

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume IX Issue X October 2025

An Intertemporal Analysis of Households Consumption Decisions Among Staff of University of Uyo, Nigeria

*Samuel Effiong Isaac, Effanga Anthony

Department of Economics, University of Uyo

*Corresponding Author

DOI: https://dx.doi.org/10.47772/IJRISS.2025.910000809

Received: 07 November 2025; Accepted: 14 November 2025; Published: 24 November 2025

ABSTRACT

This study explores the factors shaping how staff of the University of Uyo make intertemporal consumption choices. Data were gathered from 37 respondents across academic and non-academic units, covering their current and expected income, years of service, age, savings plans, present and future consumption, and utility rankings. Using this information, intertemporal consumption, savings, and utility functions were estimated for two periods: the present period, defined by each respondent's current rank and income, and the future period, tied to their next promotion and expected earnings. The findings reveal that current income and age play central roles in influencing both consumption and saving behavior. Evidence from the Euler equation suggests that the expected marginal utility of future consumption exceeds that of the present, implying a stronger incentive to save now for higher future satisfaction. The study highlights the importance of sound financial planning and supportive welfare policies to promote smoother consumption over time.

Key Words: Consumption, Savings, intertemporal choice, utility maximization

INTRODUCTION

The decision to consume is one of the basic economic decisions made by households in the economy. This decision is driven by a number of factors. Over the years, there have been emergence of theoretical explanation of the determinants of household consumption behavior. At the macroeconomic level, the Keynesian absolute income hypotheses of consumption had dominated the discuss at a time (Bhatia, 2006). The absolute income hypothesis came with very little or no microeconomics foundation. The attempt to provide microeconomic foundation to macroeconomic theories led to the emergence of intertemporal consumption analysis and consequently the emergence of other consumption theories (Palley, 2005). In microeconomics, the analysis of consumption is concern with the behavior of individuals and households regarding how much to consume, what to consume and when to consume (Hall, 1988). Consumption behavior by households can respond to a wide range of factors such as prices, income, expectation and time preference of consumption.

Many areas of private and public economics require the understanding of households' intertemporal decision. For example, issues such as household investment on human capital, household savings, fertility choices require the knowledge of the intemporal household behavior. Consumption behavior is also crucial for understanding both short-term business cycles and long-term economic growth (Samuelson and Nordhaus, 2009). There are two main categories of households: married couples and singles. It has been said that most of the studies on intertemporal consumption decisions has been performed under the assumption that these two types of households have identical intertemporal behavior (Mazzocco, 2002).

Studies on household intertemporal behavior also assume that each household can be represented using a unique utility function independently of the number of decision-makers (Attanasio and Paiella 2006). Under this assumption, life-cycle models of household consumption behavior have been developed and estimated (Mazzocco, 2002). In this study, the intertemporal allocation of resources for consumption purposes is





modelled as the joint decision of household members. Thus, the household is characterized as a group of agents, each of them being represented by individual preferences.

The life cycle model of household consumption choices appears to be consistent with households' intertemporal consumption decision (Campbell and Mankiw, 1989; Canova and Ravn, 1996; Dohmen et al, 2012). Similar to intertemporal consumption decision, the life cycle hypothesis of consumption explains how individuals make consumption decisions over their entire lifetime, taking into account their income and wealth level at different stages of their life (Campbell and Mankiw, 1990; Cambell and Deaton, 1989). The theory suggests that there are three periods or stages in an individual's consumption throughout his lifetime, namely; the early years of working life where income is low, the later years of working life where earnings is high, and retirement during which an individual dissave to consume (Corroll, 1997). It is expected that rational individuals will smoothen their consumption over their life time to maintain their standard of living despite fluctuations in income.

