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THE LIFE CYCLE THEORY AND PERMANENT INCOME THEORY IN HOUSEHOLD FINANCIAL SUSTAINABILITY

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Abstract**:** *This article explains the interplay between the Life Cycle Theory (LCT) and Permanent Income Theory (PIT) in the domain of household financial sustainability. By integrating these two prominent frameworks, it offers a comprehensive approach to understanding how households manage their financial activities across their lifetimes. Considering the criticisms of both consumption theories, the article aims to provide valuable insights into distinct aspects of household personal sustainable finance, particularly in the areas of debt management and repayment, assessing sustainable consumption behavior, household expenditure and investment patterns, as well as the utilization and reduction of debt. Integrating these two theories presents a more holistic understanding of household financial sustainability.*

Keywords: Life Cycle Theory, Permanent Income Theory, Household Financial Sustainability, Household Financial Literacy

1. Introduction

One of the most important aspects of economic discipline is household financial behavior (Dwiastanti, 2019; Pope & Sydnor, 2015). Their activities are essential to economic growth and investment because their actions are critical to the nation's economic stability, prosperity, and growth, making them indispensable for long-term sustainability (Dash & Mohanta, 2024; Kumar et al., 2023). The Life Cycle Theory (LCT) and Permanent Income Theory (PIT) are two of the most prominent economic theories that explained relevancy of personal finance that aim to understand and predict household savings and consumption behavior in financial behavior literatures (Chen et al., 2018; Sulistiyowati & Dessyarti, 2022; Yun et al., 2023). These theories provide frameworks for comprehending how people make financial decisions, plan, and manage resources across lives and make consumption decisions, aiming for long-term financial sustainability. (Chen et al., 2018; Sulistiyowati & Dessyarti, 2022; Yun et al., 2023). These theories provide frameworks for comprehending how people make financial decisions, plan, and manage resources across lives and make consumption decisions, aiming for long-term financial sustainability.

Existing research has demonstrated the continued applicability of LCT and PIT in explaining household financial behaviors, especially during economic disruptions like the COVID-19 pandemic (Sulistiyowati & Dessyarti, 2022; Yun et al., 2023). These studies have further emphasized the significance of understanding how long-term income projections shape consumer conduct. Additionally, scholars have observed age-based disparities in household investment behaviors, where younger individuals prioritize low-risk assets, while older individuals rebalance their portfolios to include more high-risk assets as they approach retirement (Chen et al., 2018; Lusardi & Mitchell, 2014).

The purpose of this paper is to examine the theoretical underpinnings and practical implications of the LCT and PIT in relation to household financial sustainability. The article intends to contribute to a deeper understanding of the mechanisms that enable sustainable financial behaviour at the household level. It aims to explore the merits and drawbacks of these theories and offer a thorough analysis of how households might attain and retain financial sustainability over an extended period. Additionally, it will provide insights into their continued relevance in contemporary financial planning and policymaking.

2. Consumption Theories and Financial Literacy

Mainstream economic theories, such as the Life Cycle Theory (LCT) and the Permanent Income Theory (PIT), provide explanations for household debt management behavior. The classic LCT by Modigliani and Brumberg (1954) and Friedman's (1957) posits that individuals make rational, forward-looking decisions and incur debt to maximize utility over their lifetime. Similarly, the PIT assumes that households' smooth consumption based on their expected lifetime earnings (Drakopoulos, 2021; Fanta & Makina, 2019; Olsson, 2013; Zakaria et al., 2017). Prior research, such as that by Murphy (1997), has explored the inverse relationship between the debt-service ratio and spending growth, as well as the impact of income uncertainty on current spending patterns. Thus, these two theories portray relevant foundation in financial literature perspectives on how households make savings and consumption decisions.

