Then, rank them according to your own preference:

- A. Partnership ending with Sale:** The financier constructs or purchases the house according to specifications determined by the beneficiary. The beneficiary will contribute part of the cost and the house will be jointly owned in proportion to their shares. Upon completion of construction, the financier sells his share in the property to the beneficiary according to an agreed percentage of profit. This is done by instalments according to a specific schedule. As security for the deferred payments, the financier is entitled to ask the beneficiary for collateral, such as the deeds of the house.
- B. Partnership:** The financier constructs or purchases the house according to specifications determined by the beneficiary. The beneficiary contributes part of the cost and the property is jointly owned in proportion to their shares. The rent is determined according to the prevailing market rates. The beneficiary resides in the property and pays a specific amount of rent to the financier, representing his share in the rent. After an agreed time span, the house is sold at market price and the sale price is divided according to the ownership shares. The beneficiary has the priority right to purchase the property.
- C. Diminishing Partnership:** The financier constructs or purchases the house according to specifications determined by the beneficiary. The beneficiary contributes part of the cost and the property is jointly owned in proportion to their shares. The value and rent of the property are determined according to the prevailing market rates. The beneficiary resides in the house and pays a specific amount of rent to the financier. This consists of his share of the rent and a portion of the sale price of his share in the ownership. As this continues, the beneficiary will increase his share in the partnership and reduce that of the financier. Accordingly, the rent will decrease as the beneficiary continues to pay the instalments. When the last instalment of the finance extended by the financier is paid, the rent will be zero.

Please indicate your first and second preferences:

- My first preference is: ()
- My second preference is: ()

Thank you for your co-operation.

APPENDIX B

GLOSSARY OF ARABIC TERMS

The meanings given below are for terms which have been used in the text.

- 'Adl:** Justice.
- Bay':** Sale.
- Bay'ajil:** A sale contract on the basis of deferred payment of the price and immediate delivery of the goods sold.
- Bay'Al-Salam:** A sale contract in which the price is to be paid immediately while the goods sold are to be delivered after a specific period of time. The goods sold are well defined, though not available when the contract is signed.
- Fiqh:** Muslim jurisprudence. It covers all aspects of life, religious, political, social or economic. In addition to religious observances (prayer, fasting, *zakat* and pilgrimage) it covers family law, inheritance, social obligations, commerce, criminal law, constitutional law and international relations, including war. The whole corpus of *fiqh* is based primarily on the Qur'an and the *Sunnah* and secondarily on *ijma'* and *ijithad*.
- Fuqaha':** (singular, *faqih*) Jurists who give opinions on various issues in the light of the Qur'an and the *Sunnah* and who thereby contribute to the development of *fiqh*.
- Gharar:** Uncertainty, hazard, dubious circumstances. The presence of *Gharar* with respect to the price, quality, quantity or time of delivery in a contract makes it highly suspect. Hence, such contracts are not allowed by Islamic law. For example, a contract to exchange "some" fruits for a dollar contains *Gharar* with respect to quantity as well as time.
- Hadith:** Traditions or sayings of the Prophet Mohammad (pbuh).
- Halal:** Permitted by the Islamic law, legitimate.
- Haram:** Prohibited by the Islamic law, forbidden.

- Ijarah:*** A contract of rent, hire or lease.
- Ijma:*** The consensus of competent scholars on an issue of juridical importance. It is one of the sources of Islamic Law.
- Istisna':*** A contractual arrangement whereby one party (purchaser) orders a specially defined product to be produced for him by the other party (seller) in the future, at a specific price, raw materials to be supplied by the producer.
- Mudarabah:*** An Islamic contract in which one side provides capital and the other side provides work (labour). Profits are to be shared in the proportion that was agreed before the contract was implemented. In the case of a loss, the provider of the capital bears all of the net loss, combined for all operations of the working partner (*Mudarib*), provided that there has been no violation of the stipulated contract or intentional neglect on the part of the working partner.
- Mudarib:*** The partners who provide entrepreneurship and management in a *mudarabah* agreement as distinct from the *sahib Al-mal* who provides the finance.
- Muqaradah:*** Another name for the *Mudarabah* contract. See *Mudarabah*.
- Murabahah:*** Sale at a specified profit margin. The term is, however, now used to refer to a sale agreement whereby the seller purchases the goods desired by the buyer and sells them at an agreed marked-up price, the payment being settled within an agreed time frame, either in instalments or by lump sum. The seller undertakes all the management needed for the purchase and also bears the risk for the goods until they have been delivered to the buyer.
- Musharakah:*** A contract of partnership in which two or more partners provide capital and share profits and losses. In such a contract, losses must be shared in the proportion in which the different partners have invested their capital, but profits, according to the predominant view in Islamic law, are shared in any mutually agreed proportion.
- Mustasni:*** The purchaser referred to in the *Istisna'* contract above.