Although the life cycle model clearly mirrors intertemporal choices, the analysis of intertemporal consumption decisions can be done in more disaggregated time periods and the focus could be between two specific periods which represent the present and the immediate future period, perhaps for analytical simplicity. The estimate of household intertemporal consumption behavior has been done frequently using the Euler equation which is a mathematical equation that relates household consumption behavior to their preference for consumption over time, their expectation about future income and cost of borrowing money (Ascari, Magnussonc and Mavroeidis, 2019). This provides a framework for understanding how individuals make intertemporal consumption decisions by balancing the trade-off between present and future consumption, taking into account their preferences, expectations and interest rate.

The life cycle consumption model's assumption about the flow of income throughout an individual's lifetime is always consistent with the income flow of salary earners in the private and public sectors. The same may not always be said about business men and entrepreneurs whose earnings closely follows the pattern of the business cycle. However, workers in the public sector in Nigeria seems to have more job security than those in the private sector who may lose their jobs due to downturn in the business cycle and consequently truncate what was supposed to be a steady and predictable flow of income throughout one's life time. Therefore, the theoretical prediction of the life cycle and intertemporal consumption theory will most likely be observable among workers in the public sector in Nigeria. Thus, this study focused on staff of the University of Uyo who are employees of the Federal Government of Nigeria. The study examines how this category of households makes intemporal consumption decisions and the factors that drives their decision.

LITERATURE REVIEW

THEORETICAL FRAMEWORK

This section draws on life-cycle, behavioral, and intertemporal consumption theories, viewing consumption as a lifetime choice shaped by limited resources. The intertemporal approach explains that people rarely spend all their income in one period; they spread consumption across time to sustain a stable standard of living. Classical ideas such as the Fisher model and the life-cycle hypothesis highlight deliberate planning, while behavioral economics reminds us that habits, self-control issues, framing, and liquidity constraints often affect real-world decisions. Individuals constantly weigh today's consumption against tomorrow's needs, guided by expected income, interest rates, and their own perceptions of the future.

Intertemporal consumption decision is approached as utility maximization problem. Thus, we can start from the individual utility maximization problem which could be stated as follows;

Maximize:

$$U = U(X_1, X_2 ... X_n)$$
.....Equ(1)

Subject to:





$$Y \ge P_1 X_1 + P_2 X_2 + \cdots P_n X_n \dots Equ(2)$$

U is the individual utility function which depends on the consumption commodities $X_1, X_2...X_n$ while Y is the income of the consumer and $P_1, P_2,...P_n$ are the prices of the commodities. The consumer can spend his entire income on the purchase of all the commodities $(P_1X_1, P_2X_2,...P_nX_n)$ or save some of his income. If we consider the utility of an individual from the consumption of the commodities over different periods, the utility maximization problem could be expressed as follows;

Maximize:

Subject to:

$$\frac{Y_1}{(1+r)^0} + \frac{Y_2}{1+r} \dots \frac{Y_n}{(1+r)^n} \ge \frac{C_1}{(1+r)^0} + \frac{C_2}{1+r} + \dots \frac{C_n}{(1+r)^n} \dots Equ(4)$$

Here U_1 , $U_2...U_n$ are the individual utilities in different periods. Y_1 , $Y_2...Y_n$ are individuals' income in different periods while C_1 , $C_2...C_n$ are individual consumption expenditure on commodities in different periods. This means that for each period, consumption expenditure represented by C_1 , $C_2...C_n$ is respectively a function of P_1X_1 , $P_2X_2...P_nX_n$ while the utilities in each period represented by U_1 , $U_2...U_n$ is respectively a function of X_1 , $X_2...X_n$. The discount factor $\frac{1}{1+r}$ is used to discount individuals' income and expenditure to reflect their present values while r is the market interest rate.

