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Determinants of Withdrawal Choice of Pension Funds: Evidence from Fiji

By:

Uday Raj Sen

A Supervised Research Project submitted in partial fulfillment of the requirements for the Degree of Master of Commerce

School of Accounting and Finance
The Faculty of Business and Economics
The University of the South Pacific

June, 2009

DECLARATION OF ORIGINALITY

I, Uday sen, hereby declare that this thesis is an original piece of work and has been solely compiled by me. Where other sources have been used, these have been duly acknowledged and referenced.

……………………………………
Uday Sen

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This study has been made possible by support from various people. Firstly, I wish to acknowledge the cooperation of the retirees who agreed to be interviewed. Had it not been for their willingness to participate in the study, this study would have not been possible. I also wish to acknowledge the support of Prof Michael White of USP who gave me the initial encouragement to choose the thesis option to finish Masters in Commerce and to read and comment on the first draft of my proposal. Lastly, but not the least, I wish to thank Dr Arvind Patel for agreeing to supervise this project. I have benefited immensely from his comments and insights on this topic, particularly the quantitative aspect.

ABSTRACT

Social security institutions, whether run by private sector or public sector are quite important and forefront of policy dialogue in developing countries. There are various reasons for it. Firstly, it tends to facilitate national savings thus promoting economic growth via investment. Secondly, if owned by the private sector partially or fully, it tends to reduce a significant burden from the state in terms of welfare payouts/benefits for the retired. Thirdly, social security is quite important for individual workers given the fact that it redistributes resources both within and across generations. Social security savings of a worker is a very important form of support during old age.

The ability of a social security system to play these roles successfully depends on a number of factors including the choice the retiree makes on being eligible to withdraw its social security fund. In this study, a total sample of 360 pensioners was included. The study revealed that the majority of the pensioners, 74%, opted for lump sum withdrawal. The pensioners were also asked for key reasons for deciding on a particular option. For those choosing the pension option, the largest number reported a steady source of income as the reason for choosing pension option. The other reason receiving second highest score was the retirees ability to meet the needs of his family while the third highest score was given to the reason of not to be dependent on the children. For the retirees who chose the lump sum option, the foremost reason was related to buying of house, car or paying of mortgages. The second largest score was given to the reason of world tour or overseas visit. Medical bills and children's education were another important reason for decision to withdraw in lump sum. The quantitative modelling results indicate that that the variables ethnicity, total value of pension at retirement, total value of assets and cash at bank at retirement significantly determine an individuals probability of pension choice option. The results from this study can be of great use by policy makers to reform the pension system of Fiji.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF ACRONYMS

PAYG- Pay As You Go

FNPF- Fiji National Provident Fund

ATH- Amalgamated Telecom Holdings

SDB- Special Death Benefit

SG- Superannuation Guarantee

NA- National Account

DC- Defined Contribution

CHAPTER ONE
INTRODUCTION

1.1 Introduction

A major policy issue in developing country is the ageing population for the next 40 to 50 years. The projected increase of the ageing population is expected to raise government expenditure on social security and health (Nicoll, 1998). Given this problem, social security plans and institutions play a major role in any country. Social security primarily refers to a social insurance program providing social protection, or protection against socially recognized conditions, including poverty, old age, disability, unemployment and others. It is designed to only benefit those who truly need the assistance, particularly for the elderly as a security during retirement. However, there exceptions to retirement benefits as well. For example, if a person is only able to work certain days, or if they are only able to work part time due to their mental or physical condition, they may still be eligible to receive social Security benefits. The nature of benefits allowable to a person and at what age is determined by the countries social security plans.

Social security institutions, whether run by private sector or public sector are quite important and are at the forefront of policy dialogue in developing countries. There are various reasons for it. Firstly, it tends to facilitate national savings thus promoting economic growth via investment. Secondly, if owned by the private sector partially or fully, it tends to reduce a significant burden from the state in terms of welfare payouts/benefits for the retired. Thirdly, social security is quite important for individual workers given the fact that it redistributes resources both within and across generations. Social security savings of a worker is a very important form of support during old age (Blan, 1997 and Krueger and Pischke, 1992). Given these benefits, there are a variety of pension schemes in established in various countries. Some have a single centrally controlled system while others have a number of schemes operated by the private sector. Table 1.1 provides a brief summary of the schemes present in selected countries.

The PAY-As-You-Go (PAYG) pension schemes has been frequently questioned has to whether it is sustainable in the longer run. As the country is developing, declining fertility and rising life expectancy will enormously alter the future demographic structure of the population. With an increase in pensioners in future, the sustainability of the pension fund will be an issue (Overbye, 1994). A possible reform agenda would be to reduce the benefit by raising the retirement age, tightening the eligibility criteria and lowering indexation. Others argue that a means-tested system of pension payout be adopted. On other spectrum of pension reform deals with issues of unemployment. In response to this debate, a number of countries have embarked on reform programs. Up until 1989, the general retirement age in Norway was 67.

Table 1.1

Pension Plans in Selected Countries

No	Country	Pension Type
1	Australia	Mandatory occupational DC, personal pension plans (Retirement Savings Account)
2	Chile	Mandatory pension plan, Voluntary pension plan
3	Czech Republic	Personal pension plan (Supplementary pension insurance)
4	Estonia	Individual mandatory funded pension plan, voluntary funded pension plan
5	Hong Kong	Mandatory occupation, Voluntary occupational pension plans
6	Hungary	Voluntary pension plan
7	Ireland	Personal pension plan, Occupational pension plan
8	Israel	Occupational defined contributions pension plans and personal pension plans
9	Italy	Occupational pension funds (closed and open pension funds)
10	Latvia	Mandatory pension plan
11	Mexico	Mandatory pension plan
12	Peru	Mandatory pension plan, Voluntary pension plan
13	Poland	Mandatory personal, Voluntary occupational, Voluntary personal pension plans
14	Russia	Funded mandatory pension plan
15	Slovak Republic	Mandatory personal pension, Supplementary voluntary personal plans
16	South Africa	Voluntary occupational pension plan (retirement fund)
17	Turkey	Voluntary personal pension plan

(Adapted from Rozinka and Tapia 2005:2)

With negotiations with unions and employers, an early retirement age was negotiated so that government does not have to give rise in wages to these workers who, at their later stage of life are earning high wages. Furthermore, this move can also make room for younger people to enter the labour market.

Australia on the other hand made announcements that changes will be made to its superannuation system to encourage people to remain in the workforce for longer period. Knox (1998) summarized the need for a reform of the pension system as follows:

- an ageing population is placing greater financial pressure on exiting national retirement income programs;
- the voting power of an ageing population is becoming more important;
- increasing longevity;
- lower savings rates requiring governments to consider options to increase private sector savings and /or reduce public sector expenditure;
- changing employment patterns and greater flexibility in labour markets; and,
- international pressure.