The LCT proposes that households may consume more than their current income during preliminary stages of life, financing the difference through borrowing (Ganic & Mamuti, 2020; Modigliani & Cao, 2004). The theory suggests that individuals plan their spending and saving behavior over their lifetime, considering their predicted future income and wealth. Specifically, the LCT posits that individuals aim to smooth consumption by borrowing when young with low income and repaying the debt when older with higher earnings (Ganic & Mamuti, 2020; Modigliani & Cao, 2004). In contrast, Wang's (2006) model suggests that households consume out of their human wealth rather than financial wealth, and that precautionary savings increase with current income, which is modified by the LCT framework. Additionally, the LCT has been used to explain the high savings rates in China, where income growth has been a primary driver of the substantial increase in the saving rate, as anticipated by the theory (Nkomo & Adanlawo, 2023; Wen, 2009).

While the LCT has been supported by empirical evidence from numerous studies, some researchers have questioned its validity (Ganic & Mamuti, 2020; Modigliani & Cao, 2004; Nkomo & Adanlawo, 2023; Stephens Jr., 2008), particularly considering the financial crisis of 2008. These studies suggest that the Keynesian relative income hypothesis may offer a more comprehensive account of household consumption behavior. The Keynesian hypothesis posits that current consumption is influenced by factors such as current income, its distribution, household borrowing, and household indebtedness.

Several articles have re-evaluated Friedman's PIT as an alternative consumption theory (Murphy, 1997; Tolar, 1997; Wang, 2006). The classic PIH assumption is that consumers make consumption decisions based on their long-term average income rather than short-term income volatility. The PIH supports the idea that individuals have a target level of consumption they aim to sustain throughout their lives, referred to as their permanent income. However, some studies that have examined PIH within the context of nondurable consumer expenditure decision-making have found results that diverge from the classic PIH arguments (Tolar, 1997; Wang, 2006). These studies have utilized both primary data from telephone interviews and secondary data on nondurable consumption expenditure, disposable household incomes, and total credit available.

Research suggests that temporary income adjustments, such as receiving a bonus or a wage increase, may not significantly impact consumption behavior. Conversely, other studies such as Lim and Yoon (2011) indicate that in a PIH setting, households may borrow to smooth consumption patterns over time. When individuals have low current income but expect higher future income, they may choose to borrow to support their desired present consumption level.

The PIT has been studied in various contexts, including examining credit card usage and the spending behavior of low-income households (Murphy, 1997; Wang, 2006). For instance, research has found that the PIH explains notable outcomes for low-income households regarding food consumption, demonstrating that they may borrow money to meet their basic needs. Similarly, a study by Lim and Yoon (2011) of food stamp recipients revealed that low-income households on welfare can smooth their consumption, even though borrowing and saving may be challenging for them. Ziliak's (1998) research uncovered a common scenario in more developed nations where individuals often experience a temporary negative income shock, leading to the need for food stamps to stabilize their food consumption. The income elasticity of food demand is smaller compared to other less significant consumption components (Lim & Yoon, 2011). Overall, the PIH provides a framework for understanding why households may choose to borrow for consumption, particularly when their current income is limited. By considering their expected future income, individuals can make decisions to support their desired level of consumption in the present.

The LCT suggests that individuals save during their working years to smooth consumption over their lifetime, while the PIT posits that households base their consumption decisions on their expected long-term or "permanent" income rather than current income. These two theories are linked by household literacy, particularly in this article focused on household debt and the observed patterns of saving and consumption over the household financial decision cycle. Thus, this article will boldly examine the core principles of the LCT and PIT that contribute to household indebtedness, by evaluating the facets of financial literacy. The aim is to underscore the significance of making well-informed economic choices in managing household debt and securing long-term financial stability.