We can consider a simple model of inter-temporal choice where the individual has a life time of two periods (present and future) and has a zero initial wealth. We assume that the present and future income levels (Y_1 and Y_2) are known with certainty and that individual's preferences and the market interest rate (r) are given. We also assume that the individual does not wish to transmit or bequeath any wealth to the next generation. The main objective is to maximize present and future utility (U_1 , U_2). The problem is to determine the utility-maximizing combination of present and future consumption levels (C_1 and C_2), subject to the present and future income constraint. This could be stated as follows;

Maximize:

$$U = U(C_1, C_2)$$
..... Equ(5)

Subject to:

$$Y_1 + \frac{Y_2}{1+r} = C_1 + \frac{C_2}{1+r}$$
.....Equ(6)

The left-hand side of the income constraint gives the present value of income while the right-hand side gives the present value of consumption expenditure. At present, the individual can choose to consume less than the present income (Y_1) and save some or, consume more than the present income (Y_1) and become a borrower; or just to consume an amount equal to Y_1 . In more extreme cases, a consumer may decide to save all his present income (Y_1) and consume it in the future period along with the future income. In such case present consumption (C_1) will be equals to zero and consumption in the future period (C_2) will be given as;

$$C_2 = Y_1(1+r) + Y_2...$$
Equ(7)

Equ(7) shows that since the individual saved all his income(Y_1) in the present period, his income(Y_1) will yield some interest (1+r) which is then added to Y_2 for consumption in period C_2 . If the individual consumes all his income (Y_1 and Y_2) in the present by borrowing his future income for consumption in the present period, consumption in the future period(C_2) will be equals to zero and consumption in the present period (C_1) will be given as;





$$C_1 = Y_1 + \frac{Y_2}{1+r}$$
......Equ(8)

Equ(8) shows that the individual borrows his future income (Y2) in addition to current income(Y1) for consumption in the current period(C1). 1/(1+r) is the discount factor which reflects the cost of borrowing. The intertemporal consumption decisions of individuals are also described in the Euler equation. The equation states that individuals will allocate their income for consumption between the present and the future period such that the marginal utility of consumption in the present period is equal to the discounted expected marginal utility of consumption in the future period. Thus, from equ(5) the Euler equation derived as follows;

$$U'(C_1) = \frac{1}{1+r} E[U'(C_2)]$$

U'(C1) is the marginal utility of consumption in the current period, 1/(1+r) is the discount factor which captures the individual preference for consumption today against consumption in the future. $E[U'(C_2)]$ is the expected marginal utility of consumption in the future period taking into account all possible future states of the economy. The Euler equation suggest that individuals will smoothen the consumption of their income over time to optimize their consumption from present and future periods.

In this study we also assume two period of income earnings and consumption. The present period is the period where the individual is in his or her current rank in public service and the income and consumption reported during this period is the present income and consumption. The expected future period is the period of the individuals next promotion and the associated expected income and consumption from that period.

Empirical Literature

There are a number of empirical studies about intertemporal consumption decisions of households. Karlsson, Garling and Selart (1995) in their study shows that the effects of prior outcomes in the form of temporary income change influence the individuals' choices on immediate and delayed consumption. They found that propensity to consume was greater when the respondents received an income increase rather than when there is an income decrease with an available savings. This means that in the behavioral life-cycle theory, individuals do not use their savings for their current or immediate consumption. The expected increase in income is the reason why the respondents choose to consume today.

Loewenstein (1998) also comes up with the result similar with the study made by Karlsson, et. al (1995). The study showed that the respondents chose not to consume now because they considered the delay premium as a gain. The delay premium pertains to the value that is being received by an individual when he/she chooses to give up the object now, and getting or it later or in the future. We could consider the delay premium as a gain or additions in the savings of the individual.

The study Levin (1998) shows that the behavioral life-cycle consumption model can explain how the changes in different types of financial assets, could affect the consumption of the individuals at or near retirement. In this study, it is found out that the consumption expenditure is sensitive to the changes in income and liquid assets, but is not sensitive to the changes in the value of the other types of assets such as houses and social security.

Shefrin and Thaler (1988) in their study incorporated qualitative factors such as self-control, mental accounting and framing in an attempt to do a behavioral enrichment of the intertemporal and life-cycle theory of consumption called the Behavioral Life Cycle Hypothesis. In their research, it is found out that individuals make consumption decisions based on their three mental accounts namely; their current income, assets and their future income. These factors were considered on their consumption and savings behavior.

