Efficient Vol 8 (1) (2025): 78-89 DOI: https://doi.org/10.15294/efficient.v8i1.16034

EFFICIENT

Indonesian Journal of Development Economics

https://journal.unnes.ac.id/sju/index.php/efficient

Income's Role in Mediating Consumption, Education, and Credit Effects on Household Savings

Efriyani Sumastuti[1]✉, Nuswantoro Setyadi Pradono[2]

[1]Management study program, Faculty of Economics and Business, Universitas PGRI Semarang
[2]Management study program, Faculty of Economics and Business, UNAKI

Permalink/DOI: https://doi.org/10.15294/efficient.v8i1.16034

Submitted: July 2024; Revised: October 2024; Accepted: January 2025

Abstract

This study aims to investigate the mediating role of income in the effects of consumption, education, and credit on household savings among business actors in Indonesia. Using a sample of 170 business owners, data were collected through structured questionnaires covering variables such as monthly consumption, education level, credit usage, income, and household savings. Structural Equation Modeling (SEM) was employed to analyze the data using JASP software, allowing for both direct and indirect effects to be assessed. The results indicate that consumption positively affects both income and household savings, suggesting that increased spending among business actors reflects higher income levels that enable greater saving. Education also positively influences household savings by enhancing financial literacy, though it does not directly increase income. Conversely, higher credit usage is associated with reduced income and household savings, highlighting the financial burden imposed by debt repayment. Income is shown to be a significant mediator in the relationships between consumption, credit, and household savings but does not mediate the effect of education. These findings underscore the importance of financial literacy and responsible credit use in enhancing savings among business actors. The study offers insights for policymakers to promote financial stability and prudent financial behavior.

Keywords: Income, Household Savings, Consumption, Education, Credit

How to Cite: Income's Role in Mediating Consumption, Education, and Credit Effects on Household Savings. (2025). Efficient: Indonesian Journal of Development Economics, 8(1), 78-79. https://doi.org/10.15294/efficient.v8i1.16034

✉ Correspondence Address :
Address: Gedung L2 Lantai 2 FE Unnes
Kampus Sekaran, Gunungpati, Semarang, 50229
E-mail : efriyanisumastuti@upgris.ac.id

INTRODUCTION

Household savings are fundamental to economic stability and growth. Savings provide a financial buffer for families, allowing them to invest in essential areas such as education, healthcare, and housing, which contributes to

individual and collective welfare. In developing economies, where external financial resources may be limited, household savings become even more crucial.

These savings serve as internal capital sources for investments, reducing reliance on external financing and enhancing national economic resilience (Aini, Dianta and Pratama, 2023; Andriati & Huda, 2015; Grigoli et al., 2018; Kim & Lee, 2020; Banerjee et al., 2021).

The importance of understanding the determinants of household savings has been underscored in various studies. Savings behavior is influenced by multiple factors, including income, consumption patterns, educational attainment, and access to credit. However, these factors often interact in complex ways, requiring an integrated approach to capture their collective impact.

Many previous studies focus on isolated effects, which may overlook the nuanced ways these factors interrelate to shape household savings (Chen et al., 2020; Mahasuweerachai & Mahariwirasami, 2019; Granda et al., 2019; Lu et al., 2021; Yang et al., 2023). This comprehensive perspective is essential for designing effective policy interventions aimed at improving household savings rates.

Income is a key variable that mediates the relationship between consumption, education, credit, and savings. While some research acknowledges income's influence on savings (Tarigan, 2020; Silva & Susanti, 2019), few studies explore income's mediating role in these relationships. Mediation analysis can reveal indirect effects and pathways, offering deeper insights into how these variables interact to influence household financial behavior.

This approach is particularly valuable in developing contexts where income disparities and variable economic conditions may complicate the savings process (Escalante & Maisonnave, 2022; Haninda & Elfita, 2022; Faisal et al., 2016).

