OCCUPATIONAL PENSION AND SCENARIO INVESTMENT DECISIONS 
FOR AGE 30-34 (DUBLIN, IRELAND.)

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DECLARATION
I, Edujie Dominic Ighodalo, declare that the work contained in this dissertation is entirely my own and that all sources used have been acknowledged as per the requirements.

Signed:....Edujie Dominic Ighodalo..........  
Date:.......06/1/2019................................
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ABSTRACT

**Purpose** – This Research aims at simplifying terms, Schemes and simulates various investment decisions as regards to sustainability of contributions that should provide annuities after retirement.

**Methodology** - Through the literature review the researcher gained an enormous amount of knowledge regarding Occupational pension, varieties of schemes and priority costing for retirees, the researcher conducted a survey to which 184 respondents answered questions regarding Pension readiness, Financial literacy, Desired annuity at retirement.

**Findings** – 73% of the sample population have not planned for retirement, representing a sample size of 133 of 182. Only 12.6% have planned for retirement, 47.8% of the sample population, seem to think that large varieties of schemes would cause indecision, while 37.4% were neutral, 40.7% of the Sample population indicated that individuals should have and should be given more freedom of choice in making investment decision. While 27.5% were neutral. 70.9% respondent would prefer a third party to manage their Occupational pension Investment while 14.8% were comfortable within themselves to manage their streams of investment.

**Limitations** – The Findings in this dissertation is limited by time, Reforms in pension are rapidly changing in Ireland, The government is meant to make change early 2019, Banks are now partnering to get a slice of the huge potential in offering pension schemes, Millennial and technology are expected to drastically change the concept of pensions.

**Practical implications** – The conclusion arrived in this dissertation can be directly used by Individual who plan to stay in Ireland, Companies who desire to woo the best employees and Financial sector on how to tailor schemes to Millennial in Dublin, Ireland

**Value of paper** - This dissertation aims to add value to the researcher, Dublin Business School and Workers in Ireland, professionals and Irish SMEs would also be aided by this study.
1.0 CHAPTER 1

“IT IS IN THE NATURE OF PENSION THAT THEY ARE COMPLEX AND RARELY UNDERSTOOD BY MEMBERS. VERY OFTEN THEY SHOW LITTLE INTEREST UNTIL THEY ARE CLOSE TO RETIREMENT”

Dr David Begg (Pensions Authority, 2017, p.3)

1.1 BACKGROUND

Ireland pension system is based on a three tier system (Pensions Authority, 2017) with degree of depth as with current European standard (Study on pension schemes, 2014, p.11-15).

- Pillar 1: State pension: Contributory and non contributory pension, whose goal is poverty avoidance. (Citizensinformation.ie, no date b) (Citizensinformation.ie, no date c)
- Pillar 2: Occupational pension schemes: Employer sponsored Defined Benefit (DB), Defined Contribution (DC) and Hybrid schemes – Operate on a funded basis (private sector) and pay-as-you-go basis (public service) (Pensions Authority, 2017, p.2) (OECD, 2014, p.13) (Australian Centre For Financial Studies, 2017, p.63)
- Pillar 3: Personal pension: Personal pension Schemes: Includes Personal Retirement Savings Accounts (PRSAs) and Retirement Annuity Contracts (RACs).

Occupational pension schemes in Ireland are group either as Defined Benefits (DB) or Defined Contribution (DC) (Pensions Authority, 2017, p.2) (OECD, 2014,p.13) (Australian Centre For Financial Studies, 2017, p.63) Occupational pension for the DB schemes are been phased away in Europe and Ireland because of demographic challenges (Government of Ireland, 2018, p.6), (EurOhex, 2018, p.2) Increased life span, (HEALTH IN IRELAND Department of Health, Key Trends., 2017).

Report from Pension Roadmap 2018, indicates that Ireland had 160,000 types of Occupational pension and that the complexity and depth of them has lead to a limited participation of them. With the increase in Defined contribution scheme, Occupational workers will need to watch their investment if they are to meet target amount.

Occupational pension scheme as defined by the Pension act of 1990 is any scheme or arrangement

- Which is comprised in one or more instrument or agreement.
- Which provides or is capable of providing in relation to employee in any description who reside within the state benefits.
- Which has been approved by the revenue commissioner for the purpose of chapter 11 or section 17 of part 1 of the Finance act, 1972 (Book (eISB), 1990)

According to the Irish Pension acts of 1990 Occupational pension benefit scheme refer to agreement which provides, or is capable of providing occupational benefits to employed or self employed persons this include models of

- Termination of work.
- Retirement, old age or death.
- Interruption of service by reason of sickness or invalidity.
• Accident, injuries or diseases arising out of or in the course of a person’s employment (Book (eISB), 1990)

Defined contribution scheme has the meaning assigned to it under section 2, of the Irish pension act 1990 (Book (eISB), 1990)

**Figure 1  LAWS RELATING TO OCCUPATIONAL PENSION IN EUROPE**

**Applicable EU Law (1.3)**

Applicable EU Law – total

![Pie chart showing applicable EU laws](image)

Source: Database of pension plans & products in EEA: Statistical Summary

The figure above aim at showing the legal linkages in the Euro zone and Portability of Pension is a choice of each citizen. Another implication could be that if occupational pension factors are not so favourable in one country then member of the Euro zone have the choice of settlement in a country that favours them for retirement.

There are three main types of private pension arrangements in Ireland:

- Occupational pension schemes;
- Personal Retirement Savings Accounts (PRSAs);
- Retirement Annuity Contracts (RACs).

**1.2 RESEARCH QUESTION AND OBJECTIVES**

**Research Question:**

- What is the minimum income adequacy for the sample population?
- How long would this minimum income be sustainable under various investment scenarios?

**OBJECTIVES**

This Research aims at simplifying terms, Schemes and simulates various investment decisions as regards to sustainability of contributions that should provide annuities after retirement

**RECIPIENTS OF THIS RESEARCH**
The recipient of this study is firstly, Dublin Business School to whom this study will be presented along with my supervisor Mr Paul Walsh. It is under them that this research will be carried out. Other than DBS and my supervisor, Workers in Ireland, professionals and Irish SMEs would also be aided by this study.

Most Employees are encouraged to cover savings for pensions, has life expectancy has increased and growing demographic challenge inhibit intergenerational benefit transfer, some European government are going to be forced to reduce pillar one pension benefits (State Pension)

Employees could lifestyle their investment: higher investment risk when scheme members have much more economic years or cautious when retirement is almost due. (Keeley, Brian, 2010)

1.3 INVESTMENT PLAN.
This Research which is Occupational pension and Scenario investment Decisions for age 30-34 (Dublin, Ireland.) Research into Actuary reports, which seems to indicate that Europeans are living longer, Tilda seemly support this reports, find data for this below. (Mortality and life expectancy statistics - Statistics Explained, no date) (Broeders et al., 2014).
Life expectancy is expected to rise further in Ireland in the coming decades according to the (HEALTH IN IRELAND Department of Health, Key Trends., 2017, p.1) (Central Statistics Office, 2017)

Table 1: LIFE EXPECTANCY IN EUROPE

<table>
<thead>
<tr>
<th>Country</th>
<th>Life Expectancy</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lithuania</td>
<td>8.2</td>
<td></td>
</tr>
<tr>
<td>Latvia</td>
<td>8.0</td>
<td></td>
</tr>
<tr>
<td>Poland</td>
<td>8.5</td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td>8.2</td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td>8.1</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>8.0</td>
<td></td>
</tr>
<tr>
<td>Slovenia</td>
<td>8.9</td>
<td></td>
</tr>
<tr>
<td>Slovakia</td>
<td>8.9</td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td>8.5</td>
<td></td>
</tr>
<tr>
<td>Luxembourg</td>
<td>8.8</td>
<td></td>
</tr>
<tr>
<td>Portugal</td>
<td>8.0</td>
<td></td>
</tr>
<tr>
<td>Bulgaria</td>
<td>7.7</td>
<td></td>
</tr>
<tr>
<td>Finland</td>
<td>7.7</td>
<td></td>
</tr>
<tr>
<td>Romania</td>
<td>7.6</td>
<td></td>
</tr>
<tr>
<td>Croatia</td>
<td>7.6</td>
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</tr>
<tr>
<td>Belgium</td>
<td>7.5</td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>7.4</td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>8.2</td>
<td></td>
</tr>
<tr>
<td>Austria</td>
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<tr>
<td>Greece</td>
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<tr>
<td>Cyprus</td>
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</tr>
<tr>
<td>Denmark</td>
<td>8.0</td>
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</tr>
<tr>
<td>Netherlands</td>
<td>8.0</td>
<td></td>
</tr>
<tr>
<td>Ireland</td>
<td>7.5</td>
<td></td>
</tr>
<tr>
<td>Malta</td>
<td>7.4</td>
<td></td>
</tr>
<tr>
<td>Sweden</td>
<td>7.4</td>
<td></td>
</tr>
<tr>
<td>United Kingdom (I)</td>
<td>7.3</td>
<td></td>
</tr>
<tr>
<td>Liechtenstein</td>
<td>4.5</td>
<td></td>
</tr>
</tbody>
</table>


The Above table, seemly indicated life expectancy rate in various states, Ireland is shown to have a rate of 2.5, Higher than United Kingdom but lesser than Germany. The table is used to back up the statements that people are living longer in Europe.
In modelling the saving and investment benchmark, the Researcher used the Irish Consumer Price index which should provide this research a standard for simulating pension investment under various rate of pay.

The sample population saving will be gotten by using several rate of pays multiply by hours in a week assuming (40 hrs). The researcher will also simulate an investment plan using two assets, Equity and Bonds.

**Figure 2: CONSUMER PRICE INDEX**

![Image of Consumer Price Index](https://www.cso.ie/en/statistics/prices/consumerpriceindex/)

The table above is the consumer price index for Ireland, the figure denote the activities that are trending such as alcohol beverages and tobacco, Housing, Transport, while seemingly clothing and footwear and recreations have declined. The table will be useful has it will assist in the e-questionnaire aim of prioritising costing centres.

This research has used online questionnaires which can be found in [https://goo.gl/forms/X1q4WLGaFNezCw1h2](https://goo.gl/forms/X1q4WLGaFNezCw1h2) to delve further into which of these items in the consumer price index (CPI) are priority and based on results, simulate a saving plan for the sample population,

The Research is geared towards Occupational pension in Ireland only but upon research it was discovered that a majority of the sample size might be eligible in the future to state pension entitlement and IORP Coverage (*Qualifying for State pension (contributory) - FAQ’s*, no date) this will not be taken into consideration when simulating investment models.

This could be done by considering the components driving retirement expenditure in more detail, rather than assuming simple expenditure patterns and indexation. Alternatively, desired expenditure levels could be variable depending on investment performance. This could be simulated and provide an updated assessment measure which make use of actual expenditure such has the Irish Consumer Price Index. A more simplified pension scheme investment model, taking into consideration various rates of pay and hours in a week, uncertainty in desired annuities range due to phasing out of the define benefit scheme, Intergenerational scheme gap, and aging society. A lifestyle approach to pension investment would increase the optimal growth asset reinvested over time due to the need to fund expenditure for a longer period.
1.4 DISSERTATION ORGANIZATION

Chapter 1

The Occupational pension in Ireland will be introduced; The Objectives of the dissertation and questions will be stated and would be linked to the literature review and methodology.

Chapter 2

This Chapter, will review Previous works in Occupational pensions, Adequacy, Indexation, Defined Benefits, Defined contributions, IORP and consumption smoothing.

Chapter 3

This Chapter will specify how this research will meet the dissertation aim and questions, the methodology, cluster of the sample population is made and how feedback of the survey should provide results for the investment simulations and how the primary research will meet these objectives.

Chapter 4

This chapter discusses the approach taken towards analysing the data. It will make use of primary research via the online questionnaires to provide first line investment decision and make simulations with secondary data, It will also present the findings of this research. The research should provide key values and help to bench mark financial target for the sample population under various conditions, these findings should provide new data to Ireland occupational pension system.

Chapter 5

The research will take the key point reached from the primary data and provide the analyse, The Researcher will test the analysis against what was in the literature review and provide finding and summarize important points from both the secondary and primary data collection to draw conclusions and make recommendations regarding Occupational Pension and Scenario investment Decisions for age 30-34.

Chapter 6

This Chapter will detail the soft and technical skills learnt and enhanced, while undertaking this research and how it ought to add value to the researcher and the society, the passage through the MBA (Finance) , The interactions and how it has shaped the research and the researcher.

1.5 SCOPE OF THE RESEARCH AND LIMITATION

The research which is occupational pension and scenario investment decisions for age 30-34, has a total population as at April 2017 of 1,350,000, the target sample size has a population of 360.3, of which males are 172.5 and females are 187.8, (28.2% of total population). (Central Statistics Office., 2017,p.15)

The Project is limited by time, Lot of changes are going on in Ireland as regard to pension structure, awareness campaign are massive, some financial institution are partnering with pension providers to
offer this service to a wider reach of people(Pensions - Retirement Planning - AIB Pension Plans | AIB, 2018)

The project is also limited by the quality of data to be gotten, Most of the residence in Dublin Ireland are not Irish, this means presently they don’t qualify for state pension in Ireland, and most likely don’t have or bothered presently about Occupational pension in Ireland.

While the Investment models are meant to be projected, for the next 30 years, technological factors that might drastically change definition of terms like pension, housing, healthcare might occur.
2.0 CHAPTER TWO

2.1 INTRODUCTION

“Occupational Pensions in Ireland are established under trust law, are tripartite in nature and exist as an employment relationship, this means that assets of the schemes are separate from the company, Occupational pension schemes are separate legal entity and maintained and controlled by distinct scheme trustees”. (“The defined benefit pension landscape in Ireland in 2014 and the implications for private sector employers”, no date).

In Ireland, Revenue and pension authority have schemes which allow for favourable tax policy this provide for reliefs on both employer and employee, which favours increments of funds, moving taxation till retirement. (https://www.revenue.ie/en/jobs-and-pensions/pensions/tax-relief-for-pension-contributions.aspx).

The Finance Act of 1921, is one of the primary legislature for the Occupational pension structure in Ireland, It requires that Occupational pensions are set under irrevocable trust to guarantee proceeds, inhabit the diversification of assets for other purpose than pensions, and that the schemes provide benefits and be bona fide in scope.