Britta (2012) studied the influence of age on consumption in Germany. The findings in the study shows that the consumption of the young people in Germany pertains more on food and non-alcoholic beverages unlike those on the old group, which spends more on their health. This already pertains to the idea of the life cycle hypothesis that people save in order for them to have money to spend for their health when they retire.





Ascari, Magnussonc and Mavroeidis, (2019) in their study developed econometric methods, that are robust to weak instruments and exploit information in possible structural changes and applied it to study the Euler equation for consumption using aggregate US post-war data. They investigated several extensions to the baseline Euler equation model. The results were insensitive to using linear versus nonlinear specifications, different instruments or different consumption data. The result also shows that consumption was very sensitive to asset returns. With risk-free returns, the elasticity of intertemporal substitution was tightly estimated around zero, while with stock market returns, it was significantly positive but very imprecisely estimated.

Despite the many empirical literature on intertemporal consumption decisions, a clear research gap exists regarding micro-level analyses within developing economies, particularly in Nigeria. Most existing studies, such as those by Karlsson et al. (1995), Loewenstein (1998), and Ascari et al. (2019), have focused on developed economies using aggregate or experimental data, neglecting the contextual realities of African households. Furthermore, previous research has emphasized theoretical and behavioral dimensions of consumption while overlooking institutional and socioeconomic factors such as job security and inflation which strongly influence consumption smoothing among salaried workers in Nigeria. Hence, limited evidence exists on how university staff in Nigeria allocate income intertemporally across consumption, savings, and investment decisions, creating a gap this study seeks to address empirically.

METHODOLOGY

The sample size of 37 respondents, though relatively small, was determined by the accessibility of staff during the survey and the need for a focused exploratory analysis. Variables such as income, consumption, age, savings, and working years were selected based on theoretical relevance and empirical precedence from previous intertemporal consumption studies. Basic OLS diagnostic checks such as normality and heteroscedasticity tests were conducted, and potential multicollinearity was examined to ensure model robustness.

Model Specification

This study estimates household consumption function taking into consideration variables which could drives intertemporal choices of staff in the university such as current income, expected income, age, working years and savings plan. The model of this study is thus specified as follows;

$$C_1 = F(Y_1, Y_2, SAV, AGE, WYE).....$$

Where,

 C_1 = Current Consumption expenditure

 Y_1 = Current income

 Y_2 = Expected income

SAV= Savings

AGE= age of the consumer

WYE= working years

Equation 1 is estimated in a log-linearized form as follows;

$$LogC_1 = B_0 + B_1LogY_1 + B_2LogY_2 + B_3LogSAV + B_4LogAGE + B_5LogWYE + U \dots 2$$

Where Bo to B₄ are the model parameters and U is the error term.





To examine how current $income(Y_1)$, expected $income(Y_2)$, consumers age (AGE) and works years (WYE) affect their saving behavior which is also an intertemporal choice decision that will complement the above model,

a second model is specified as follows;

$$SAV = F(Y_1, Y_2, AGE, WYE) \dots \dots \dots \dots 3$$

Equation 3 is also estimated in a log-linear form as follows;

$$LogSAV = B_o + B_1LogY_1 + B_2LogY_2 + B_3LogAGE + B_4LogWYE + B_5LogC_1 + U \dots . 4 + B_5LogC_1 + B_5$$

To examine how consumption from the current period(C1) and expected consumption(C1) affect individual's utility, we specify and estimate the household utility function as follows;

Equ(5) is estimated in the form

Where 1/(1+r) is the discount factor. We assume that the discount rate(r) is 22% which reflect the market lending rate in Nigeria. Because of the nature of this study in which survey data is used for the estimation of the model, diagnostic test such as unit root test and autocorrelation which essential econometric diagnostic test when time series data is use does not apply in the estimation of the model of this study. However, normally test of the error term and heteroscedasticity test are carried out accordingly.