Consumption patterns are directly linked to household savings and typically exhibit an inverse relationship. Higher consumption levels often reduce disposable income available for savings, as noted in several studies (Silvia & Susanti, 2019; Setiawan & Amar, 2022). For business actors, however, consumption can also represent investment in business operations, potentially leading to increased income and savings. This complex relationship underscores the need for policies that balance the goals of consumption and savings to support sustainable financial planning and growth (Chan et al., 2022; Brown et al., 2021).

Education plays a crucial role in shaping income and savings behaviors, impacting economic outcomes at both individual and national levels. Higher education levels are associated with improved financial literacy and decision-making skills, which lead to more effective financial management and increased savings (Apriani & Faozan, 2023; Granda et al., 2019).

Education also positively influences income, contributing to higher savings potential (Chen et al., 2020; Mahasuweerachai & Mahariwirasami, 2019). However, in business contexts, the effect of education on income and savings can vary based on practical skills, market knowledge, and entrepreneurial acumen (Ghosh & Nath, 2023; Do et al., 2023; Eren & Genç İleri, 2022).

Access to credit also significantly impacts household savings by providing necessary resources for consumption or investment, though its effects on savings are complex. While

credit can facilitate investments that enhance income, it may also reduce disposable income due to debt repayment obligations.

Research shows that increased reliance on credit can negatively affect savings, especially if credit is used for non-investment purposes (Iski et al., 2016; Jaya et al., 2017; Azariadis et al., 2019). The relationship between credit and savings is nuanced, as it depends on factors such as interest rates, repayment terms, and individuals' financial literacy (Mohanta & Dash, 2022; Lotto, 2022; Lu et al., 2021).

Despite considerable research, there is limited understanding of how these factors interact to impact household savings, especially in developing countries. Existing studies tend to examine these variables individually, without fully considering income's role as an intervening factor.

This gap in the literature highlights the need for a more integrated approach to study these relationships and to explore income as a mediating factor within a broader economic and social context (Escalante & Maisonnave, 2022; Haninda & Elfita, 2022; Yang et al., 2023). This study seeks to address these gaps by offering a comprehensive analysis of factors influencing household savings among business actors in a developing economy.

Specifically, it aims to (1) analyze the combined impact of consumption, education, and credit on household savings, (2) examine the role of income as an intervening variable, and (3) provide context-specific insights applicable to developing economies.

Utilizing data from 170 business actors, this study provides a focused understanding of the dynamics that shape household savings in economically similar settings.

RESEARCH METHODS

This study adopts a quantitative research design to analyze the mediating role of income in the relationship between consumption, education, credit, and household savings. A quantitative approach was selected to allow for systematic data collection and objective analysis, which helps identify patterns and relationships between variables (Strijker et al., 2020).

The research focuses on business actors as the target population, given their distinct financial behaviors and the significant impact their savings patterns have on broader economic stability. The study was conducted within a developing economy context, making the findings relevant to similar economic settings.

To ensure a diverse and representative sample, purposive sampling was employed, selecting 170 business actors, including entrepreneurs and business owners from various sectors. This sampling method aligns with the research objectives by capturing a range of financial behaviors across different demographic backgrounds. Data on age, education level, and income were collected to provide context and enhance the analysis of savings patterns.

Structured questionnaires were used to gather data, covering key variables such as consumption, education, credit, income, and household savings. The questionnaires were distributed over two months, with careful pre-testing to refine questions and ensure data quality based on feedback from a pilot study (Bryman, 2016).

The data collection focused on capturing monthly expenditures across various consumption categories to assess how consumption patterns influence household savings. Education was measured by the highest

qualification attained, serving as an indicator of financial literacy and savings behavior.

Credit use was measured by outstanding loan amounts and frequency of credit access, providing insights into how credit impacts household savings. Income, considered an intervening variable, was measured by total monthly income, highlighting its role in mediating the effects of consumption, education, and credit on savings. The primary outcome, household savings, was measured by the amount saved monthly.

For data analysis, JASP software was employed due to its capabilities for advanced statistical analysis, specifically Structural Equation Modeling (SEM), which is ideal for testing complex relationships involving multiple variables and mediation effects (Kline, 2023).

