


IMPACT OF INDIVIDUALS SAVING AND CONSUMPTION BEHAVIOUR TOWARDS INVESTMENT AS INFLOW OF MONEY IN THE ECONOMY OF PAKISTAN: A CASE OF SALARIED CLASS



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ABSTRACT

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Savings and consumption are the central core valuable factors in the growth of an economy. Saving and investment are specifically crucial for individuals and the government for smooth economic growth and wellbeing of the peoples. This study has used the federal government salaried class individuals with the convenience sampling of 550 participants including both male and female. The theory of permanent income study and lifecycle hypothesis support the consumption and savings patterns of the salaried class with their retirement planning and investment decisions. These decisions are also affected by the living standards and investment scams prevailing in the market. The Structural Equation Modelling-Partial Least Square (SEM-PLS) method is used in this study. The literature results revealed that saving patterns and consumption patterns significantly impact investment decision of individuals. The moderating role of living standards and the mediating role of retirement planning on investment and savings relationships is essential in today's era for the better investment decision and as inflow of money in the economy. This study will help the policy makers and government to define the policies and regulations for the save investment avenues. However, the model has not been tested empirically, but the literature and study hypothesis support the model and study hypothesis. A future empirical study can be carried on using this model.

Contribution/ Originality: This study has been carried out using model of these variables and population of government servants, to uplift their welling and living standards after retirement through government and policy makers to enhance savings as inflow of investment in prevailing investment scams available in Pakistan. Earlier studies discussed traditional investors.

1. INTRODUCTION

An individual's consumption behaviour matters for the micro and macro decision-making relating to the social environment and inflow of money through his savings as an investment. These social-economic frameworks of saving and investment aid in determining the individual's consumption behavior for their current and future perspectives. Saving is measured as the income of an individual minus the total expenditures. These socioeconomic and demographic factors, social status, age, income, class, no of dependents, household head education, etc., play a crucial role in determining the household's budget for retirement. Mainly the expenditures on the household members, policy

benefits of salaried class increase the income, marginal propensities to consume (MPC) and increasing marginal propensities (MPC) to save. In today's era, money is essential for investment and consumption and saving for the future. Therefore, the liquidity of the individuals and their preferences for avenues increase. Saving and investment behaviour prefer to be precautions about the investment and like bank deposit irrespective of sharing and mutual funds. These are more risky and unaware of the process. The education of the individual investor plays a vital role in a person's investment decision, especially in the salaried class.

The individual investor chooses avenues that fulfill its needs and demands consumption behaviour. The main objective is retirement planning, tax saving, children's marriage, future obligation, children's insurance, improved living standards, acquisition of assets, supporting parents, health insurance, income regularity, and many more. Male invest in shares, mutual funds, and provident funds, while females consider gold and metals safer and more liquid (Nagy & Obenberger, 1994).

Behaviour depends on risk-free and profitable investment as the salaried household class is the primary source of finance in developing countries like Pakistan, Malaysia, Indonesia, India, Bangladesh, etc. The socio-economic variables, like the social status of the household head, play a significant role in the analysis of household budget data (Merz, 1983). The economic theories state that individual households consider additional payments as income at different times and sources, even after retirement. As per time preferences, savings, capital, and wealth accumulation are the critical outcomes of discounting payments, and predictions to save are only for earning interest. Inconsistent saving rates are due to overconsumption of harmful goods such as smoking and drinking. Financial illiteracy, supported by Lusardi and Mitchell (2007) financial mistakes over the lifecycle, suggests that overconsumption leads to low savings and investments.

People intend to save in the long run compared to the short run, but actual savings are meager compared to those planned (Katona, 1975). Savings are for uncertain events, but unfortunately, households have little savings for emergencies (Lusardi, 1999).

It is essential to think retirement planning is early, but unfortunately, one-third do not plan anything about retirement (Wood, 1998). The gap between saving and investment is evident in the long and short-run (Katona, 1975). The ability to delay gratification and implement matters for the saving and spending of an individual households, both to economic and psychological literature (Ainslie, 1975; Strotz, 1955; Wa'rneryd, 1999; Wood, 1998).

Preferences and abilities differ for economic and other social decisions, and people vary in habits, pre-commitment, avoiding temptation, and managing their long-term plans. Bernheim, Garrett, and Maki (2001) found that children follow their parents' bank account savings and are encouraged by their parents to save. Educational programs also played a vital role in enhancing savings and positive effects.

Investment is extra or saved funds for value growth or income to increase wealth, and it is the accumulating assets for return. The planning of individuals and consumption patterns relate to savings as an investment in old age for upcoming expenditures. These investment and saving conversions towards investment are affected by age, occupation, gender, and income of the savers.

This research aims to know and understand the factors affecting the savings, consumption, and investment behaviour of the individual household. There are different investment choices for life savings and investment against the investment scam factors important for an appropriate investment. The studies discuss a wide range of problems relating to investments and savings. They have concluded that; investment and saving depend on time, long term or short term, tracking the strategy for the returns, and dealing with the individual financial goals and risk profile.

Households gather capital from formal and informal jobs, own businesses, or are self-employed and avoid risky assets (Kawaguchi, 2003). To generate more money, investment is an option (Jones, Lesseig, & Smythe, 2005). The Information structure and the factors influence individuals' investment decisions. Greater personal responsibility

toward financial decision-making is backed globally as households need to take an active approach to personal finances (Meşca, 2012).

Effective macroeconomic policies, control of public expenditures and revenues, fiscal variables, and enhancing private investment resulted in stable economic growth and employment in the long run. The neoclassical model by Keynesians states that both short-run and long-run private investment positively impacts the inflow of money through fiscal policies. Taxation is weak and mixed, but taxes contribute to economic growth. In Pakistan, studies have determined the effect of education, health, age, and family class on saving and investment. Furthermore, there is gender investment behaviour females are less participative, and males are dominating personalities in Pakistan (Herrmann, 2007).

Consumption changes with a change in taste, preferences, and individual choices. Wages, dividends, profit, annuity, etc., are produced by different factors of production. These macroeconomic factors are spent or saved; are dependent upon the usage of the money. Behavioural finance suggests that individuals deviate from rational behaviour; they only show cognitive and affective behaviour, which is based on human psychology to finance. Researchers need to know how individual and environmental factors could affect investor decision-making (Sivaramakrishnan, Srivastava, & Rastogi, 2017; Xiao & Porto, 2017). Economic well-being after an individual's retirement is pensions, private or public transfers, and wealth accumulated throughout service. There are uncertain and unavoidable events that harm and affect the individual's savings and economic status after retirement. Therefore an individual must determine the goals, motives, and lifecycle savings and investment for retirement wellbeing. Another aspect of the factors is the legal & illegal prospects of savings-investment scams & frauds and retirement policy. This study is designed to elaborate the savings and consumption behaviors with investment decisions of the salaried class of Pakistan. The moderating role of living standards between saving, consumption, and investment decisions, and mediating role of retirement planning between saving and investment decisions. In Pakistan, Federal Government Employees are from scales BPS-01 to BPS-22, including staff and officers. Basic Pay Scale (BPS) starts from BPS-01, the minimum scale for workers, peon, and drivers till scale BPS- 11, the scale BPS-12 to 16 are officers but not gazetted officers and scale from BPS 1/47 to BPS-22 are seniors officers and heads of the organizations.

This study has included all services, and professions of government employees in the different categories like doctors, engineers, accounts, finance, management, etc. these salaried classes are doing government jobs, will retire at the age of 60, and get Gratuity, Provident fund, and pension as a source of income after retirement and accumulated savings during their life of service. These savings may be the wealth (money, Real Estate, and property), investment in banks, shares, mutual funds or traditional investment funds, chit funds, and cash at home in money, gold, silver, or any other form. Further, this research explored the barriers and factors affecting the investment opportunity of savings and factors that affect the savings, consumption, and investment decision of the salaried with moderating and mediating the role of living standards & retirement planning and the direct effect of investment prevailing in Pakistan. There are many institutes for the elderly working for the well-being and planning instruments of retirees. They have support from family Pension plans or labour unions, government social insurance programs, and personal savings in financial assets. There has been a change in these avenues in recent years, and even in emerging markets, new demographic and economic realities have prompted the beginning of widespread retirement system reforms in Latin America, Eastern Europe, and Asia. These developments mean that people with given choices are more individual over their asset accumulation and drawdown processes and transfer towards financial decision-making in a format that ordinary people can understand and implement. Saving may be classified into domestic, corporate, foreign, contractual, and household savings. This study's primary focus is household savings, consumption, and investment decisions, with household savings as an inflow of money in the economy. The national saving rate in developing countries is less than its investment ratio overall (Chandavarkar, 1993). The case of savings in Pakistan is difficult to measure (Kozel, 1987). However, an understanding of savings behavior is essential for household welfare and its contribution to investment behavior (Alderman & Garcia, 1993).

Investment is a financial activity where funds are invested in a particular project to generate a positive return, maintaining or increasing its value (Gitman, Joehnk, Smart, & Juchau, 2015). This provides benefits in terms of enhanced finances to the investor. This increase the financial inclusion of the potential investors. As the financial literacy in Pakistan is very low, only 13% have bank accounts.

The report of According to UNDP (2017) states that 64% of Pakistan's population has access to formal financial services. Pakistan individuals market has financial inclusion indicators such as savings and investment, including insurance penetration and pension and mutual funds participation, which may build public confidence in financial institutions through financial literacy and financial inclusion by the policy makers and institutes.

Pakistan is in dire need of robust financial planning by making people (children and youth) financially literate to help and develop skills and attitudes towards budgeting, savings, investment, debt management, financial negotiations, and improved financial management. Furthermore, steps should be taken to include basic financial literacy in the curriculum to plan, secure, and improve their financial future. [Published in *The Express Tribune*, April 13th, 2019.] Pakistan holds great potential not only for local investors but also for Pakistanis living abroad. Many people are unaware that there are many investment avenues in Pakistan apart from the commonly known avenues like Stock Exchange, Property, and Mutual Funds.