Report from Tilda seems to indicate that Ireland pension system of tax relief is given at the marginal rate of income tax of the employee and that the state welfare pensions are flat, not linked to inflation and rising economic costs('Determinants of Pension Coverage and Retirement Income Replacement Rates -- Evidence from TILDA', 2014) Previous work done by Butt et al, on linking and simulating a pensioner longevity with investment plan will be used as reference in simulating this research investment and saving model of occupational pensioner using prioritized consumer priced indexed items and basic long term expenditure to provide estimated annuities(Disbursement).(Butt and Deng, 2012)

Current research(2017) seems to indicate that schemes are moving from Defined Benefits to Defined Contribution and hybrids, the transfer of risk from employers to employees in retirement seemly has also increased. This research should provide a relatively simplified approach to modelling appropriate investment strategies at retirement.(Government of Ireland, 2018, p.16)

2.2 PENSION PROCESS SYNOPSIS

Research seems to indicate that, the Irish pension system works this way, Contribution made into the retirement fund, maybe weekly, monthly or annually, the retirement fund is kept out of reach till due date and invested continually, with the aim of grow over time so that when individual retire they have sufficient to live their life comfortably.

A pension plan is just another opportunity of saving for the longer life after retirement, but it’s different for two reasons tax relief and compounded reinvestments. Research seems to indicate that money put into pensions get you tax relief, meaning you save money by getting a pension, which makes it very efficient, another benefit would be that returns on investments are re invested over time.
Irish current State contribution isn’t adequate and might be meant to be supplementary at the rate of €232 per week, The estimated time the sample population is due to retire would be 2049,
Research indicates that there is a phasing out of defined benefit schemes, , the current pensionable age in Ireland is 66 and might be increased, state pensions are unfunded and therefore not guaranteed, Some nations had to slash their pension contributions Greece (2017), Latvia(2009) state pensions are paid from current contributions tax payers make to the treasury, it is not known if the state pension plan would still be in place when the sample population retires so this wasn’t included in the research investment scenarios.(Government of Ireland, 2018).

Defined benefit scheme: puts all the risk(Shortfall) at the employers basket, Defined Benefit works by putting all contributions into a pension scheme and when the worker attains his retirement age he is paid a pre defined amount, while defined contribution scheme the risk is borne by the employee, contributions are paid into a scheme and at retirement whatever the scheme is worth is the Individuals take home package, the element of the pensions are contributions+ tax relief+ growth – Charges = take home package.(Pensions Authority, no date)

2.3 KEY FACTORS IN OCCUPATIONAL PENSIONS
The size and number of contributions, the growth rate achieved, how long the fund is allowed to grow, charges and cost over the plan term.

Basic pension choices: Take cash out: 25% can be taken free of income tax from your retirement fund, subject to the amount being less than the amount €200,000, Buy an annuity: exchange the fund for an annuity, or you leave the money invested and draw down from incomes that come from those investments.

2.4 DIFFERENCES BETWEEN ANNUITY AND INCOME DRAWDOWN
Research seem to indicate that Annuities are usually sourced from Pension fund, it pays a taxable income for life, most scheme should have inflation linking, minimum guarantee period (in case of death, benefits go to next of kin), amount disburse regularly depends on health and lifestyle factor, whole Income drawn down, allows you to stay invested and draw taxable disbursement income, the fund is capped base on if you don’t have alternative investment plans.(Cappelletti, Guazzarotti and Tommasino, 2013a)

For Income drawdown, the key concepts are total amount your contribution accumulated too, how much income you could draw off, how many years, what real growth rate.

Research has indicated that amount taken as lump sum shouldn’t be so large, because of the eroding impact of inflation, Amounts reinvested and used as income drawdown have shown to provide higher longer term returns than lump sum amounts drawn out and paid out at instalment, which might be use as supplement funds, there is also the risk in the income drawdown option of income fluctuating, or even negative yields to investment.
What then is an annuity: it might mean a series of pension payments made at stated intervals. Usually, an annuity ends with the death of the employee but annuities can be bought that continue to be paid during the lives of more than one individual. (Goodman and Gahan, 2016, p.1), (Cappelletti, Guazzarotti and Tommasino, 2013, p.1).

An annuity is a contract, with a life insurance company, that should pay an assured regular amount for life in return for a lump sum. The lump sum generally comes from the policyholder’s pension scheme fund.

A variation of Annuities is the Enhanced, or impaired, annuities which are a meant to capture policy holder with health or medical history, it is meant to pay a higher rate of return than standard annuities. (Enhanced Annuity | Irish Life Corporate Business, no date), (Impaired Life and Enhanced Annuities, no date)

Occupational workers are also able to transfer their pensions between insurance companies through the open market options, enabled by S786 of the Taxes Consolidation Act, each schemes provide must have transfer options between other Annuities providers to get the best value for Retirement.

Guarantee Periods – Various schemes might offer guaranteed minimum payment periods, up to 10 years. This might means the annuities would be paid out for the required number of years even if the pension holder dies, to the contracted next of kin. (Pension sales inspection reveals significant variations in annuity rates |Central Bank of Ireland, no date)

2.5 ADEQUACY

“Previous Studies have evaluated that the future rate of state pension contribution payment should be set in-between the margin of 34/35 of regular earnings, that is if it’s to achieve its mission of providing a minimum level of pension adequacy. The rate of payment for the state pension of £238.30 per week, rising to £243.30 March, 2018 already meets this goal.”

(Government of Ireland, 2018, p.6)

The Statement above will be used as a benchmark when getting Occupational pensioner desired level of adequacy. According to a report given by the Pension authority, 2016, and Nivakosk, 2017 Adequacy is measured by its ability to substitute income before retirement., (ADEQUACY AND SUSTAINABILITY OF PENSIONS, 2016, p.1) (Nivakosk, 2017, pg.1) Harmer, 2009 added another dimension which is a current societal standard, his view on Pension adequacy is the capability to sustain ‘an acceptable benchmark of living, accounting for present societal standards’ (Harmer, Australia and Department of Families, 2009 pg.32).

The European Commission (2010) defines an adequate pension system as one that prevents poverty amongst pensioners; that allows pensioners to sustain their economic living benchmark after retirement. (Green paper towards adequate sustainable and safe European pension.pdf, 2010, p.2)
According to the International Labour Organization (ILO) which seemly says that the objective of a pensions system is to assure a tolerable economic living standard above the poverty threshold for the duration of a pensioner life. (Grech, 2013).

The Organization for Economic Cooperation and Development (OECD) views adequate pension system as an income which replaces a employee’s earnings at a level which enables him or her to maintain a standard of living in retirement comparable to that enjoyed in working life—even though retirement annuities often do not just replace earnings (OECD, 2014a).

Adequate pension system as defined by research in the Baltic region is the one that provides annuity (disbursement) to the pensioner that ought to be sufficient to prevent old-age poverty on a country-specific absolute level while also giving a dependable means to smooth down the lifetime expenditure for the pensioner. Concepts used to measure Occupational pension adequate levels of pension expenditure as a fraction of monthly income during active economic work life (replacement rates). (Rajevska, 2014, p.42).

Adequacy of Occupational pension are seemly based on the perception of the Retiree environment, this seemly concurs with the opinion of the Department of Social Security (DSS) as at then, that main decisive factor of retiree annuity (disbursement) is considered adequate if it allow retiree to live reasonably in his or her society, with regards to the society norms and values (Pension Adequacy and the Pension Review: Full Text Finder Results, no date).

Based on the above researched work, some key words seem to stand out in occupational pension adequacy

- Adequacy is reflected in the capability of a given level of annuity (disbursement) to maintain a yardstick of living that is acceptable
- Adequacy itself can only be evaluated with reference to retiree community standards, as reflected in the economic and financials that exist in that society at that period.
- Protection against poverty
- Consumption smoothing. (‘The Replacement Rate: An Imperfect Indicator of Pension Adequacy in Cross-C...’, no date)

Broad adequacy as defined by Edward Whitehouse, 2009 is the replacement rate of life time income that the pension scheme replaces for a pensioner. (Sustainability of pension systems in Europe – the demographic challenge, 2012, p.11) (OECD, 2014) (Edward Whitehouse et al., 2009, p.5) While Narrow adequacy seems to be based on the perception of earning-poverty. It looks at total earnings in retirement, earnings as a function of previous pension Schemes and rules and of the fluctuation of the markets/Economy over the past contribution periods. (Department of Employment Affairs and Social Protection, 2017, p.18) (OECD, 2014)

The Golden lines based on research is that Occupational pension adequacy should provide annuities (disbursement) for expenditure of pensioner on a sufficient level above poverty. (Grech, 2013, p.7)

How should Occupational pension adequacy be attained, Should it be by a pensioner’s income or expenditure level, or both? The difference between annuity and expenditure, both in the period of Pensionable activities and during the retirement period, consists in money saving.
While money saving is beneficial and reasonable while employees are employed, accumulating assets could be used to smooth expenditure during retirement, saving might not be a critical factor during retirement period. (The Replacement Rate: An Imperfect Indicator of Pension Adequacy in Cross-Country, 2015, p.4).

Research seems to indicate that consumption smoothing, which seems to be a milestone of Occupational pension adequacy, does not automatically eliminate the risk of poverty after retirements, consider an employee on defined contribution scheme, where the pension scheme funding is a function of savings, if the employee generated low income during his or her period of economic activity, Most likely the pensioner annuity might still be low during the retirement period despite proper smoothing of his or her consumption (‘Literature review’, 2015, p.37) (The Replacement Rate: An Imperfect Indicator of Pension Adequacy in Cross-Country, 2015, p.6)

Adequacy of Occupational pension can be measured by the replacement rate, while the state pension could be supportive (ADEQUACY AND SUSTAINABILITY OF PENSIONS, 2016, p.1)

2.6 REGULATORY BODIES OF PENSION IN IRELAND

There are two bodies that are held responsible for supervising and controlling of the pension system in Ireland: the Pensions Board and the Financial Services and Pensions Ombudsman (FSPO).

The Pensions Board is a statutory body; set up under the Pensions Act 1990. It regulates occupational pension schemes, RACs and Personal Retirement Savings Accounts. it monitors and supervises the Pensions Act operation, It investigate suspected breaches, provide data and counsel to individual and companies. While the FSPO is an independent public entity, that was created to enhance financial pension transparency, by using its power to solve dispute. (Agudo and Garcia, 2010, p.3) (Oireachtas, 2001). (Our Mission | Financial Services and Pensions Ombudsman’s Bureau of Ireland, no date) while in the Euro zone The European Insurance and Occupational Pensions Authority (EIOPA) supervises (EIOPA About EIOPA, no date)

2.7 INDEXATION AND VALORISATION

Research seems to indicate that some core variables of occupational pension schemes adequacy and sustainability are, Indexation: Method of Adjustment of pensions to compensate for price increments over time and Valorisation: past income being adjusted in the calculation of the pension benefit.

For Ireland, indexation is a relevant parameter given that the State pension is not related to the individual’s earnings and seemly depends on the duration of contributions, defined-benefit Public Service Pension Scheme is seemly no longer based on final salaries but on career-average earnings, valorisation then is relevant for occupational pensions in the public service. (OECD, 2014b)

2.8 INDEXATION

According to the OECD 2014, indexation is a Method of Adjusting of pensions schemes to compensate for price increments over time. Indexation is the periodic adjustment of pension
benefits to reflect changes in costs and standards of living. Occupational Pension schemes aim to maintain the standard-of-living of individuals after retirement by providing indexation.

The aim of indexation in practice depends on the financial position of the Occupational pension fund. If financial resources are abundant, indexation is fully granted. However, if the financial resources are poor, the pension fund might choose not to fully index pension benefits.

According to research done by Broeders, who seems to indicate that drivers of indexation are:

- Funding ratio
- Inflation
- Real wage growth,
- Type of occupational pension scheme and the
- Interest rate exposure. (Broeders et al., 2014, p.29)

Seemly the degree of indexation has an important impact on the annuity (disbursement) of retirees and the pension accrual of active members in pension schemes. indexation is made conditional on the funds or assets sustainability of the pension schemes.

**SOME KEY CONCEPTS USED IN INDEXATIONS**

Policy ladder relates the level of granted indexation to the funds or assets position of the pension fund. Seemly occupational pension funds are required to annually provide (wage or price) indexation. This is often determined by the policy ladder (Broeders et al., 2014) level of indexation is linked to the funding ratio. The degree of indexation may be raised in line with the funding ratio until full indexation is achieved. (Ponds, 2003).

Partially suspending indexation gives pension funds some flexibility to deal with financial set-backs (Bikker and Vlaar, 2007) (Thurley, 2018, p.7) Some Schemes agreements operate a catch-up indexation, that is, offsetting past indexation cuts by additional indexation when financial conditions are more favourable.

Occupational schemes could be structured based on an age-dependent indexation ratio which could be partly related to the investment portfolio of the pension fund, Constant Contributions of the Pension Members with the weight attached to the investment risk gradually declining with the age of the employees. (Broeders et al., 2014)

Research seems to indicate that larger pension funds schemes might profit from economies of scale and more foreign portfolio in terms of large annuities to expenditure matching, this seemly should provide a higher level of indexation. Research carried out by Broeder from 1996 to 2006, finds that smaller pension funds tend to exhibit limited diversification and a stronger home bias. economies of scale might explain the reason for schemes variation in both investment costs and administration costs (Broeders et al., 2014, p.12)

According to Broadbent et al, 2006 Equity and property investments seemly provide an effective hedge against inflation, the ratio of equity and property portfolio are positively correlated to indexation (Broadbent and Palumbo, no date) Research also seems to indicate that risks for future occupational pension adequacy might be due to career patterns that fail to equal rising pensionable
ages and the lengthening contribution periods, weak valorisation and indexing, this should most likely lead to a reduction in the relative value of pension annuity (disbursement). (Europäische Kommission et al., 2015) Grech, 2013).

Occupational pension schemes in Ireland are generally tax approved by Revenue. (‘Chapter 23 - Approved Retirement Funds’, 2018, p.2) Research seems to indicate that annuities payable to pensioners often takes into account the level of State pension paid to the member.

