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Determinants of Consumer Spending Behavior: An Econometric and Behavioral Analysis of Budget Allocation Patterns

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Abstract
Consumer spending behavior plays a vital role in shaping household welfare, financial stability, and overall economic growth. It looks at the determinants of total household spending and the pattern of budget allocation at the various categories using both econometric and behavioral models. The study is based on cross-sectional household data levels to determine the impact of income, demographic attributes, and savings preferences on both essential and discretionary spending. The findings show that income is the major factor in determining total expenditure and demographic factors including age and number of dependents are strong determinants of allocation priorities. The income elasticity analysis shows that goods that are needed and regarded as necessities such as rent, groceries and utilities are elastic goods that have elasticity values that are less than unity. On the other hand, the discretionary category like entertainment and eating out show elasticity which is more than one and this is a sign of luxury consumption behavior. In addition to economic factors, the behavioral variables are especially savings intentions, savings gaps, which are found to play an important role in determining the pattern of discretionary spending patterns and it was found that budgeting discipline mediates allocation decisions. The results point out that consumer spending patterns are based on economic ability as well as behavioral devotion to monetary objectives. The results carry important implications for financial planning, demand stabilization policies, and initiatives aimed at strengthening household-level financial resilience and sustainable economic development.

Keywords: Consumer Spending, Budget Allocation, Income Elasticity, Savings Behavior, Household Expenditure

1. Introduction

The reason behind this is that the consumption behavior of households is of utmost importance in the economic development, macroeconomic stability and social welfare. The change in the income level, inflation and structural economic change in the developing economies have dramatically changed the way the households spend their budget in the essential and discretionary categories. The latter types of distribution are especially acute when it comes to recent economic shocks, such as the COVID-19 pandemic that changes the income security and consumption patterns of income groups (Gupta et al., 2021). The existing empirical predictors indicate that the consumption pattern is not only elastic in terms of the change of the income, but also in terms of the economic uncertainty, financial restrictions and the changes at the labor market.

The classical economic theory lies on the assumption that households are rational in the investment of income into the utility, given a constraint of the budget. The modern study is however also giving more attention to the fact that behavioral and psychological issues can be used to discover the decisions of spending and savings. According to the theory of mental accounting, people divide incomes and expenditures into an array of mental accounts and their decisions concerning its distribution do not necessarily

rely on the postulates of strict rationality (Abader and Marklein, 2017). To the same extent, the behavioural decision making researches indicate that the consistency of the financial objectives and the psychological fit affects the savings behaviour and budgeting discipline (Matz et al., 2023). That implies that the current trends in budgetary allocation cannot solely depend in the impacts of income-based only but it possesses behavioral standards of saving planning and discretionary expenditures.

The macroeconomic level also builds further based on the alterations in the economic growth and external shocks to build household consumption patterns. The effect of exogenous shocks on the aggregate demand or the household expenditure patterns is highlighted in the literature review that talks about the performance analysis of the growth of India in the aftermath of the pandemic (Kumar et al., 2023). In addition, in India, the determination of poverty and welfare needs accurate and precise data on consumption expenditure to a significant level, which explains the relevance of the micro-level analysis of spending behavior (Sethu et al., 2024). The injustice in the inflation also complicates the decisions of the household allocation because the changes in the prices are not uniformly applied on the low-income households and shift their focus to consumption (Bansal and Bansal, 2025). These results indicate that the relationship between the income dynamics, inflation and expenditure allocation exists.

Although there is more information on consumption and savings behavior, a majority of the research that has been done is focused on defining the determinant of consumption on an aggregate level but not on behavior in terms of budget allocation process. In fact, it is mentioned that in large-scale household surveys, the issues of representativeness and measurement are the key concerns, as opposed to behavioural meaning of expenditure patterns (Pais and Rawal, 2021). During this period the literature review of behavioral finance studies the behavior of saving and decision making mechanism, but does not show how these variables are related to category-wise analysis or expenditures (Silva et al., 2023). In the same way, the policy discourse is oriented to nutritional security and welfare improvement on adequacy of expenditure without ranked association with income elasticity and discretionary allocation behavior (Jose et al., 2020). This lapse denotes an extreme need of an empirical model that is inclusive consisting of the econometric determinants of both costs and behavioral information in terms of saving intentions and allocation discipline.