The significant investment avenues hold fantastic potential for people to invest in. (Source: April 23, 2020, | by Pakistan Stock Exchange). Real Estate, National saving schemes, Bank Deposits, Stock Market, Foreign Exchange, Govt. Securities & Bonds, Mutual Funds, Currencies, and Commodities. Whereas these avenues are present, there are investment scams and fraudulent activities which attract potential financially literate individuals towards fake investments. Where they lose their savings and investment wealth. The Federal Investigation Agency (FIA) is a critical organization in informing and protecting the public from these scams. FIA has indicated current prevailing scams in Pakistan. Although they are different names, the scammers only loot public investments and savings worldwide.

Fraud Detected in National Savings Schemes, [Source :(Dawn, TODAY'S PAPER | JANUARY 29, 2020)]. Money Scams (NOV 3, 2019, National Association of Securities Dealers Automated Quotations (NASDAQ) guided the public about the scams of fake calls worldwide for sharing the information of identity, bank accounts, mobile no, address, email and security code, and PIN of ATM and Internet banking. All these scams are prevailing in Pakistan. Most people lose their money, savings, and investment in fake accounts or unknown investments, upsetting their financial affairs, monetary loss, and loss of assets. (State Bank of Pakistan (SBP), Pakistan & Federal Investigation Agency (FIA), Pakistan).

1.1. Saving and Investment in Pakistan

Pakistan's state bank and planning commission stated, "Savings and investment gap is always equal to the current account balance." In the financial year 2018, it was observed that there was a rise in private and government consumption due to inflation and fixed exchange rate. In the (2019) Report of Employee Old-Age Benefits Institution (EOIB) Pakistan, an institute that deals with the insurance, pension, and gratuity fund for federal government employees in Pakistan employees 126,783 persons are being contributed by the registered federal employees for old-age benefit. There are 83,618 persons active. Thirty-nine thousand two hundred two persons closed and deregistered employees 3,950 in 2019.

Financial products such as mortgages, leasing, credit cards, and business loans are now conveniently available. Financial development requires that resources be used sensibly to derive the maximum benefit (Lusardi & Mitchell, 2014).

The role of fiscal policy in affecting economic activity has been on the theoretical and applied research agenda for both academicians and policymakers since the evolution of macroeconomics. Government expenditures as a policy instrument appear to be more effective than taxes. Private investment supplements government expenditures; hence,

increasing development is inevitable for economic growth (Ameriks & Zeldes, 2001). The poor people cannot save, and it is no longer exit as accurate; they have the intention and potential to save, and they have substitution savings altogether. Household savings of the salaried class seems challenging to measure and are not quantifiable as the saving methods differ for long-term savings. The constraints on savers are self-imposed.

The problem of a lack of grass-root information on the saving behaviour, no clear policy for saving mobilization, and socio-economic factors influencing the extent and form of savings and hence investment of individuals. Behavioural finance is behavioural economics' "academic cousin" and the basis for technical analysis. In addition, psychological and sociological estimates, emotions, and personal intuitions significantly affect the individual's investment decision. Past studies suggest that investors with low financial literacy tend to make investment decisions that are not favourable. Investors with low financial literacy avoid participation in the stock markets and hold less diversified portfolios due to complicated financial products, which require investors to remain updated with the latest financial information. People frequently admit to saving less than planned (Katona, 1975). People often prefer money to cover unforeseen emergencies, but many households have little savings (Lusardi, 1999). People vary in their ability to use strategies and planning. The results show that parental behaviour (such as discussing financial matters with children) and parental orientations (conscientiousness, future orientation) have a weak but clear impact on children's economic behaviour and behaviour in adulthood. Lusardi (1999) reported that the gap between long-run intentions and short-run actions is evident in saving and borrowing, supported by psychological literature. People vary in their preferences for and ability to delay gratification, impacting various economic and other decisions (Ainslie, 1975; Strotz, 1955; Wa˝rneryd, 1999; Wood, 1998). Lusardi (1999) reports that "thinking about retirement" is an important element for a household nearing retirement. Other studies support that the future orientation or time horizon is important for economic behaviour (Julander, 1975; Lea, Webley, & Walker, 1995; Webley & Nyhus, 2001). Bernheim et al. (2001) found that people are having children save more than adults. Especially in a country like Pakistan, the major problem is the low level of per capita income and utilization. The social or economic factors cause individual behaviour; the market's fluctuation also affects the individual's decision-making. It is important to consider both uncertainty and savings on retirement behaviour. Literature support that 30 % of individuals near retirement have no planning for retirement life Bernheim et al. (2001). Individuals' decision-making is also affected by individuals' level of awareness and behaviour towards investment in traditional and non-traditional financial instruments and government roles in the effectiveness and safety of the saving schemes for the individual. Household consumption and saving behaviors are vital in macroeconomic growth and policy, constantly tested in empirical research since Keynes (1936); Modigliani and Brumberg (1954). More than 90% of the national saving in Pakistan comprises household savings, but these household saving floats around 12% to 14% of the Gross Domestic Product (GDP) (SPB, Pakistan). Pakistan's average household saving trend has declined since 2003 and reached the minimum of the last three decades in 2015 (SPB, Pakistan). Pakistan's Gross Savings Rate was measured at 5.2 % in Jun 2019, compared with 5.8 % in the previous year. This rate is updated yearly, from Jun 2000 to Jun 2019, with 9.6 %. The data reached an all-time high of 17.4 % in Jun 2004 and a record low of 5.2 % in Jun 2019. Census and Economic Information Center (CEIC) calculates the annual Gross Domestic Savings Rate from annual Gross Domestic Savings and annual Nominal GDP. Gross Domestic Savings are Nominal GDP minus Consumption Expenditure and Nominal GDP in local currency. [(source: Pakistan Gross Savings Rate 2000 - 2019 | Yearly | % | CEIC Data)].

1.2. Problem Statement

Saving of some people think that they are saving a lot for their life after retirement, not aware of uncertainty, and prediction of as they are taking pension is confirmed and faraway of today and unable to optimize their needs and daily life expenditures maintaining as per current living standards cost after retirement. Therefore, especially the salaried class have not been able to safeguard their old age and retirement savings like an annuity, gratuity, and pension. Therefore, salary class people are particular about current income as regular income but not enough to cater

to inflation, interest rate fluctuations, or unexpected loss in life. So, with no planning after retirement or expected savings, motives and investment objective for gain and return are badly affected through fake investment scams, no retirement planning provided by the government to pensioners, and no comparison of the market available investments with the service incentives. Unavailability of financial knowledge and guidance to the salaried class is the primary cause of attracting them to fake and unregistered investment scams like property schemes, investment bonds, fake lottery calls, and traditional saving traps offering the doubling amount within one year, and so on. In addition, a low level of certainty in retirement planning is a problem for the salaried class to save and invest, especially in Pakistan. The current prevailing problem in Pakistan is the literacy of the people and unawareness of the fake investment schemes, fake real estates, and fake agents of financial institutions “Biggest-ever’ fraud detected in National Savings schemes - Pakistan” (Chaudhry, Faridi, Zahir, & Muhammad, 2010). To fulfill their debt needs and investment aspirations, lower middle class and middle-class people in Pakistan invest in the Committee (Chit fund) and save at home or with their relatives as joint savings. They happily invest in a lottery system due to its uniqueness and simplicity, attracting potential people to invest. So, people of Pakistan, especially the salaried class, have a salary as income, only go for fake local and private individual investment avenues, and trust fake due to unguided and illiterate behaviour about the decision of investment. Hence losing all their savings and money as an investment before or at the time of retirement. Like a scam, Double Shah, National Savings, fake calls, fake banking, fake charity institution, Benazir income support program, Naya Pakistan Housing Schemes, Green Taxi Schemes, and some programs on TV (giving the huge prize). Most people lose their savings and income as an investment, showing getting rich early and earning without risk of loss.

So, there is a dire need to study consumer behaviour, keeping living standards, and retirement planning of government employees so that they save less or invest in these types of unproductive and risky traditional fake investment avenues. Their consumption behaviour and living standards are too high or hard to meet, leaving no savings for investment purposes.

Based on the above discussion, the following

1.3. Research Objectives

1. To determine the effect of saving and consumption patterns of the individual salaried class on the investment decision with moderating role of living social cost and mediating role of retirement planning.
2. To determine the role of investment scams on retirement planning and individual salaried class investment decision-making.
3. To determine the effect of demographics on the salaried class's savings, consumption, and investment patterns.
4. To determine the preferences of the individual's saving, consumption, and investment avenues of the salaried class.
5. To identify the barriers to the mode of investments of the salaried individuals in various investment avenues.

1.4. Research Questions

1. The effect of saving and consumption patterns of the individual salaried class on the investment decision with moderating role of living social cost and mediating role of retirement planning?
2. What is the role of investment scams on retirement planning and investment decision-making of individual salaried class?
3. What is the effect of demographics on the salaried class's savings, consumption, and investment patterns?
4. What are the salaried class's preferences for savings, consumption, and investment avenues?
5. What are the barriers to the investments of salaried individuals in various investment avenues?

1.5. Scope and Significance of the Study

This study is exploratory, exploring the effect of saving and consumption behaviour on the investment decision of the salaried class with moderating and mediating role of living standards and direct effect of investment scams, indirectly on the economy of Pakistan, taking saving as saving inflow of money. It has focused on the salaried class of federal government organizations from scale BSP-17 to BPS-22 towards saving, Consumption, and Investment behaviour with moderating role of living standards and mediating role of retirement planning. It has been supportive to identify the different and better investment options available in the market for the public. Especially, preferences of the salaried class individual who have been saving through their service in the form of gratuity fund, provident fund, and pension and become victims of the fake investment and loss all their savings that is the potential investment in the economy. In addition, it is compassionate to the government and policymakers in defining the employee's fringe benefits and rules per needs and demands. These are the employees' savings and consumption behaviours and patterns for maximum output and increasing their savings and investment for retirement. This study also guides in removing barriers faced during the investment and enhancing savings in the market influenced by their living standards and consumption behaviour, as supported by Bashir et al. (2013).