Despite a review and changes to the Australian social security scheme in the 1980's, there still remains a number problems. The major issue relates to the lack of integration between the age pension and the benefits provided from superannuation (Stanford, 2004). Knox (1998) notes that this anomaly creates major disincentives and causes considerable misallocation of resources within the economy including the following:

- the use of the superannuation benefits to fund voluntary early retirement and then for the retiree to rely, at least in part, on the age pension for retirement income;
- the investment of assets during retirement in a manner that maximizes age pension entitlement but not necessarily income;
- a strong disincentive for most retirees to take up part-time work due to the very high effective marginal tax rates with the combination of the income test and income tax;
- an incentive to continue to live in (and even expand) the family home as this is excluded from the means tests, whereas any downsizing would realize the asset and therefore affect the pension entitlement;

- a disincentive to save both before and after retirement as the net financial gain can be very limited; and,
- considerable intrusion into the private financial affairs of most retirees (Knox, 1998:38).

In Fiji, the issue of integration is compounded by a certain pension withdrawal choice option taken by the retiree. Fiji's social security scheme is provided for by the independent financial institution of Fiji National Provident Fund (FNPF) established by an act of Parliament where by it is mandatory for employees to contribute 8% of their gross earnings to the fund while employers also contribute equal amount towards the employee's social security fund. When an employee retries, he has to choose a particular option of pension withdrawal. This could be lump sum, partial lump sum and partial pension, or full pension option. While formal statistics does not exists, it is common knowledge that lump sum withdrawal of the full savings are often spent within a short period of time thus leaving the retired employee with no additional source of income.

This leads rise to vulnerability and poverty of the retired person and his or her household (Hurd, 1993). In some societies, where culture and tradition are quite strong, the elderly are looked after by their children. This is gradually declining and a visible indicator is the rise in Old People's Home and homeless begging on the street.

The rising incidences of homelessness of the elderly are also quite visible in Fiji. While this study is not designed to examine the causes of such predicament, it will be interesting to examine why people choose a particular form of pension as taking lump sum pension could lead rise to social problems when it is fully spent. Data from Fiji National Provident Fund annual reports reveal that less a 30% of those eligible to withdraw their social security opt for pension payout (Table 1.2). This finding is quite worrying as lump sum payout, given that it is often spent off in few years, may imply burden of these group on state in future.

Table 1.2

Proportions Opting for Pension Payout, 2002-05

Year	Pension Option (%)
2002	22
2003	35
2004	37
2005	28

(Adapted from Fiji National Provident Fund 2008)

1.2 Summary and Organization of Thesis

Therefore, the broad objective of this study is to examine what may be the various factors that will affect a person's choice of a particular option of pension payout. Such a study will help the Fund to use these factors identified by the Fund to develop policies, customer service system and public relations programs to ensure that government's social security objective is not compromised. For example, if the study finds that a large number of lump sum withdrawals is for the purpose of children's education, then could consider raising its scholarship fund or loans scheme so that parents source funds from this allocation for their children's education rather than drawing in from their social security deposits.

The thesis is structured as follows. The second chapter provides a review of the social security literature. The third chapter provides and over view of the social security scheme in Fiji. The core analysis of this thesis, the determinants of pension choice withdrawal in Fiji is presented in chapter 4 while the chapter 5 provides summary and conclusion. The following section provides briefly the methodological approach that we wish to take to examine this issue.

CHAPTER TWO
SOCIAL SECURITY LITERATURE REVIEW

2.1 Social security Literature Review

The pension literature covers a wide range of topics. In this paper, we examine the key sub themes of the social security literature.

2.2 Regulation of Pension Funds

One of the strands of research examines the issue of regulation. Simpson (1996) argues that experience of the long term personal investment markets has demonstrated that, on the whole, regulation under the financial services act does not work but that effective competition does. The purpose of Simpson's article was to reinforce this argument and suggest ways in which competition in this market could be significantly increased. Simpson (1996) in his article argues that the characteristics of the social security market are significantly different from the neo classical economics "perfect market" model. He further argues that there is a connection between these characteristics and the industry's manifest failure to satisfy its customer's needs in a way which they regard as acceptable. Furthermore, he argues that market forces could play a much stronger role in compelling its suppliers to behave in a way that is satisfactory to its customers.

2.3 Pension Reforms

There also have been quite a lot of studies undertaken on pension reform. Stroinski (1993) argues that the discussion about social security reform in Poland began shortly after the collapse of communist government in the year 1989, parliament election. The current system has many obvious deficiencies: it lacks stability; it is very costly and when it comes to the distribution of benefits, it is unfair. There is no doubt that the national economy can no longer support the social security system in its present shape. As the state budget is unable to continue financing social security, there is a danger of high inflation rate as a result of an unbalanced economy. The cost of production in Poland has lead to a high increase in the social security premium. The situation will worsen in the first decade of the new millennium as a result of the worsening demographic of Poland. The crisis prompted an open discussion of the reform and in the last two years, work on the reform of social security has accelerated. The reform has been initiated recently by the polish parliament passing a package of three acts concerning the spilt of current pay-as-you-go single system into a pillar system, with provision made for transition period. Zus (1996), mentioned that in the year 1995 over 30% of all pension were those for disability. In the attempt to curb the cost of the system, the early retirement benefit were limited by prolonging the period of earning which counted towards final salary. This failed to achieve the objectives of reducing cost, as it simply bought forward large numbers of early retirements. Wirtschaft (1998), argued that in industrialized countries, a decline in fertility and rise in life expectancy would enormously alter the future demographic structure of the German population. While pensioners currently constitute about 40percent of the working population, their share is projected to double in the next 50 years. Thus this would undermine the sustainability of pay –as you-go financed social security insurance arrangements such as the statutory system. Moreover if the current benefit levels and labour force participation are maintained, the contribution rate of pension system is projected to increase from 20 percent to 31 percent in 2035.

Fox et all. (1996), in the debate he argued that the actuarial benefit of national account (NA) pension system provides a better link between contributions and the benefits at the individual level than the traditional salary based benefit. Thus this in turn, contributes to a reduction in the labour market distortions caused by mandatory pensions.