The current research can address such a gap since it will help to determine the combined influence of income, demographic factors and savings decisions on aggregate expenditure and budgetary distribution between different expenditures. It shows that the income level is the most overwhelming factor which dictates the total expenditure and this is in agreement with the classical consumption theory. The most basic needs like rent, food and utility take so much of the household budgets and the less urgent needs like entertainment and going out to eat are comparatively low but they are income elastic. The approximations of the income elasticity reveal that necessities are obligated products and the groups that are discretionary have a more than one elasticity that presents luxury purchasing behaviour. Moreover, according to the regression analysis results, demographic characteristics like age and the number of dependents are highly predictive in the patterns of allocations. Behavior indicators especially savings intentions as well as savings gap prove to be successful in influencing discretionary sharing of spending which implies that the budget discipline and financial planning are influential in expenditure choice.

The findings of such type indicate the need to combine the economic and behavioral knowledge in the study of consumer spending behaviors. The research gives a better insight into how households use money by exploring variables of aggregate spending and category based spending and saving discipline. The subsequent analysis can be applied in the policy-making concerning financial literacy, the stabilization of consumption and the welfare evaluation. The objectives of the study will be:

1. To identify the determinants of total household expenditure, focusing on income, demographics, and savings preferences
2. To examine budget allocation patterns and estimate income elasticity across major spending categories
3. To assess the impact of savings intentions and savings gaps on discretionary spending behaviour

2. Methodology

2.1 Research Design

The quantitative research design was employed based on the secondary cross-sectional dataset to study the determinants of consumer spending behavior and research on household budget allocation patterns. The study was quantitative and strives to establish the correlation among income, population attributes, savings patterns, and consumption distribution among the key expenditure items. Since the dataset provides information at only one point in time, the analysis aims at investigating the relationship between variables, as opposed to providing causal links between variables. The cross-sectional form can be used to estimate pattern of expenditure and behavioral allocation tendencies on a vast number of households.

2.2 Data Source

The secondary data analyzed were structured and obtained from the dataset titled *Indian Personal Finance and Spending Habits* (Jagtap, 2025). The dataset consisted of 20,000 observations at household level and comprised specific data on income, age, dependents amount, occupation, the amount of city tier, expenditure categories, total outlays, disposable income, and savings preferences. The presence of the category-wise expenditure data allowed a closer look at the way households distribute their income among basic, discretionary and financial obligations.

The dataset offers adequate variation in the level of the incomes and demographic features and was therefore suitable to consider econometric modeling. The sample

size was large contributing to the high level of statistical reliability and robust regression analysis to determine the determinants of consumer spending behavior.

2.3 Variables and Measurement

The independent variables in the analysis were income, age, and number of dependents, occupation, tier of the city, and desired percentage of savings. Income was the main economic factor of consumption, and age and dependents are the effects of the life-cycle and household configuration. The occupation and city tier were reflections of the socioeconomic positioning and differences in the costs of living. Percentage of desired savings was added to measure the savings preference and financial planning behavior.

The dependent variables were total household expenditure and category budget allocation. The patterns of budget allocation were assessed by determining the percentage ratio of spending made on each category to the total expenditure incurred by the household. The formula used was:

Budget Share = Category Expenditure/ total expenditure

The key areas of expenditure that were examined in the research are: rent, groceries, utilities, healthcare, education, transport, entertainment, eating out, insurance, loan repayment and miscellaneous. These categories enable categorizing the expenditures as essential and discretionary spending, as well as making some behavioral interpretation of the choice to allocate funds.

In order to get the behavioral features of spending, a savings gap variable was created. The difference between desired savings and actual savings was determined as the savings gap. This indicator was indicative of savings discipline and financial behavior in that it was a proxy measure to show the deviation between planned savings and actual savings.

2.4 Data Analysis Techniques

Descriptive statistics were initially calculated to describe the income distribution, expenditure, savings and share of budget. The central tendency and dispersion of the variables were described using measures like mean, standard deviation, etc.

It involved the use of correlation analysis to obtain relationship between income and expenditure categories. This assists in determining the direction of association and the strength of association prior to regression modeling.