Therefore, studying the savings and consumption patterns of salaried class individuals on the investment decision with the living standard and the inflow of money in the economy through low savings, held at home, and investment issue of losing in the fake social looters' traps. The objective study data has been gathered through an adapted questionnaire to find the relationship between saving and consumption on the investment decision of individual investors working on the BPS 17- to BS 22 scale, irrespective of gender. This can help the policy makers, government, and planners of the human resource of government organizations peruse and determine government employees' problems. Some individuals with higher incomes, savings, and investments consume more, leaving nothing behind. The belief and behaviour of the individual matter, how much to consume, who prefer to save or consume, or whether they want to invest their extra income in enhancing their ability and skills to meet their goals. All the studies are in different contexts and populations using secondary data like students, private workers, general households, and countries like Malaysia, India, China, and Japan. Therefore, in its contextual frame, this study addressed the saving, consumption, and investment decision with the living standards of the salaried class person in Pakistan, especially the federal government employee being dissimilar in culture and provinces. This study contributed to the theories of consumption and savings provided by Keynes and lifecycle study hypothesis theories by Franco Modigliani, and the permanent income study hypothesis by Milton Friedman. Also, relevant and practical research by identifying the actual term problems of the salary classes, investors, governing bodies, and policymakers in defining the policies, plans, and strategies for increasing investment and savings among the public and investors firm. By removing the economic, personal, and demographics as factors discussed by theories and literature for saving and investment behaviour. Savings are an integral part of the economy at the household and personal level, playing a vital role in the GDP as supported by Lifecycle Saving and investing theory. The study examines the relevant literature on savings, consumption, and investment decisions from different methodological strands. It synthesizes a new theoretical framework in retirement planning, living standards, and investment scams. The framework borrows tools from Behavioral Economics to check the savings and consumption on investment decisions.

2. LITERATURE REVIEW

Keynesian economic theory states that saving is the amount of money from excess income after personal expenses have been achieved. Savings decisions are determined by lifetime budget constraints and form financial literacy, information, and sources of the individual's advice (Abu & Karim, 2016; Lusardi, 2008). The investment and saving decisions about saving and investment after retirement are more complex, and people need help (Mitchell, Utkus, & Yang, 2007). Household is not good at solving the retirement saving problem on their own as in old age, they save their uncertain future and gain prosperity. Individuals are born with different natures and belongings, so they define

their investments accordingly. Investment is beneficial if it produces more than its worth. Investors' behaviour has shown to prefer low risk, high return, and high maturity. Lacking strong preferences appears to affect individual investment decisions. Framing effects determine the choices when investing in retirement contribution plans (Mitchell et al., 2007). Different individual investors showed the asset allocation in different offered avenues for investment (Benartzi & Thaler, 2001). In a study by Chandra and Kumar (2011) an individual's decision-making is significantly affected by resilience, precautionary information, and cautious behaviour. According to Modigliani (1986) keeping a life cycle perspective, many factors determine an individual's decision-making (Abu & Karim, 2016). It is evident from the facts that transaction cost cognitive limitations justify the investment products at the retail level, providing the minimum rate of return as a substitute for other avenues (Bodie & Merton, 1995).

There are periods in the individual's life in which he dissaves when expenditure exceeds income and meets the expenditure through borrowing and usage of wealth or assets. Kotlikoff, Spivak, and Summers (1982) suggest that up to age 45, expenditures closely match income and low savings or dissaving on a cumulative basis. However, it is positive savings between ages 45 and 60, and after 60, savings are negative. The life-cycle model suggests there have been savings, but these savings are not agreeable or explained. The original life-cycle model (Ando & Modigliani, 1963; Modigliani & Brumberg, 1954) emphasized that saving is due to a fall in income after 60 years and deferment of consumption from earning years until retirement. The retirement's saving motive is limited to the evidence that they dissave. However, King and Leape (1987) explained that during the life cycle, the no of assets is in a hump shape until 40 years of age with an increasing trend and remains constant 40-60 and declines afterward. Proponents of this precautionary savings motive argue that individuals consume less to build a reserve to meet unexpected adverse future circumstances. Many researchers have discovered the income uncertainty effect on consumption and savings (e.g., (Abel, 1985; Flavin, 1981; Friedman, 1957; Kotlikoff et al., 1982; Skinner, 1987)). Precautionary savings are 56 percent part of aggregate life-cycle savings. Parents or children transfer wealth to balance public policies resulting in public debt or future Social Security burdens (Barro, 1974; Becker, 1974). Alternatively, Parents get satisfied from passing a level of bequests. Yaari (1965) or use transfers to encourage children to supply desired services (Bernheim, Shleifer, & Summers, 1986). This Motive for saving may support one's well-being after retirement by children to care for failing parents, which is estimated to be below 25 percent of total savings (Modigliani, 1988).

The saving of an individual changes due to a change in income and consumption at any point in his lifecycle.

Lower-income suggests lower levels of saving. However, young individuals do not save temporarily. Children are short-term expenses and are a long-term savings substitute for earning income. Social Security is an essential portfolio of individuals as family wealth. Boskin and Puffert (1987) have estimated that the real rate of return to Social Security investments ranges from 1.9 to 2.7 percent over the cohort's lifetime in their 40s. This natural rate is below historical Social Security returns and below the long-term rate of return to other financial assets. Thus, individuals who become more dependent on Social Security earn less on their retirement portfolio than those who have acquired other assets.

Consumption means expenditure on goods and services to satisfy needs and wants during a particular period. John Maynard Keynes developed a theory of consumption that focused primarily on the importance of people's disposable income in determining their spending. A rise in real income gives people more significant financial resources to spend or save. The marginal propensity to consume is when consumers increase demand as income rises. Savings, investment, and consumption are closely related. There has been no investment without savings. Consumption, therefore, is affected by decisions to spend. If we spend all our income, there is no capital accumulation for saving-investment.

According to Rose and Kolari (1995) savings postpone current consumption. The volume of savings by individual consumers is a function of several factors, including the amount of current and expected income, the stock wealth held by the individual, the level of interest rate, expectations concerning the future rate of inflation, and other variables. Chang (1994) noted that consumption smoothing positively correlates with current consumption and

saving because transitory income shocks increase current income and savings. As was pointed out by Carroll, Hall, and Zeldes (1992) this may create a significant correlation between consumption growth, lagged income, and saving ratio. Russian households saved much the same in the 1990s, higher than savings in 1976 (Gregory, Mokhtari, & Schrettl, 1999). According to Bassett, Fleming, and Rodrigues (1998) consumption and saving functions positively slope as disposable income rises and consumption and saving rise. Loayza and Shankar (2000) advocate using savings measures that correct consumer durables. Their study stated that saving and consumer spending have a positive relationship. Woytinsky and Koffsky (1948) remarks on the relationship between consumers' expenditures, savings, and disposable income. Saving relates to growth and economic development. There is a close link between household consumption and national saving rates (Deaton & Paxson, 1997).

Athukorala (2003) and Drèze and Sen (2002) noted that a higher interest rate increases the current price of consumption relative to the future price and provides an incentive to increase saving.

JM Keynes presented the earliest theories, which explained consumption and saving behaviour. He used psychology with economics for the first time, describing the psychological law of consumption. Following his theory, the base of consumption and savings behaviour, the permanent income study hypothesis, and the lifecycle theory of consumption of individuals present the individual's behavior in an alternative way. The Lifecycle and Permanent Income Study hypothesis theories depend upon the individual's life and his income throughout his life eventually.

2.1. Life-Cycle Hypothesis

On the other hand, the Lifecycle hypothesis defined by the theories of Franco Modigliani expressed that an individual, while consuming his income, would like to settle fluctuations in his consumption and wants to be stable in his consumption and hence to the average standard of living and well-being of his life. Therefore, the lifecycle study hypothesis believes that an individual being a rational consumer, allocates his consumption over his lifetime in such a way to smooth and even his consumption over his lifetime and wants to settle his consumption patterns through the savings he made or investments he made during or after his retirement. According to the life cycle study hypothesis, people in the individual age group are more in-depth than mainly completing their education or building their homes over time. They can save more and build assets in the old age they dissave so that by the end of their lifetimes, they have little assets left unless they want to leave a considerable bequest. Many individuals live, consume a higher period, and bear low consumption in any other period.

2.2. Permanent Income Theory

The permanent income theory by Milton Friedman states that an individual estimates his future income in his lifetime to smooth his consumption decision, rather live a luxurious life than live in poor life. Consumption is positively and directly related to the individual's permanent income (disposable). Like the life cycle study hypothesis discussed, income being related is temporary or a transitory increase in income.

All the above theories serve as the tool for neoclassical economists providing a weak relation between income and consumption and lacking the stabilization of the policies and their effectiveness. The reason is that the transitory income is temporary due to unemployment or tax reduction, and consumption decreases in return, balancing his life. Taxation may not reduce consumption during the inflation period lagging behind the effectiveness of the life cycle study hypothesis, and the permanent income theory may not appropriately explain consumption behavior. The reason is the borrowing limitations and the myopic consumers. Therefore, the salaried class suffers most of their consumption and savings due to expected and unexpected deductions in the permanent income and uncertainty in life.

Consequently, he plans for the after retirement and earnings as income though his savings are invested in the investment avenues available to him. He plans for the long-term scenario that is 80 years and above, taking his savings through consumption patterns for long-term investment. The permanent income Theory affirms that a consumption decision is set up in the long-term permanent income of the individual. An individual small amount of income expects

a higher income and consumes more in current by borrowing. Permanent income is not only relevant to consumption; the higher level of consumption is the borrowing cost and liquidity constraints inability to pay back his. Therefore, current consumption depends upon the current permanent income, as the literature supports.