Paiz (1997) argued that demographic structure will begin to cause problems when the post – Second World War baby boomers begin to retire in the year 2010 and there will not be enough people in the labour force to ensure the financing of pension benefits. Any further increase in the contribution rate will not be feasible that is why the government decided to change the structure of the pension system. The main purpose of the reform is to reverse the situation whereby all retirees would have their pension benefit coming only from state- run system, which could become insolvent. The idea of the reform is to spread the sources of financing of pension benefit so that they include two or three pillars, with each pillar funded in a different way. The gradually diminishing role of the state would also help to educate younger generations to think of their retirement more seriously and at a relatively early stage of their professional life. They would have a choice between pension funds in which their money would be invested and therefore have the ability to monitor the accumulation of their pension during their working life. Hemming (1979, 1980) and Jones and Page (1980), explains the issue of market failure in superannuation. Market failure exists in that savers with small accounts encounter high transaction costs in their endeavors to find a vehicle which provides a sufficient high returns to make the terminal accumulated balances large enough to support retirement.

Callund (1996) at the conference of the Institute for the reform and social policy in Warsaw, pointed out that although several different bodies had undertaken a significant amount of effort and although a series of proposals had been advanced the differences between the proposed solutions would not allow the reform to begin. Closer to home, in Australia, Drew and Stanford (2002) argue nearly all employees are now covered by superannuation and superannuation scouts for a significant proportion of house hold wealth. The expansion has come as a result of decision to make superannuation contributions compulsory. The major policy decision for compulsory superannuation was the introduction of superannuation guarantee (SG) in 1992. This provides a pecuniary plenty for employers who failed to make prescribed payments on behalf of employees superannuation fund. Within the superannuation system there are other elements of compulsion, including contributions by, and on behalf of the employers, and the accumulated balance transferred by employees. The level of compulsion in superannuation is inconsistent with the measure in superannuation is inconsistent with the measures taken to deregulate the financial sector and the labour market. The existence of such compulsion implies a welfare loss as individual economic agents are constrained in their choices.

There are also arguments of welfare loss from compulsory superannuation. Freebairn (1996), pointed out that direct welfare losses occur because some people would prefer to contribute less of their earnings to superannuation than is required under compulsion and would prefer higher current consumption or to acquire greater amounts of non- superannuation assets. Factors that affect individual choice are taxation system, the availability of government pensions, and the possibility of inheritances and other inter-family transfers for retirement income. Therefore individual’s decision about the provision of retirement benefits will be taken in a general equilibrium framework.

Podger (1986), had identified some groups who might prefer not to defer consumption until retirement, and these include low income earners, part time and causal workers and the young. Low income workers may suffer a welfare loss through compulsory superannuation if they are not able to accumulate enough retirement savings to provide for their own retirement but will rely substantially, if not exclusively on the government provided pension. Other people may prefer to make provision for retirement income by acquiring other assts; the advantage of doing so is that negative gearing tactics may be used. Others may prefer to acquire human capital through education and training or acquire business assets or capital for a business venture.

Guest and MC-Donald (2002) argued that further welfare loss arises from the effects of the liquidity constraint on optimal consumption smoothing. They estimated, using their model of optimal savings, that an increase in the SG of 3 or 6 percentage points (an increase from the current level to 12 or 15 per cent of wages and salaries) would reduce current leaving standards by a maximum of 1 or 2 per cent. Freebarin (1998) explained that compulsion can give rise to welfare losses from second –round effects in the labour market under which compulsory employee contributions increases labour cost, and hence decreasing the demand for labour. He concludes that compulsory levies for superannuation will have large redistribution effects and that part-time workers are those with broken careers will place low values on superannuation and become losers under compulsory superannuation.

2.4 Other Issues

The social security literature also covers the issues of moral hazard. As discussed by Knox (1996), the moral hazard case for compulsory superannuation is that persons who are capable of saving for retirement do not do so because they believe that the government will not allow them to starve in old age. This belief is well founded as the government provides income support to persons over 65 years in the case of males and 62 years for the women. The trend to earlier retirement, such as 58 years for males would , encourage such person to take their accumulated superannuation balances as lump sum (these balances are available as there person are withdrawing permanently from the workforce), using the lump sum and financing living expenses with the lump sum till eligible for the government pension. Furthermore Knox (1996) argues that if there is a moral hazard problem, compulsory superannuation is only the part solution which requires, as well, preservation of superannuation till retirement age and the requirement that such benefits may then be taken only as the income stream such as annuity and allocated pension. Both of these additional requirements are regarded as politically unpopular. There is also evidence on the incidence that the government pension was consistent with both the existence of moral hazard and the inability of a relatively large number of persons to make provision for retirement. Part of the reason for this high incidence has been the progressive relaxation of eligibility requirements by the government, but part is also due to double dipping and early retirement.

Drew and Stanford (2002), argued that employee choice of fund should be unrestricted. They noted that one objection raised against the proposal was that specification of default fund (a fund to which contributions of employees who refrain from making a choice should be made) is a difficult issue. We regard this problem as trivial and easily resolved; it is trivial because the failure of some to choose constitutes no valid reasons for denying others a choice. The solution lies in the construction of a government –mandated number of default funds.

Pozen (2002), suggested that such funds would have low administrative and management cost; the US experience with the federal a thrift Fund shows a management experience ratio of five to seven basic points on funds under management although this may not show complete costs.

Drew and Stanford, (2002) argued that employers have no special knowledge of the performance of superannuation funds and can claim no expertise superior to that on the random choice of their employees. In the past employers have provided superannuation to reward certain classes of employees and to lock in employees to long-term employment by providing superannuation which was not fully vested. Such practices are now at variance with best practice labour market conditions under which rewards for employees are made by increases in salary with salary sacrificing opportunities.

Richardson (1999), at the economic planning advisory council in the1992, stated that superannuation was introduced in the late 1980s just prior to the deregulation of the labour market involving less reliance on centralized wage fixing , inclusive awards and greater use of enterprise bargaining , new employment contractual arrangements and less prescriptive awards.

In the 1960 Hilton awarded superannuation stands in stark contrast to the ancient prohibition of payments of wages in kind. The benefit that and employee receives a award superannuation is a illiquid and unmarketable long term asset provide by a particular superannuation fund, that is , the one specified in the award.

Buchanan (1968) argued that payroll taxes in US should be replaced by mandatory purchase of “social insurance bonds”. Such bonds would carry no explicit rate of yield, but only the purchase amount and the date of purchase. The bonds would mature on the owners retirement (at age 65) and on that date an amount of interest will be credited to the holder equal to the face value accumulated at the higher of the following two rates: (1) the rate of interest on long run U.S Treasury bonds , or (2) the rate of growth of Gross Domestic Product.

2.5 Conclusions

In this chapter a thorough review of the literature related to pension schemes is provided. Section 2.2 looked at the regulation of pension schemes, while section 2.3 is focused on reforms related to pension funds. In the last subsection a review of other issues related to pension funds is provided. Literature shows that significant reforms have taken place over the past decades in relation to pension schemes. The literature provides important points for consideration in the local superannuation scheme.