2.9 DEFINED BENEFIT SCHEMES

According to the Pension Authority (Ireland)

- Defined Benefit pension schemes are a type of occupational pension scheme. (Great Britain and Department for Work and Pensions, 2017, p.17)
- Annuity (disbursement) seemly is calculated based on years of service and wages.
- Under Occupational defined benefit schemes, employees seemly do not have their own pension fund as such. Instead research seems to indicate that the scheme would comprises one large fund from which pension annuities and pension Lump Sums are paid to employees when they retire. Most likely an option to swap a segment of that pension income for a pension Lump Sum at retirement scheme exist.
- Investment performance is more of a concern for the scheme trustees and for the employer providing the scheme than the employee. This is because your annuities (Disbursements) are generally not affected even if the fund performs badly. (Defined Benefit Pension Schemes, no date)
- Retirement income will be based on your years of pensionable service and a definition of pensionable salary
- Annuities adequacy is linked to Economic work life and the rate of salary, the higher your salary, the greater your pension annuities.
- Revenue rules state that defined benefit pension scheme members have the right to a Retirement Lump Sum based on their final salary and years of service. However unless the employee has made sufficient Additional Voluntary Contributions (AVCs) to their pension, taking a Retirement Lump Sum would reduce the retirement annuities paid out.
- Some schemes aim to provide members with a defined retirement income and a defined lump sum at However, the majority of schemes provide only an income benefit but allow members the option of converting part of that income into a lump sum
<table>
<thead>
<tr>
<th>Year</th>
<th>Total Number of Members</th>
<th>Total Number of Active Members</th>
<th>Total Number of Deferred Members</th>
<th>Total Number of Retired Persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>267</td>
<td>267</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2011</td>
<td>260</td>
<td>436</td>
<td>400</td>
<td>100</td>
</tr>
<tr>
<td>2012</td>
<td>923</td>
<td>423</td>
<td>400</td>
<td>100</td>
</tr>
<tr>
<td>2013</td>
<td>936</td>
<td>420</td>
<td>415</td>
<td>101</td>
</tr>
<tr>
<td>2014</td>
<td>911</td>
<td>413</td>
<td>400</td>
<td>98</td>
</tr>
<tr>
<td>2015</td>
<td>939</td>
<td>408</td>
<td>431</td>
<td>101</td>
</tr>
<tr>
<td>2016</td>
<td>928</td>
<td>411</td>
<td>415</td>
<td>102</td>
</tr>
</tbody>
</table>

Source: EiOPA_BoS-17-376_EEA_pension statistics 2004-2016_update_07-12-2017

The Table above aims to show Defined Benefit Data in Ireland, it shows that total members as at 2016 was 928,000, and pensioners from that scheme same year was 102,000

2.10 ADDITIONAL VOLUNTARY CONTRIBUTIONS (AVCS) IN IRELAND

- Occupational pension employees can decrease their tax bill by using AVCs for reduction on income tax.
- Occupational pension employees might be inclined to use their AVC to provide a lump sum at retirement, rather than reduced the value of their main scheme.
- Occupational pension employees might use any excess AVCs after taken a lump sum to augment their annuities (disbursement) on retirement.
- The amount of AVCs you can make is limited by your age and income. (Booth and Cooper, 2003)
The Pensions Act, 1990 requires that each Defined benefit scheme participant check each year that the funds has accumulate enough assets to meet its liabilities accrued to date. This is called meeting the Funding Standard, and if a scheme fails to meet this standard, steps ought to be taken to provide matching.

2.11 DEFINED CONTRIBUTION SCHEMES

Defined contribution schemes, Employee and employer pay a percentage of the employee’s earnings into a pension scheme. These contributions are then invested by a separate trustee and the value of the employees’ pension fund might at their retirement be used to purchase them a pension and/or provide them with a lump sum. (Cichon, 1999, p.2).

Research seems to indicate that Some Defined Contribution schemes might allow employees to choose the level of contribution they wish to pay, with a related employer contribution. (Francisco, no date) but in most Occupational Defined Contribution rates are fixed in advance – employees and employers know what they have committed to pay.

The higher the investment return achieved by the scheme before retirement, the better the pension benefits will be. On the other hand, if investments returns are poor, especially in the years of retirement then potential employees get poor returns. Contributions are usually allocated uniformly across all members as a percentage of pensionable earnings – there is no discrimination between those who stay until retirement and those who leave early. In a DC scheme, the member builds up a fund by retirement age, which is used to buy a retirement pension, i.e. an annuity.

Defined Contribution schemes seemly suit a more mobile worker, as the full value of accrued benefits can be more easily transferred between employers. Defined contribution pensions Value of pension is not set by the government Instead, it depends on the performance of the investments into which contributions are put Outcomes are uncertain because capital markets can be volatile.

Defined-contribution schemes, reduce the intergenerational transfer of pension liabilities, this could increase or standardised a minimum provision of the state government support for pensioner poverty index. Examples of this are provided by OECD in countries such as Italy, Hungary and Poland. What this means is that each generation pension funds will be provided by their economic activities, this create problems in Europe because seemly people are living longer and birth rate is lesser than previous generations. (Study on pension schemes, 2014)
Table 2  NUMBER OF EMPLOYEES BY SEX IN OCCUPATIONAL PENSION IN IRELAND (2015)

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>All types of occupational pensions</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Defined benefit</td>
<td>36.4</td>
<td>41.9</td>
</tr>
<tr>
<td>Defined contribution</td>
<td>61.6</td>
<td>58.1</td>
</tr>
<tr>
<td>Do not know/Not stated</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Source: (Persons with an occupational pension by Age Group, Sex, Type of Occupational Pension and Quarter - StatBank - data and statistics, no date)

The table above shows that by the fourth quarter of 2015 out of a totality of Pension, defined Contribution had more of a significant number.

The Pension road map, 2018 has indicated that Ireland is gradually phasing away Occupational Defined Benefit schemes. Employers are increasingly participating more in Defined Contribution schemes, According to OECD calculations using data from the Quarterly National Household Survey (QNHS) for 2015 Q4

2.12 HYBRID AND INTERGRATED SCHEMES IN IRELAND

According to the Pension authority, Hybrids schemes are a combination of defined benefit scheme and a defined contribution scheme there exist a number of different types of Hybrid schemes. The outcome for a pensioners contribution hybrid schemes will depend on the percentages of yields that falls under the defined benefit and defined contribution rules and the rate for the defined contribution element. (A Guide to Hybrid Pension Schemes, 2007, p.8)

Types of Hybrids schemes

- Career average revalued earnings (CARE) schemes are defined benefit in nature, but with a variation, the return obtainable is based not on the earnings close to retirement, but rather on the average earnings throughout the employee’s entire career. (Sutcliffe, 2007, p.10)
- Self-annuitizing Defined contribution schemes: These schemes seemly function as defined contribution schemes until a employee retires. Then total fund is converted to a pension income, not at the market rate for pension costs (annuity rates), but in agreement with the scheme Policy. (Milevsky, Moore and Young, 2006, p.4) ((Wesbroom, 2007,p.4)
- Final salary lump sum schemes: the scheme provides the employee a lump sum of money at retirement, Members of these schemes ought to be able to predict the lump sum of money they will be entitled to at retirement (as a percentage of final earnings) but most likely not know the pension benefit that this will purchase, which ought to be a function on the current rate of buying a pension plan at that moment. (Silver, 2006, p.1)
• Underpin schemes are perfectly flexible arrangement in that there is both element basis for benefits. At retirement, the member receives a benefit based on whichever calculation provides the better result (A Guide to Hybrid Pension Schemes, 2007, p.10).
• Fixed benefit/benefit unit schemes these schemes are defined benefit in model but without any link to income an employee usually accumulates a fixed amount of annual pension every year. The amount of pension granted in any year depends on the amount of the contribution made, how long the member has until retirement and the actuarial factors being used by the scheme. At retirement, the member receives a pension equal to the total amount of the pension built up each year. (A Guide to Hybrid Pension Schemes, 2007, p.11)
• Integration with the State pension A significant number of defined benefit schemes and some defined contribution schemes make an allowance for the State pension when providing a pension from the scheme. This is known as integration in the private sector and coordination in the public sector (Pensions Authority, no date)

The Funding standard requires that all defined benefit schemes check each year to ascertain they have enough funds to meet liabilities accrued to date(Book (eISB), 1990)

CONDITIONS

When an employee is part of a hybrid scheme, in relation to the same employment, the employee can make use of ARF and taxable lump sum options from the Defined contribution mix, but the accumulated benefits should not exceed revenue limit. When an employee takes the limit lump sum from defined benefit, the defined contribution retirement lump mix is also maximised.

When an employee decides to wait for retirement lump sum before taking the lump sum, under defined benefit or defined contribution or both, the balance left over must be used to purchase annuities(Advisers Guide to Company Pension Retirement Options.pdf, 2018)
(pension_models_mandatory_and_soft_mandatory.pdf, no date)

An actuarial funding certificate shows clearly and simply if an occupational pension scheme can meet all its liabilities to employees to a specific date of the agreement scheme, the AFC is submitted regularly to the pension authority (green paper chapter 10., 2007)Occupational Pension scheme seemly need to hold a risk reserve to allow for unfavourable future investments.

2.13 HOW IS PRESERVED BENEFIT CALCULATED

Employee Preserved benefit in a defined contribution scheme is the value of the investment held in individual retirement accounts(Pensions Authority, no date) (Preservation of Benefits and Minimum Value of Contributory Retirement Benefits Guidance Notes, 2017, p.15) While preserved benefit in defined benefit scheme is calculated as a percentage of the sum which employees are entitled if they stayed till retirement, benefit earned is seemly based on a uniform accrual system(Pensions Authority, no date)
Preserved benefit is normally revalued at closure of every year, revaluation of preserved benefit is terminated at the end of the year before benefits become payable. (*Preservation of Benefits and Minimum Value of Contributory Retirement Benefits Guidance Notes*, 2017, p. 25)

The standard fund thresholds is a lifetime ceiling limit on the amount an employees retirement annuities from all sources except state pensions is, currently its €2m, 25% of which (i.e. €500,000) is the maximum amount an individual can take in the form of a cash lump sum. (Irish Medical Organisation, 2015, p. 1) The personal funds threshold: are for employees who have exceeded the SFT and want to retain the higher amount as their personal lifetime limit.

### 2.14 Irish Pension Tax

“Tax gains, which can be shared between employers and employees, and expected increases in average tenure are both clearly associated with the occurrence of an occupational pension.” (Hernæs et al., 2011).

The first €200,000 of any lump sum payable is currently tax free as at September, 2018., Lump sums between €200,001 and €500,000 are taxed at 20% as at September, 2018. with any balance over this amount taxed at the marginal rate and subject to the Universal Social Charge.

### 2.15 Limits for Tax Relief on Pension Contributions in Ireland

Tax relief for Occupational pension contributions is focused on:

- An age-related earnings percentage threshold
- A total earnings threshold (*Tax relief for pension contributions*, no date)
- All employees contributions are now subject to PRSI and the USC.
- The maximum salary used to calculate a tax efficient individual contribution has been reduced from €254,000 to €115,000.
- The maximum lifetime tax free lump sum limit has been reduced from €1.35 million (2010) to €200,000.
- The maximum lifetime pension fund has been reduced from €5.4 million (2010) to €2 million.
- The annual Approved Retirement Fund (ARF) drawdown has increased from 0% (2006) to 6%
- Investment gains can grow tax free within the pension
- A Tax Free Lump Sum (TFLS) of 25% of the retirement fund is available at retirement €200,000 maximum.

#### Table 3: Tax Relief Based on Demographics

<table>
<thead>
<tr>
<th>Age</th>
<th>Contribution limit for tax relief</th>
<th>Maximum Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 30</td>
<td>15%</td>
<td>17250</td>
</tr>
<tr>
<td>30-39</td>
<td>20%</td>
<td>23000</td>
</tr>
</tbody>
</table>
The table above shows the tax relief that each age group is allowed within the law to utilise, tax relief on occupational pensions are incentives by the Irish government to promote a greater participation of pensions. The maximum contribution for the sample population is €23000

Table 4  
PENSION FUND ASSET ALLOCATION FOR SELECTED INVESTED CATEGORIES

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Tax Relief</th>
<th>Maximum Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>40-49</td>
<td>25%</td>
<td>28750</td>
</tr>
<tr>
<td>50-54</td>
<td>30%</td>
<td>34500</td>
</tr>
<tr>
<td>55-59</td>
<td>35%</td>
<td>40250</td>
</tr>
</tbody>
</table>

Source: https://www.pensionsauthority.ie/en/LifeCycle/Tax/Tax_relief_on_contributions/

Source: https://www2.deloitte.com/ie/en/pages/deloitte-private/articles/pension-contributions-make-sense.html

The Table above aim at showing the asset classes most used by states in investment, Ireland seems to be primary in Equity while Bills and bonds are the next asset class, Luxembourg and Italy seemly favour investment in Bills and bonds over equity. The table could also be used to define how each country is in terms of risk taking, the data seem to indicate that Irish market is dominated by risk taker, While Canada has a well balanced portfolio.

Table 5  
ASSETS ALLOCATION OF IRISH OCCUPATION PENSION SCHEME

Source: OECD Global Pension Statistics.
The table above aim at showing over a period of time the asset allocation in the Irish market.

Equity dominates the market over the period of time, indicative of the risk taker nature of Irish market, while bonds and property take lesser significant ratios.

2.16 INVESTMENTS

Employees concern for annuities to fund expenditure during retirement is a factor of assets available for retirement and employee level of saving and how the savings are invested. Employee choice of assets in occupational pension scheme investment plan is usually restricted to equity, bonds, property and cash in Ireland for small scheme. (SCOTT WEISBENNER, 2002, p.2)

Table 6 Asset Allocation and percentage holding in Ireland 2016

<table>
<thead>
<tr>
<th>Asset class</th>
<th>Percentage holding 2016</th>
<th>Percentage holding 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equities</td>
<td>32.6%</td>
<td>35.8%</td>
</tr>
<tr>
<td>EU sovereign bonds</td>
<td>33.5%</td>
<td>34.4%</td>
</tr>
<tr>
<td>Other bonds</td>
<td>8.9%</td>
<td>7.4%</td>
</tr>
<tr>
<td>Property</td>
<td>4.9%</td>
<td>4.4%</td>
</tr>
<tr>
<td>Cash</td>
<td>3.0%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Net current assets</td>
<td>0.1%</td>
<td>0.2%</td>
</tr>
<tr>
<td>With profit insurance policies</td>
<td>0.04%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Other</td>
<td>17.1%</td>
<td>15.4%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>


The table above indicates that as 2016, Equities was the highest trading asset class been traded in Ireland, next was EU sovereign Bonds at 33.5% then others at 17.1%

The table also shows a decline in the investment of equities and EU Sovereign bonds and an increase in Others, Cash and other bonds.

Research has defined the Objectives of Investment in Occupational pension schemes have likely two possibilities

Capital preservation models are for defined contribution or hybrid scheme employees who want to minimise their risk of loss, maintain asset value by hedging against inflation (risk-averse employees) and Capital appreciation push strategy for employees who have expenditure targets and are willing to take on much more risk to meet them, this models favours growth by capital gains (Hribernik and Jakopanec, 2012, p.3)

Investments must be limited to 5% of scheme assets and to 10% of the private company’s share capital, Occupational pension schemes mostly invest in equities research indicates due to a positive correlation with inflation, as they a fraction of ownership income grown by real assets. (Broeders et al., 2014, p.13) But several authors seem to have contra view bekaert, 2009 finds a negative correlation between stock returns and inflation, All scheme investments must be on an arm’s length basis, the Vendor, employer (Directors) and associated companies.
According to a report by future analytics, investment in property and more specifically investment in build-to-rent and purpose-build student accommodation would provide a substantial return in Dublin, Ireland, due to the growing demand of accommodation and the changing present European landscape (Brexit) (‘Increasing appetite in the Irish Market for Investment in Alternative Sectors’, 2017)

Source: http://www.jll.ie/ireland/en-ie/Research/JLL%20Irish%20Property%20Index%20Q3%202018.pdf?8d8f8e1f-f0e1-45fd-bdcf-7f6c7f25f914

Research from Jill seems to indicate that housing investment in Ireland peak at 2014 are having been on the decline since then, while the market demand seems to be very large in Dublin, this might be the general picture in Ireland (Ltd, 2018)

**TABLE 7: HOUSING POTENTIAL**

<table>
<thead>
<tr>
<th>Educational Centre</th>
<th>Enrolments</th>
<th>Supply</th>
<th>Percentage Accommodated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dublin</td>
<td>80,953</td>
<td>10,529</td>
<td>13%</td>
</tr>
<tr>
<td>Cork</td>
<td>25,772</td>
<td>5,438</td>
<td>21%</td>
</tr>
<tr>
<td>Galway</td>
<td>21,083</td>
<td>3,704</td>
<td>18%</td>
</tr>
<tr>
<td>Limerick</td>
<td>21,752</td>
<td>7,060</td>
<td>32%</td>
</tr>
</tbody>
</table>

Source: Future Analytics Consulting
The above table seemingly indicates that the market for accommodation is been under service and most property development scheme would earn aim more than adequate return if they were to invest in Dublin educational centre.