While the Keynesian absolute income study hypothesis argues that an individual is short-sighted and believes in the actual income increase during the lifecycle of the individual. In the life cycle and permanent income, the study hypothesis can be discussed formerly the income of the individual is earned under uncertainty and his reaction to these shocks by consumption and investment patterns and choice of expenditures and investment avenues. Because a rational and forward-looking consumer or individual whose income is only salary and increase in income is in the form of an increase in pay and fringe benefits. So, the efficacy of fiscal policy beneficial for a salaried class like fringe benefits pension, gratuity fund, health insurance, house building loan, car loan, increments, and a fallen taxation policy may or may not be able to raise consumption expenditure or increase the savings due to different needs and demands of the employees and individuals with expenditure and savings preferences and investment choices. Keynesians criticized that a consumer, given his myopic nature, may fail to understand the full implications of a tax cut in the current period only. Secondly, due to borrowing or liquidity constraints, current income might explain current consumption rather than the permanent lifetime income. Accordingly, failing to hold liquidity constraints may choose to raise spending and reduce personal or household savings when the disposable income goes up following a tax cut in developing countries like Pakistan, Bangladesh, and India. Specially, In Pakistan, the borrowing constraints are often relatively high due to the lack of proper financial markets, which are full of fraudulent and fake investment avenues like real estate, unnamed bank accounts, anonymous transactions, and fake calls for prize bonds and lottery are mainly targeting the general public. Household final consumption expenditure is the total market value of all household goods and services during a given period. Though the lifecycle permanent income model of consumption and saving decisions on how much to consume and how much to save are intimately linked, once individuals earn income and pay individual taxes, individuals have to decide how to split that income between consumption and saving. Franco Modigliani's lifecycle model and Milton Friedman's permanent income model make assumptions about human behaviour, yielding individual predictions. Unexpected and uncertain future needs and life events based on his future income and consumption patterns.

When middle-aged individuals might experience unemployment, income temporarily decreases but then recover quickly as individuals get older, individuals decide to retire. An individual has a period of retirement where income goes down because labor income typically rises until retirement in the early years. Typically, individual consumption is more significant than individual income in the middle years; individual consumption is less than individual income; individual retirement consumption is more significant than individual labor income.

To this model, if an individual expects to have a significantly higher income later, it is optimal for an individual to consume more than individual income and borrows as long as the interest rate on the individual is not too high. Keynes's consumption function shows a relationship between current consumption and income in the lifecycle study hypothesis views the economy. The rational individual distributes his consumption over his lifetime to even smooth his lifetime consumption. An increase in wealth has been distributed as higher consumption over the entire lifetime. The permanent income theory states that an Individual would always estimate the income of his entire lifetime and his consumption decision depends upon the estimation of his income. The life cycle study hypothesis and permanent income theory may not appropriately explain consumption behaviour due to the consumers' borrowing constraints and myopic nature. Borrowing or liquidity constraints imply that higher consumption expenditures may not happen even if a consumer intends to spend more on his permanent income. If rational agents believe that tax levels change, a change in current taxation is unlikely to alter consumption levels.

The modern theory of contingent claims analysis provides the framework for producing and pricing new and improved life-cycle contracts (Bodie & Merton, 1995). The life cycle products have been divided into two terms on is the service term, the accumulation phase of savings and income deductions by the employer, and second, the

retirement when receiving the reward of the contribution deduction from the income as investment and pension or other investment as the source of income after retirement. Occupational funds, college accounts, and real estate accounts are included in the first phase. The second contains the escalating annuities, bundle risk, long-term care, mortality, and market risks (Bodie & Prast, 2012).

The first one, escalating annuity, is planned but does not protect against inflationary effects. Today, it is possible to the financial intermediate by easing the salaried class in designing the annuities products with minimum benefits to the cost of living, increasing the payment (Aguiar & Hurst, 2008; Bodie, 1990; Bodie & Crane, 1997). Research shows that retired and aged do not annualize their wealth voluntarily, feeling to hold assets to pay out home caring expenditures (Aguiar & Hurst, 2008). The main problem is that annuities are illiquid and can be used for daily life payments and utilities. The financial risk of the elderly changing and products and services by the institution is facilitating them (Bodie & Prast, 2012).

There are few children in the United States, the United Kingdom, Australia, Western Europe, and Japan, where the aging population reflects that long-life expectation. People of these countries will not rely more on the family or government as in the past trend. They move towards financial markets, demographics and economic realities, and retirement reforms in the system, as seen in Latin America, East Europe, and Asia (Aguiar & Hurst, 2008). These new financial instruments hand over their responsibility and choice to workers and retirees, challenging to frame risk-reward trade-offs and cast financial decision-making in a format easily formed and understood by ordinary people.

2.3. Saving, Consumption, and Investment

The saving and consumption behaviour of the individual is affected by various factors like social and material needs, standards of living, traditions, indebtedness, and disposable income of the individual (Prinsloo, 2009). Neoclassical economics theory argues that saving is the trade-off of current vs. future consumption. Households are deferring the income for the gain in the future (Aguiar & Hurst, 2008). Luxury goods must respond more than the necessities if they move resources or inter-temporal substitution in expenditure behaviour. Entertainment expenditure has a relatively high-income elasticity. Entertainment declines in the second half of the life cycle due to inconsistency, impatience, and poor planning. Uslu and BAĞCI (2018) stated that the cheap source of financing or the performing firm assumes the internal saving. Mainly in the US, retirement saving plans are related by experiments and actual behaviour that may be secondary to primary (Meşca, 2012).

There is a low degree of financial literacy and communication policy of central banks and governments during economic downturn periods, during the economic crisis, and purchasing foreign currency (Kapounek, Korab, & Deltuvaite, 2016). Sandhu, Singh, and Mankotia (2015) and Kumar, Avinash, Manjunatha, and Swamy (2016) analyzed the investment behaviour in Bangalore city. He analyzed using a survey method that in Bangalore, investors are aware of the market's investment avenues and risks and characteristics, including quality, safety, and liquidity. Mittal and Vyas (2008) cognitive and emotional features of individuals are also the basis of the investment decision. The reason is that the individual does not always act the same; he does not perform rationally. Patil and Nandawar (2014) concluded that 60% of the salaried class are aware of the investment avenues, and 40% are unaware.

Kelly and Williamson (1968) determined the relationship between per capita household savings and household income for the household for five years in Indonesia. The Head of the household has importance in saving behaviour average and the marginal rate of the household as an increase in the agricultural income and wealth. The same result has been reported by Shultz and Fisher (2016) by analyzing the household's demographic the age composition. Gupta (1970) analyzed the secondary time series data for the determinants of saving. He concluded that the permanent income study hypothesis is acceptable in urban areas of India and more acceptable in rural areas for saving behaviour. According to modern studies, optimizing the risk and return for rational individuals/investors should reflect the utility references (Gallery & Gallery, 2005).

A study showed using panel regression on household saving behaviour that there is a low degree of financial literacy and communication policy of central bank and government during economic downturn periods, during an economic crisis, and purchasing foreign currency (Kapounuk et al., 2016). The previous and current literature analyzed that saving behaviour of aged has decreased in retired ages and an increase in 2000 has been noticed. The main factors that affected the savings were a decrease in social security benefits, an increase in consumption expenditure, taxes, and social insurance premiums. It was practical and applicable in Japan case. Brounen, Koedijk, and Pownall (2016) examined that households' savings and financial planning decrease with age and is high. Baby boomers tend to save more, and the behavioural and psychological effects the self-efficacy and future orientation with parental effects. Some take and avoid these factors define the financial responsibility some take and avoid. Individual behavior towards saving and investment from available resources make a strategy for the inactive period (retirement) and generation.

Prosperity to save by households analyzes economic behaviour. By comparing the rate of savings and social capital index using the cluster approach, it was observed that a decrease in disposable income and an increase in new household type decreases the rate of savings in the economy, so improvement is needed in economic activity. Fachrudin and Silalahi (2022) examined the psychological factors which impact investment decisions.

Fedorova, Nekhaenko, and Dovzhenko (2015) examined the influence of financial literacy on the stock market. Demographic information such as income, age, gender, education, and job designation was sought from the respondents. Financially literate investors participate proactively in the stock market.

2.4. Investment Scams

Studies on investment scams cannot be separated from the Theory of Planned Behaviour (Ajzen, 1991) and Attribution Theory (Heider, 1958). The theory of planned behaviour explains the underlying reasons for individual behaviour. This theory explains the factors that drive investors to get involved in investment scams as victims of investment scams. The main factor of individual behaviour is the individual's intentions towards a particular behaviour. The intention to behave is influenced by the following components, namely (Ajzen, 1991).

Behaviour attitude refers to an individual's positive or negative assessment of a particular behaviour. About investment scams, the emergence of a positive investor assessment of investments (which is "scams") can arise as a result of the success of the fraudsters in using some tactics, such as credibility, wealth, social agreement, reciprocal, and scarcity tactics (Finra, 2013) cited in Mottola (2013). (2) Subjective norms refer to a person's perception of social pressure to perform or not to do specific behaviour. Many fraud perpetrators approach the potential victims through the closest people, such as friends, relatives, or family (F.I.R., 2013). This approach utilizes mutual trust among group members. This creates pressure for potential investors to invest because of reluctance. (3) Perceived behaviour control refers to perceiving ease or difficulty in performing certain behaviours. Investment scams often lead to many victims because fraudsters offer easy ways to make those investments. Examples of such cases can be seen from the work-at-home scheme. In this case, investors are asked to give money (invest) to purchase company supplies. However, once the investor gives the money, the fraud perpetrator will disappear without yielding to the investor. (4) Education and the Ability to detect Investment Scams is the argument of attribution theory. The experience of past success is the reason that encourages one to do the same in the future. An educated person tends to believe that past successes are a foothold for action in the future, regardless of the risk of failure. Individuals who are more educated tend to fool by investment fraud because previously, the individual has successfully made similar investments. Fraudsters use this condition as a strategy in running investment scams. Several studies have confirmed the influence of investor education on the early detection of investment scams. For example, Wilkins, Acuff, and Hermanson (2012) found that most victims of investment scams were educated. (5) Financial Literacy and Ability to detect Investment Scams, as defined by Mason and Wilson (2000) define financial literacy as the ability of individuals to acquire, understand, and evaluate the relevant information necessary to make decisions with an awareness of the possible financial

consequences. Financial literacy is an essential element of investment activity to avoid investment scams. Lokanan (2014) found that investors most vulnerable to investment scams have limited investment knowledge.