CHAPTER THREE
SOCIAL SECURITY IN FIJI: AN OVERVIEW

3.1 Introduction

The following section attempts to provide an overview of Fiji's social security system. This report is compiled from secondary information available from the website of Fiji National Provident Fund and from the published Annual report of the Fund which is also posted on the institutions home page. The first section provides a history of Fiji National Provident Fund. Secondly it looks at the pension options that FNPF provides to its members and the age at which the members are likely to withdraw their funds. Thirdly it looks at what are the functions of FNPF and the types of benefit it provides to its members and finally leading to summary and conclusion.

3.2 History

The Fiji National Provident Fund is a social security saving scheme jointly supported by employees, employers and government. The Fund was established in year 1966, to provide financial security for workers when they retire at age 55. The FNPF is now (2008) 42 years old and much of its success is owed in no small part to the role that employers play in caring for their employees' future financial security (Fiji National Provident Fund 2008). As at year 2006, it had 331,050 members which has been steadily increasing over the years (see Table 3.1 below). The table also shows that the contribution from members has been increasing steadily over the years. It is interesting to note that over the years the growth rate of members' balances has been on a decline, in 1994 the growth of members fund averaged 11.24%, while in 2006 it averaged 7.36%. On the other hand the growth rate of number of members has been fluctuating but generally increases in growth compared to 1994.

The results in table 3.1 point out an important issue related to the withdrawal of funds by members. The data shows that growth rate of members have increased while growth rate of members' balances has declined. In this thesis the determinants of withdrawal choices is being investigated which will provide evidence on the reason members are withdrawing funds and hence, aid in policy choices related to members withdrawal and disbursements of pension funds.

Table 3.1

Growth of Members

Year	Annual Contributions ($)'000	Total Members' Balances ($)'000	Growth Rate for Balances (%)	Number of Members	Growth Rate for Members (%)
1994	116,419	988,781	11.24	183,610	3.25
1995	121,664	1,084,355	9.67	188,323	2.57
1996	127,626	1,179,175	8.74	193,525	2.76
1997	134,954	1,272,363	7.90	198,885	2.77
1998	141,949	1,356,166	6.59	203,610	2.38
1999	149,250	1,431,660	5.57	205,510	0.93
2000	178,496	1,538,195	7.44	212,628	3.46
2001	180,978	1,625,229	5.66	213,668	0.49
2002	193,240	1,748,810	7.60	281,570*	31.78
2003	209,186	1,868,230	6.83	289,800*	2.92
2004	225,331	2,011,654	7.68	306,133*	5.60
2005	245,678	2,166,142	7.68	316,791*	3.48
2006	267,650	2,325,623	7.36	331,050*	4.50

*Includes member accounts with zero balance

(Adapted from Fiji National Provident Fund Annual Reports)

FNPF also provides for permanent incapacity, and survivors benefit in the event of death. Over the years the Fund has evolved into a comprehensive scheme that provides a number of pre-retirement benefits to members such as home ownership, healthcare, and education. The FNPF covers all employees who are Fiji citizens. An employee is anyone who has attained the age of 16 years, and is employed under a contract of service, either individually, or as a member of a group. A contract may be written or oral, expressed or implied. A worker has to be in employment for one day for contributions to be payable (Fiji National Provident Fund 2008b). However, there are cases reported in the media which pointing out employers which have failed to contribute there share of the social security contribution to the Fund.

3.3 Pension Plans

A pension is generally defined as payment made to a person, usually at retirement that is intended to support the person for the rest of his/her life. The FNPF Pension Scheme is specifically designed for workers who, by virtue of there contribution, have become members of the Fund. It provides a monthly payment for life to the member who chooses to take a pension when he/she retires. The Scheme has its own formula for calculating the amount of the monthly payment, and the age from which the payments should commence. In a nutshell, it provides for either a lump sum withdrawal of a persons total contribution plus interest on retirement at 55 or a pension at a specified rate over the entire lifetime. Prior to 1998, the rate was 25%. There are other variations to the payout which will be discussed later in this section.

Over the years of the existence of the fund, it was noted that some major changes were needed in order to ensure that it was sustainable. In August 1998, Parliament passed important amendments to the FNPF Act, which provided major changes in the Fund's pension scheme. The purpose of the new pension scheme was to eventually have a viable scheme based on actuarial principles and consequently safeguard its continuity into the future. The scheme also extends the pension to more members who were not entitled to a pension previously. A major change was the pension rate which was reduced from 25% to 15%.

The following are the grounds for withdrawal of the fund. There are three grounds of withdrawal where pension is applicable:

1. Age 55 (Retirement)
2. Sole nominee of deceased member (usually spouse)
3. Medical: that is, 100% incapacity and approval from FNPF medical board.

The following are the pension withdrawal options. Upon retirement Fiji national provident fund provides the following options to its members:

1. Life Pension
2. Joint Pension
3. Part Lump sum, Part Life Pension
4. Part Lump sum, Part Joint Pension
5. Part Lump sum, Part Life, Part Joint,
6. Full Lump sum

3.3.1 Option One - Life Pension

Through this option, the member has the opportunity to receive their savings as pension for the life time.

3.3.2 Option Two - Joint Pension

Through this option, the member has the opportunity to receive his/her savings as a joint pension usually with the spouse for the rest of his/her life. The benefit of this option is that if one member dies the pension payment would not stop as the other is liable to enjoy the benefit till he/ she is alive.

3.3.3 Option Three - Part Lump Sum, Part Life

Through this option, the member has the opportunity to take part of his contribution as lump sum and the balance as life pension. it is up to the member to decide the amount he prefers to take as lump sum and pension. The pension will cease upon the death of the member..

3.3.4 Option Four - Part Lump Sum, Part Joint

This option is similar to that of option three, but goes one step further in providing the member a joint pension with the spouse. It is up to the member to decide the amount he/she prefers to take as lump sum and pension. Upon the death of the member, his spouse will continue to get the sum until her death

3.3.5 Option Five - Part Lump, Part Life, Part Joint

This is one option that provides the member with the opportunity to enjoy all the options mentioned earlier. He will be able to receive a lump sum amount and the remaining balance as a Life and Joint Pension. The member during his life time will be receiving two pensions upon his death the life pension will cease but the joint pension will be transferred to his spouse, who then will be receiving the joint pension amount during her life time.