Figure 3 Pension Strategy

Source: http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,shib,cookie_url&db=bth&AN=52651575&site=eds-live

Researched carried out by Broeder seems to indicate that equities provide a long-term hedge against inflation, seemingly Occupational pension funds with a higher allocation of equity portfolio should be able to provide more indexation than funds with a lower equity allocation. The report also seem to indicate a positive return on rent on property to inflation, employees could use long-term bonds or derivatives to lengthen the duration of their assets so that they are better matched with the duration of their liabilities. (Broeders et al., 2014, p.13) (Hamilton, 2010)

Research seems to indicate that pension funds investments are exposed to degree of risk such as sponsor insolvency, insufficient funding of the scheme, Lack of technical knowledge and misappropriation by managers, default of third parties etc (Stewart, 2009), risks can involve both asset-liability mismatching (where assets are not effectively ordered to meet expenditure when they become due) and return related risks (where deficient fund is generated to cover expenditure).

Research by Broeder indicate that Occupational pension funds needs interest rate exposure to provide indexation, Interest rate exposure is the margin between the value change of liabilities and capital investments when market interest rates decrease. This indexation hedging mainly applies to nominal liabilities(Broeders et al., 2014, p.14) Defined Contribution Scheme individuals can meet their future expenditure by constructing a portfolio of assets usually bonds, that should provide returns to matching projected expenditures. Most Assets Manager and Trustees will prefer not to use this option because it most likely removes the chance to generate excess returns. So, Most Small
scale schemes set return targets on assets, create portfolio with less correlated assets with the goal of exceeded projected liabilities

Asset-Liability-Management (ALM) is a simulation technique where projected annuities and expenditures can be maintained by the continual shifting of portfolio of assets with different returns, risk to meet expenditures, an individual asset may differ from its target expenditure but on a portfolio level they should be matched gains (Hribernik and Jakopanec, 2012, p.5) The Society of Actuaries in Ireland reports seemly conurs with view of others in terms of asset liability matching and using lifestyling to provide annuities. (review_of_retirement_income_options_from_dc_pensions_final_report_7_november_2015_2.pdf, 2015)

TILDA, 2014 report on determinants of pension indicate that Ireland Replacement rates reduces continuously, that the rate falls faster for retired private sector employees, the report seem to indicate that Occupational pension supplement state pensions increasing annuities and padding retirement incomes of middle and high-earners to some degree. (‘Determinants of Pension Coverage and Retirement Income Replacement Rates -- Evidence from TILDA’, no date) (‘Supplementary pensions and the income of Ireland retirees.pdf’, 2012)

2.17 SUSTAINABILITY

“The low level of private pension coverage is not therefore just an individual risk but is also a macro-economic risk. It is critical that today’s workers save now to accumulate wealth to fund non-employment income and expenditure into the future”

Source: (Government of Ireland, 2018)

Research seems to indicate that pension sustainability of countries with Europe is under reforms due to an aging population which is a factor of declining fertility rates, better life expectancies, increase in the projected numbers of recipients of social benefits, and a estimated decreased active working population in Croatian(2015), Slovenian(2016) (Vukorepa, 2015) (Čater and Pučko, 2010)
The table above seemsly indicates European countries level of pension adequacy and sustainability for the period 2017/2016, the table seems to indicate that pension sustainability in Ireland at 43.9 is low, but Ireland seems to fare better than Italy and France. Adequacy of fund is seemly high at 77.9.

The table seems to suggest that the pension landscape in Ireland is generous has the pensions are adequate but not sustainable, the table also seems to indicate that countries such as Australia, Denmark and Finland where pensions are adequate and sustainable might be seen as a prime example of a working pensionable state option.

Investment in Occupational Pension schemes are over the long term period and the oscillation of market are very key in annuities because monthly rates of return must be multiplied by the size of the portfolio. Initially Total size of contributions are usually low, But increment due to investment decisions and further scheduled contributions towards retirement are much more sensitive to actual returns, As at 2015, In Belgium and Hungary, Pillar two(Occupational pension) are mostly paid as lump sum, The comparison of country is needed because of IORP 11 and portability. (Report on key issues for setting up national pension tracking services in six EU-countries, 2015)

Ranging from 9% of GDP in Ireland (2018) to 15% in Italy(2012), countries are in rather different situations although they face similar demographic challenges. (WHITE PAPER An Agenda for Adequate, Safe and Sustainable Pensions, 2012, p.4)

“The allocation for the State Pension has increased by €900m between 2015 and 2018. the latest actuarial review of the Social Insurance Fund (SIF) estimates that increasing demand, particularly as
a result of demographic pressures on State Pension payments, could result in a deficit of some €3bn by 2030." (DEPARTMENT OF PUBLIC EXPENDITURE & REFORM, 2018).

The Phase above is useful as it indicates the growing level of state deficit, the sample population is due for retirement in 2049, The Growing importance of individual occupational Pension scheme is made glaring.

Pension Sustainability according to the Prince Edward Island report will be a factor of increasing contribution to meet target benefits, working longer hours, and aggressive investments (PEI announces changes to public sector pensions, 2014)

Table 9  POVERTY THRESHOLDS COUNTRY COMPARISON

<table>
<thead>
<tr>
<th>Country</th>
<th>Total</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>21</td>
<td>24.6</td>
<td>20</td>
</tr>
<tr>
<td>Denmark</td>
<td>17</td>
<td>19.8</td>
<td>16</td>
</tr>
<tr>
<td>Estonia</td>
<td>17</td>
<td>14</td>
<td>22</td>
</tr>
<tr>
<td>Spain</td>
<td>30</td>
<td>30.2</td>
<td>27</td>
</tr>
<tr>
<td>France</td>
<td>16</td>
<td>29.5</td>
<td>14</td>
</tr>
<tr>
<td>Ireland</td>
<td>40</td>
<td>35.9</td>
<td>45</td>
</tr>
<tr>
<td>Italy</td>
<td>16</td>
<td>34.5</td>
<td>18</td>
</tr>
<tr>
<td>Cyprus</td>
<td>52</td>
<td>45.3</td>
<td>18</td>
</tr>
<tr>
<td>Latvia</td>
<td>14</td>
<td>29.9</td>
<td>7</td>
</tr>
<tr>
<td>Lithuania</td>
<td>12</td>
<td>13.3</td>
<td>15</td>
</tr>
<tr>
<td>Malta</td>
<td>20</td>
<td>43.6</td>
<td>19</td>
</tr>
<tr>
<td>Austria</td>
<td>17</td>
<td>36.1</td>
<td>19</td>
</tr>
<tr>
<td>Portugal</td>
<td>29</td>
<td>32.8</td>
<td>13</td>
</tr>
<tr>
<td>Slovenia</td>
<td>19</td>
<td>23.6</td>
<td>11</td>
</tr>
<tr>
<td>Finland</td>
<td>17</td>
<td>21.7</td>
<td>11</td>
</tr>
<tr>
<td>Sweden</td>
<td>14</td>
<td>27.8</td>
<td>9</td>
</tr>
</tbody>
</table>

Source: (Department of Employment Affairs and Social Protection, 2017)

Research and archives seem to indicate that Most Nations in Europe are planning and preparing for the sustainability of pensions and guaranteeing the income of those who have retired and are living longer lives. (WHITE PAPER An Agenda for Adequate, Safe and Sustainable Pensions, 2012), Research carried out by Allianz seemly indicate that only four counties have achieved this as at 2015, Finland, Norway, new Zealand and the Netherlands (‘2016 pension sustainability index.pdf’, 2016, p.5) This Countries are critical because of IORP directives which make it easier for Occupational pension Portability and hence retirement at a more favourable economic climate.

Sustainability of future asset is a function of long term allocations to meet various and most expenses for a long duration of time, the future comfort of the planned worker will be measured by how well he wore old age, the stamp of a planned life.
<table>
<thead>
<tr>
<th>Country</th>
<th>Target cost for 30 years</th>
<th>Nursing home per month</th>
<th>Medicals per Visit</th>
<th>Basic Cost</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ireland</td>
<td>€588,572</td>
<td>€4800</td>
<td>€104.77</td>
<td></td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>€1,949</td>
<td>€100 (Paid mainly by the government through socials)</td>
<td>Correspondent no date</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td>€3100</td>
<td>€100 (Paid mainly by the government through socials)</td>
<td>(Focus, no date)</td>
<td>Healthcare in Spain: A guide to the Spanish healthcare system, 2017</td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>£3,504</td>
<td>£1,435 Per Year</td>
<td>(Care home fees across the UK explained - Which?, 2018)</td>
<td>(What does Private Health Insurance cost?, no date)</td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td></td>
<td>£100 per month</td>
<td></td>
<td></td>
<td>(Wedia, no date)</td>
</tr>
</tbody>
</table>

The Table above aim at showing Countries costing Centre in respect of Occupational pension, While a worker is citizen of the euro zone then portability of pension is an option, Severally mandatory principle which each of the countries stipulate are: long term residence, Payment of a social contributions, etc.

Expenditure on Occupational pensions is a means to an end, the avoidance of poverty and the provision of stream of income for retirement. The pickle of sustainability of Occupational pension seems to be a factor of higher contributions or taxes or by lowering generally level of adequacy needed. (Vukorepa, 2015)

An ageing society which is also dwindling in workers due to reduced birth rates, has to make choices, Viable pension policies have to be time conscious and regular, policies made shouldn’t pass the weight of deficit shortfalls in pensions to future generations. Current Occupational workers might have to accept that to maintain sustainability then they would have to: contribute more while working or Get better paying jobs or work longer and retire later or retire at a cheaper country. (David Blake and Les Mayhew, 2006)
3.1 RESEARCH INTRODUCTION

According to Saunders research is what an individual or a group initialises to get new information in a processed manner, the key is that the process of getting the information and conducting the research should be systematic. (Saunders et al, 2012 pg 5) Methodology is the general process used for the collection and analysis of researched data Jankowicz, 2005 pg 224

The intention of this research is to simplify Occupational Pension and Scenario investment Decisions for age 30-34 (Dublin, Ireland.) This section of the study details the methodology behind the research including the research design, data collection and analysis methods, as well as the how primary and secondary data will be sourced and used.

The aims and the process of achieving the research in an academic format will be discussed, The research will be positivism philosophy, the approach this research will take is deductive has this will give much more result in quantitative analysis.

3.2 RESEARCH QUESTION

According to Saunders et al (2012 pg 10) the research questions helps to define the research process, it is a core factor, the research questions is

1. What is the minimum income adequacy for the sample population?
2. How long would this minimum income be sustainable under various investment scenarios?

3.3 RESEARCH ONION

The research onion is a pictorial representation of the overall research task. There are six layer, strategies, philosophy and time horizons covered. The six layer of the research onions are used to show a working path used to attain academic result of the research.

Figure 4: Research onion

![Research Onion](source: Research Onion (Saunders et al (2012) pg 128)
3.4 RESEARCH PHILOSOPHY

According to Silverman (2010) (*Interpreting qualitative data (4th Ed.) by D. Silverman.* Discovery Service for DBS, no date), effective research philosophy aids the researcher in visualising the goals of the research properly. The philosophies are essentially four different dimensions; which are Pragmatism, Realism, Positivism and Interpretivism.

According to Sanders et al, 2012, research philosophy represent the perception of the world to the researcher. While sourcing and viewing this research, different paradigms were considered, matters of ontology and epistemology. These concepts describe perceptions and attitude. Research seems to indicate that they seemly affect the method in which academic research is taken, from concept to closure. Saunders et al suggested that the assumptions arrived by research philosophy should strengthen the foundation for the researcher’s methods and strategy choice. Saunders et al. The choice could either be subjective or objective.

**Figure 5: Research philosophy**

![Research Philosophy Diagram](source: Silverman, 2010, p.101)

**PRAGMATISM**

According to Saunders et al (2012 pg 130) pragmatism is a research approach in which process are only relevant when they support objectives and goals. Pragmatism is a multidimensional concept of way of viewing an event, or data.

**ONTOGY**

According to Saunders et al (2012 pg 130) Ontology is concerned with the nature of reality. Research seems to indicate that ontology is basically a search for what is the truth, the core definition of ontology as “the science or study of being” there are two types of Ontology which are Objectivism and Subjectivism.

**EPISTEMOLOGY**

According to (Bryman and Bell 2015, pg 26) epistemological is concerned with the question as what comprises acceptable knowledge in a research. Research seems to describes epistemology as the theory or science of the method or grounds of knowledge, the methods are expanded to assumptions about the ways in which it is possible to gain knowledge of reality, how what exists may be identified, what can be identified, and what benchmark must be satisfied in order to be described as knowledge. An epistemological approach will be taken as the research aims to simplify Occupational pension Simulated investment decision for the sample population.

There are three different forms of Epistemology which are Positivism, Realism and Interpretivism.

**POSITIVISM**
According to (Jankowicz, 2005 pg 110) positivism searches for the truth and how logic can be made to others, it operates by probing for regularities and similarities when collecting and analysing data, it is a structured method of gathering large data (Saunders et al, 2012 pg 135). Positivism shows that the techniques adopted for the research purpose are scientifically approved.

REALISM

According to (Saunders et al, 2012 pg 136) research data is gathered more by what we perceive through our senses, it don’t put much values on structured processes, Realism: Realism shares the principles of both positivism and interpretivism. This means that realism combines the two philosophies. Researchers with a realist approach will combine both the viewpoints of a reality that exists apart from human behaviour, and that to understand people the researcher must accept human subjectivity. Researchers must identify the external factors and forces that influence humans, as well as how they interpret and perceive the setting they find themselves in. There are two types of realism which are direct realism and critical realism.

INTERPRETIVISM

According to (Blumberg et al, 2011 pg 17) interpretivism seem to feel that research are social and based on human interactions, that the researcher is part of what is observed and research is driven by interests. : The interpretivist goal of their research is to understand and interpret human behaviours, as opposed to predicting causes and effects.

