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Term Paper

The Retirement Consumption Puzzle: A Trade-Off

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Abstract

What happens to the prediction of the Permanent Income Hypothesis/ Life-Cycle Hypothesis (PIH/ LCH) when individuals earn income from a post-retirement job? It is expected that there should be an increase in consumption (food) expenditures at retirement. I hope to find a decrease (be it very little) in food expenditures after taking into account the impact of employing a house-help to carry out home production activities, which will result in incurring a cost (in terms of remuneration) but more importantly could bring about an increase in efficiency in home production activities (saddling the hose-help with the responsibility of shopping and food preparation). This study is in line with trying to suggest the explanations for the retirement consumption puzzle and to see whether it is even a puzzle.

INTRODUCTION

Milton Friedman (1957) opined via the Permanent Income Hypothesis (PIH) that individuals will prefer to smooth their consumption over their lifetime, rather than having their consumption undergo a relatively fluctuating pattern (that could arise from temporary shocks in their income level). This summarises the behaviour of a forward-looking consumers who strive to maintain a balance in their consumption over their time in life.

Modigliani and Brumberg (1954), in the same vein, believed that individuals will plan their consumption spending over their lifetime. Individuals at their early stages in life are opened to debt financing to invest in their future, and in the middle stage of their lifetime, they begin to repay their debts and engage in savings towards a better life in their old age; and at the old age, they spend the wealth they were able to create in their income-earning stage (known as the dis-saving stage). This theory is known as the Life-Cycle Hypothesis (LCH) theory.

However, there have been studies that depicts/ evidence or explains a/ the decline in the consumption expenditure pattern of retired individuals. This does not align with the PIH LCH, as it is expected that individuals should spend more at old age (of which retirement is a good proxy for this period in their life-cycle).

There is a body of literature that revolves around the highlights, discussions and/ or reasons for this decline in consumption expenditure at retirement. These studies are tagged as the "Retirement Consumption Puzzle" or the "Retirement Savings Puzzle".

To start with, the finding in **Bernheim et al. 2001** is more tilted towards the theory of "mental accounting", whereby individuals exhibit varying levels of self-discipline with regards to income management i.e how they can manage the urge to spend their current income on consumption and/or models with economic agents that are inconsistent in their decision making process over time. Thereby indicating that some individuals experience a decline in consumption expenditure as a result of insufficient planning for the phase after income earnings (at retirement).

Also, **Lusardi (2002)** noted in his study (using data from the Health and Retirement Study (HRS)) that a high number of households have not considered their retirement phase or started planning towards it. This lack of planning by these households will bring about low accumulated wealth and portfolios with a low probability of yielding high returns (e.g. stocks). The paper also lent a voice to the debate on the privatization of Social Security; indicating that there are possible jeopardy in implementing associated policies without complementing them with policies that will help address the factors behind the struggles of people to engage in saving plans and plan towards their future.

Banks et al. 1998 documented that, a relatively large factor for the decline in consumption expenditure around retirement can be understood via the life-cycle model by accounting for the seeming entanglement of consumption and leisure. The anticipated decline in consumption expenditure is approximately two (2) percent, although, the actual decline in consumption expenditure is approximately three (3) percent. This remaining approximately one (1) percent decrease in consumption expenditure could be explained by changes that are not prepared for towards retirement and might not be as a result of not planning adequately ahead of retirement.

Luengo-Prado and Sevilla (2013) reported (using a detailed panel expenditure data from Spain) that, in Spain, during the period between 1985–2004, the retirement consumption puzzle is not a puzzle. A little drop in non-durable expenditure at retirement can be attributed to a reduction in work-related expenses such as outfits for work, transportation to work and meals from the restaurants. After taken into consideration, social norms and the division of labour within the household, they stated that the distinct behaviour of food expenditure in the two periods of the sample (no observed decrease in the earlier period but in the latter period) at retirement, is in line with an augmented life-cycle model of consumption and home production.

Miniaci et al. (2003) discovered that consumption age patterns follows the reports of those evidenced in the USA and other developed countries, Using micro data covering the 1985-96 period from Italy. They also found that there is one-time decline in consumption expenditure at retirement of the head of the household, similar to that of the UK and the USA,

and showed that work-related expenses declines around retirement age and there is a rise in home production of food and expenditure on other goods. They further stated that, based on the fact that the households in the Italian survey over the sample period knew quite well the income they will receive from their pension, the only factor that explains the reduction in consumption expenditure at retirement is due to the increase in the consumption of leisure. With the accounting for leisure, the drastic decline in total non-durable consumption expenditure is evened out, resulting in an alignment with the the projections of the life-cycle theory.

Stephens and Haider (2003) realized that there is a significant evidence that using age profile of actual experiments and expected retirements do not have the same effect, which implies that using age as an instrumental variable for expected retirement is not an effective approach. They utilized an idiosyncratic expectation of retirement and found that the expectations of workers has a stronger projection for what the retirement consumption pattern would look like. Through this approach, they reported that consumption dropped by eight (8) to nine (9) percent for workers who eventually retired as they had expected. This led them to conclude that there still exists evidence of a decrease in consumption at retirement, with the use of a proper instrument.

Lundberg et al. (2003) using a data on food expenditure from the Panel Study of Income Dynamics, noted that the decrease in consumption experienced at retirement, as documented by other researchers is limited to households with a couple and in the scenario that the husband is the one that retires. From their study, they found that there is either no substantial change or a rise in the food consumption of households with just a single individual. This

dissimilarity between the behaviour of the households with a couple and those with a single individual is not in synchronization with past elucidations on the decline in consumption (hinged on lack of adequate plans for retirement or the occurrence of unforeseen negative events at retirement), but is in line with a model that accounts for marital bargaining where the wives have more incentive to save more towards an expectation of a wider retirement span (age gap as an indicator) and the control over market income is a factor for the comparative level of presiding over decisions in the households.