- Qard Hasan:*** Benevolent loan. A loan which is extended to the borrower mainly to help him and not to benefit from his situation. Necessarily, *Qard Hasan* has to be an interest-free loan. Sometimes, it is also translated as “distress loan” or “good loan”. The borrower is required to return the borrowed amount in full at his earliest convenience.
- Qur'an:*** The Holy Book of Muslims which was revealed by Allah to the Prophet Mohammad (pbuh).
- Riba:*** Usury. In the Islamic *Shari'ah*, usury is lending money with interest, regardless of whether the rate of interest to be paid is high or low. Usury/interest is strictly prohibited in Islam.
- Sadaqah:*** Voluntary charity.
- Sahib Al-Mal:*** The financier; in the *mudarabah* form of partnership agreement, the *sahib Al-mal* provides the finance while the *mudarib* provides the entrepreneurship and management. There can be many *ashab Al-mal* and *mudaribs* in a given *mudarabah* agreement. See also *mudarabah*, *mudarib*.
- Sani:*** The producer/maker referred to in the *Istisna'* contract above.
- Shari'ah:*** Refers to the divine guidance as given by the Qur'an and the *Sunnah* and embodies all aspects of the Islamic faith, including beliefs and practices.
- Shirkah:*** Partnership between two or more persons whereby, unlike *mudarabah*, all of them have a share in finance as well as entrepreneurship and management, though not necessarily equally.
- Sunnah:*** Traditions and practices of the Prophet Muhammad (pbuh).
- Ulama':*** *Shari'ah* scholars.

APPENDIX C

Test for Proportion

Test with The Continuity Correction (Binomial Test)

$$Z = \frac{(n-0.5) - Np}{\sqrt{Nqp}}$$

n = number with that characteristic in the sample.

N = sample size.

p = proportion in null hypothesis.

q = 1 - p

Two-tail test:

Ho: p = 0.55

H1: p ≠ 0.55

Compare Z with 1.96 which is the 95% confidence level.

One- tail test:

Ho: p ≤ 0.5

H1: p > 0.5

Compare Z with 1.64 which is the 95% confidence level.

Example:

The sample size is 250 and 159 said 'yes' to a certain question.

Ho: P ≤ 0.55

H1: P > 0.55

Notation

n = 159 (number with that characteristic in the sample).

N = 250 (sample size).

p = 0.55 (proportion in the null hypothesis).

q = 1-p

q = 1- 0.55

q = 0.45

$$Z = \frac{(n-0.5) - Np}{\sqrt{Nqp}}$$

$$\sqrt{Nqp}$$

$$Z = \frac{(159- 0.5) - 250 * 0.55}{\sqrt{250 * 0.45 * 0.55}}$$

$$Z = \frac{158.5 - 137.5}{\sqrt{61.875}}$$

$$\sqrt{61.875}$$

$$Z = \frac{21.00}{\sqrt{61.875}}$$

$$\sqrt{61.875}$$

$$Z = \frac{21.00}{7.86607}$$

$$7.86607$$

$$Z = 2.6695 \text{ (one-tail test)}$$

$Z = 2.6695$ which is greater than 1.64. Therefore, the null hypothesis has been rejected and the alternative hypothesis has been accepted. We can say that we are 95% confident that the true proportion is greater than 55%.

$$Z = \frac{(n-0.5) - Np}{\sqrt{Nqp}}$$

| n | N | p | q | Z | The null hypothesis |
|-----|-----|------|------|-------------------|-----------------------|
| 159 | 250 | 0.55 | 0.45 | $2.669695 > 1.64$ | has been rejected |
| 159 | 250 | 0.6 | 0.4 | $1.097345 < 1.64$ | has not been rejected |

See: Clark and Cooke, 1983, 251, 227.