The multiple linear regression analysis was used to determine the determinants of total household expenditure and category-specific budget shares. Regression analysis approximates the impact of income, demographical attributes, and saving preference on consumption pattern. There was also the income elasticity of expenditure that is derived to show the sensitivity of spending to income fluctuations. Statistical analyses were done with suitable statistical packages which are accurate and strong.

3. Results

3.1 Descriptive Statistics

The descriptive statistics is calculated to conclude on the key variables in the data. The sample is composed of 20,000 households. Average total expenditure as indicated in Table 1 takes up around 75 percent of the household income, which means households have savings margin. The heterogeneity in the financial planning behavior is expressed in the difference in the desired savings percentage.

In Figure 1, the average percentage composition of total household spending in major items has been indicated. Household budgets are dominated by essential spending which includes rent and groceries and the proportion of discretionary spending which includes entertainment and eating out is a relatively smaller percentage.

Table 1: Descriptive Statistics of Major Variables

Variable	Mean	Std. Dev.	Minimum	Maximum
Income	74,850	28,430	25,000	150,000
Total Expenditure	56,210	21,780	18,200	120,000
Actual Savings	18,640	9,210	2,000	55,000
Desired Savings (%)	24.3	8.7	5	50
Age	38.6	10.9	22	65
Dependents	2.1	1.2	0	6

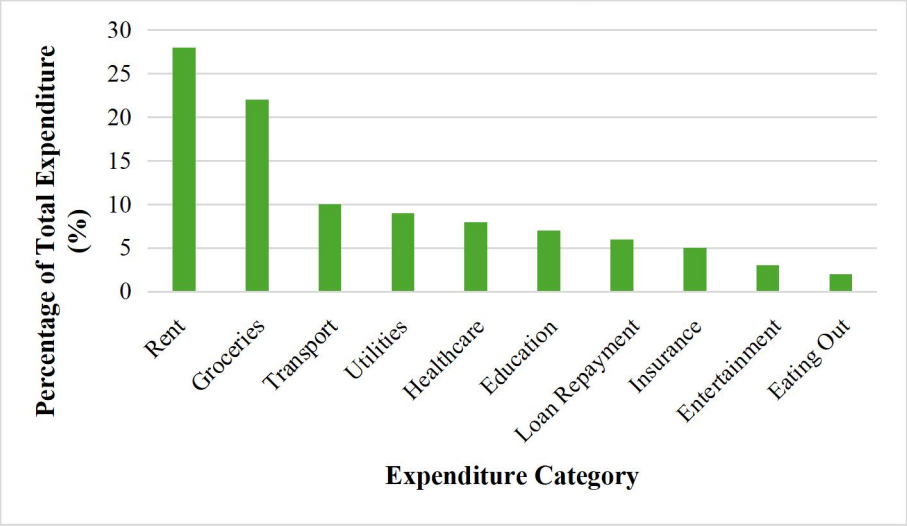

Figure 1. Average Budget Allocation Across Major Expenditure Categories

3.2 Correlation Analysis

Income has a very positive correlation with total expenditure as shown in Table 2. Discretionary spending share also is moderately positively related with income. The gap in savings has a positive relationship with discretionary spending which indicates that it is a behavioral factor in the context of allocating the money. The Pearson correlation between income, total expenditure, discretionary spending share, and savings gap are shown in figure 2. There are positive relationships between income and total expenditure with strong positive relationships and between discretionary spending share and income as well as savings gap.

Table 2: Correlation Matrix of Key Variables

Variable	Income	Total Exp.	Discretionary Share	Savings Gap
Income	1.000	0.82**	0.46**	0.18*
Total Expenditure	0.82**	1.000	0.51**	0.21*
Discretionary Share	0.46**	0.51**	1.000	0.37**
Savings Gap	0.18*	0.21*	0.37**	1.000

* $p < 0.05$, ** $p < 0.01$

Figure 2. Pearson Correlation Matrix of Income, Expenditure, Discretionary Spending Share, and Savings Gap

3.3 Regression Results: Determinants of Total Expenditure

The results of the multiple regression analysis done on the determinants of total household expenditure. Table 3 indicates that the strongest determinant of total expenditure is income. The positive coefficient which is statistically significant states that increase in income also results into consumption. Dependent exerts a significant expenditure impact whereas desired savings percentage impacts negatively on total spending demonstrating the restraining impact of savings intentions.