DATA ANALYSIS AND FINDINGS

Summary of Survey Data

	C1	C2	Y1	Y2	SAV	AGE	WYE	U
Mean	96756.76	155945.9	170540.5	213540.5	73783.78	42.62162	10.35135	5.162162
Median	80000.00	120000.0	140000.0	180000.0	64000.00	41.00000	7.000000	5.000000
Maximum	300000.0	400000.0	420000.0	500000.0	210000.0	59.00000	34.00000	7.000000
Minimum	35000.00	50000.00	50000.00	80000.00	12000.00	29.00000	2.000000	3.000000
Observations	37	37	37	37	37	37	37	37

Table 1: Descriptive Statistics

NOTE: Details of survey data and instrument if data collection is at the appendix

The summary statistics of the research data shows that the average current consumption spending (C_1) by the respondents is N96,756 with a minimum spending of N35000 and a maximum spending of N300,000. The average expected consumption expenditure(C_2) is N155,945 with a maximum of N400,000 and a minimum of N50,000. The average current income (Y_1) of the respondents is N170,540 with a maximum earning of N420,000 and a minimum earning of N50,000. The average expected income (Y_2) is N213,540.5 with a maximum of N500,000 and a minimum of N80,000. The average age of the respondent is 42.62 years. The oldest respondent is 59 years old while the youngest is 29 years old. The average number of years that the respondent has put into work is 10.35 years. The longest serving employee have worked for 34 years while the least have worked for just 2 years. The average utility rankings (U) from the current and expected consumption (C_1 and C_2) by the respondents in a scale of 1 to 10 is 5.16 with highest ranking of 7 and the lowest ranking of 3.





Model Estimations

The estimated result of the consumption model is as follows;

 Table 2: Consumption Function

Dependent Variable: LOG	(C1)			
Sample: 37				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	-1.383649	0.313363	-4.415480	0.0001
LOG(Y1)	1.738932	0.088823	19.57744	0.0000
LOG(Y2)	-0.126525	0.090399	-1.399637	0.1716
LOG(SAV)	-0.655929	0.028764	-22.80387	0.0000
LOG(AGE)	0.217191	0.066907	3.246153	0.0028
LOG(WYE)	-0.014157	0.015783	-0.896993	0.3766
R-squared	0.954869			
Adjusted R-squared	0.947589			
F-statistic	1367.406			
Prob(F-statistic)	0.000000			
JB Normality Test(Prob)	5.32(0.07)			
Heteroscedasticity Test	0.589(0.708)			

$$\mathsf{LogC_1} = -1.384 + 1.739 \mathsf{LogY_1} - 0.127 \mathsf{LogY_2} - 0.656 \mathsf{LogSAV} + 0.217 \ \mathsf{LogAGE} - 0.014 \ \mathsf{LogWYE}$$

The estimates shows that current income exerts the strongest influence on consumption spending with a coefficient of 1.73, it shows that as earnings rise, families tend to raise their consumption accordingly. Expected future income moves in the opposite direction, though its effect is not strong enough to be statistically meaningful. Savings play a more decisive role, reducing consumption significantly, as reflected in the negative coefficient of -0.656. Age also matters. The positive coefficient of 0.217 suggests that as individuals grow older, their spending increases slightly. In contrast, years spent in the workforce show a mild dampening effect on consumption, implying that people tend to cut back as their working years accumulate.

The adjusted R-squared of above 94 percent indicates that the included variables explain nearly all the variation in household consumption. Joint significance tests further confirm that the explanatory variables move consumption in meaningful ways. Diagnostic checks support the reliability of the estimates as both the normality and heteroscedasticity tests return p-values (0.07 and 0.708) that do not warrant rejecting the null assumptions. This means the residuals are roughly normally distributed with constant variance, suggesting that the model satisfies the core requirements for valid regression inference.