2.5. Research Hypothesis

Researchers follow the study hypothesis to meet the research objectives and answer the research. Based on the above-discussed literature following hypotheses are drawn

H1: There is a relationship between saving patterns and consumption patterns of the salaried class.

H2: There is an effect of saving patterns of the salaried class on the investment decision.

H3: There is an effect of consumption patterns of the salaried class on the investment decision.

H4: The effect of the living social cost salaried class is on the investment decision of the salaried class.

H5: There is a moderating role of the salaried class's living social cost and savings patterns on the investment decision.

H6: There is a moderating role of the salaried class's living social cost and consumption patterns on the investment decision.

H7: There is a mediating role of the salaried class's retirement planning and saving patterns on the investment decision.

H8: There is an effect of mediating role of retirement planning and consumption patterns of the salaried class on the investment decision.

H9: There is a relationship between Investment scams on savings.

H10: There is a relationship between investment scams on investment decisions.

H11: There is an effect of retirement planning on investment.

H12: The relationship of demographics on the savings, consumption, and investment patterns of the salaried class.

2.6. Research Gap

Most of the studies in Pakistan have discussed the problem of individual investors in the stock exchange at the business level and as earning for the individual's business. This study examined the individual behaviour of salaried persons, which has not been discussed in Pakistan except in a few. The saving and consumption behaviour and investment avenue availed in Pakistan to salaried persons are limited to their income and variation in savings. The individuals in Pakistan desirous of investment mostly rely on their savings to become investors in Pakistan. The study supports saving as a dominant factor in modifying investment preferences. From the extensive literature review, it has been depicted that people are investing in traditional investment avenues. Significantly, the salaried class individuals prefer safety, liquidity, tax benefits, and old age plans for their investment decisions. For emergency and precautionary purposes, individuals tend to select safe securities such as cash and bank deposits are taken into consideration. From a social security point of view, money is invested in tax benefits and pension investment schemes. Individual investors have been affected by personal and social situations having different investment preferences and levels of knowledge. The general factors external to the behaviour (state policies, economic stability, income levels & experience) also affect investment decisions on the bases of the salaried class workers' choices and investment portfolio available in Pakistan that is not correctly available or conveyed through official media channels, newspaper or even no proper understanding and information of the market instruments and working of the stock market. Finally, savings are influenced by the investment opportunities available in the economy, which further depends on their growth prospects and return availability. The level of saving depends upon the investment avenues available for mobilizing household sector savings in a well-developed and organized financial system with various financial institutions and intermediaries.

2.7. Conceptual Framework

After the deep literature review, to meet the objective and scope of this research illustrated in [Figure 1](#) describes the model details about the dependent, independent, moderating and mediating variables used in this study.

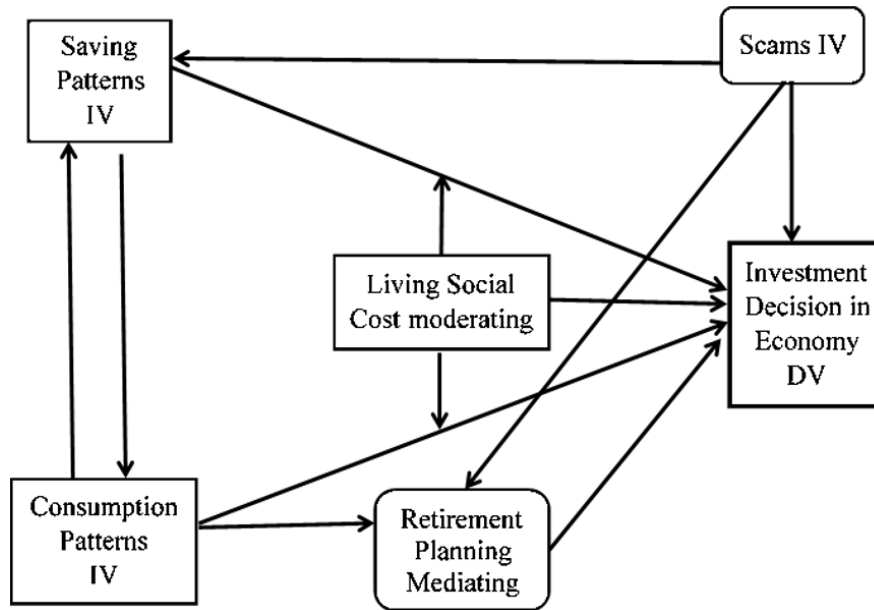


Figure 1. Research diagram.

3. METHODOLOGY

This study employs a primarily quantitative approach to data collection, based on a questionnaire used to collect data to achieve research objectives, which compact with identifying saving and investment relationship with an investment decision with moderating and mediating variable of living standards and retirement planning. The current research is exploratory. So far, no study has been conducted in Pakistan that analyses the saving, consumption, and investment scams with decision making, moderating the role of living standards, and moderating the role of retirement planning. The study was conducted proactively based on investment scams and decisions. The study has also tried to answer the preferences of savings and investment avenues and barriers, especially the salaried class.

3.1. Research Population and Sampling

Sampling consideration is significant in quantitative research. The researcher must have adequate units of analysis to have primary data for statistical data analysis. Therefore, there must be an adequate sample to illustrate the conclusion about the population (Saunders, Lewis, & Thornhill, 2009). In this study, the research population consists of Government officials working in Federal Government originations from BS-14 to BS-22, covering lower, middle, and upper-level employees.

3.2. Population

The study population is the federal government employees from Scale BPS-17 to BPS-22, including males and females working in federal government organizations and Pakistan. Significant cities, Lahore, Islamabad, Rawalpindi, Gujranwala, and Multan, have been used for data collection because all the head offices of all federal government organizations are present in that area easy to contact and interact with the population (Haque, 2010). Autonomous bodies/corporations at a glance for 2017-18 description of employee's total strength sanctioned posts officers and staff domicile wise employees Punjab 222839 Sindh 86131 Khyber Pakhtunkhwa 58925 Baluchistan 17245 federally administered tribal areas 3499 Gilgit Baltistan 3090; Azad Jammu & Kashmir 5758; autonomous bodies/corporations at a glance for 2017-18 Table 1.

Table 1. Total number of employees in federal government, both officers, and staff.

	Total	Male Employees	Female Employees
Officer, BS 17-22	67842	61089	6753
Staff, BS 01-16	329645	316314	13331
Subtotal		377403	20084
Total		397487	

Source: Annual employee bulletin 2018, planning commission, Pakistan.

3.3. Sample Design and Size

A sample design is a roadmap or framework which serves as the basis for selecting the sample for the survey. Sampling units are the federal government employees of BPS-17 to BPS-22, currently including males and females in Pakistan. Employees of scale BPS-17 to BPS-22 from each department or organization, both male and female, are profiled in Table 1. Cochran and Chambers (1965) designed a formula for calculating the population size.

$$n = \frac{Z^2 p q}{e^2}$$

no = Sample size
 Z2 = Desired confidence interval that is 95%. =1.96
 P = Estimated proportion of the population. =.5
 Q = 1-p = 1-.5 =0.5
 E = Level of precision. =0.05*1
 no = $\frac{(1.96)^2 (.5) (.5)}{(0.05)^2} = 385$ Government Employees.

Table 2. Province wise share of federal employees.

Domicile Quota	BS 17 – 22	% Share
Islamabad	949	1.40
Punjab	32057	47.25
Sindh	21330	31.44
Khyber Pakhtunkhwa	8161	12.03
Balochistan	3123	4.60
Azad Jammu & Kashmir	1086	1.60
Gilgit Baltistan	527	0.78
FATA	609	0.90
Total	67842	100

This study has used the quota sampling dividing in the government/ public organizations in the six provinces as a quota of different geographical areas of the Pakistan provincial and federal areas as; Islamabad, Punjab, Sindh, Khyber Pakhtunkhwa (KPK), Baluchistan, Azad Jammu & Kashmir (AJK), Gilgit Baltistan (GB), Federally Administered Tribal Areas (FATA) shown in Table 2.

3.4. Data Collection Methods

Mainly data in this research was collected by adapted questionnaires; a fully structured, self-administered questionnaire was given to the federal government employees from job scale BS-16 to BS-17 in all over six provinces and federal areas of Pakistan. This study will collect data from 385 salaried employees of federal government organizations using the survey method. Any salaried employee can be a sampling unit for the survey.

¹A 05% precision of an estimate in a 90% confidence interval means that we can guarantee that the population parameter is within the 05% range of the observed sample estimate, except in 10% of the cases.

3.5. Questionnaire Development & Design

The questionnaire was based on an extensive literature review on saving, consumption, investment scams, retirement planning, and investment decisions. It was written in English, which is an official language in Pakistan.

Questionnaire questions are grouped into classification, behavioural and attitudinal questions. Facts such as age, social class, etc., are asked in classification. On the other hand, behavioural seeks information about the occupation of respondents or how often they do something. The Attitudinal questions are asked about something (Hague, 1993; Sekaran, 1983). In this study, close-ended questions have been used to record the responses from the respondents. Data was collected through a closed-ended question. The questionnaire has been adapted from the previous studies related to saving, consumption, and investment behaviour of the salaried class person to avoid biases and achieve this study's aim. Items of the previous study are adopted and transformed to achieve the study objective.

The questionnaire is designed in four parts; demographics, preferences, and personal and economic factors of saving, consumption, living standards, and decision-making. The first part, demographics, has been designed to link demographics with saving, consumption patterns, and decision-making. The dimensions and items are mentioned in the questionnaire Appendix.

To inquire about the relationship of these variables and achieve the study's aims and objectives, continuous variables of living standards, saving, consumption, and investment have been taken. The scale for measuring the continuous variable is 5 points Likert scale related to the statements of the components of living standards, saving, consumption and investment decision has been asked and checked as 1 to 5 Likert scale as; 1= being strongly disagreed, 2=disagree, 3=neutral, 4=Agree and 5= being Strongly agreed. Five Point Likert scale is easy to construct and administer, and respondents easily understand how to use the particular scale.