3.3.6 Option Six - Full Lump Sum

This is an option where the member simply asks for a Lump sum which means that the balance of his account at the time of withdrawal is paid to him in one cheque

3.3.7 Pension rates

The pension calculation is based on the amount a member opts from the credit balance. This is calculated by using the Pension Table which is provided by the Fund. The table shows the percentage rate a member will receive per annum at retirement. It can be noted that the percentage rate is being reduced by one percent annually over a ten-year period. The percentage rate that relates to the financial year in which the member withdraws will be fixed for life. For example (Financial year is from 1st July to 30th June) A member who withdraws in the year July 1 1999 to June 30th 2000, the pension rate will be 24%. If a member retires in the year 1st July 2000 to 30th June 2001, the pension rate will be 23%. The pension rate will continue to be reduced by 1% annually, and the joint pension rate will reduce by 0.6% until 30th June 2009. According to the annual report (Fiji National Provident Fund, 2008) published by Fiji National Provident Fund most of its members, opt to fully withdraw their savings (full lump sum) when the retire (age of 55) and very less number of people opt for pension.

3.4 FNPF functions and benefits it provides to its members

3.4.1 FNPF Function

The role of FNPF is to protect and preserve the value of the savings of members, while providing fair market returns to contribute towards the member's well being in retirement. It ensures that all the business and functions of the Fund adhere to the spirit and meaning of trustee principles. The Board is tripartite in nature comprising six members. Two members represent employers, two members represent employees, and two members represent the government. Each tripartite component ensures that their interests are protected while ensuring that the over-riding principles of trusteeship of protecting the member's savings are not compromised.

3.4.2 The Types of Benefits Available for Members

The FNPF has three principal benefits, which are regarded as the main pillars of the FNPF system. The three pillar benefits are Retirement, Permanent Incapacity, and Survivors benefit in case of death. Further, there are supplementary benefits or schemes that compliment these pillar benefits. These are the Housing Scheme, Education Scheme, and Medical Assistance Scheme. In cases where members leave Fiji permanently they can withdraw their FNPF savings.

If a member unwisely and repeatedly withdraws his savings for any one or more of the secondary benefits during his membership, without giving due consideration for the pillar benefits, then such depletion of funds will in turn affect his quality of life at retirement.

Retirement: FNPF members can withdraw their FNPF savings when they reach the age of 55. In order to provide the widest possible choices to the member, he/she is given six choices to decide on which type of retirement plan that suits him/her best. (Refer to pension option above). On average a member is expected to live another 15-20 years after retirement at 55 years of age.

Incapacity: FNPF members can withdraw their savings and receive a lump sum or pension in case he/she is permanently incapacitated. The member has six choices from which to choose the type of financial plan that suits him/her in the circumstance he/she is in. (refer to pension option above). Most cases of incapacity are caused by human error or accidents, whether in the work place, or on the road, or some form of illness. For a member's career to be suddenly put to a halt because of incapacity can be an unnerving and heartrending experience. The person has to come to terms with a completely new chapter in life. One of the crucial ones he has to face is his/her financial well being from that point in time. This is one of the fundamental purposes of the FNPF to provide financial security when a member is incapacitated.

Survivors Benefit: In the unfortunate event of death the member's FNPF savings are paid to his/her survivors, in accordance with the nomination filed by the member. A nomination is like a 'will', which provides the names of those who would receive your money in case of death. Usually the survivors are the spouse and children of the deceased. The FNPF provides special death benefit (SDB) insurance for all members. Currently (1st July, 2007) the benefit is $8,000. This benefit is paid in addition to the member's balance.

Migration: Members can withdraw their FNPF savings if they leave Fiji permanently to reside in a foreign country. The applicant has to hold a relevant permanent residence visa of the country to which he will migrate in order to qualify to withdraw.

Housing: Members can apply for two thirds of the balance of the account for the purpose of home ownership. Under the scheme, the member applies through an 'approved lender' who provides 100% loan for home ownership. The member's transfer from his account is utilized to reduce the loan with the approved lender. The transferred amount may be repaid by installment if the member chooses, however no lump sum repayment will be accepted prior to retirement.

Education: The education scheme is to assist in the payment of school fees. The assistance is confined to the children of the member in Form 7 and those in tertiary institutions, where the parent (member) is unable to meet the expense due to financial hardship. The amount the member is eligible to withdraw is one third of the simulated balance. Assistance for other types of education is granted on merit.

Medical: In cases where a member may not have a health insurance cover, the healthcare scheme provides assistance where there is an immediate or unforeseen medical condition that requires urgent attention, whether locally or overseas. The maximum allowed to be withdrawn under the scheme is one third of the simulated account balance (Fiji National Provident Fund 2008c).

FNPF Share Investment Scheme: The FNPF Share Investment Scheme gives FNPF members the choice to invest part of their FNPF savings by buying and selling shares in profitable companies in Fiji, while meeting the long-term objective of financial security in old age. The members are allowed to use up to ½ of total contributions received minus the net amount of all previous withdrawal and housing transfers taken or a maximum of $20,000 whichever is lower. The approved companies, in which the member can invest, are:

- Fiji TV
- ATH
- Fijian Holdings Ltd
- Flour Mills of Fiji Ltd

- RB Patel Group Ltd
- Rice Company of Fiji Ltd
- Pacific Green (Fiji) Ltd
- Fosters Group Pacific Ltd

3.5 Pension Choice Options

An analysis of the annual reports of the fund reveals that most members opt to choose ground 8 which is upon retirement they chose to partially withdraw their savings. From the annual report it is noted that the number of members choosing this option has been increasing over the years. In the year 2006, $70,549 was paid out as partial withdrawal by the members compared to $49,279 paid out in the year 2005.

The second ground that members prefer is ground 9, which is for housing assistance. In 2006, a total of 6906 members were paid for housing assistance scheme compared to 6253 in the year 2005. The third ground that most members prefer is ground 1, which is they withdraw their net savings when they retire at the age of 55 years. In the year 2006 a total of 2870 members were paid out compared to 2856 in the year 2005.

The fourth option that members opt to choose is ground 4, which is where members withdraw their funds for migrating purpose. In the year 2006 a total of 1868 members was paid out for migrating purpose compared to 1840 paid in the year 2005. The option that any member does not opt to choose is option 5 which is withdrawn by female members for marriage purpose (Fiji National Provident Fund 2006). A common thing noted in the trend above is that every year the number of withdraws made by members increases for each ground.

3.6 Returns on investment

One important way a member's account is made to grow over time is through interest credits that is declared and added to the member's account annually. On 30th June each year, the FNPF Board declares an interest rate that is based on the performance of its investment activities. When an account is allowed to compound, interest credits is a big factor in the growth of a member's account. Over the last decade, on an average, member’s accounts have been credited with interest rate averaging 6.5%. (see Table 3.2 below) The investment portfolio of the Fund has been performing well since its inception (see Table 3.3).