3. LCT and PIT Foundation in Household Financial Sustainability

Research on financial sustainability has gained increasing prominence in financial literacy. Consequently, the financial sustainability of households has been recognized as a sign of their financial security and stability (Yergasheva et al., 2020). The household sector constitutes a considerable proportion of buyers in the economy and financial markets, thereby exerting a substantial influence on overall demand for goods and services. This, in turn, promotes economic maturation and growth, contributing to the financial sustainability of the

economy. Despite the household sector's contribution to national accounts, it shapes the aggregation of responsible savings and spending habits, as well as a portion of business revenues due to their insatiable consumption, benefiting both individuals and the overall economic stability (Bunn et al., 2016; Organisation for Economic Co-operation and Development (OECD), 2021a, 2021b; Stenning et al., 2010). Furthermore, the household sector's participation in the labor market, propelling employment rates and income levels, and in the property market, for own residence, wealth accumulation, and investment opportunities, also impact financial sustainability at both the individual and macroeconomic levels. Understanding these nuanced dynamics is crucial when formulating policies aimed at promoting financial equilibrium within an economy.

A variety of studies have been conducted to analyze the factor of sustainability with mixed results (Boj del Val et al. (2022), Munisamy et al. (2022), Shah et al. (2020), and Yergasheva et al. (2020)) while Munisamy et al (2022). investigated the socioeconomic sustainability of low-income households in Malaysia and found that financial literacy has a positive impact on the socioeconomics of such households. These findings suggest that financial literacy can help low-income households improve their economic potential and support their social status in highly competitive markets. Additionally, early pandemic study by Shah et al (2020) insight the impact of financial attitudes, financial behavior, and financial self-efficacy on financial sustainability, utilizing 284 Malaysian employees from the manufacturing sector. The study revealed that psychological factors, such as financial attitudes, financial behavior, and financial self-efficacy, have a significant influence on the financial sustainability of manufacturing sector employees in Malaysia.

Both the Life Cycle Theory (LCT) and Permanent Income Theory (PIT) have significant implications for household finance planning, shaping strategies that households and policy makers use to ensure long-term financial sustainability. Thus, this study aims to address the lack of research on financial sustainability (Shah et al., 2020; Munisamy et al., 2022), particularly regarding East Malaysian households and their socioeconomic status. The objective is to enhance financial literacy among these households, empowering them to make informed financial decisions and achieve financial well-being, thereby improving their socioeconomic standing. It is reasonable to believe that household financial literacy, economic conditions, and external factors contribute to financial stability.

The household's capacity to maintain a minimum standard of living under varying conditions represents a crucial contribution to the social financial system and household financial sustainability (Bimendiyeva et al., 2019). By understanding the life cycle theory and permanent income hypothesis, households can better plan for future expenses and avoid excessive debt or overspending. According to the life-cycle hypothesis, individuals tend to spend more when young and save more as they age, with income and consumption patterns peaking during middle age (Schooley and Worden, 2008),. This knowledge allows households to anticipate future expenses based on their current life stage. Furthermore, it underscores the importance of saving for retirement and long-term goals, rather than relying solely on credit or loans. Awareness of these theories enables individuals to make better financial decisions aligned with their long-term objectives, avoiding financial traps such as excessive debt or overspending. This insight is particularly relevant for college students who are beginning to manage their own finances and require guidance on effective budgeting (Lusardi & Mitchell, 2014). Sustainable consumption behavior in financial literacy and knowledge refers to the selection of environmentally friendly, socially beneficial, and personally well-being-enhancing products and services (Betti et al., 2007; Sheoran & Kumar, 2022).. The extent to which this behavior affects financial stability is related to household debt patterns, as ethical and

sustainable offerings tend to be more expensive and less accessible to the general household (Betti et al., 2007; Sheoran & Kumar, 2022).