3.6. Data Analysis

3.6.1. Pilot Testing

This study will imply pilot testing to check the appropriation of the survey questions and their sequence and respondents' problems in reading and understanding the questions. According to Wilson, McClean, and Ulster (1994) researchers must conduct a pilot questionnaire test and consider its findings. The pilot testing helps refine the questionnaire, removing discrepancies for data collection. The Cronbach's alpha scores represent the reliability of the scores in the pilot study (Field, 2006; Tabachnick & Fidell, 2007).

3.6.2. Data Analysis Techniques

The quantitative data analysis will be done in three phases. The quantitative data collected from different resources was refined. In the second phase, structural equation modeling (SEM) will be used to examine and confirm the confirmatory factor analysis (CFA) scales. In the final phase, the partial least square method was used to test the hypothesis study based on SEM (PLS-SEM).

The Statistical Package for Social Sciences version 25 (SPSS-25) and Smart-PLS 3.3.0 were used to test for descriptive statistics, missing data, outliers, linearity, normality, multicollinearity and homoscedasticity, reliability analysis, and exploratory factor analysis. In comparison, PLS-SEM will be performed to test the confirmatory factor analysis to test the measurement and path models for hypotheses testing using the Smart-PLS package.

3.6.3. Structural Equation Modeling SEM

Structural Equation Modelling (SEM) was applied to perform quantitative analysis in this research. SEM is a statistical technique that allows for studying the relationship between dependent and independent variables. In addition, it is known as casual modeling, path analysis, or confirmatory analysis (Tabachnick & Fidell, 2007). Hair, Anderson, Tathan, and Black (2006) set SEM as the most appropriate and efficient estimation technique for separate multiple regression equations, estimated simultaneously. It consists of two primary components: the structural and

measurement models. The structural model denotes the path model that connects independent and dependent variables (Hair, Hult, Ringle, & Sarstedt, 2013; Tabachnick & Fidell, 2007). This formation helps the researcher identify which variable predicts the dependent variable (e.g., Investment Decision) using prior experience and theory. The measurement model helps the researcher apply several indicators (variables) to measure a single variable.

SEM is highly applied in behavioral science to determine the casual modeling of complex, multivariate datasets having compound measures of proposed constructs (Hair et al., 2006). Additionally, the application of SEM in business, management, and behavioural sciences has increased due to the availability of several software packages that perform SEM (Hair et al., 2013).

3.6.4. *The Structural Model*

The causation is assumed among the dependent and independent constructs for the analysis and, simultaneously, meaning the loadings of the items (measurements) to their latent (constructs), so the model and factor analysis are combined in one operation with the hypotheses testing. The result is a more rigorous analysis of the proposed research model and a better methodological assessment tool (Bollen, 1989; Bullock, Harlow, & Mulaik, 1994; Jöreskog & Sörbom, 1989). SEM also supports the model through data given and through study hypothesis testing. SEM tools are increasingly used in behavioural science research to model complex, multivariate data sets. The researcher gathers multiple measures of proposed constructs (Hair, Tatham, Anderson, & Black, 1998). Confirmatory factor analysis in PLS is then done by verifying that the AVE of each construct is larger than its correlations with the other constructs and that each item loading in the factor analysis is much higher on its assigned construct (factor) than on the other constructs. Partial least squares – are employed in PLS and PLS-Graph (Chin, 1998b). The statistical objective of PLS is, overall, the same as that of linear regression, i.e., to show high R² and significant t-values, thus rejecting the null study hypothesis of no effect (Goodhue, Lewis, & Thompson, 2012). The study will run the data through the partial least square method, an advanced method to check the relationship of variables wider. CFA is used to test the validity of the instrument. It is suggested that items with factor loadings more than 0.40 are considered valid to measure the variable in a local scenario. The confirmatory analysis has been carried out through Smart PLS software to check the validity of the scale and the Reliability of data using the value of Cronbach Alpha.

3.6.5. *Measurement Model (Outer Model)*

The measurement model examines convergent validity, internal consistency reliability, discriminant validity, and model fit indices. To achieve.

Convergent validity, the value of the scale items loads the construct intended in the study and compares the validity across constructs in the model. Internal reliability deals with only one construct and differs from reliability (internal consistency) (Boudreau, Ariyachandra, Gefen, & Straub, 2004; Gefen & Straub, 2005). The minimum average extracted (AVE) is 0.5, the factor loading of the indicator on the construct is 0.5 (Barclay, Higgins, & Thompson, 1995; Chin, 1998a) and the minimum reliability of the construct is 0.7 (Chin, 1998a; Fornell & Larcker, 1981).

Reliability “concerns the degree to which the scores are free from random measurement error” in smart PLS, composite reliability is used instead of Cronbach Alpha, and the minimum requirement of the reliability of construct of 0.7 (Chin, 1998b; Fornell & Larcker, 1981). Discriminant validity tests whether the latent constructs differ (Chin, Marcolin, & Newsted, 2003; Fornell & Larcker, 1981). Discriminant validity requires that the correlation between indicators and their construction be higher than between indicators and other constructs (MacKenzie, Podsakoff, & Jarvis, 2005).

The scale items load has firmly on the intended construct and weak on the unintended construct (Gefen & Straub, 2005) and it can be measured using the cross-loading and square root of AVE's. Scale items of the latent construct must construct the unintended crossroad weakly (Straub, Boudreau, & Gefen, 2004). The square root of average variance extracted (AVEs) is measured by the diagonal with other values on each column, and the latent construct is

more significant than each value showing that the discriminant validity of the latent construct is satisfactory (Chin, 1998a; Fornell & Larcker, 1981; Gefen & Straub, 2005).

The model fit indices have the following measures average path coefficient (APC), average R-squared (ARS), and average variance factor (AVF) are absolute values of the path coefficient, Average R Square (ARS) index represents the absolute value of the model's path coefficient. The AVF is the multicollinearity of the model. The acceptable value for APC and ARS is 0.05, and the Average variance inflation factor (AVIF) is lower than 5 (Kline, 2005; Kock, 2011).

3.6.6. Structural Model (Inner Model)

The Structural Model (Inner Model) determines the correlation between the latent constructs in the structural model, path coefficients between the exogenous and endogenous constructs, and R², or coefficient determination. The strength of the first and higher-order construct is measured by the path coefficient (Anderson & Gerbing, 1988; Chin & Gopal, 1995; Gefen, Straub, & Boudreau, 2000; Segars, 1997). The R² specifies the amount of variance in the endogenous and exogenous constructs, path coefficient, and its significance, and tests hypotheses (Chin, 1998b; Hair et al., 2006). A mediator is a construct that affects the relationship of independent and dependent constructs, producing an indirect effect in between (Baron & Kenny, 1986). The indirect effect is consistent with mediation (Hair et al., 2006).

PLS-SEM has been adopted as the powerful analysis technique for path model testing in this study. PLS-SEM provides a proper and organized inference of multiple regression equations. The measurement and structural models pursue the theoretical model's reliability and estimated model (Hair et al., 2006). PLS-SEM helps integrate latent variables into the analysis and its importance in this study as some unobserved concepts are approximated by measured variables (Tabachnick & Fidell, 2007). PLS-SEM uses confirmatory modeling to confirm the hypothesized relationship between the different study variables to meet the objectives of this research. PLS Analysis

PLS methodology has been used in this study. The reason is that the PLS does not require the maximum likelihood the most likelihood estimation of the data is not required as the social sciences research demands (Fornell & Bookstein, 1982; Haenlein & Kaplan, 2004). To improve the overall fitness of the model, PLS can calculate the weights of indicators. PLS calculates the R-squared calculate independently of each construct, showing the variance in the dependent construct in the model (Chin, 1998b). PLS can cover the complexity of relationships of multiple dependent constructs in a single corrected item (Cronbach's Alpha model). The PLS is suitable for prediction purposes in the studies (Barclay et al., 1995; Chin, 1998a; Haenlein & Kaplan, 2004). First, even though PLS path modeling is similar to the conventional technique, it has the advantage of estimating the relationships between constructs (structural model) and relationships between indicators and their corresponding latent constructs (measurement model) simultaneously (Duarte & Raposo, 2010; Lohmöller, 1989). Secondly, the present research is explorative as the study's goal is to predict the role of moderating effect, which requires a path modeling approach. It has been suggested that if research is prediction-oriented, PLS path modeling should be used (Hair, Ringle, & Sarstedt, 2011; Henseler, Ringle, & Sinkovics, 2009). Software is a tool of analysis because of its friendly graphical user interface, which helps users create a moderating effect for path models with interaction effects (Temme, Kreis, & Hildebrandt, 2010). As a regression, SEM assists researchers in answering research questions in a single, systematic, and comprehensive analysis by modeling the relationships among multiple independent and dependent constructs altogether (Anderson & Gerbing, 1988) and testing for statistical conclusion validity (Cook, Donald, & Arles, 1979). The quality of research may be poor unless tests for reliability and validity are not undertaken (Pallant, 2007). Statistical analysis was carried out in the present study to ensure the reliability and validity of the results.

3.7. Reliability Analysis

If the instrument is reliable, it shows the same results tested repeatedly. The value of Cronbach Alpha determines the reliability of the instruments, as suggested by literature and previous studies. The acceptable value is the 0.7

minimum to check the instrument's reliability. Reliability refers to the consistency of the results, that is, the degree to which repeated measurements in the same conditions would yield the same results. The reliability is tested to minimize the chances of biased results (Cooper & Schindler, 2006; Cooper & Emory, 1995). The alpha value ranges between 0 and 1. A scale of five points shifts variance with a hypothetical alternative scale. Cronbach's alpha coefficient value falls above 0.6 is acceptable (Pallant, 2007). The alpha value is between 0.70 and 0.86, which shows that the measures are.

3.8. Validation of Results

Validity means that the measures represent what they mean, and the conclusions drawn from the analysis are rigorous (Saunders et al., 2009). There are different methods for validating the result; however, the researcher has worked with the following main types of validity throughout this research.

3.9. Construct Validity

Researchers must demonstrate that the selected measures address the concepts and relationships (Chin, 1998a; Hair et al., 2006). Constructs have been examined to ensure the constructs correlate among themselves. This is the so-called convergent validity and is measured by Cronbach's alpha. All the constructs have appropriate Cronbach's alpha values and fulfill the requirement of uni-dimensionality. Construct validity can be measured using other datasets, but this is a limitation in this stance, lacking sufficient data for cross-validation and time constraints; the limitation should be addressed in future research.