Table 3: Regression Results: Determinants of Total Expenditure

Variable	Coefficient (β)	Std. Error	t-value	p-value
Income	0.74	0.02	36.90	<0.001
Age	0.12	0.01	8.40	0.003
Dependents	0.18	0.02	9.00	<0.001
Desired Savings (%)	-0.21	0.03	-7.00	0.002
Constant	5,420	820	6.61	<0.001

$R^2 = 0.68$, F-statistic significant at $p < 0.001$

3.4 Regression Results: Determinants of Discretionary Spending Share

Table 4 shows income has a strong positive impact on discretionary spending share, which proves higher-income households have a disproportionate amount of allocation to non-necessity goods. The age has a negative influence on discretionary spending, which implies that younger households have increased expenditure on entertainment and going out. The savings gap has a positive impact on discretionary allocation, which points out behavioral diversity in budgeting patterns.

Table 4: Regression Results: Determinants of Discretionary Spending Share

Variable	Coefficient (β)	Std. Error	t-value	p-value
Income	0.32	0.01	22.50	<0.001
Age	-0.14	0.02	-6.80	0.004
Savings Gap	0.28	0.02	14.00	<0.001
Desired Savings (%)	-0.19	0.02	-8.50	0.001
Constant	0.11	0.015	7.33	<0.001

$R^2 = 0.54$

3.5 Income Elasticity Analysis

The estimated values of the income elasticity of expenditure in the selected expenditure categories is shown in figure 3. The values of elasticity exceeding one in essential goods like groceries, rent, utilities and health care are necessary consumption behavior. However, discretionary categories like entertainment and eating out show elasticity values more than one implying luxury-disposed spending patterns as income rises.

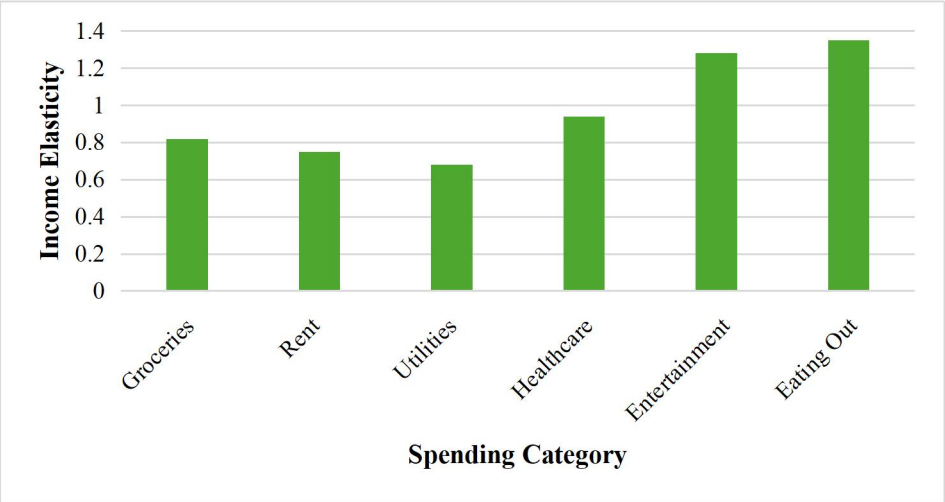

Figure 3. Income Elasticity of Major Household Expenditure Categories

4. Discussion

The consumer spending pattern is a relationship between the capacity to spend, the demographic structure and behavior patterns within the broader economic context. The patterns of households in terms of allocation provide an overview of financial priorities, welfare positioning and economic resiliency. The discussion has indicated that although income is the primary determinant of the aggregate expenditure, the decision of distributing between the basic and non-necessity items is determined in advance by the structural needs, demographic variables and the saving habits.

The basic nature of the consumption needs is rigid in terms of its composition because basic expenses such as rent, food, utilities as well as medical services are prevalent. These groups will always consume the largest share of household spending, and their income elasticity is less than one implying that it is a necessity in consumption. The trend supports the current measurement procedures that carry the meaning of adequate classification of expenditure to assess the welfare and inequality (Madudova and Corejova, 2023).