Financial education and literacy have expanded to incorporate sustainable consumption behaviors, with the aim of equipping individuals to make informed economic decisions conducive to sustainable living (Chen et al., 2020). On the other hand, recent study by del Castillo Negrete (2022) suggests, changes in both physical and financial assets can significantly impact one's overall financial well-being and long-term financial security. Consequently, a robust and comprehensive comprehension of sustainable personal finance is vital for individuals navigating the complexities of the modern economic landscape. This encompasses not only effective money management and prudent budgeting, but also intelligent and responsible investing strategies. Lacking proper financial knowledge, skills, and awareness, individuals risk falling victim to predatory lending practices, making uninformed investment choices, and engaging in consumption patterns that could have profound, long-lasting ramifications for their financial future (Lusardi & Mitchell, 2014). By promoting comprehensive financial education at the collegiate level, students can gain a deeper understanding of economic principles, acquire practical strategies for managing their finances, and develop a greater sense of financial responsibility. The study of household finance has been bolstered by advancements in behavioral economics and cognitive science, which have shed light on the psychological and neurological factors influencing financial decision-making (Frydman & Camerer, 2016). One key concept is the notion of financial literacy, defined as an individual's ability to process economic information and make informed financial decisions. (Lusardi & Mitchell, 2014). Overall, this not only benefits household personally, but also contributes to the broader economic stability and sustainability of society.

While much of the personal finance literature focuses on macroeconomic factors, it is crucial to consider the individual household perspective when discussing financial sustainability. Exploring the concept of sustainable consumption at the personal level is a key component of financial literacy. The relationship between household finances and financial well-being often centers around debt management, and studies have shown that financial education programs can have a positive impact on financial knowledge and behaviors (Kaiser et al. 2022, Zhang & Chatterjee, 2023). This underscores the significance of understanding personal finance to secure a stable financial future. By learning about budgeting, saving, and investing, individuals can build a solid foundation for making sound financial decisions. Moreover, higher financial literacy enables people to navigate complex economic systems and make more informed choices, benefiting the individual and society. Improving financial literacy is therefore pivotal for promoting personal finance sustainability (Lusardi & Mitchell, 2014).

The presented framework elucidates the linkage between the LCT and PIT in the context of household financial sustainability and well-being. This relationship is influenced by financial literacy, which is frequently associated with effective household debt management.

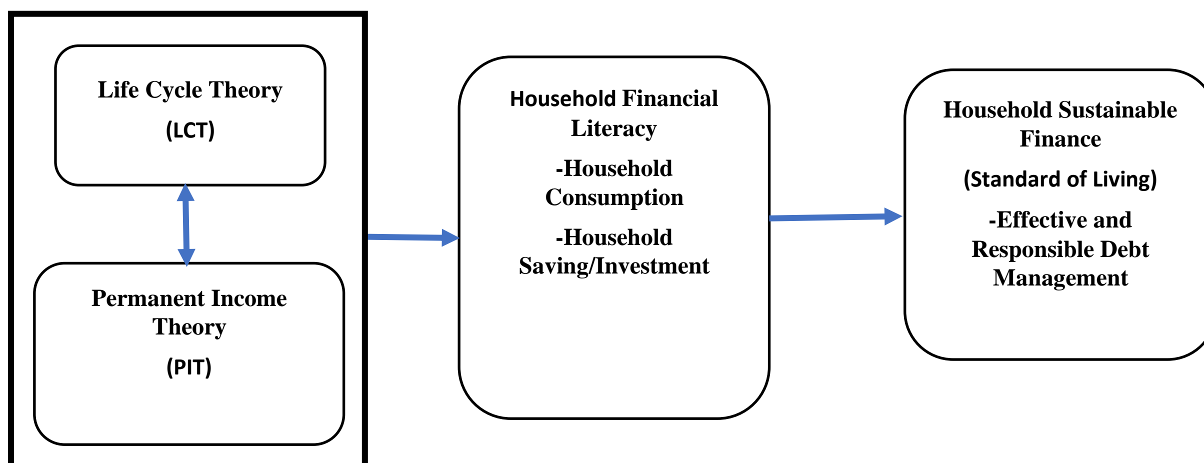

Figure 1.
Propose Framework Linking Consumption Theory to Household Sustainable Finance

The proposed framework discusses how the LCT and PIT can be linked to provide a holistic framework for personal finance sustainability representing a holistic household standard of living. The first component of the proposed framework, justifying how both LCT and PIT offer complementary frameworks for understanding household savings and consumption behavior over an individual's lifetime. Despite potential criticisms, these theories provide valuable insights into the factors that contribute to personal finance sustainability and have significant implications for policymakers. The LCT posits that individuals adjust their saving and spending patterns to maintain a satisfactory standard of living throughout their lives. In contrast, the PIT suggests that households base their consumption decisions on their perceived long-term or "permanent" income, rather than solely on their current income. Research such as Hall (1978) has shown that these theories are linked through the concept of investment saving, where households save to maintain a target wealth level as an emergency fund against unexpected financial distraction.