The estimated result of the savings model is as follows;

Table 3: Savings Function

Dependent Variable: LOG(S				
Sample: 37				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	-2.063392	0.462081	-4.465438	0.0001
LOG(Y1)	2.575017	0.131821	19.53425	0.0000



SIS	7 1 0 N A
¢	`

* ~				
LOG(Y2)	-0.184167	0.134029	-1.374087	0.1793
LOG(AGE)	0.270668	0.103894	2.605240	0.0140
LOG(WYE)	-0.017955	0.023456	-0.765460	0.4498
LOG(C1)	-1.438784	0.063094	-22.80387	0.0000
R-squared	0.937169			1
Adjusted R-squared	0.927029			
F-statistic	980.4378			
Prob(F-statistic)	0.000000			
JB Normality Test(Prob)	5.063(0.07)			
Heteroscedasticity Test	0.5951(0.7037)			

$$LogSAV = -2.063 + 2.575LogY_1 - 0.184 LogY_2 + 0.271 LogAGE - 0.018 LogWYE - 1.439LogC_1 + U$$

The estimated household saving function for staff of the University of Uyo suggests a clear pattern in how different factors shape saving behavior. Current income (Y1) shows a strong and positive relationship with savings, indicating that households tend to save more when their earnings rise. Expected income (Y2), on the other hand, slightly reduces the tendency to save, implying that when people anticipate higher future earnings, they feel less pressure to save from what they currently earn. Still, this effect is not statistically meaningful. Age (AGE) stands out with a positive and significant coefficient of 0.271, showing that people save more as they grow older. Working years (WYE) does not have a significant effect on saving decisions. Consumption (C1) exerts a strong negative effect on savings, which aligns with the idea that income is shared between consumption and saving, so an increase in one naturally reduces the other. The R-square value indicates that 92% of the variation in household savings is explained by the included variables, and the F-statistic confirms their joint significance. Tests for normality and heteroscedasticity further show that the error term is normally distributed with constant variance.

Table 3: Utility Function

Dependent Variable: U	
Sample: 37	
Variable	Coefficient
С	-9.925340
LOG(C1)	1.087344
LOG(C2/(1+r))	2.361934

The estimate of the utility function in table 3 is expressed in equation form as follows;

$$U = -9.923 + 1.087LOG(C_1) + 2.362LOG(\frac{C_2}{1+r})$$

From the estimated utility function, the marginal utility from consumption in the current period(U'(C1)) is 1.087 while the marginal utility from consumption in the future period(U'(C2)) is 2.362. Meaning that U'(C1) < U'(C2), indicating that individuals should save and consume more in the future period to maximize utility.

DISCUSSION OF FINDINGS

The findings point to current income and age as the key forces shaping how households allocate their consumption. Expected income and years spent working do not meaningfully influence current spending,





ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume IX Issue X October 2025

suggesting that people anchor their decisions more on what they earn now and their stage in life. The positive relationship between age and consumption mirrors the earnings pattern common among public-sector workers, whose income generally rises with rank and experience. This outcome supports the life-cycle hypothesis and echoes the conclusions of Britta (2012), showing that many individuals tend to consume more later in life. A similar pattern appears in the savings function: both current income and age encourage higher savings, even though consumption and saving move in opposite directions, as expected. The intertemporal utility estimates further reveal that people derive greater expected satisfaction from future consumption, implying a need to save more at present. This is consistent with studies by Karlsson et al. (1995) and Shefrin and Thaler (1988).

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Individuals make intertemporal choices consciously or unconsciously. Every purchase involves deciding whether to buy now or postpone it, and most people try to balance their present comfort with the kind of life they hope to maintain in the future. This study examines how staff of the University of Uyo navigate these intertemporal consumption decisions. The results point to two main factors: current income and age. These factors shape how respondents divide their resources between spending today and saving for later. Interestingly, expectations about future income and remaining working years did not play a significant role. This suggests that many respondents do not view their future earnings as strong determinants of later spending choices, perhaps a reflection of how sharply the cost of living has risen in Nigeria. Since incomes rarely keep pace with prices, people tend to favor present consumption. Yet, the estimated utility patterns hint that greater saving could yield higher future well-being.