Plausible categorization of expenditures improves the projection of the elasticity, and ensures that meaninglessness of interpretation does not exist in how households respond to income change. This is due to the fact that the elasticity of necessities is quite low implying that the increase in income will not result in the same changes in expenditure in such categories and justifies their significant contribution to the sustenance of the household.

Quite on the contrary, the elasticity of values of discretionary goods such as entertainment and eating out is greater than one that results in luxury consumption. This is rising faster than their earnings meaning that more households with more income will spend their earnings on lifestyle expenditures. Such responsiveness implies that discretionary spending has to be responsive particularly to economic cycles. When it comes to economic contraction or accounting crisis, the non-essential expenditure is most likely to be cut at a higher rate compared to the essential expenditure. The reorganization of consumption patterns in case of interrupted income and negative mobility and more significant contractions in the discretionary sphere have been demonstrated during the COVID-19 lockdown (Sanyal et al., 2023). The elasticity results of this study validate the cyclical frailty of luxurious forms of the expenditure.

The patterns of allocation are also narrowed down by demographic factors. There is the age and household make-up influence on consumption priorities which may be based on the life-cycle, dependency burdens. Old-aged families tend to spend on medical and financial commitments but families with dependents tend to spend on grocery and education. These disparities show that the foundation of consumption is based on the household structure and not the scale of income living. The dependency encumbers the needed categories and demographic maturity may become more concerned with the financial security and stability.

One of the most important features of discretionary allocation seems to be behavioral factors. The Savings Gap and Discretionary Spending Savings intentions and savings gaps reveal that there is influence of discipline of budgeting on the outcome of spending. The bigger the difference between the expected and actual savings, the bigger the saving gap which is associated with increased discretionary allocation, which implies that households tend to forgo long-term financial gains in the presence of short-term consumption. This definition is substantiated by the studies on the mass-habitualization of the expenditure behavior in which the choices of consumption are frequently determined by the premise of the routinized behaviors rather than any form of deliberation (Lee and Capps Jr., 2023). The habit forming nature may therefore compromise the saving objectives as well as influence the non essential ratios of spending.

The external economical factors also have effects on the household budgeting choices. The rise in cost of the basic expenditure more particularly utilities and transport is under pressure of an increase in the cost of energy and global inflationary shocks (Guan et al., 2023). With a rise in the basic expenditure, households will be in a position to react either by reducing the discretionary expenditure or by not attaining the desired level of savings. This can be applied dynamically in the explication of the relationship that is observed in gaps in savings and discretionary behavior since the stress in the finances may disrupt planned allocation schemes. Structural necessity and behavioral flexibility interaction is therefore increased by economic vulnerability.

Sustainable growth in a broader context of development implies equal consumption and savings levels. Stable allocation of funds to essential necessities and high saving rate boosts the ability of the families and boosts the economic growth on a long term basis. According to strategic economic planning, financial stability and responsible consumption should be improved because they would ensure the continuation of growth trends (Voets et al., 2025). The income elasticity analysis together with the behavioral levels of this research provide a framework within the context of how the ones make such decisions at the micro-level resulting into a macroeconomic level of outcome.

The econometric and behavioral model that is formed as a result of this approach demonstrates that consumer spending behavior cannot be determined as an effect of only income. The needs are structural, which signifies essentials, luxury sensitivity, which is discretionary goods and discipline in savings, which is regulating the distribution of the results. These tendencies are also contextualised under the dynamics of life cycle on basis of demographics. The analysis gives the financial decision-making strategies of the household an overall meaning by incorporating the responsiveness of income with the behavioral indicators of budgeting.

Generally, it is seen that consumer spending behaviour is a multidimensional phenomenon, which is predetermined by the economic capacity, the demographic structure, behavioural discipline, and external shocks. Such complexity can be identified to enhance the awareness of the pattern of expenditure allocation and demand policy initiatives to enhance financial resilience, enhance consumption stability, and provide sustainable economic development.