JUSTIFICATION FOR THE CHOSEN PHILOSOPHY:

The research is on Occupational Pension and Scenario investment Decisions for age 30-34 (Dublin, Ireland.)
The researcher has adopted positivism philosophy to link it with the previous models and strategies that have been cited in the literature review part. As the research emphasizes upon analyzing the commercialization of micro financing institutions positivism philosophy is perceived to be the most relevant one. Here, it would better to notify the readers that the researcher has refrained from using any other philosophies, as they fail to meet the scientifically approved recognition.

For the purpose of this research which is Occupational Pension and Scenario investment Decisions for age 30-34 (Dublin, Ireland.) , The Researcher chose the Positivism approach, this research involves a high level of numerical data set, Therefore this is highly suitable to the study as Positivism is an epistemology that advocates by searching for regularities and similarities when collecting and analysing data, it is a structured method of gathering large data (Saunders et al, 2012 pg 135).

In relation to the research ontology (nature of reality) the research will involve a objective approach to the study because the research will involve analysis of questionnaires

3.5 RESEARCH APPROACH

The next element or layer of the onion is the type of approach the study will utilize. According to Saunders et al (2009) there are two main types of research approach , The deductive approach: it’s a scientific approach which is linked to the positivist philosophy. It’s an approach of testing theories via scientific hypothesis as a “top down analysis”.
The inductive approach: it’s the opposite of deductive approach i.e a “bottom up” analysis. It works from observations (data) in order to build a theory.
The inductive approach helps the researcher to develop new models and theories on his own on the basis of the research outcomes. Whereas the deductive approach mainly tells about analyzing the present models and strategies that adopted by the researcher.

**JUSTIFICATION FOR THE CHOSEN APPROACH:**

The Research is on Occupational Pension and Scenario investment Decisions for age 30-34 (Dublin, Ireland.), this research will make use of the deductive approach, this is partly due to that the approach aids the quantitative analysis, this research has not developed any model or theories and relies on previous models and theories

**RESEARCH STRATEGY**

According to Blumberg et al (2011 Pg 501) research strategy is a flow map of meeting research aims and objectives, answering the research questions. It’s the process of how the research questions will be answered. Saunders et al, 2012 pg 143)

The research strategy is the third layer of the “research onion”, it is based on the approach the author is using to answer a problematic, according to Saunders et al (2009) there are several research strategies that can be employed: case study, survey, experiment, exploratory, descriptive and explanatory studies, action research, grounded theory, ethnography and archival research.

For the purpose of this study, the survey strategy for quantitative data analysis will be used Jankowicz, (2005 pg 198) says the research strategy can be classified into three types: exploratory, descriptive and causal. Bryman & Bell (2015 pg 37) describes the research strategy as a framework for the collection and analysis of data and that the choice of the research strategy reflects decisions about the priority being given to a range of dimensions of the research process. Saunders et al (2012 170) state that the nature of the research project will also be either exploratory, descriptive, explanatory or combination of them.

Elements of the research strategy for the simplified investment analysis on Occupational pension in Ireland will involve e-questionnaires given out to

- MBA(Finance) what app group.
- Torrela Trading Company individual and group.
- Occupational Workers in Dublin( Friends networks).

**JUSTIFICATION FOR THE CHOSEN DESIGN:**

This Research aims at simulates various investment decisions as regards to sustainability of contributions that should provide annuities after retirement in Ireland, The Justification for carry out this research is that, The researcher is of that set population age and has enquired for this information and few people were able to provide answer, The research will provide specific insight and add data to precious research carried out by OECD 2014 and should provide some answer to issues in the Pension Road map 2018.

The sample population of 30-34 of employee in Ireland should benefit from this research by Quantifying Adequacy of funds needed to be saved till specific retirement of 68. Provide a simplified benchmark of analysing the sustainability of funds in several investment scenarios. The research will use the descriptive research design.

**3.6 RESEARCH CHOICE**
Research by Saunders et al., 2009, p. 156) indicate that in data collection the key factor are reliability and validity. Reliability refer to the degree in which data collection process will provide constant result. Data Viability according to the Saunders refers to correctness of data uncovered, it denotes that data uncovered must be tested against the means of getting the data.

According to Saunders et al (2012 pg 161), Research choice could either be quantitative or qualitative. Quantitative research is mainly Numerical such as survey while Qualitative Research is main non numerical data collection approach such as interview.

**QUANTITATIVE RESEARCH**

According to Blumberg et al (2011 pg 144) quantitative research rely on numeric data, The tools used are experimental and survey research conducted through questionnaires or structured interviews.

Saunders et al 2012 pg 162. Concurs with this view and links quantitative research to positivism. In addition, Bryman and Bell (2015 pg 727) indicate that quantitative research usually emphasizes quantification in the collection and analysis of data.

**QUALITATIVE RESEARCH**

According to Saunders et al (2012 PG 163). Qualitative research usually emphasizes words rather than the quantification in the collection and analysis of data, the tool used to gather data include Interviews, observations, videotaping, its is associated with the interpretative philosophy.

### 3.7 TIME HORIZON

According to Saunders et al (2012 pg 190) there are two types of time horizons which are cross-sectional the snapshot view and longitudinal the diary snapshot views.

Bryman and Bell, 2015 pg 62). Cross-Sectional research is mainly conducted only once and reveals a picture of data at one point in time Blumberg et al (2011 pg 490) , while Longitudinal study is continually repeated over an extended period of time, tracking changes in variables over times Blumberg et al (2011 pg 495). This study will fall under cross sectional as the project undertaken is under time constraints. A cross-sectional study engages the collection of data on more than one case at one specific time in order to collect quantitative or quantifiable data when more than one variable is considered (Bryman and Bell, 2015 pg 62). Therefore the investigation into the Occupational Pension and Scenario investment Decisions for age 30-34 (Dublin, Ireland.) is a snapshot of what has happened over the past few years and what plans have been put in place for the period 2018.

### 3.8 Data Collection Method

**Primary Data**

The author will also undertake primary data collection as an essential part of the proposal. The researcher will attempt to used e-Questionnaires to generate data for the sample population, Google form collates quantitative data. After the researcher’s interpretation of this quantitative data on consumer price index on Occupational pension the researcher then simulates investment strategies relating to set parameters.

Primary data is data collected by the researcher through means of e- questionnaires. The Questionnaires are in electronic format enabling me to reach out more sample population.
Secondary Data Collection
The researcher will make use of existing sources of data that are publicly available, also known as secondary sources of data. Secondary data are data researched on by other academic or prime institutions. It could be peer reviewed journal articles, international organisational with no bias, research papers. The research has made use of several prime source of information previous research journals, books, magazines and internet such as Pension Authority.ie, OECD, EIOPA, TILDA, The pension road Map Report, e-ism for the literature and simplification of themes, while it will make use of the of the following for the investment simulation

**TABLE 11: SECONDARY SOURCE OF PRIME DATA**

<table>
<thead>
<tr>
<th>Request</th>
<th>Data</th>
<th>Source</th>
<th>Date</th>
<th>Needed for the Scenario Investment plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>OECD</td>
<td></td>
<td><a href="http://dx.doi.org/10.1787/888932996581">http://dx.doi.org/10.1787/888932996581</a></td>
<td>2011</td>
</tr>
<tr>
<td>35/150</td>
<td>IAPF, BANK OF JAPAN, OECD GLOBAL PENSION STATISTICS</td>
<td>1 2</td>
<td><a href="http://dx.doi.org/10.1787/888932996619">http://dx.doi.org/10.1787/888932996619</a></td>
<td>2011</td>
</tr>
<tr>
<td>49/150</td>
<td>OECD</td>
<td></td>
<td><a href="http://dx.doi.org/10.1787/9789264169401-en">http://dx.doi.org/10.1787/9789264169401-en</a></td>
<td>2009 - 2010</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><a href="http://dx.doi.org/10.1787/888932996733">http://dx.doi.org/10.1787/888932996733</a></td>
<td>2011</td>
</tr>
</tbody>
</table>
3.9 SAMPLING SECTION

According to Saunders et al, 2012 pg 261) There are two types of sampling techniques: probability or representative sampling and non-probability or judgmental sampling. Probability sampling is used in this Research which is Occupational pension and Scenario investment Decisions for age 30-34 (Dublin, Ireland. It is usually linked to survey research strategies as each case being selected from the population is known and is usually equal for all cases.

The Research which is Occupational Pension and Scenario investment Decisions for age 30-34, has a total population as at April 2017 of 1,350,000, the target sample size has a population of 360.3, of which males are 172.5 and females are 187.8, (28.2% of total population). (Central Statistics Office., 2017,p.15) The Research will be using the simple random Sampling MBA IN Finance: representing: Internet aware and educated, Gourmet food: Represents workers, with pension plans already, Costello: Represent workers, with pension plan, and students.

3.10 ETHICAL ISSUES

According to Saunders et al (2012 pg 226) ethics refers to the appropriateness of your behaviour in relation to the rights of those who become the subject of your work, or are affected by it.

Secondary data was gathered from unbiased sources to get best possible results, Conducting the research using ethical means assures the researcher the liberation to quote the results strongly, without any cause to be alarmed by further investigation (Bryman and Bell, 2011). All the ethical issues pertaining to demography and organizations would be considered in this research. The information about the objective and impact of the research has been explained in writing to each person involved in the research as a direct participant. The questionnaires will contain the note to allow the freedom to user to answer or not if he chooses to, All the sources will be given due citations in the research work in detail. Personal details of the people involved in the research will never be shared out neither in the part or a whole.

3.11 RESEARCH LIMITATIONS

The most likely limitation a short term or snapshot research study like faces is time management. This is due to the short period of time allowed in which the researcher could conduct the research. The project is also limited by the quality of data to be gotten, Most of the residence in Dublin Ireland within and outside are not Irish, this means presently they don’t qualify for state pension, and most likely don’t have or bothered about Occupational pension in Ireland.

While the Investment models are meant to be projected, for the next 30 years, technological factors that might drastically change definition of terms like pension, housing, healthcare might occur. Maybe e-Pension with housing Options Schemes.
Chapter 4- Data Analysis and Findings

4.1 Introduction:

Survey feedback for this research were gotten from MBA (Finance) what’s app group, Torrelles trading company Individual and group platform, Occupational workers (Friends) in Ireland. The e-Questionnaire was done with Google Form, An online survey platform that provide basic level of analysis after response and could be exported into excel, the form captured most of the range of demographics and this allowed the analysis to become broader, 23 questions were asked, details of the analysis are presented below.

This research was analysed by using SPSS 21, After exporting data from excel to SPSS, The Frequency and Crosstabulation tool would be used to provide insights, the data will be relayed in table format to provide easy to see and analyse benchmarks.

The questionnaires can be found in https://goo.gl/forms/AiZXuwqlMPQb5R462

<table>
<thead>
<tr>
<th>Under which demographics are you?</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid 15-20</td>
<td>1</td>
<td>.5</td>
<td>.5</td>
<td>.5</td>
</tr>
<tr>
<td>21-30</td>
<td>30</td>
<td>16.5</td>
<td>16.5</td>
<td>17.0</td>
</tr>
<tr>
<td>31-40</td>
<td>97</td>
<td>53.3</td>
<td>53.3</td>
<td>70.3</td>
</tr>
<tr>
<td>41-50</td>
<td>43</td>
<td>23.6</td>
<td>23.6</td>
<td>94.0</td>
</tr>
<tr>
<td>51-60</td>
<td>10</td>
<td>5.5</td>
<td>5.5</td>
<td>99.5</td>
</tr>
<tr>
<td>61-70</td>
<td>1</td>
<td>.5</td>
<td>.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>182</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary Research Analysis
The table above present a demographic indicator of the composition of the sample population and how the e-questionnaire was submitted. The data seemly indicates that 53.3% of the respondent are within the 31-40 bracket of the sample population, this bracket group can still work for the 30 years period use in the research analysis, the next major bracket group has 23.6% which is 41-50.

The demographic composition of the sample population is needed has its indicative of the awareness, views and engagement of the sample population.

4.2 RESEARCH QUESTION NO. 1
What is the minimum income adequacy for the sample population?

Table 13: Estimated Health plan and Nursing Home Cost

<table>
<thead>
<tr>
<th></th>
<th>COST PER WEEK</th>
<th>COST PER MONTH</th>
<th>COST PER YEAR</th>
<th>10 YEARS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAINTS XXXX NURSING HOME (Dublin)</td>
<td>€1200</td>
<td>€4800</td>
<td>€57600</td>
<td>€576000</td>
</tr>
<tr>
<td>vhi health plan company plan plus one</td>
<td>€104.77</td>
<td>€1257.27</td>
<td>€12572.7</td>
<td></td>
</tr>
</tbody>
</table>

Source: [https://www.vhi.ie/health-insurance/plandescription?coverset=LIFCPP&profileId=individuals](https://www.vhi.ie/health-insurance/plandescription?coverset=LIFCPP&profileId=individuals)


The Table above represent estimated figures for Health and Nursing home cost, the figure will be used to project Occupational pension adequacy under different rates of pay, this data reflect current (September, 2018) costing for Dublin, Ireland.
### Table 14: Pension adequacy of the sample Population

How much per week would you consider adequate pension annuity (Disbursement)?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>€150</td>
<td>3</td>
<td>1.6</td>
<td>1.6</td>
</tr>
<tr>
<td>€200</td>
<td>5</td>
<td>2.7</td>
<td>4.4</td>
</tr>
<tr>
<td>€250</td>
<td>13</td>
<td>7.1</td>
<td>11.5</td>
</tr>
<tr>
<td>€300</td>
<td>26</td>
<td>14.3</td>
<td>25.8</td>
</tr>
<tr>
<td>€350</td>
<td>31</td>
<td>17.0</td>
<td>42.9</td>
</tr>
<tr>
<td>€400</td>
<td>67</td>
<td>36.8</td>
<td>79.7</td>
</tr>
<tr>
<td>€450</td>
<td>17</td>
<td>9.3</td>
<td>89.0</td>
</tr>
<tr>
<td>€500</td>
<td>8</td>
<td>4.4</td>
<td>93.4</td>
</tr>
<tr>
<td>Above €500-€1000</td>
<td>12</td>
<td>6.6</td>
<td>6.6</td>
</tr>
<tr>
<td>Total</td>
<td>182</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Primary Research Analysis

The Table above seemly shows the sample population expected annuities.

The data indicates that 36.8% would want to take €400 per week, the present rate in term of state pension is €232 per week (Citizensinformation.ie, no date a) While 17.0% indicate the desire to take €350 per week.