Recommendations

From the findings of this study, the following recommendations are offered;

- 1. Individuals should be more conscious of making intertemporal choices based on their expected income and future consumption needs because when the future becomes the present, their income constraint may increasingly limit their ability to maximize utility from the consumption of their desired commodities.
- 2. Government should pay more attention to improving the welfare of university staff in form increase in earnings so that they could make better intertemporal choices to improve their lifetime living standards.

REFERENCES

- 1. Ascari, G; Magnussonc, L and Mavroeidis, S. (2019). Empirical evidence on the Euler equation for consumption in the US, Journal of Monetary Economics 117 (2021): 129–152
- 2. Attanasio, P and Paiella, M(2006). Intertemporal Consumption Choices, Transaction Costs and Limited Participation to Financial Markets: Reconciling Data and Theory. National Bureau of Economic Research (NBER) Working Paper 12412
- 3. Bhatia, H.L. (2006). History of Economic Thought, 4th Edition, New Delhi: Vikas Publishing House PVT.
- 4. Campbell, J. and Mankiw, N. (1989). Consumption, income, and interest rates: Reinterpreting the time series evidence, in NBER Macroeconomics Annual, eds. O. Blanchard, and S. Fischer, Cambridge, MA: MIT Press, 185—216.
- 5. Campbell, J and Mankiw, N. (1990). Permanent income, current income and consumption, Journal of Business and Economic Statistics 8, 265—279.
- 6. Cnova, F. and Ravn, M. (1996). International consumption risk sharing, International Economic Review 37, 573—601.
- 7. Campbell, J. and Deaton, A.(1989), Why is consumption so smooth?, Review of Economic Studies 56,
- 8. Carroll, C. (1997). Buffer-Stock Saving and the Life Cycle/Permanent Income Hypothesis, Quarterly Journal of Economics 112, 1—56.

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume IX Issue X October 2025



- 9. Dohmen, Thomas., et.al. (2012). Interpreting Time-Horizon Effects in Inter-temporal Choice. Institute of the study of labour(IZA) Disussion Paper No 6385
- 10. Hall, R. E. (1988). Intertemporal Substitution in Consumption. Journal of the Political Economy, 96(2): 339-357
- 11. Karlsson, Niklas, et.al. (1995). Explanations of Effects of Prior Outcomes on Intertemporal Choices. Retrieved from: http://www.gu.se/digitalAssets/1286/1286082_gpr97_nr4.pdf
- 12. Loewenstein, G. (1998). Frames of Mind in Intertemporal Choice. Management Science 34(2): 200-214
- 13. Levin, L. (1998). Are assets fungible Testing the behavioral life-cycle saving. Retrieved from:http://www.econ2.jhu.edu/people/ccarroll/papers/COS-WealthEffectsLiterature/Papers/Levin.pdf
- 14. Mankiw, N., Rotemberg, J. and Summers, L.(1985). Intertemporal substitution in macroeconomics, Quarterly Journal of Economics 100, 225—251.
- 15. Mazzocco, M (2002). Household Intertemporal Behavior: a Collective Approach, Working Paper, University of Wisconsin.
- 16. Palley, T.I. (2005). Relative, Permanent Income and Consumption: A Synthesis of Keynes, Duesenberry, Friedman and Modigliani and Brumberg. Washington, DC, 20010, pp.1-23
- 17. Samuelson, P and Nordhaus, P (2009). Economics, Mc Graw Hill Publishers, New York Stover, B. (2012). The Influence of Age on Consumption. Retrieved from: https://ideas.repec.org/p/ekd/002672/3808.html
- 18. Thaler, Richard. (1979). Towards a Positive Theory of Consumer Choice. Retrieved from: http://www.eief.it/butler/files/2009/11/thaler80.pdf
- 19. Weber, E., et.al. (2007). Asymmetric Discounting in Intertemporal Choice. Retrieved from: http://www.dangoldstein.com/papers/WeberJohnsonMilchChangBrodschollGoldstein_AsymDiscIntrtmp Choice_PsychSci07.pdf