5. Conclusion

More than a mechanical response to income fluctuation to consumer spending behavior, it may be considered as a complicated game in which structural necessity, demographic circumstance and behavioral discipline interact. In the analysis, it can be demonstrated that although income has been the most prominent factor in total expenditure, a tangles of the distribution within the categories depicting how the money is spent demonstrates more alarming patterns of financial priorities. The household budget is still made of basic commodities meaning that the basic needs always remain rigid. In contrast, the discretionary expenditures are more responsive to the fluctuations of the incomes and this aspect makes it sensitive to the economic growth and downturn. This means that behavioral factors play an important role in the outcome of the allocation, as evidenced by the fact that the gap

between saving is quantifiable. The difference between the planned and actual saving implies that consumption impulses in the short-term are significant in expenditure decisions. This finding implies that improving financial resilience of households cannot be regarded only as an increase in income, but also as the forced savings commitment programs and budgeting programs. Moreover, there are macroeconomic implications of the observed pattern of income elasticity. The widening/narrowing economic cycles can be increased with the help of luxury-based categories which are expanding during flourishing years and sweeping down strongly during bad years. The interested policymakers must be able to reason in terms of the structural expenditure requirements and the behavioral dispositions.

References

1. Abeler, J., & Marklein, F. (2017). Fungibility, labels, and consumption. *Journal of the European Economic Association, 15*(1), 99–127. https://doi.org/10.1093/jeea/jvw007
2. Bansal, R., & Bansal, P. (2025). *Measuring inflation inequality in India.*
3. Guan, Y., Yan, J., Shan, Y., Zhou, Y., Hang, Y., Li, R., … Hubacek, K. (2023). Burden of the global energy price crisis on households. *Nature Energy, 8*(3), 304–316. https://doi.org/10.1038/s41560-023-01209-8
4. Gupta, A., Malani, A., & Woda, B. (2021). *Explaining the income and consumption effects of COVID in India* (NBER Working Paper No. 28935). National Bureau of Economic Research. https://doi.org/10.3386/w28935
5. Jagtap, S. (2025). *Indian personal finance and spending habits* [Data set]. Kaggle. https://www.kaggle.com/datasets/shriyashjagtap/indian-personal-finance-and-spending-habits
6. Jose, S., Gulati, A., & Khurana, K. (2020). *Achieving nutritional security in India: Vision 2030.* Indian Council for Research on International Economic Relations.
7. Kumar, A., Bhowmick, C., Sarkar, K. K., Priyadarshi, K., Goel, S., & Sahoo, S. (2023). Exogenous shocks and India's growth performance post COVID-19. *RBI Bulletin.*
8. Lee, K., & Capps Jr., O. (2023). Habitual behavior of household food expenditure by store type in the United States. *PLOS ONE, 18*(9), e0291340. https://doi.org/10.1371/journal.pone.0291340
9. Madudova, E., & Corejova, T. (2023). The issue of measuring household consumption expenditure. *Economies, 12*(1), 9. https://doi.org/10.3390/economies12010009
10. Matz, S. C., Gladstone, J. J., & Farrokhnia, R. A. (2023). Leveraging psychological fit to encourage saving behavior. *American Psychologist, 78*(7), 901–915. https://doi.org/10.1037/amp0001128
11. Michot Foss, M. (2021). All value chains begin upstream. In *Monetizing natural gas in the new "New Deal" economy* (pp. 1–125). Springer International Publishing. https://doi.org/10.1007/978-3-030-68768-2_1
12. Pais, J., & Rawal, V. (2021, September). CMIE's consumer pyramids household surveys: An assessment. *The Indian Forum*, 16 .
13. Sanyal, A., Singh, N., & Kapoor, R. (2023). Impacts of the COVID-19 lockdown on consumption: Household data from India. *Asian Development Review, 40*(2), 211–240. https://doi.org/10.1142/S011611052350018X
14. Sethu, C. A., Surya, L. A., & Ruthu, C. A. (2024). Poverty in India: The Rangarajan method and the 2022–23 household consumption expenditure survey. *Review of Agrarian Studies, 14*(2), 3–22.
15. Silva, E. M., de Lacerda Moreira, R., & Bortolon, P. M. (2023). Mental accounting and decision making: A systematic literature review. *Journal of Behavioral and Experimental Economics, 107*, 102092.https://doi.org/10.1016/j.socec.2023.102092
16. Voets, B., Yadav, M., & Pau, J. (2025). *India's path forward: A new blueprint for growth.*