3.10. Internal Validity

Internal validity is achieved when all extraneous variables are controlled and only manipulated by the researcher to influence the study's results (Saunders et al., 2009). Interrelationships are derived from the existing literature between the main variables of the study and are controlled across several variables selected.

3.11. Regression Equations

3.11.1. Decision Making Investment

Decision-Making Investment = Consumption, scams, and saving

$$DMI = \beta + \text{Saving}(S) + \text{consumption}(C) + \text{Retirement planning}(RP) + \text{Investment Scams}(IS) + \text{Living Standards}(LS) + \epsilon(1)$$

$$DMI = \beta + \beta_S S + \beta_C C + \beta_{RP} RP + \beta_{IS} IS + \beta_{LS} LS\epsilon$$

$DMI = \beta + \beta_S X_{S1} + \beta_S X_{S2} + \beta_S X_{S3} + \beta_S X_{S4} + \beta_S X_{S5} + \beta_S X_{S6} + \beta_C X_{C1} + \beta_C X_{C2} + \beta_C X_{C3} + \beta_C X_{C4} + \beta_C X_{C5} + \beta_C X_{C6} + \dots + \epsilon$ Where S = saving behaviour, X_{S1} = Social factors, X_{S2} = Economics factors, X_{S3} = Personal factors, X_{S4} = Demographic, X_{S5} = Environmental, X_{S6} = social, ϵ = Error Term.

3.12. Mediation

A mediator is a construct that affects the relationship between independent and dependent constructs, producing an indirect effect in between (Baron & Kenny, 1986). The indirect effect is consistent with mediation (Hair et al., 2006). Mediation is the term of psychological literature, while an indirect effect comes from sociology (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002). The simplest mediation model involves an independent construct, X, a moderating construct, M, and a dependent construct, Y. There are three regression equations to examine the mediation (Baron & Kenny, 1986). First, the independent construct X should be significantly related to the dependent construct Y, resulting in a significant coefficient. Secondly, the independent construct X should be significantly related to the hypothesized moderating construct M, producing a significant coefficient. Thirdly, the moderating construct M must be significantly related to the dependent construct Y, controlling for the independent construct X,

thus finding a significant coefficient b . Finally, the relation between the independent construct X and the dependent construct Y should be weaker when the moderating construct M is added to the model. The causal steps approach is the mediation approach, the influential work of Baron and Kenny (1986) employing SmartPLS- software ver. 3.0 because the software also estimates mediating effects based on Baron and Kenny (1986) criteria (Kock, 2011).

3.13. Mediation of Retirement Planning

Decision-Making Investment = Saving, Retirement Planning, and investment

Where mediation of retirement planning is shown as:

$$DMI = \beta + \beta_S S + \beta_{ID} ID + \beta_{RP} RP + \beta_M M_{RP} + \epsilon \quad (2)$$

Where, M_{RP} mediator = RP,

Retirement Planning, $\beta_S S$ = Savings Patterns, $\beta_{ID} ID$ = Investment Decision

3.14. Moderation

In the presence of moderation, the relation of the two variables is checked through the third variable to validate their relationship nature. For example, the relationship between variables, like design and colour, is not the same for all customers, but it differs depending on their income and age. When there is a relationship between two constructs, one dependent and another independent is not constant, and a third variable moderator defines their relationship as moderation (Hair et al., 2006). The moderator only changes the direction or strength of the relationship through heterogeneity in the data defining the relationship between the two-variable weak or strong. To test the effect of moderation of the one specific variable in the model with other dependent variables to determine the effect. So, in this study, the relationship between savings and investment by living standards influences it or not as weakly or strongly (Kock, 2011).

3.15. Moderation of the Living Standard

Decision-Making Investment = Consumption and Saving and Living Standards

Where moderation of social living costs is shown as:

$$DMI = \beta + \beta_S S + \beta_C C + \beta_M M_{LS} + \epsilon \quad (3)$$

Where, M_{LS} moderator = $LS \times S + LS \times C$

M_{LS} moderator = Living Standards, $\beta_S S$ = Savings Behaviours, $\beta_C C$ = Consumption patterns

3.16. Research Study Hypothesis

H1: There is a relationship between saving patterns and consumption patterns of the salaried class.

H2: There is an effect of saving patterns of the salaried class on the investment decision.

H3: There is an effect of consumption patterns of the salaried class on the investment decision.

H4: The effect of the salaried class is on the investment decision of the salaried class.

H5: There is a moderating role of the salaried class's living social cost and savings patterns on the investment decision.

H6: There is a moderating role of the salaried class's living social cost and consumption patterns on the investment decision.

H7: There is a mediating role of the salaried class's retirement planning and saving patterns on the investment decision.

H8: There is an effect of mediating role of retirement planning and consumption patterns of the salaried class on the investment decision.

H9: There is a relationship between Investment scams on savings.

H10: There is a relationship between investment scams on investment decisions.

H11: There is an effect of retirement planning on investment.

H12: The relationship of demographics on the savings, consumption, and investment patterns of the salaried class.

3.17. Limitations

As the model has not been empirically proved through data collection and data analysis. So future studies may be conducted to check the model estimated through theories lying behind this model.

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Appendix

i) Questionnaire

This questionnaire is designed to collect the data for educational usage only, and all the data has been kept confidential and secret. This research is about the savings and consumption of the salaried class individual and their effect on the investment decisions making in their daily life, especially after retirement. This study with the outcome on the effect of the factors on the behaviour of the salaried class and their preferences of investment and saving and consumption.

1. Demographic Factors		
1. Scale	SCL	<input type="checkbox"/> BPS 17, <input type="checkbox"/> BPS 18, <input type="checkbox"/> BPS 19, <input type="checkbox"/> BPS 20, <input type="checkbox"/> BPS 21, <input type="checkbox"/> BPS 22.
2. Income	TAIN	Total Annual Income Rs=123456789/- 15000-30000, <input type="checkbox"/> 31000-50000, <input type="checkbox"/> 51000-75000, <input type="checkbox"/> 76000-100000 <input type="checkbox"/> 100000-125,000 <input type="checkbox"/> 126000-150000., <input type="checkbox"/> 151000 & above.
3. Next years expected % in income	NYEI	%age _____
4. Savings	ANS	Total annual savings i.e. Rs=123456789/- <input type="checkbox"/> 0, <input type="checkbox"/> 1-5000, <input type="checkbox"/> 5000-10000, <input type="checkbox"/> 11000-15000, <input type="checkbox"/> 16000-25000 <input type="checkbox"/> 26000-50,000 <input type="checkbox"/> 50000 & above.
5. Next years expected % change Savings	NTYS	%age _____
6. Consumption	ANC	Total annual consumption i.e. Rs=123456789/- _____
7. Next years expected % in consumption	NTYC	%age _____
8. Age	AGE	<input type="checkbox"/> 21-30, <input type="checkbox"/> 31-40, <input type="checkbox"/> 41-50, <input type="checkbox"/> 51-60, <input type="checkbox"/> 60 & above
9. Gender	GEN	<input type="checkbox"/> Male <input type="checkbox"/> Female
10. Education	EDU	<input type="checkbox"/> Matriculation, <input type="checkbox"/> Intermediate, <input type="checkbox"/> Bachelor, <input type="checkbox"/> Master, <input type="checkbox"/> M.Phil., <input type="checkbox"/> Ph.D., <input type="checkbox"/> Diploma
11. Family Size	FZ	No of dependents: <input type="checkbox"/> 0, <input type="checkbox"/> 1, <input type="checkbox"/> 2, <input type="checkbox"/> 3, <input type="checkbox"/> 4, <input type="checkbox"/> 5, <input type="checkbox"/> Above 5
12. Job Type	JT	<input type="checkbox"/> Permanent (P), <input type="checkbox"/> Contract (C)
13. Family Type	FT	<input type="checkbox"/> Single, <input type="checkbox"/> Joint
14. Experience	EXP	<input type="checkbox"/> less than 1year, <input type="checkbox"/> 1 to 3year, <input type="checkbox"/> 3 to 5 year, <input type="checkbox"/> 5 to 8 year, <input type="checkbox"/> 8 to 15, <input type="checkbox"/> 15 and above
15. Province	PRO	<input type="checkbox"/> Punjab, <input type="checkbox"/> Sindh, <input type="checkbox"/> KPK, <input type="checkbox"/> Baluchistan, <input type="checkbox"/> Gilgit Baltistan, <input type="checkbox"/> AJK.
16. Profession	PROF	<input type="checkbox"/> Engineering, <input type="checkbox"/> Medical, <input type="checkbox"/> Business & accounts & admin, <input type="checkbox"/> Legislative, <input type="checkbox"/> Academic, <input type="checkbox"/> Law and Order, <input type="checkbox"/> Other.
17. Family Class	FC	Upper Class, Upper Middle-Class Middle Class, Lower Middle Class, Lower Class
18. Preferences		
1. Investment	PREF	<input type="checkbox"/> Source of Income, <input type="checkbox"/> Education of Children, <input type="checkbox"/> Marriage of Children, <input type="checkbox"/> Buy property, <input type="checkbox"/> Payback loan, <input type="checkbox"/> Other. _____
2. Saving	SPREF	<input type="checkbox"/> meet the basic needs, <input type="checkbox"/> Education of Children, <input type="checkbox"/> Marriage of Children, Health Expenses, <input type="checkbox"/> Buy property, <input type="checkbox"/> Payback loan or interest, <input type="checkbox"/> Other. _____
3. Consumption	CPREF	<input type="checkbox"/> meet the basic needs, <input type="checkbox"/> children's education, <input type="checkbox"/> clothes and fashion, <input type="checkbox"/> fitness and health, <input type="checkbox"/> technology, <input type="checkbox"/> food, and entertainment.
4. Categorize yourself	CAT	<input type="checkbox"/> non-saver + non-investor, <input type="checkbox"/> saver + non-investor, <input type="checkbox"/> saver + investor, <input type="checkbox"/> non saver + investor
5. Monthly consumption	MC	Health _____, educations _____, travel _____, Grocery _____, House maintenance _____, Other _____