Survey Data

C1	Y1	Y2	C2	C2/(1+22%)	SAV	AGE	WYE	U
90000	117000	150000	120000	98360.6557	27000	38	6	5
40000	52000	85000	60000	49180.3279	12000	29	2	4
150000	250000	300000	200000	163934.426	100000	49	8	6
200000	380000	450000	350000	286885.246	180000	53	12	6
35000	50000	80000	50000	40983.6066	15000	36	3	5
80000	130000	170000	120000	98360.6557	50000	56	30	4
60000	120000	150000	150000	122950.82	60000	39	5	7
80000	114000	127000	100000	81967.2131	34000	37	4	6
249000	414000	414000	300000	245901.639	165000	57	34	5
50000	80000	100000	80000	65573.7705	30000	32	2	4
150000	250000	300000	200000	163934.426	100000	52	20	6
60000	114000	140000	100000	81967.2131	54000	41	5	4
75000	125000	150000	100000	81967.2131	50000	43	5	5
70000	153000	180000	120000	98360.6557	83000	40	7	4
140000	350000	450000	300000	245901.639	210000	54	30	5
100000	180000	250000	200000	163934.426	80000	49	27	7
50000	75000	100000	80000	65573.7705	25000	36	2	3
110000	180000	220000	150000	122950.82	70000	43	8	6
300000	420000	500000	400000	327868.852	120000	59	31	7
80000	140000	180000	130000	106557.377	60000	39	7	5
200000	315000	400000	350000	286885.246	115000	56	32	7
120000	200000	250000	200000	163934.426	80000	45	9	6
80000	180000	250000	150000	122950.82	100000	42	8	6
65000	120000	160000	100000	81967.2131	55000	44	5	4
35000	65000	85000	50000	40983.6066	30000	41	9	3



ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume IX Issue X October 2025

50000	82000	120000	80000	65573.7705	32000	47	2	3
75000	120000	160000	100000	81967.2131	45000	41	4	4
56000	75000	100000	70000	57377.0492	19000	38	3	4
120000	180000	250000	200000	163934.426	60000	50	7	4
40000	75000	100000	50000	40983.6066	35000	31	2	5
150000	310000	350000	300000	245901.639	160000	41	12	7
50000	114000	150000	100000	81967.2131	64000	31	2	7
60000	150000	180000	120000	98360.6557	90000	37	5	6
80000	180000	250000	170000	139344.262	100000	35	6	6
50000	120000	150000	100000	81967.2131	70000	31	4	4
80000	150000	200000	120000	98360.6557	70000	36	8	5
100000	180000	250000	200000	163934.426	80000	49	17	6

Household Consumption Questionnaire (Hcq)

Dear Respondent,

I am a Postgraduate student in the department of Economics, University of Uyo, conducting research on household intertemporal consumption decisions among staff of the University of Uyo. Please kindly provide answers to the following questions to the best of your knowledge. To ensure confidentiality, there is no question about your identity details. Be assured that the answers provided will be used only for the purpose of this research and not for any other purpose. The final outcome of this research can be provided to you on request.

Thank You

1.	Male Female
2.	Married Single Divorce
3.	Academic Non academic
4.	Please indicate your age
5.	Please indicate your rank in public service
6.	Indicate the number of years you have worked so far
7.	Indicate the number of work years remaining before retirement
8.	Please indicate your monthly income in naira
9.	Indicate an estimate of your monthly expenditure on food, clothing, rent etc
	Which year are you expecting your next promotion
11.	Indicate your expected monthly earnings after your next promotion
12.	Give an estimate of your expected consumption expenditure after your next
	promotion
13.	If you have a monthly saving plan other than your pension, which of the following are your serving plans
	meant for? If you have no serving plans, please tick None
	Car Land Building School fees Others None
15.	If you have a monthly saving plan, please indicate how much you save monthly
17.	Rank your satisfaction from your current and expected consumption in a scale of 1 to 10
18.	1 2 3 4 5 6 7 8 9 10