Table 3.2

Returns to Members Funds

Year	Inflation Rate (%)*	Interest Credited to Members (%)	Interest Credited Net of Inflation (%)	Amount of Interest Credited(%)'000
1994	1.9	8.5	6.6	71,765
1995	1.1	8.5	7.4	79,268
1996	2.8	8.5	5.7	86,368
1997	3.5	8.0	4.5	87,919
1998	3.3	7.5	4.2	89,223
1999	5.9	7.5	1.6	94,338
2000	0.0	6.5	6.5	87,422
2001	3.5	6.4	2.9	86,074
2002	2.4	6.4	4.0	92,593
2003	2.2	6.0	3.8	93,058
2004	3.5	6.0	2.5	100,205
2005	2.8	6.25	3.45	111,964
2006	2.03	6.5	4.47	124,570

(Adapted from Fiji National Provident Fund Annual Reports)

The current returns to members funds as outlined in table 3.2 is on the decline compared to a decade ago. This decline coupled with rises in inflation rate means that the real returns to members is far lower than what was a decade ago.

Table 3.3 shows the investment portfolio of the fund. The table shows that while the investment portfolio is increasing the growth rate has declined over the decade. The rate of return on the portfolio has been fluctuating over the years.

Table 3.3
Total Investments Portfolio

Year	Investments Portfolio($)'000	Growth Rate (%)	Rate of Return on Investment (%)	Rate of Return on Investment (Net of Inflation) (%)*
1994	1,293,473	10.86	7.87	5.97
1995	1,422,920	10.01	7.91	6.81
1996	1,503,701	5.68	8.20	5.40
1997	1,742,776	15.90	9.40	5.90
1998	1,909,807	9.58	7.30	4.00
1999	2,098,477	9.88	6.30	0.40
2000	2,236,313	6.57	6.14	6.14
2001	2,310,518	3.32	5.63	2.13
2002	2,427,546	5.07	4.22	1.82
2003	2,609,785	7.51	4.25	2.05
2004	2,748,922	5.33	5.98	2.48
2005	2,937,519	6.86	5.73	2.93
2006	3,150,000	7.14	7.63	5.59

(Adapted from Fiji National Provident Fund Annual Reports)

3.7 Summary and Conclusion

The fund is the only social security option for the entire populace in Fiji. The challenge for government is to ensure that all employers comply with the act and send their share of the social security contribution to the fund. At the moment, there are a number of businesses which have been avoiding the mandatory contribution to the fund. The challenge for the members are to ensure that they strive harder to raise their income and the more income they have, greater will be the contribution to the fund and thus greater will be pension benefits on retirement. Furthermore, those workers who are self employed, the challenge for them is to become voluntary members and thus make contributions themselves. The challenge for the Fund is to preserve the value of the members' funds so that a member can receive an adequate level of pension when he or she retires. The Fund have to make the right investment decisions and thus contributing to greater returns on members funds. The Fund also has to convince the government to deal with issues of housing, education and health so that members do not need to withdraw their retirement savings based on these grounds.

CHAPTER FOUR

ANALYSIS OF DETERMINANTS OF PENSION WITHDRAWAL CHOICE

4.1 Introduction

In this chapter, we provide a qualitative and quantitative analysis of choice withdrawal in Fiji. The secondary data will be obtained from Fiji National Provident Fund, Fiji Bureau of Statistics and Reserve Bank Quarterly reports. The data from pensioners, at the time withdrawal of pension were obtained by interviewing them using structured questionnaires (see Appendix 1 for a copy of the questionnaire used).

The survey was analysed with the data already collected over a 3 month period, August to October, 2007. First attempt was made to get a list of pensioners and their address from FNPF but this was not successful. The other alternative was to call every household listed in Suva and Lautoka to find out if a pensioner stayed in the house. If a pensioner was found, then their full residential address was obtained and face-to-face interview was organised. In this way, 200 pensioners were targeted in Suva and 200 in Lautoka. In this study, we examine both the qualitative and quantitative dimensions of pension payout choice by retirees. The qualitative dimension to pension choice will be examined by asking them questions on some of the reasons for choosing a particular option. In the quantitative approach, we obtain data on choice of pension payout and various socio-economic factors. Such quantitative relationship modelling would allow researchers to rigorously test and determine the significance of factors. Furthermore, quantitative modelling would allow decision-makers to measure the impact of individual policy response on the direction and magnitude of change on the independent variable. To do so, the following theoretical model is specified:

$$Y_i = \alpha + \beta X_i + \varepsilon_i$$

Where Y_i = pension payout option in discrete numbers (0, 1, 2, etc);
X_i = vector of explanatory variables; and
ε_i = random error term.

Application of Ordinary Least Squares (OLS) techniques to estimate the above model will result in inefficient estimates since the error term is heteroskedastic. Furthermore, the parameter estimates will be inefficient (Goldberger, 1964; Pindyck and Rubinfeld, 1983). Also, due to a non-normal error structure, classical hypothesis tests such as the t-test are no longer appropriate (Shakya and Flinn, 1985). Given this problem, a commonly used approach in the econometrics literature is to transform the original model using a cumulative probability function in such a way that the predictions (P) will lie within the stated lower and upper limits of the stated dependent variable for all X. A large number of studies exist in the literature which has utilised this model to explain the probability of adoption or acceptance by decision makers (see Reddy, *et. al*, 1999, Masuo and Reddy, 1997 and Yanagida and Reddy, 1997). However, we extend the model to handle more than two discrete points for the dependent variable known as the ordered dependent variable. To model this relationship, we use the Ordered Probit probability model (which utilizes the cumulative normal probability function) for estimation. The Probit model can be shown as follows:

$$Pi = F\ (Zi) = F(\alpha + \beta Xi) = \frac{1}{\sqrt{2\pi}} \int_{-\infty}^{\alpha+\beta Xi} e^{-x^2/2ds}$$

Where P_i = probability that the event occurs;

e = base of natural logarithm;

s_i = random variable with mean zero and unit variance.

The empirical model for this study can be written as follows:

$$PWC_i = \beta_0 + \beta_1 ETH_i + \beta_2 Gend_i + \beta_3 HS_i + \beta_4 PV_i + \beta_5 Assets_i + \beta_6\ CB_i$$

PWC_i = Pension Withdrawal Choice measured by 0= full pension; 1= full lumpsum payout.

HS_i = Index of health status measured using lickert scale, 0= none to 4=very high/bad.

ETH_i = Ethnicity of the respondent, 0=Indo-Fijian, 1= Fijian, 2=Others

$Gend_i$ = Gender, 0= Male, and 1=Female.

PV_i = Total value of pension (in \$).