Hurd and Rohwedder (2003) found that there is a change in projected spending at retirement and actual spending as reminisced by the retirees. The findings goes against the explanation of **Bernheim et al. (2001)** and **Banks et al. (1998)** on the explanation for the reduction in consumption at retirement. The key result is that, at retirement, spending decreases by fifteen (15) to twenty (20) percent, however, the projected (at ages advancing a common retirement age) decrease in spending is almost the same as that of the actual decrease in spending. The study was carried out using data from the Health and Retirement Study (HRS), in addition with a supplemental survey to the Health and Retirement Study (HRS), the Consumption and Activities Mail Survey (CAMS).

Aguiar and Hurst (2005) directly scrutinized the connection between food expenditures, time spent on food production, and actual food consumption via the utilization of the Continuing Survey of Food Intake of Individuals (CSFII) (a novel data set) and the National Human Activity Pattern Survey (NHAPS). They stated that these data sets helped to depict that the retirement consumption puzzle is no puzzle at all once we untangle consumption

from expenditure. They found that a decrease in consumption expenditure by seventeen (17) percent is complemented by a rise in the time spent on food production by fifty-three (53) percent.

In **Battistin et al.(2009)** their main result is that there is a decline by nine point eight (9.8) percent in non-durable consumption as a result of (male) retirement. They also depicted that such decline is not engendered by liquidity issues for the less well-off in the population, but rather can be interpreted by the decline in goods that are work-related expenses or leisure substitutes. They further showed that retirement brings about a substantial decrease in the number of grown children living with their parents, and this can account for a highly significant fraction of the decline in retirement consumption.

Li et al. (2015) empirically tested if the households in China exhibit consumption smoothing at retirement. Using a unique dataset - the Urban Household Survey (UHS) in China, in addition with the data from the time use survey conducted in 2008, they found out that, total non-durable expenditure declines by twenty (20) as a result of retirement. This decline is interpreted as the decrease in expenses that are work-related and expenses on feeding at home. In addition to what has been said, husbands increase the time expended on shopping and food preparation. They stated that their findings can be interpreted by the life-cycle model in which home production is accounted for (indicating that retirees in China smooth their consumption well).

Allais et al. (2020) documented that households reduce their expenditure on food after the head of the household retires. They are convinced that this reduction in food expenditure for consumption at home is not matched by a rise in the expenses on food eaten away from home. They controlled for the likely compensation effect by accounting for the average number of meals consumed at home in a regular week (they do not have information on food eaten away from home), since evidence from the literature indicates that after retirement, individuals expend less on food away from home.

Anya and Nzepang (2023) examined and the effect of retirement on consumption (food) expenditure in Cameroonian households. They found out that consumption expenditure declines by fifty-five point six (55.6) percentage points and expenses on restaurants and hotels declines by sixty-five percentage points, in retirement.

Olafsson and Pagel (2024) found that individuals clear their consumer debt and engage in more savings after they retire; which is puzzling because judging by theory, individuals should engage more saving activities before and not after, the projected decrease in income at retirement; and thereby, stating various possible factors responsible for the findings which includes the same interpretations with the tagged retirement-consumption and retirement-savings puzzles.

Celidoni and Weber (2020) examined (using a regression discontinuity design technique) the impact of the male head retirement on the minimum amount of money required for a household to have a good standard of living but not a luxurious life in the case of Italy. They discovered that the minimum amount of money required declines by eight point three (8.3) percent at retirement, and that consumption falls by nine point eight (9.8) percent (That is, in the case where there is a decline in consumption expenditure at retirement, it might have no impact on the marginal utility of consumers, taking into account consumer's efficiency in shopping or putting a stop to work-related expenses) . Also supporting the opinion that the retirement consumption puzzle is no puzzle after all.

CONSULTANCY FEE AND FOOD EXPENDITURE

In this paper, I will examine if retirees who engage in consulting during retirement, which represents a source of income to them in form of consultancy fees, truly smooth their consumption (which signals a case of high incentive to increase their consumption expenditure due to income generation during retirement from their consulting job).

Cahill et al. (2006) documented that a large number of older Americans with career jobs do not retire at a go but in a gradual manner; about sixty (60) percent of these Americans secure some kind of bridge employment rather than exiting the workforce in its entirety.

Focusing on these type of retirees, I will go a step further to see if there is a reduction in consumption expenditure of those who employ the services of house-helps. These house-helps will be paid for their services, which will be accounted for as part of the cost of home production. Apparently, this should bring about an increase in their household expenditure. However, the delegation of the duties of home production to the house-help could bring about a net decrease in food expenditure in the household. This is because the house-help will dedicate time to shopping and food preparation which might bring about efficiency when compared to the retirees engaging in these activities personally.

These research work is interesting and will add to the existing literature by empirically testing for a scenario where there is an higher incentive to increase food expenditure, due to income from consulting, but being matched with impact that accrues from employing the services of an house-help in reducing food expenditure; thereby, examining whether the retirement consumption puzzle is a puzzle after-all.

This paper is to be structured as follows:

- Section I was an introduction;
- Section II is on CONSULTANCY FEE AND FOOD EXPENDITURE;
- Section III describes the data to be used for this empirical study;
- Section III focuses on the methodological approach employed in this study;
- Section IV documents the results;
- Section V is about the endogeneity issues;
- Section VI will focus on the conclusion/ policy implication (recommendation) of this paper.

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