### Table 15: Minimum income adequacy for the sample population

<table>
<thead>
<tr>
<th>MODAL AGE 31-34</th>
<th>WEEKS</th>
<th>MONTH</th>
<th>YEARS</th>
</tr>
</thead>
<tbody>
<tr>
<td>€400</td>
<td>4</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>€400</td>
<td>€1,600</td>
<td>€19,200</td>
<td>€192,000</td>
</tr>
<tr>
<td>€350</td>
<td>€1,400</td>
<td>€16,800</td>
<td>€168,000</td>
</tr>
</tbody>
</table>
The table above aim to show the Minimum income adequacy for the sample population,

Data from the analysed questionnaire seems to indicate that the modal age 31-40 would like to
make €400, the table above shows how much would be adequate for a week, a Month and 10 Years.

Every Month the sample population has projected it would need €1,600 to survive and for 10 years it
would need €192,000.

**Table 16: Annuities needed by Occupational pensioner after retirement after 10 years**

<table>
<thead>
<tr>
<th></th>
<th>€400</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per week</td>
<td></td>
</tr>
<tr>
<td>Per Month</td>
<td>€1,600</td>
</tr>
<tr>
<td>For a year</td>
<td>€19200</td>
</tr>
<tr>
<td>For 10 years</td>
<td>€192000</td>
</tr>
<tr>
<td>Adjusted 10 year plus</td>
<td></td>
</tr>
<tr>
<td>10% rise in cost of living</td>
<td>€211200</td>
</tr>
</tbody>
</table>

In Ireland the maximum guarantee period that can be chosen is 10 years also the longer the chosen
guarantee period the lesser the level of disbursement received. Unless
The Occupational pensioner purchased a life Annuity, which would guarantee a level of income for
as long as they live.

**Table 17: Health plans**

<table>
<thead>
<tr>
<th></th>
<th>Highest (P.M)</th>
<th>Lowest (P.M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single –No Guarantee</td>
<td>€187.58</td>
<td>€162.03</td>
</tr>
<tr>
<td>Single –5 Year Guarantee</td>
<td>€186.77</td>
<td>€161.30</td>
</tr>
<tr>
<td>Single –10 Year Guarantee</td>
<td>€183.91</td>
<td>€158.83</td>
</tr>
<tr>
<td>Joint – No Guarantee</td>
<td>€162.05</td>
<td>€132.48</td>
</tr>
<tr>
<td>Joint – 5 Year Guarantee</td>
<td>€161.63</td>
<td>€132.47</td>
</tr>
<tr>
<td>Joint – 10 Year Guarantee</td>
<td>€160.38</td>
<td>€132.34</td>
</tr>
<tr>
<td>Single Life Enhanced –No Guarantee</td>
<td>€231.43</td>
<td>€218.03</td>
</tr>
</tbody>
</table>
The table above shows Different schemes with levelled for paid annuities (2016) in Ireland, the differences between the high and low figure is health, more is paid if pensioner can prove they are relatively healthy. The table is important has it will be used as a basic for choosing a Health plan.

Table 18:

Would you like to manage your pension investment yourself? * How much per week would you consider adequate pension annuity (Disbursement)? Crosstabulation

<table>
<thead>
<tr>
<th>How much per week would you consider adequate pension Annuity (Disbursement)?</th>
<th>€150</th>
<th>€200</th>
<th>€250</th>
<th>€300</th>
<th>€350</th>
<th>€400</th>
<th>€450</th>
<th>€500</th>
<th>Above €500-€1000</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would you like to manage your pension investment yourself?</td>
<td>No</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>14</td>
<td>26</td>
<td>55</td>
<td>14</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Would prefer options</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>7</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>7</td>
<td>2</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>3</td>
<td>5</td>
<td>13</td>
<td>26</td>
<td>31</td>
<td>67</td>
<td>17</td>
<td>8</td>
<td>12</td>
<td>182</td>
</tr>
</tbody>
</table>

Source: Primary Research Analysis

This Table above was used to measure the sample population risk appetite and correlate with desired annuity desired at retirement.

The table also seems to indicate that 129/182 of the sample population don’t want to manage their pension investment themselves. The Mode of the Frequency is 55, which is seemingly made up of Individual who do not want to manage their pension themselves and desire €400 per week.

The Table above seems to indicate that a pure Defined contribution plans for this sample population really would be less than optimal because of the strong negative response to managing pensions themselves.
Table 19:

Do you have a pension plan? * How much per week would you consider adequate pension annuity (Disbursement)? Crosstabulation

| How much per week would you consider adequate pension annuity (Disbursement)? |
|---------------------------------|------|------|------|------|------|------|------|
| Total                           | €150 | €200 | €250 | €300 | €350 | €400 | €450 | €500 | €500-€1000 | Total |
| Do you have a pension plan? I don't know | 0    | 0    | 1    | 4    | 0    | 1    | 1    | 1    | 4    | 14    |
| No                              | 3    | 4    | 9    | 12   | 23   | 58   | 14   | 4    | 6    | 133   |
| Yes                             | 0    | 1    | 3    | 10   | 8    | 6    | 2    | 3    | 2    | 35    |
| Total                           | 3    | 5    | 13   | 26   | 31   | 67   | 17   | 8    | 12   | 182   |

Source: Primary Research Analysis

The Table Above was used to measure the degree of pension readiness for the sample population.

The table had 133/182 who don’t have a pension plan, 35/182 have a pension plan and the majority of that desired to be paid €300 per week for annuity.

Based on the table above, the mode which is 58, indicates that a majority of the sample do not have a pension plan and desired to be paid €400 per week for annuity. The next big figure is 23, which is still under people who don’t have a pension plan but want to be paid €350 per week for annuity.

Table 20: Simulated expected incomes by rate per hour

<table>
<thead>
<tr>
<th>Rate per Hour</th>
<th>Per Week</th>
<th>Per Week</th>
<th>Per Week</th>
</tr>
</thead>
<tbody>
<tr>
<td>€20</td>
<td>€191</td>
<td>358.125</td>
<td>€382</td>
</tr>
<tr>
<td>9.55</td>
<td>€200</td>
<td>€375</td>
<td>€400</td>
</tr>
<tr>
<td>10</td>
<td>€206</td>
<td>€386.25</td>
<td>€412</td>
</tr>
<tr>
<td>10.3</td>
<td>€220</td>
<td>€412.5</td>
<td>€440</td>
</tr>
<tr>
<td>11</td>
<td>€226</td>
<td>€423.75</td>
<td>€452</td>
</tr>
</tbody>
</table>
From the table it could be seen that workers doing rate of week from €9.55 to €15 per hour at a cut off at 20 per week will not be able to make the target €400 per week.

If the worker was allowed to do 37.5 hours per week then only workers earning €11 and above would be able to meet target annuity range, if the worker was doing 40 hours per week then the rate to hours rate to meet target is €10

The Table seems to suggest that with longer working hours, Minimum rate of pay workers would still meet up their adequacy target.,

### 4.2.1 RESEARCH QUESTION NO. 2
How long would this minimum income be sustainable under various investment scenarios?

**Table 21: SIMULATED NURSING HOME COST (Savings)**

<table>
<thead>
<tr>
<th>RATE PER HOUR</th>
<th>WEEKLY/MONTHLY SALARY</th>
<th>EMPLOYEE CONTRIBUTION PER MONTH @ 10%</th>
<th>EMPLOYER CONTRIBUTION PER MONTH</th>
<th>TOTAL AMOUNT GOTTEN PER MONTH</th>
<th>TOTAL AMOUNT IN 30 YEARS(SAVINGS WITH INTEREST)</th>
<th>TARGET COST OF NURSING HOME COST FOR 10 YEARS</th>
<th>HOW LONG WILL SAVINGS LAST ON CURRENT NURSING YEARLY COST(57600)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>€240</td>
<td>€450</td>
<td>€480</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.3</td>
<td>€246</td>
<td>€461.25</td>
<td>€492</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>€260</td>
<td>€487.5</td>
<td>€520</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.3</td>
<td>€266</td>
<td>€498.75</td>
<td>€532</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>€280</td>
<td>€525</td>
<td>€560</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.3</td>
<td>€286</td>
<td>€536.25</td>
<td>€572</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>€300</td>
<td>€562.5</td>
<td>€600</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Researcher Analysis
The Table above could be used to show the total amount of money saved after working for 30 years at the selected rates. Current median cost of nursing home is €4800 per month in Dublin Ireland.

The table seems to indicate that for the pay rate of €9.55 to €15 per hour, if an individual saves for 30 years then they would be able to afford a nursing home for a median of 2 years and 5 months in Dublin, Ireland. The range would be three years at the rate of pay of €15 per hour.

**TABLE 22: CONSUMER PRICE INDEX**

What do you think your Annuity (Disbursement) would be spent on?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>Alcohol Beverages &amp; Tobacco</td>
<td>4</td>
<td>2.2</td>
</tr>
<tr>
<td></td>
<td>Health care</td>
<td>85</td>
<td>46.7</td>
</tr>
<tr>
<td></td>
<td>Housing</td>
<td>50</td>
<td>27.5</td>
</tr>
<tr>
<td></td>
<td>Socials and Communication.</td>
<td>3</td>
<td>1.6</td>
</tr>
<tr>
<td></td>
<td>Rate Per Hour</td>
<td>Total Amount in 30 Years (Savings with Interest)</td>
<td>Target Cost of Basic Medicals for 10 Years</td>
</tr>
<tr>
<td>---------------</td>
<td>---------------</td>
<td>--------------------------------------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>Travelling</td>
<td>10.3</td>
<td>€118,656.00</td>
<td>€(12,572.70)</td>
</tr>
<tr>
<td>Water, Electricity, Gas &amp; Other Fuels</td>
<td>11</td>
<td>€126,720.00</td>
<td>COST WILL BE MEET</td>
</tr>
<tr>
<td>Total</td>
<td>11.3</td>
<td>€130,176.00</td>
<td>COST WILL BE MEET</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>€138,240.00</td>
<td>COST WILL BE MEET</td>
</tr>
<tr>
<td></td>
<td>12.3</td>
<td>€141,696.00</td>
<td>COST WILL BE MEET</td>
</tr>
</tbody>
</table>

The items in the table above were taken from the Irish consumer pricing index list. The purpose of the table was for the sample populations to make a priority list among the many items. It seems that Healthcare is the first concern of the sample population at 46.7%, While Housing is at 27.5%. And Travelling is 16.5%. The table seems to suggest that 85/182 respondent are health conscious, Based on this, A simulated healthy plan was designed below.
<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>€149,760.00</td>
<td>COST WILL BE MEET</td>
</tr>
<tr>
<td>13.3</td>
<td>€153,216.00</td>
<td>COST WILL BE MEET</td>
</tr>
<tr>
<td>14</td>
<td>€161,280.00</td>
<td>COST WILL BE MEET</td>
</tr>
<tr>
<td>14.3</td>
<td>€164,736.00</td>
<td>COST WILL BE MEET</td>
</tr>
<tr>
<td>15</td>
<td>€172,800.00</td>
<td>COST WILL BE MEET</td>
</tr>
</tbody>
</table>

Source: Researcher analysis

The Table above seeks to measure if healthcare needs by different rate per hour pensioner will be meet for 10 years in Dublin, Ireland.

The Table seems to suggest that savings for 30 years across the range of rates per hour would be able to carter for basic healthcare.

It could also be projected that with the projections of people living longer and a generation of individuals (30-35) moving into retirement, alot of marketing would be tailor to service this niche, as Health seems to be a core factor then most likely, New Technology and Investment will most likely be expected. Healthcare cost was from [www.vhi.ie](http://www.vhi.ie)
Chart 1: Pensionable assets

The table above seemly shows some assets pension scheme are invested in, while Occupational Pension investment is a subject of Size of scheme funds, years to retirement, Trustee ability to buy and sell equity at premiums,

2018 Report seem to indicate that Equity investment improved to €1,101bn in Q3-2018 from €1,058bn in Q2-2018. Investment in and from the United States based Non-Financial conglomerate equity add value to growth, Valuation of net of €11bn and a valuation margin of €20bn. *(information release on investment funds statistic2018q3.pdf, 2018).*

**Table 24: Financial Confidence of the sample population**

<table>
<thead>
<tr>
<th>Would you like to manage your Occupational pension investment yourself?</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>No</td>
<td>129</td>
<td>70.9</td>
<td>70.9</td>
</tr>
<tr>
<td></td>
<td>Would prefer options</td>
<td>26</td>
<td>14.3</td>
<td>14.3</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>27</td>
<td>14.8</td>
<td>14.8</td>
</tr>
</tbody>
</table>
This Table seemly is used to measure the sample population financial confidence in managing self Assets.
The table seems to indicate that 70.9% respondent would prefer a third party to manage their Occupational pension investment while 14.8% are comfortable within themselves to manage their streams of investment. The table seemly indicates that the sample population is either not financially confidence, or might be risk averse.

**Chart 2: Inflation rate Ireland 2018**

![Chart - CPI Inflation Ireland 2018 (yearly basis)](source)

The average inflation of Ireland in 2018: **0.47 %**


The table above aims to show the current inflation rate in Ireland. The data would be useful for measuring the true rate of annuities after adding inflation rates.

Inflation risk is the possibility that over time, constant increase in cost of services and goods would reduce the value of a constant amount of money. Annuity risk is that the price of Annuities increases faster than Pension scheme investment returns. Research seems to indicate that schemes ought to attain an investment return that outperforms inflation over each period. It has been suggested that equity might have a better chance of beating inflation than cash or bond funds, this is also shown in chart 1 above.

But as in all things financial, “the greater the returns the greater the risk”

**Table 25: Assets Yield to Investment.**

<table>
<thead>
<tr>
<th>Yield</th>
<th>Inflation</th>
<th>Real Returns</th>
</tr>
</thead>
</table>

Source: Primary Research Analysis
<table>
<thead>
<tr>
<th>Cash</th>
<th>US</th>
<th>2.8</th>
<th>2</th>
<th>0.7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Uk</td>
<td>2.4</td>
<td>2.2</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>Eurozone</td>
<td>1.9</td>
<td>1.8</td>
<td>0.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>US</th>
<th>UK</th>
<th>EUROZONE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bonds Return</td>
<td>3.9</td>
<td>3.1</td>
<td>2.7</td>
</tr>
<tr>
<td>Inflation</td>
<td>2</td>
<td>2.2</td>
<td>1.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Real Returns</th>
<th>Equity Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>US 3.2</td>
</tr>
<tr>
<td></td>
<td>UK 5</td>
</tr>
<tr>
<td></td>
<td>Eurozone 4.2</td>
</tr>
<tr>
<td></td>
<td>Emerging Markets 5.9</td>
</tr>
</tbody>
</table>


Table 26: SIMULATED INVESTMENT PLAN

<table>
<thead>
<tr>
<th>RATE PER HOUR</th>
<th>TOTAL AMOUNT GOTTEN PER MONTH</th>
<th>TOTAL AMOUNT GOTTEN PER YEAR</th>
<th>TOTAL AMOUNT GOTTEN ON 4% EQUITY INVESTMENT FOR 10 YEARS</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.3</td>
<td>€ 329.6</td>
<td>€ 3955.2</td>
<td>€ 47,484.15</td>
</tr>
<tr>
<td>11</td>
<td>€ 352</td>
<td>€ 4224</td>
<td>£50,713.80</td>
</tr>
<tr>
<td>11.3</td>
<td>€ 361.6</td>
<td>€ 4339.2</td>
<td>£52,096.90</td>
</tr>
<tr>
<td>12</td>
<td>€ 384</td>
<td>€ 4608</td>
<td>£55,324.14</td>
</tr>
<tr>
<td>12.3</td>
<td>€ 393.6</td>
<td>€ 4723.2</td>
<td>£56,707.25</td>
</tr>
</tbody>
</table>
The table above gives a projected investment plan with only equity. The table used 4% as rate of return for equity as per figure gotten from table 14.