$Assets_i$ = Total value of personal assets (in \$);

CB_i = Total value of Cash at Bank (in \$).

where "i" refers to the "ith" retiree.

This model will be estimated and variables interpreted to derive policy implications.

4.2 Results and Discussion

While a total of 400 retirees were interviewed, only a total of 360 questionnaires had complete information for inclusion in the final analysis. A basic profile of the respondents is provided in Table 4.1 below. On an average, the retirees had a mean age of 61 years with mean formal education of 11 years. Of the total sample, 38% were ethnic Fijians while 62% were Indo-Fijians. Furthermore, 67% of all the respondents were male. Most of the retirees, 74% has opted for lump sum withdrawal.

Table 4.1

Some Basic Characteristics of Respondents

Variable		Observation
Mean Age of Pensioner (years)		61 *(Min:55 ; Max:78)*
Mean Formal Education (years)		11 *(Min:1 ; Max:25)*
Ethnicity (%):	Ethnic Fijian	38
	Indo Fijian	62
Gender of Pensioner (%):	Male	67
	Female	33
Mean Pension on Retirement ($)		31460.50 (Min: 1200 ; Max: 100,000)
Mean Total Non Cash Assets ($)		81,624.20 (Min: 1000; Max: 500,000)
Mean Cash at Bank on Retirement ($)		18,416.30(Min: 0; Max: 100,000)
Pension Withdrawal Choice (%):	Pension	26
	Lump sum	74
Sample size (n)		360

4.3 Reasons for Choosing Pension Option

For those retirees who chose to take up the pension option for their fund, I question asked was to list 5 most important reason for deciding on that option. The largest number reported a steady source of income as the reason for choosing pension option (Table 4.2). The other reason receiving second highest score was the retiree’s ability to meet the needs of his/her family. The third highest score was given to the reason of not to be dependent on the children.

Table 4.2

Reasons for Choosing a Pension Option

Reasons	**Number Responded**				
	Number 1 Reason	Number 2 Reason	Number 3 Reason	Number 4 Reason	Number 5 Reason
Steady income over the remaining lifetime	30	6	7	2	0
Support mine and family and get basic needs	25	21	14	1	0
Not to be dependent entirely on children	11	31	3	4	2
I have money on hand can make own decisions	7	3	0	3	0
Buy food for consumption	2	0	2	2	0
Pay children's fees	2	4	4	2	0
Buy share in business	2	0	2	0	0
Is my security as long as a live	0	3	7	0	3
For old age and medical problems	0	4	4	6	0
Pay rent and bills	0	0	0	2	2
Buy assets for business start up	0	0	2	2	0
Deposit in banks, earn interest and withdraw at anytime	0	2	0	0	3
Helps in Expenditure control	0	2	12	0	0
Health is good	0	5	0	0	0

4.4 Reasons for Opting for Lump Sum Payout

The retirees who chose the lump sum option were asked to list the first five reasons in order preference for doing so. The reason which received the most score was related to buy of house, car or paying of mortgages (see Table 4.3). The second largest score was given to the reason of world tour or overseas visit. Medical bills and children's education were another important reason for decision to withdraw in lump sum.

Table 4.3

Reasons for Choosing Lump Sum Payment

Reasons	**Number Responded**				
	Number 1 Reason	Number 2 Reason	Number 3 Reason	Number 4 Reason	Number 5 Reason
World tour/overseas trip	33	5	9	2	2
Buy a House/Car or pay off house mortgage	40	33	41	3	0
For medical purpose	19	7	17	6	0
For children's education	18	36	5	7	0
Because of migration	15	8	0	1	0
Enjoy life as future uncertain	14	5	6	12	8
Have cash readily on hand i.e. easy withdrawal	6	0	2	8	2
Earn interest from bank by putting money in savings account	5	5	7	2	0
Invest in business	7	6	3	0	3
Personal reasons	4	0	8	2	5
Get my children married	3	15	8	8	0
House repairs	3	6	9	5	2
Buy luxury items	3	0	0	0	2
Don't trust children	3	0	0	0	0
Help my children migrate	2	2	0	0	0
To stay out of pension collecting hassle	2	8	3	2	8
Get myself a good medical checkup	0	3	3	6	0
Buy consumable goods	0	0	2	4	2
Buy furniture	0	2	0	0	0
Pay off mortgage and other debts	3	10	3	3	0
Give some to children who will take care of me	0	10	9	1	2

4.5 Quantitative Modelling of Pension Withdrawal Choice

The above section demonstrated a qualitative analysis of the reasons for choosing a particular option of pension withdrawal. However, there are number individual specific factors which affect an individual's probability to choose either of the two options. In this section, we provide the results of a Probit model for the choice of a withdrawal option.

The Probit model results are presented in Table 4.4 below. The sample size or the number of observations in this analysis was 360. For the test of goodness of fit, the Maddala R^2 was estimated which gives a fit level of 18%. Though this is low, it is normal for these kinds of binary dependant variable models. What it implies is that of the total variation in the dependent variable, a total of 18% is explained by the explanatory variables. However, more interesting would be to examine the individual explanatory variables. The results indicate that that the variables ethnicity, total value of pension at retirement, total value of assets and cash at bank at retirement significantly determine an individuals probability of pension choice option. The ethnicity variable suggests that probability of ethnic Fijians opting for lump sum payment are higher than for Indo-Fijians. The total value of pension variable indicates that the larger the pension at retirement, the higher is an individual's probability to choose lump sum payout. The total value of individual assets on retirement indicates that if an individual has high value of assets, the probability that he will choose lump sum payout is high. The model also indicates that if an individual has high amount of cash at Bank on retirement, then the probability of choosing pension option is high.

Table 4.4

Probit Model Analysis of Determinants of Pension Withdrawal Choice

Variable	Coefficient	Marginal Effect	t-ratio
Gender	0.045	0.011	0.221
Ethnicity	-1.492	-0.365	-4.130
Health Index	-0.147	-0.036	-1.371
Total Value of Pension	0.115E-4	0.28E-5	2.093
Total Value of Assets	0.693E-05	0.169E-05	3.809
Value of Cash at Bank	-0.183E-04	-0.44E-05	-3.965
Constant	1.715		4.037
Scale factor	0.244		
Maddala R-Square	0.184		
Mcfadden R-Square	0.189		
N	360		

The results in Table 4.4 have very important implications for the regulators of FNPF, for the pensioners and for employees. It appears that ethnic Fijians are not able to plan their savings during the time of employment, thus having to make lump sum withdrawal. This factor has a drastic economic impact on retired ethnic Fijian society. The government must create awareness on the importance of a savings plan among all employees. The FNPF should also consider the removal of the choice to fully withdraw the pension fund and should make compulsory that fifty percent of funds should be put aside for pension. This will not make employees reliant of lump sum withdrawals. Savings during employment will sure lead to higher value of cash at bank and assets which will cause lower lump sum withdrawal.