6. Government Policy Investment Benefits /Schemes			
<i>Satisfaction items</i>	<i>Satisfied</i>	<i>Neutral</i>	<i>Not satisfied</i>
1. Health			
2. Education of children			
3. House loan/ maintenance			
4. Car loan/ transport			
5. Other			

7. Expenditure type	Monthly, (Rs.)
1. Food	
2. Clothes and Shoes	
3. Energy (electricity, gas, fuel)	
4. Goods for Housekeeping	
5. Traffic and News Service	
6. Care of Body and Health	
7. Education and Entertainment	
8. Personal Equipment	
9. Other Expenditures	
10. Saving for Building	
11. Society Deposits	
12. Bonds, Loans	

8. investment avenues			
Several investment avenues are listed below; select the appropriate column according to the level of awareness (select one only).	1= Unaware	2= Moderately aware	3= Completely Aware
1. Saving Account			
2. Bank FD			
3. Equity Shares			
4. Govt. Bonds / Debentures/ NCDs			
5. Derivatives (Futures and Options Markets) / Commodity Market/ Currency Market			
6. Mutual Funds			
7. PPF			
8. Other Post Office Products (NSC, MIP)			
9. Life Insurance			
10. Money Market (Call, T Bill, Liquid Funds)			
11. Tax Saving Schemes			
12. Real Estate			
13. Non-Conventional Avenues (precious Coins, Paintings)			

9. Choices and preferences (Please select any three options)	
1. Provision for unexpected events	
2. Complement pension at retirement	
3. Children Education	
4. Support of children/grandchildren	
5. Pay off debts	
6. Vacations	
7. Provision for unexpected events	
8. Complement future public pensions	
9. Children's education and support)	
10. Housing,	
11. Vehicles	
12. durable goods	

10. Barriers to the investment you feel (Please select any three options)	
1. Perceived risk of investments	
2. Financial scandals and corruption	
3. Economic crisis	
4. Perceived risk of financial intermediaries -	
5. Lack of knowledge to analyze investment alternatives	
6. Complement future public pensions	
7. Gaining higher	
8. Risk diversification and risk reduction	
9. Payless taxes	

Living Standards.

Please select the best option among the five-point scale having a value from 1 to 5, 1 for Strongly Disagree, 2 for Disagree, 3 for Neutral, 4 for Agree, and 5 for Strongly Agree

LSS	Living standards (Moderating variable) VS Saving patterns & Decision Making (5 Likert scales) (Lai, Lai, & Lau, 2009; Zabri, Ahmad, & Lian, 2016).	SD	D	N	A	SA
Social cost & saving						
SS1	Money matters for your respect in society.					
SS2	People get impressed by you when you have new things.					
SS3	Your standards of living make you proud in society,					
SS4	The social behaviour of others affects your savings					
SS5	Your standards of living are up to the mark of society					
SS6	Your social behaviour affects the savings					
SS7	People that are important to me think I should save regularly					
SS8	Most people like me save regularly					
Culture & saving						
CS1	I bargain about the cost of almost everything I buy					
CS2	I often have difficulty making decisions about spending on culture.					
CS3	Your social behaviour affects the savings					
CS4	Your savings are for cultural adaptations					
CS5	Cultural cost affects your savings					
CS6	It is necessary for cultural living and saving for it.					
6. Economics factors VS Saving and Consumption (5 Likert scales)						
Saving patterns INFFS Inflation		SD	D	N	A	SA
INFS1	Expected future rise in prices is the cause of your savings for retirement.					
INFS2	You know future uncertainty to save more for retirement.					
INFS3	Saving for the bad time is essential for the life of a retiree.					
INFS4	Inflation affects your saving goals after retirement.					
Inflation Consumption patterns INFC						
INFC1	Your consumption increases with change in inflation					
INFC2	You consume more due to the expected rise in future prices					
INFC3	After retirement, Consumption must be reduced on the item when its price increases.					
INFC4	After retirement, your consumption remains the same for increased fuel prices.					
INFC5	After retirement, fuel is the major expense of your consumption.					
(Shanmugam & Abidin, 2013)						
Retirement planning Personal Factors VS Saving and Consumption PFS (5 Likert scales)						
(Shanmugam & Abidin, 2013; Shanmugam & Zainal, 2013).						

Financial knowledge & saving		SD	D	N	A	SA
FKS1	I am aware that the value of money will depreciate over time to my saving for retirement.					
FKS2	Employee Provident Fund (EPF) or Public Pension scheme is the only source of income during my retirement.					
FKS3	After retirement, I am aware of other investment alternatives (stocks, properties, etc.).					
FKS4	I do not know how the inflation rate is calculated.					
FKS5	I understand the process of compound interest gaining a return after retirement.					
FKS6	I am aware that participating in many different investments reduces my investment risk.					
FKS7	I am not aware of the retirement benefits offered by my company/ government.					
FKS8	I cannot clearly distinguish between retirement fund and other funds (s) (child education fund, medical fund etc.)					
The behaviour of Saving patterns (Shanmugam & Abidin, 2013; Shanmugam & Zainal, 2013).		SD	D	N	A	SA
ABS1	I have good behaviour towards saving money for future retirement plans.					
ABS2	I have good behaviour towards spending money responsibly and saving for retirement.					
ABS3	I find it easy to save money from my salary.					
ABS4	I enjoy like to save money.					
ABS5	I am always organized in regard to managing money for the future.					
ABS6	Regular saving is beneficial (desirable).					
ABS7	My saving regularly will result in a more secure future financial life for my family and me					
The behaviour of Consumption patterns (Hamza & Arif, 2019).		SD	D	N	A	SA
ABC1	I always read the terms and conditions on the use of financial products/services					
ABC2	I always consume more on-sale items or discounted items.					
ABC3	I always look to spend money on my nonfood items.					
ABC4	I always keep aside some money for future use in retirement life.					
ABC5	I always choose financial products that suit their needs and conditions					
Goal Clarity Savings patterns (Shanmugam & Abidin, 2013)		SD	D	N	A	SA
GCS1	I set specific goals for how much I will need to save for retirement.					
GCS2	I think a great deal about the quality of life in retirement.					
GCS3	I have a clear vision of how life has been in retirement.					
GCS4	I set clear goals for gaining information about retirement.					
GCS5	I discussed retirement plans with my spouse, friend, or financial consultant.					
Personal needs Consumption patterns (Zabri et al., 2016).		SD	D	N	A	SA
FNC1	You consume on your health, children education a lot					
FNC2	You consume less, keeping your future needs					
FNC3	Your consumption is only your basic needs					
FNC4	Your savings fulfill your personal					
Personal Behaviour of Investors		SD	D	N	A	SA
CSCDM1	your family structure and social environment affect their investment decisions					
CSCDM2	Publications with financial content presented with means of communication like the internet and media positively influence investor behaviour					

CSCDM3	You tend to prefer low-risk investments as they get older.					
CSCDM4	you closely follow investment tools' performance of return					
CSCDM5	you have a high level of self-confidence in their investment decisions					
CSCDM6	your religious and political views affect their investment decisions					
CSCDM7	You make payments (individual loan, credit card, etc.) in time for investment.					
CSCDM8	People that are important to me think I should invest regularly					
CSCDM9	Most people like me to invest regularly					

Preferences and Knowledge Level of Investors

PKDM1	You mostly reside in the countryside					
PKDM2	You have sufficient information regarding investment tools					
PKDM3	You discriminate between domestic and foreign banks in their bank preference					
PKDM4	You prefer long-term investments rather than short-term investments					
PKDM5	You prefer traditional investment tools (real estate, gold, etc.)					
PKDM6	You prefer less risky investment tools (bank deposits, bonds, etc.) to risky investment tools (stock certificates, etc.)					
PKDM7	you tend to reduce risk through portfolio diversification					
PKDM8	Gold accounts presented by the banks attract the attention of investors					

General Factor Affecting Investment Decisions

		SD	D	N	A	SA
GFDM1	Government policies (contributions, tax reductions, etc.) affect investor behaviour in a positive way					
GFDM2	Investors attach importance to innovations in banking and financial services					
GFDM3	An increase in income level raises investor interest in financial instruments					
GFDM4	Investors' income levels affect the maturity date of the investments they make					
GFDM5	Investors consider their past investment experiences while making investment decisions					
GFDM6	Investors are influenced by an expert (consumer or investment representatives) and other investors' decisions while making investment decisions					
GFDM7	Economic stability is a key element affecting investment decisions for investors					

Investment Scams ISC

Chariri, Sektiyani, Nurlina, and Wulandari (2018).

		SD	D	N	A	SA
ISCROI	3. Investment offering tax-free return is beneficial for me to invest					
ISCROI	Investment offering inconsistent returns is fake					
ISCROI	Investments with unreasonably-high returns attract me well to invest					

Marketing of Investment

ISCM1	1. Investment offered individually with unreasonable promises attracts me well					
ISCM1	2. Investment focusing on recruitment of new members make me invest.					
ISCM1	3. Investment by which its member recruitment and activities are similar to multi-level marketing, and I will do surely.					
ISCM1	4. I get involved in Investment involving salespeople that tend to force potential investors to make an immediate decision about the investment					

Procedure of Investment

ISCPI	Investment is safe in the Investment do not carry their principles of fairness and prudence in the investment sectors					
ISCPI	Investment is safe in the Investment in goods or commodities, but the quality is not consistent with its prices					
ISCPI	Investment is safe in the Investment by which its products are not registered					
ISCPI	Investment is safe in the Investment without any clear documentation					
Investment Management Information						
ISCM I	Mostly any Investment is a scam with no clear explanation of how the investment funds are managed.					
ISCM I	Mostly any Investments is a scam without any information on the structure of management, ownership, and business, and the address of the companies					
ISCM I	Mostly any Investment is a scam providing a bonus, and the payment of the bonus depends on the recruitment of new members					
ISCM I	Mostly any Investment is a scam offered by complex strategies that is difficult to understand					

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