The table above seemly indicates that if an occupational worker put in 10 years of investment with this rate of returns not going lesser that estimated rate, Most of the sample population would be able to cover the health but not their Nursing home Cost.

Table 27: Simulated Investment plan pure equity or bonds for 30 years.

<table>
<thead>
<tr>
<th>RATE PER HOUR</th>
<th>TOTAL AMOUNT GOTTEN PER MONTH</th>
<th>TOTAL AMOUNT GOTTEN PER YEAR</th>
<th>TOTAL AMOUNT GOTTEN ON 4% EQUITY INVESTMENT FOR 30 YEARS</th>
<th>TOTAL AMOUNT GOTTEN ON 2% BONDS INVESTMENT FOR 30 YEARS</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.3</td>
<td>329.6</td>
<td>€3955.2</td>
<td>€221,815.93</td>
<td>€160,446.75</td>
</tr>
<tr>
<td>11</td>
<td>352</td>
<td>€4224</td>
<td>€236,902.78</td>
<td>€171,359.57</td>
</tr>
<tr>
<td>11.3</td>
<td>361.6</td>
<td>€4339.2</td>
<td>€243,352.54</td>
<td>€176,024.90</td>
</tr>
<tr>
<td>12</td>
<td>384</td>
<td>€4608</td>
<td>€258,439.39</td>
<td>€186,937.71</td>
</tr>
<tr>
<td>12.3</td>
<td>393.6</td>
<td>€4723.2</td>
<td>€264,889.16</td>
<td>€191,603.04</td>
</tr>
<tr>
<td>13</td>
<td>416</td>
<td>€4992</td>
<td>€279,976.01</td>
<td>€202,515.85</td>
</tr>
<tr>
<td>13.3</td>
<td>425.6</td>
<td>€5107.2</td>
<td>€286,425.78</td>
<td>€207,181.18</td>
</tr>
<tr>
<td>14</td>
<td>448</td>
<td>€5376</td>
<td>€301,512.63</td>
<td>€222,759.32</td>
</tr>
<tr>
<td>14.3</td>
<td>457.6</td>
<td>€5491.2</td>
<td>€307,962.39</td>
<td>€222,759.32</td>
</tr>
<tr>
<td>15</td>
<td>480</td>
<td>€5760</td>
<td>€323,049.24</td>
<td>€233,672.14</td>
</tr>
</tbody>
</table>

Source: Research Analysis

The table above aim to show the amount to be made if Occupational pension schemes were invested for 30 years in only equity or Bonds. The rates of returns were gotten from table 14, Equity (4%) and Bonds (2%).

While the value of equities could be capital gain, dividends and bonus stocks, bond has the interest value.
### Table 28: Risk appetite of the sample population

Under which demographics are you? * What level of financial risk taker are you? Crosstabulation

<table>
<thead>
<tr>
<th>Under which demographics are you?</th>
<th>Depend on if the fund belongs to me.</th>
<th>Depend on Information</th>
<th>High</th>
<th>I don't know</th>
<th>Low</th>
<th>Medium</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-20</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>21-30</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>7</td>
<td>8</td>
<td>8</td>
<td>30</td>
</tr>
<tr>
<td>31-40</td>
<td>1</td>
<td>6</td>
<td>1</td>
<td>26</td>
<td>44</td>
<td>19</td>
<td>97</td>
</tr>
<tr>
<td>41-50</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>11</td>
<td>17</td>
<td>11</td>
<td>43</td>
</tr>
<tr>
<td>51-60</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>61-70</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td>9</td>
<td>7</td>
<td>49</td>
<td>72</td>
<td>40</td>
<td>182</td>
</tr>
</tbody>
</table>

Source: Primary Research Analysis

This Table above aims to show how the sample population, broken down into demography tolerance for risk.

The mode is from the brackets 31-40 and it oscillates, low risk individuals 44 of the sample, 26 individuals from the sample don’t know, while 19 individuals are medium risk takers.

The significant of this would be in shaping the kind of assets and Pension schemes to be chosen. The table above seems to be geared more towards low risk takers; Research has shown that the asset portfolio used for that sub set are Bonds.

According to research done bond nominal prices in 2018 in the Euro zone are 2.7% while inflation is 1.8%.
Table 29: Choice paralysis of the sample population

Do you think large varieties of schemes should cause Indecision?

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid Agree</td>
<td>87</td>
<td>47.8</td>
<td>47.8</td>
<td>47.8</td>
</tr>
<tr>
<td>Disagree</td>
<td>20</td>
<td>11.0</td>
<td>11.0</td>
<td>58.8</td>
</tr>
<tr>
<td>Neutral</td>
<td>68</td>
<td>37.4</td>
<td>37.4</td>
<td>96.2</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>5</td>
<td>2.7</td>
<td>2.7</td>
<td>98.9</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>2</td>
<td>1.1</td>
<td>1.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>182</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary Research Analysis

This Table above is used to measure how the sample population feel about the varieties of schemes.

47.8% of the sample seems to think that large varieties of schemes would cause indecision, while 37.4% are neutral. But 11.0% disagree are seemly like more options in their pension scheme. The table seems to indicate that the sample population would prefer limited and simplified choice of occupational pension schemes.

Table 30: Investment Confidence of the sample population

Should individuals make their investment plan?

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid Agree</td>
<td>74</td>
<td>40.7</td>
<td>40.7</td>
<td>40.7</td>
</tr>
<tr>
<td>Disagree</td>
<td>34</td>
<td>18.7</td>
<td>18.7</td>
<td>59.3</td>
</tr>
<tr>
<td>I don’t Know</td>
<td>6</td>
<td>3.3</td>
<td>3.3</td>
<td>62.6</td>
</tr>
<tr>
<td>Neutral</td>
<td>50</td>
<td>27.5</td>
<td>27.5</td>
<td>90.1</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>11</td>
<td>6.0</td>
<td>6.0</td>
<td>96.2</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>7</td>
<td>3.8</td>
<td>3.8</td>
<td>100.0</td>
</tr>
</tbody>
</table>
This Table above aim at showing how much financial choices the sample population might desires. The table seems to show that 40.7 feel that individual have and should be given more freedom of choice in making investment decision. While 27.5% are neutral. 18.7% disagree and wanted limited choices.

The Table above seems to indicate that a larger percentage of the sample population want to participate more in decision relating to pension investments.

This could be usefully in reducing administration charges and allowing the schemes flexibility to grow.

**Table 31: Retirement Readiness**

<table>
<thead>
<tr>
<th>Have you made plans for retirement?</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>I don't know</td>
<td>26</td>
<td>14.3</td>
<td>14.3</td>
<td>14.3</td>
</tr>
<tr>
<td>No</td>
<td>133</td>
<td>73.1</td>
<td>73.1</td>
<td>87.4</td>
</tr>
<tr>
<td>Yes</td>
<td>23</td>
<td>12.6</td>
<td>12.6</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>182</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

The sub aim of this data would to measure the pension readiness of the sample population.

Based on the data gotten it would seem that 73% have not planned for pension, representing a sample size of 133 of 182. Only 12.6% have planned for retirement, while this percentage is relatively low at the moment, it is hoped that the present awareness of pension would increase this percentage. The table seem to indicate that alot of opportunities are available for annuities provider to market their services, as the data above highlight the under utilisation of schemes.

**Table 32: Costing Choice**

Under which demographics are you? * What do you think your annuity (Disbursement) would be spent on? Crosstabulation
What do you think your annuity (Disbursement) would be spent on?

<table>
<thead>
<tr>
<th>Alcoholic Beverages &amp; Tobacco</th>
<th>Health care</th>
<th>Housing</th>
<th>Socials and Communication</th>
<th>Traveling</th>
<th>Water, Electricity, Gas &amp; Other Fuels</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under which demographics are you?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15-20</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>21-30</td>
<td>1</td>
<td>8</td>
<td>6</td>
<td>2</td>
<td>12</td>
<td>30</td>
</tr>
<tr>
<td>31-40</td>
<td>1</td>
<td>45</td>
<td>34</td>
<td>0</td>
<td>13</td>
<td>97</td>
</tr>
<tr>
<td>41-50</td>
<td>0</td>
<td>28</td>
<td>8</td>
<td>0</td>
<td>3</td>
<td>43</td>
</tr>
<tr>
<td>51-60</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>61-70</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>4</td>
<td>85</td>
<td>50</td>
<td>3</td>
<td>30</td>
<td>182</td>
</tr>
</tbody>
</table>

Source: Primary Research Analysis

The sub aim of this data is to try and analyze based on demographics what they would prioritize as retirement expenses.

The age group 31-40 had a total of 97 response of which 45/97 indicated that health care was their major cost factor to be planned for, followed by Housing which was 34/97. The age group 41-50 has a respondent of 43, of which 28/43 indicated that they would allocate more funds towards healthcare, while 8/43 individuals indicated housing.
CHAPTER 5- CONCLUSION AND RECOMMENDATION FOR FUTURE RESEARCH

In this chapter, the researcher intends to correlate the research from secondary sources (literature) to methodology and data obtained from the primary source (e-Questionnaires) in order to answer the underlining research questions:

5.1 WHAT IS THE MINIMUM INCOME ADEQUACY FOR THE SAMPLE POPULATION?

The primary research carried seems to indicate that the modal frequency for desired annuities per week is €400, this will give a total payout of €48,000. This figure doesn’t take into consideration Savings of the Occupational Pensioner till retirement, or investments assets needed to accumulate funds.

Based on the analyzed questionnaires healthcare has been indicated has the highest priority for the sample population, vhi provided data on how much is needed for basic medical for a year, and this is multiplied by 10 (years) to give the figure €12,572.7. Which can be covered by the desired income.

The Next priority based on the analysed questionnaire for the sample population is Housing: Research has indicated that it pays to have your personal house, has your personal house could provide assets when you liquidate it, and will reduce the money to be pay for nursing home, However this Researcher went to the next stage of housing which would be Nursing Homes.

According to www2.hse.ie, the minimum cost of Nursing home in Dublin, Ireland is €4800, this is multiplied by 10 (years) to provide the figure €576,000., this cost supersedes the savings by (€528,000).

Let us try this scenario in another format

**Table 33: Estimated Adequacy**

<table>
<thead>
<tr>
<th>10 YEARS COSTING</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HEALTH CARE</td>
<td>€12,572</td>
</tr>
<tr>
<td>NURSING HOME</td>
<td>€576000</td>
</tr>
<tr>
<td>TOTAL COST</td>
<td>€588,572</td>
</tr>
<tr>
<td>WEEK</td>
<td>MONTH</td>
</tr>
<tr>
<td>€1226.191667</td>
<td>€4904.767</td>
</tr>
</tbody>
</table>

Source: Researcher Analysis

The minimum level of funds needed after 30 years of working should be €588,572.
With a life annuity plan, the occupational pensioner should plan to receive €1226 minimum per week to be adequately funded in Dublin Ireland. But this doesn’t tally with the desired of the sample population which was €400. This indicates that the sample population would need to source €826 weekly to meeting nursing home and health Adequacy.

To make this funds for a worker investments must be made that provide yields over inflation cost and income tax., research seems to indicate that equities provide this avenue. But In Dublin Ireland (2018), the trend moves towards property due accommodation binge.

Table 7 seems to indicate the majority of the sample population would not like to manage their pensions themselves, Literature review indicate that the defined benefit scheme is been phased out and Defined Contribution holds sway, meaning that unless individual took charge of making optimal investment, probability might be the assets would be invested in Bonds, Which barely cover inflation cost, But are relatively Safe.

With the scarcity of affordable and sustainable accommodation maybe investment in Property ought to be the best Investment in Dublin Ireland. Another area of potential investment would be the Healthcare Industry, Research indicates that Europeans are living longer, Research indicates that the society is an aging society, future development product might be devises that allow individual achieve physical results with less strain.

Table 8, indicates that a majority of the sample population don’t have a pension plan, and a majority will not take active roles in their retirement assets, this might lead to a higher administration cost of running the scheme or a passive approach to Investment.

While the table seem to indicate that the sample population doesn’t have a pension plan doesn’t mean or indicate that they don’t have funds or asset kept aside for their old age, what it means is that if they exist they don’t get tax relief in Ireland.

5.2 How long would this minimum income be sustainable under various investment scenarios?

The researcher simulated rates of pay at different Hours per week to get several minimum incomes. The projected income was then used to estimate adequacy of funds as compared to Costing of Health and Nursing home.

The research used savings, that is accumulated funds (Bank deposit) to simulate if at retirement cost for Health or Nursing home would be meet, The tables seem to indicate that a saving of 30 years could take care of basic health plan BUT will only be sufficient for an average of 2 years and six months in the used rate per hours for Housing cost.

The simulated projected investment scenario seemly depicts that if an individual works for 30 years and invests funds in equities at 4% for 10 years and bonds then most likely the individual would be able to cover cost of Health but not Nursing home cost.

This research also simulated a projected equity and bonds for 30 years and the figures arrived at, which are significantly higher than savings alone, the projected investment would not be able to cover Nursing home cost in totality.
### TABLE 34: SIMULATED INVESTMENT (B)

<table>
<thead>
<tr>
<th>TOTAL AMOUNT IN 30 YEARS(SAVINGS WITH INTEREST) FOR 10 YEARS</th>
<th>TARGET COST OF NUSING HOME COST FOR 10 YEARS</th>
<th>TOTAL AMOUNT GOTTEN ON 4% EQUITY INVESTMENT FOR 30 YEARS</th>
<th>TOTAL AMOUNT GOTTEN ON 2% BONDS INVESTMENT FOR 30 YEARS</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.3 €118,656.00</td>
<td>€576,000.00</td>
<td>€221,815.93</td>
<td>€160,446.75</td>
</tr>
<tr>
<td>€116,720.00</td>
<td></td>
<td>€236,902.78</td>
<td>€171,359.57</td>
</tr>
<tr>
<td>€130,196.00</td>
<td></td>
<td>€243,352.54</td>
<td>€176,024.90</td>
</tr>
<tr>
<td>12 €138,240.00</td>
<td></td>
<td>€258,439.39</td>
<td>€186,937.71</td>
</tr>
<tr>
<td>€141,696.00</td>
<td></td>
<td>€264,889.16</td>
<td>€191,603.04</td>
</tr>
<tr>
<td>€149,760.00</td>
<td></td>
<td>€279,976.01</td>
<td>€202,515.85</td>
</tr>
<tr>
<td>€153,216.00</td>
<td></td>
<td>€286,425.78</td>
<td>€207,181.18</td>
</tr>
<tr>
<td>14 €161,280.00</td>
<td></td>
<td>€301,512.63</td>
<td>€222,759.32</td>
</tr>
<tr>
<td>€164,736.00</td>
<td></td>
<td>€307,962.39</td>
<td>€222,759.32</td>
</tr>
<tr>
<td>€172,800.00</td>
<td></td>
<td>€323,049.24</td>
<td>€233,672.14</td>
</tr>
</tbody>
</table>

Source: Researcher analysis

The table above aim to show the different amount an occupational pension individual would arrive at with projected savings or pure assets investment.