4.6 Conclusions

The results of the analysis in this chapter provide important evidence for policies related pension funds. Results show that ethnic Fijians have a higher probability of opting for a lump sum payout than indo- Fijians. In addition the value of assets, the total values of pension and cash at bank amounts are significant in explaining an individual's choice for a pension or lump sum payout. Regulators and FNPF must act to encourage retirees to go on pension for a more healthy retired life and to avoid wide scale poverty in the long run.

CHAPTER FIVE
SUMMARY AND POLICY IMPLICATIONS

5.1 Conclusions and Policy Implications

Social security institutions, whether run by private sector or public sector are quite important and forefront of policy dialogue in developing countries. There are various reasons for it. Firstly, it tends to facilitate national savings thus promoting economic growth via investment. Secondly, if owned by the private sector partially or fully, it tends to reduce a significant burden from the state in terms of welfare payouts/benefits for the retired. Thirdly, social security is quite important for individual workers given the fact that it redistributes resources both within and across generations. Social security savings of a worker is a very important form support during old age.

With respect to the core function of social security, the function could be jeopardized if the retiree does not make the right choice of fund withdrawal on retirement. In Fiji, the available secondary data reveals that most of the retirees opt for lump sum withdrawal. In a society of large extended families, this habit of lump sum withdrawal which are spent out in a short period of time, there could be a social security crisis despite having a social security fund. Therefore, in this paper, we explored the determinants of pension withdrawal choice by retirees.

In this study, a total sample of 360 pensioners were included. The study revealed that the majority of the pensioners, 74%, opted for lump sum withdrawal.

The pensioners were also asked for key reasons for deciding on a particular option. For those choosing the pension option, the largest number reported a steady source of income as the reason for choosing pension option. The other reason receiving second highest score was the retirees ability to meet the needs of his family while the third highest score was given to the reason of not to be dependent on the children.

For the retirees who chose the lump sum option, the foremost reason was related to buying of house, car or paying of mortgages. The second largest score was given to the reason of world tour or overseas visit. Medical bills and children’s education were another important reason for decision to withdraw in lump sum.

The quantitative modelling results indicate that that the variables ethnicity, total value of pension at retirement, total value of assets and cash at bank at retirement significantly determine an individuals probability of pension choice option. The ethnicity variable suggests that probability of ethnic Fijians opting for lump sum payment are higher than for Indo-Fijians. The total value of pension variable indicates that the larger the pension at retirement, the higher is an individual's probability to choose lump sum payout. The total value of an individuals assets on retirement indicates that if an individual has high value of assets, the probability that he will choose lump sum payout is high. The model also indicates that if an individual has high amount of cash at Bank on retirement, then the probability of choosing pension option is high.

Results from this study can be used to target the retirees by various stakeholders who are not playing their part thus forcing the retirees to make lump sum withdrawal. For example, governments housing scheme development would avoid the workers to withdraw funds from their social security funds. Furthermore, provision of financial assistance for children's education can help in minimising social security withdrawals. The study also reveals that ethnic Fijians have a higher probability to make lump sum withdrawals. Therefore, the state and social security institutions can develop educational programs and target the ethnic Fijians more. The study is quite revealing and to avoid any major social security crisis in the future, the state has top lead a major program involving all stake holders geared towards improving the withdrawal of social security funds to serve its core objective, old age security.

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Appendix 1: Questionnaire

Determinants of Pension Withdrawal Choice:
An Application of Ordered Probit Model

This questionnaire seeks to obtain information on the reasons for choice of a particular pension option by retirees in Fiji. Any information that you provide will be kept strictly confidential. It will be solely for the purpose of this study.

Office use only

Sample Number

City/Town

Street/Settlement

A) Questionnaire No: _______

B) Age of retiree: ______

C) Gender of retiree: ______

0) Male
1) Female

D) Living status of retiree:_______

0) Married
1) Single
2) Divorced/Separated
3) Widowed

E) Ethnicity of respondent: _____

0) Fijian
1) Indo-Fijian
2) Others __________

F) Pension Withdrawal Choice:

0) Total withdrawal as pension over remaining lifetime;
1) Partial pension and partial lump sum;
2) Total withdrawn in one lump sum payout.

Health Status

G) Do you have diabetics?

|---------------------|---------------------|---------------------|----------------------|

0= none 1=mild/low 2=moderate 3=high 4=Very high/bad.

H) Do you have heart or heart related problems:

|---------------------|---------------------|---------------------|----------------------|

0= none 1=mild/low 2=moderate 3=high 4=Very high/bad.

I) Do you have blood pressure problems:

|---------------------|---------------------|---------------------|----------------------|

0= none 1=mild/low 2=moderate 3=high 4=Very high/bad.

Any other health related problems:

J) Do you have _______________ problems:

|---------------------|---------------------|---------------------|----------------------|

0= none 1=mild/low 2=moderate 3=high 4=Very high/bad.

K) Do you have _______________ problems:

|---------------------|---------------------|---------------------|----------------------|

0= none 1=mild/low 2=moderate 3=high 4=Very high/bad.

L) Do you have _______________ problems:

|--------------------|--------------------|--------------------|---------------------|

0= none 1=mild/low 2=moderate 3=high 4=Very high/bad.

M) Do you have _______________ problems:

|--------------------|--------------------|--------------------|---------------------|

0= none 1=mild/low 2=moderate 3=high 4=Very high/bad.

N) Education level measured in terms of no. of years of formal education____________.

G) Education level (Primary, Secondary or Tertiary) of the head of the activity: ________

0) Primary
1) Secondary
2) Tertiary

O) Income level (Past 5 years annual average annual gross income): _________________.

P) Total value of pension (in $):___________________

Q) Total value of personal assets (in $):________________

R) No of years of formal employment (in years): _____________

S) Value of cash savings in your personal account: ____________

T) Any other form of income that you get such as remittances, children, stock market dividend, etc in $ per year: ______________

If you have chosen to take full pension

U) List 5 most important reasons why you have chosen to take full amount of pension deposit as pension payout over your life time:

a) ____

b) ____

c) ____

d) ____

e) ____

If you have chosen to take some as pension and sum as lump sum payout

V) List 5 most important reasons why you have chosen to take **some as pension and sum as lump sum payout**:

a) ____

b) ____

c) ____

d) ____

e) ____

If you have chosen to take all in one lump sum payout

W) List 5 most important reasons why you have chosen to take all in one lump sum payout:

a) ______________________________

b) ______________________________

c) ______________________________

d) ______________________________

e) ______________________________