The second part of the proposed framework bring forward the idea of financial literacy crucial element, especially among young adults, can help individuals navigate this changing landscape and make better-informed decisions regarding saving, spending, and debt management. Developing sustainable personal finance curricula can equip young people with the knowledge and skills needed to achieve long-term financial stability and contribute to broader economic growth and inclusion (Praveena and Rachel2018). Thus, the proposed framework includes financial literacy element as a moderator effect that can lead to better economic outcomes for individuals and inclusive society.

In this framework, household financial sustainability posted as the third part of the proposed framework, refers to an individual's capacity to maintain a stable and secure financial standing over time, which necessitates personal financial knowledge and literacy(Hamid et al., 2023). This encompasses the ability to effectively manage finances, make informed decisions, and engage in long-term financial planning, encompassing areas such as budgeting, saving, investing, and debt management. Individuals lacking the requisite knowledge and literacy in these domains may face challenges in preserving their financial stability over the long run.

4. Conclusion

Undeniably, there are overlapping and significant divergences in both the LCT and PIT. Both theories emphasize the importance of smoothing consumption over time but differ in their assumptions about how households make this optimization. The LCT for example, elucidates how households manage and utilize debt across their lifespans, explaining household debt by considering the distinct phases of an individual's life and their corresponding income, consumption, and saving patterns. In contrast, the PIT focuses on consumption behavior, describing how individuals make consumption decisions over time based on their perceived long-term or disposable income. The PIT does not directly address household debt, but it directly explains debt through its ideas on how individuals manage their finances and make borrowing decisions.

The LCT and PIT are prominent frameworks in personal finance that aim to understand and predict household savings and consumption behavior. The LCT posits that individuals save during their working years to smooth consumption over their lifetime, while the PIT suggests that households base their consumption decisions on their expected long-term or permanent income rather than current income. These two theories are linked to the concept of sustainable household savings, where households save to maintain an elevated level of monetary liquidity against unexpected income losses. Empirical studies such as Bodie et al., (2007), Guo, (2011) and Beshears et al. (2018) have provided support for the linkages between the LCT and PIT in the context of personal finance sustainability, highlighting the influence of factors like income uncertainty and credit constraints. The integration of these theoretical perspectives with insights from behavioral household finance can offer valuable insights into the complex factors driving individual financial decision-making and promote personal finance sustainability.

In conclusion, achieving long-term financial well-being is a critical challenge for households, policymakers, and financial planners. Households today must navigate an increasingly complex financial landscape, managing a range of decisions related to borrowing, saving, investing, and debt repayment. While recent advancements in financial products and services have provided households with more options, they have also placed a greater responsibility on individuals to make informed financial choices (Hamid et al., 2023). The proposed framework aims to draw on theoretical foundations and empirical evidence to offer valuable insights for promoting sustainable household financial management practices.

Therefore, the concept of integrating both the LCT and PIT offers new perspectives on household financial decision-making, just by examining these theoretical foundations, and empirical evidence on real-world application, the proposed framework can provide valuable insights for promoting household financial sustainability. Incorporating factors that influence sustainable financial management behavior, such as income uncertainty and credit constraints, policymakers and financial planners can better support household financial well-being over the long term. Thus, it may lead to more understandable approaches that capture the interaction between household income retention, level of consumption, saving and investment pattern over its lifetime. Financial literacy getting more attention amongst the young adults will help household better in navigating their future personal finance sustainability provided more robust and inclusive long-term financial well-being.

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