The research also gives an insight into the level of risk the sample population was willing to take, it seems that they are skewed towards risk adverse (Low risk taker), this is very significant has low risk takers tend to invest mainly in assets backed up by a prime institution (Government, Prime institution). Research seems to indicate that the safest investments are Bonds. Investment in Bonds within the euro zone yielded 2.7, while inflation went at 1.8.
The research also indicates that the sample population wants to participate in decision making of investment.

5.3 RECOMMENDATION FOR FUTURE RESEARCH
The research topic which is Occupational pension and Scenario investment Decisions for age 30-34 (Dublin, Ireland.) tries to make the terminologies and the process of pension seemly simplified, the basic terms, schemes and international process were briefly narrated, Primary research was also carried out to try and ascertain retirement readiness, Financial literacy, Financial confidence and Promoting Occupational pension awareness in Dublin Ireland.

Future research could aim to further show how early investing in pension could help to quickly reach pension target for each individual, Research could also be done on the tax advantages of having a pension plan in Ireland as compare to other Eurozone.

A research could also be done on the portability of occupational pensions into countries which have lesser cost in terms of medicals or Nursing home, which seems to the biggest concern of the sample population. A research could be done on the effect of technology to change the concept of pension.

CHAPTER 6- SELF-REFLECTION AND LEARNING

6.1 INTRODUCTION
According to Rodgers there exist four criteria of reflection to help outline and classify 1: reflection is a defining creating process that enhances continuity of experience and depth of understanding; 2: reflection is a methodical, meticulous, disciplined way of thinking, 3: reflection takes place optimally in a society where there is a high level of relations; 4:, “reflection requires characters that know the significant of the individual and intellectual growth of oneself and society. (Asfeldt, Hvenegaard and Purc-Stephenson, 2018, p.243)

Reflection can be defined as thinking deeply about a process or history with similar correlations that could advance understanding or make logical patterns that could provide views in which the researcher looks at a certain event.

This research should help the researcher reflect on the process or history, In undertaking this dissertation, what was built from it and the though process are being taken forward and will be used to shape the researcher future.

The Research has opened and increased my financial Horizon, because i am aware of the financial target to be reached and how long it might take to get the target funds, going forward financial prudence would be managed better.
6.2 SKILL DEVELOPMENT

This research has enabled the researcher to widen skills to a greater extent, Some of the skills that were improved are mentioned below.

**COGNITIVE SKILLS:**

There was a lot of knowledge acquirement throughout the process of the MBA (Finance). Learning, reading and participating totally in the Course outline and specifically in Occupational Pension has significantly widen the researcher knowledge.

**CRITICAL AND ANALYTICAL SKILLS:**

Reading, archiving and filtering big data allowed the researcher to benchmark the significance of data that only correlated, significant key points could be included, This research skill should help the researcher in executive swot and pestle analysis. The knowledge acquired has given me an industry related skill has the researcher knows the pension landscape, knows about sustainability, knows that early start will be key, Knows what to check for when entering a scheme and hopefully knows which investment structure to utilising to make ends.

**JOURNAL WRITING SKILLS:**

Journal-writing was grown and some conditions that were accrued from this are: The researcher was able to take a step back from everything and find the tempo of learning, The researcher was able to grow his sense of academic ownership.

Primary data mined had to be analysed, and conclusions were drawn, this necessitates an understanding of analytical skills. The skill was honed by researching and practising.

**TEAM BUILDING SKILLS:**

Throughout the academic year and during this research the researcher was made to work as a group, a team, the researcher learnt the fundamental of mass rallying and delegation of task to responsibilities, Most of the task had a time limit and date to actualisation, The researcher learnt to work with diverse individual and culture, the researcher learnt how to see from other people view Communication skills were enhanced as the researcher had to market questionnaires which positively affected the oral skills and in writing the research. studying in Ireland helped the researcher enlarge his confidence while mingling with different individual who have various cultural beliefs assisted in team building skills.
Team building skills were also emphasised as several occasions arose in which the researcher had to lose time to make time by waiting for a group beyond agreed time, the researcher was able to build patience and see other team mates views and respect it.

**PERSONAL MANAGEMENT SKILLS:**
The researcher learned a lot about time management throughout the academic period, due dates for group or individual assignment had to be coordinated to avoid lost of marks, each assignment had to be researched and referenced properly, time had to be allocated on degree of research to be carried out and date of submission.

The research was time limited, Effective management of time was a hurdle, and even though it could have been done better, the researcher will improve on time management.
This skill is still been developed has ongoing work in project.

**FINANCIAL KNOWLEDGE:**
The researcher's financial/ portfolio concept has significantly increased. The researcher has 6 years of governmental financial background, however, learning in Dublin Business School, the researcher was able to see an international point of view. Writing on Occupational pension allowed the research see glaring the ramification of using only one class of asset, as compared to having a portfolio of negatively correlated assets.

The research was able to see that most assets be invested in Ireland seem to be Equities.

**6.3 REFLECTION ON THE PROCESS**
The researcher has always wonder on how retired workers survived, In Nigeria it was mostly through the individual saved assets( House, Property(Rent) and Cash), in Ireland it was hinted that tax reliefs existed, and that a maximum amount existed that was tax exempted, this was academically researched and it was discovered that social security programme existed for pensioners, I Deep dived and this dissertation was borne.

The domain of pensions isn't new to the researcher. Already holding an honours degree in Banking and Finance, along with a six year in governmental financial services and experience in project management, Because of the different method pension was treated in Ireland and because the researcher is very keen on retiring comfortable, passion for this research was maintained. Another reason was that the researcher was well aware of the ageing problems been felt in Europe and the rising cost of payments of pension by nations and felt that an attempt at trying to help bring more data would be a service to humanity.

Initially, as the researcher started reading about pension, it was realised that state pension was an extremely vast topic, and that a specific sector existed with the pension scheme which is Occupational pensions in Dublin Ireland, this topic was felt to be more in tune with the researcher personal needs and would drive towards attainment of the best quality information to society.

This led to the researcher exploring more about Occupational Pension. Focused on depth research down the academic rabbit hole led the researcher to find more associations such as how has Occupation pension scheme grown in Ireland, the number of schemes and seemingly implications.

The research which is limited by time and funds had to have a perimeter around Dublin, Ireland and be more electronic to save time and cost.
The Scheme were the first level concepts that had to be research and data gotten, in term of if variety was a reason for reduced participation, then Deep Occupational pension simplification due to
its importance within Ireland in the face of increased longevity and inter generational gaps in defined benefits payments.

Looking Back, the research could have been better organised if the research had been started on time, the e-questionnaires were not been filled using passive methods and the researcher had to advertise the questionnaire using a Blog and twitter.

There is a lot of information about Occupational Pension and Annuities mostly in broad and not specific of Ireland available as secondary resources, all the data had to be filtered to meet the Research aims of the literature review.

Sourcing Relevant and peer reviewed data on Occupational pension, Investment in pensions and Annuities was difficult, But the researcher passion made this hurdle easier. The research was taken sequentially, meaning each phase was studied, key concepts noted, then the next phase started, after all the concepts were jotted and reflected on then the writing began.

The researcher came across much more relevant information this way. The database used the most was DBS Library, OECD, pension authority (Ireland), Journal of Pension and Finance, and Google scholar, all this sources have provided relevant and significant secondary source of data.

Considering the importance of Occupational pension in Ireland, it was surprising to find out that there was/is limited participation of schemes, it was also alarming to find out that despite people been aware of the hurdle to be faced due to intergenerational pension gaps, taking charge of their retirement was still to most people a concept to be faced later in the future.

6.4 Future Application of Learning

MBA(Finance) at DBS has been challenging and transformative experience for the researcher. The researcher will hopefully use the process learnt, knowledge acquired, and skills mastered throughout this dissertation progression. The researcher will use the findings of the dissertation as well as all knowledge gained through courses at DBS to develop himself and society at large.
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APPENDIX A

1. How Many Tiers is The Pension System in Ireland?
   - One
   - Two
   - Three
   - I don’t know

2. Do you think large varieties of schemes should cause Indecision?
   - Strongly Agree
   - Agree
   - Neutral
   - Disagree
   - Strongly Disagree

3. What is the current pensionable age in Ireland?
   - 63
   - 64
   - 65
   - 66
   - 68
   - I don’t know
4. Do you think occupational pensions are savings?
   - Strongly Agree
   - Agree
   - Neutral
   - Disagree
   - Strongly Disagree
   - I don’t know

5. Do you think occupational pensions are investments?
   - Strongly Agree
   - Agree
   - Neutral
   - Disagree
   - Strongly Disagree
   - I don’t know

6. Should it be a duty of the government to provide pension for workers?
   - Strongly Agree
   - Agree
   - Neutral
   - Disagree
   - Strongly Disagree
   - I don’t know

7. Do you have a pension plan?
   - Yes
   - No
   - I don’t know

8. Should workers have to choose their pension schemes?
   - Strongly Agree
   - Agree
   - Neutral
   - Disagree
   - Strongly Disagree
   - I don’t know

9. Should individuals make their investment plan?
   - Strongly Agree
   - Agree
   - Neutral
   - Disagree
   - Strongly Disagree
10. How much per week would you consider adequate pension annuity (Disbursement)?
   - 150
   - 200
   - 250
   - 300
   - 350
   - 400
   - 450
   - 500
   - Above 500 – 1000

11. Have you made plans for retirement?
   - Yes
   - No
   - I don’t know

12. Do you think each generation should fund its own pension?
   - Strongly Agree
   - Agree
   - Neutral
   - Disagree
   - Strongly Disagree
   - I don’t know

13. Do you think the government should assist if workers don’t have pension after retirement?
   - Strongly Agree
   - Agree
   - Neutral
   - Disagree
   - Strongly Disagree
   - I don’t know

14. Are you working in Ireland?
   - Yes
   - No
   - Something like that
   - Voluntary
   - Care

15. Are there tax incentives to pension schemes in Ireland?
   - Yes
16. At what age do you think pensions planning should start in Ireland?
   - From Birth
   - Once you reach 16
   - Once you start working
   - I don’t know

17. What pension plan are you on?
   - Defined Benefits
   - Defined Contribution
   - Hybrid
   - Customised
   - None
   - I don’t know

18. Would you like to manage your pension investment yourself?
   - Yes
   - No
   - Would prefer options

19. Have you been to the site Pension Authority.ie?
   - Yes
   - No
   - I don’t think so

20. Under which demographics are you?
   - 15-20
   - 21-30
   - 31-40
   - 41-50
   - 51-60
   - 61-70

21. What level of financial risk taker are you?
   - High
   - Medium
   - Low
   - I don’t know
   - Depends on Information
   - Depends on if the funds belong to me
22. What do you think your annuity (Disbursement) would be spent on?

- Housing
- Health care
- Water, Electricity, Gas & Other Fuels
- Alcoholic Beverages & Tobacco

APPENDIX B

How Many Tiers Is The Pension System In Ireland?
184 responses

- Three: 108 (58.7%)
- Two: 58 (31.8%)
- One: 15 (8.2%)
- I don't know: 1

Do you think large varieties of schemes should cause Indecision?
184 responses

- Strongly agree: 13 (7.1%)
- Agree: 108 (58.7%)
- Neutral: 37.5%
- Disagree: 11 (6.0%)
- Strongly Disagree: 4 (2.2%)
What is the current pensionable age in Ireland?
184 responses

- 65
- 77 (41.8%)

Do you think occupational pensions are savings?
184 responses

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree
- I don't know
Do you think occupational pensions are investments?

- 40.3% Strongly agree
- 34.8% Agree
- 17.4% Neutral
- 6% Disagree
- 0% Strongly Disagree
- 0% I don't know

184 responses

Should it be a duty of the government to provide pension for workers?

- 35.8% Strongly agree
- 38% Agree
- 15.8% Neutral
- 6% Disagree
- 0% Strongly Disagree
- 0% I don't know

134 responses
Should it be a duty of employer to provide pension for its workers?

- 37% Strongly agree
- 18.3% Agree
- 38.6% Neutral
- 10.3% Disagree
- 2% Strongly Disagree
- 0.6% I don't know

Do you have a pension plan?

- 72.8% Yes
- 8.2% No
- 19% I don't know
Should workers have to choose their pension schemes?
186 responses

Should individuals make their investment plan?
186 responses
How much per week would you consider adequate pension annuity (Disbursement)?

184 responses

- 150: 6.2%
- 200: 14.1%
- 250: 36.4%
- 300: 6.2%
- 350: 17.9%
- 400: 6.2%
- 450: 6.2%
- 500: 14.1%
- Above 500-1000: 6.2%

Have you made plans for retirement?

184 responses

- Yes: 72.3%
- No: 13%
- I don't know: 14.7%
Do you think each generation should fund its own pension?

- 37.5% Strongly agree
- 27.7% Agree
- 24.5% Neutral
- 3.3% Disagree
- 2.2% Strongly Disagree
- 1.1% I don't know

Do you think the government should assist if workers don't have pension after retirement?

- 22.8% Strongly Agree
- 53.3% Agree
- 29.3% Neutral
- 6.6% Disagree
- 3.3% Strongly Disagree
- 1.1% I don't know
Are you working in Ireland?
184 responses

- Yes: 44.6%
- No: 22.3%
- Something like that: 25%
- Voluntary: 4.8%
- Care: 3.9%

Are there tax incentives to pension schemes in Ireland?
184 responses

- Yes: 66.4%
- No: 26.6%
- I don't know: 17.0%
At what age do you think pensions planning should start in Ireland?

184 responses

- From Birth: 55.4%
- Once you reach 18: 14.1%
- Once you start working: 28.3%
- I don’t know: 5.4%

What pension plan are you on?

184 responses

- Defined Benefits: 4 (2.2%)
- Defined Contribution: 14 (7.6%)
- Hybrid: 19 (10.3%)
- Customised: 29 (15.8%)
- None: 99 (53.8%)
- I don’t know: 22 (12.0%)