SEM was used to examine the direct and indirect effects among variables, while the mediation effect of income was analyzed using the bootstrap method, which provides robust estimates of indirect effects and their statistical significance (Hair et al., 2022).

This method ensured accurate and reliable results, supporting the study's objectives to uncover the complex dynamics influencing household savings in a developing economy context (van den Bergh et al., 2023). Here's a set of equations based on the Structural Equation Modeling (SEM) approach:

Direct Effects on Income: $\text{Income} = \alpha + \beta_1 \times \text{Consumption} + \beta_2 \times \text{Education} + \beta_3 \times \text{Credit} + \epsilon_1$

Where α is the intercept; β_1, β_2, and β_3 are the coefficients representing the effects of consumption, education, and credit on income, respectively and $\epsilon_1\epsilon_1$ is the error term for this equation.

Direct and Indirect Effects on Household Savings: $\text{Household Savings} = \gamma + \delta_1 \times \text{Consumption} + \delta_2 \times \text{Education} + \delta_3 \times \text{Credit} + \delta_4 \times \text{Income} + \epsilon_2$

Where γ is the intercept; δ_1, δ_2, and δ_3 are the direct effects of consumption, education, and credit on household savings; δ_4 represents the effect of income on household savings and $\epsilon_2\epsilon_2$ is the error term for this equation.

Indirect Effect of Consumption on Household Savings: $\beta_1 \times \delta_4$

Indirect Effect of Education on Household Savings: $\beta_2 \times \delta_4$

Indirect Effect of Credit on Household Savings: $\beta_3 \times \delta_4$

RESULTS AND DISCUSSION

The characteristics of the respondents are shown in Table 1. The majority of the respondents (48.82%) fall within the age range of 32-47 years, indicating that the sample primarily consists of middle-aged business actors. This age group is likely to be actively involved in economic activities, making significant financial decisions, including savings.

The representation of respondents aged 48-63 years is also substantial (39.41%), suggesting a mature segment with potentially established financial practices. Younger respondents (< 32 years) and those over 63 years are less represented, which might reflect the typical age range of active business actors in the sample.

A significant portion of the respondents have completed high school (40%) or middle school (33.53%). The relatively lower percentages

of respondents with diploma (1.77%) and bachelor's degrees (2.35%) suggest that the sample may predominantly include individuals with basic to intermediate education. This distribution can have implications for financial literacy and saving behaviors, as higher educational attainment is often associated with better financial management skills.

Table 1. Profile of respondents

Variable	Description	Freq-uency	Percentage
Age	< 32	13	7,65
	32-47	83	48,82
	48-63	67	39,41
	>63	7	4,12
Education	Elementary	38	22,35
	Middle School	57	33,53
	High School	68	40
	Diploma	3	1,77
	Bachelor	4	2,35
Household Saving (thousand IDR)	< 100	29	17,06
	100-250	79	46,47
	251-400	28	16,47
	>400	34	20
Income (thousand IDR)	<1000	27	15,88
	1000-2000	95	55,88
	>2000	48	28,24

Source: Data Processed (2024)

Nearly half of the respondents (46.47%) save between 100,000-250,000, indicating a moderate level of savings among the majority. A noteworthy proportion of respondents save more than 400 (20%), reflecting a segment with higher savings capability. Conversely, 17.06% of respondents save less than 100,000, which might highlight potential financial constraints or higher consumption needs.

The majority of the respondents (55.88%) have an income between 1000,000-2000,000, which indicates a middle-income group. A significant proportion (28.24%) earns more than 2000, suggesting a segment with higher earning potential and possibly greater financial flexibility. Meanwhile, 15.88% of the respondents earn less than 1000, 000 which might reflect lower economic standing and could potentially impact their saving capacity.

Table 2. Hypothesis test

Path (hypothesis)	β	t-value
Consumption->Household savings	3,27	14,38**
Education ->Household savings	0,04	3,81***
Credit->Household savings	-0,09	-1,84*
Income->Household savings	0,63	22,21***
Consumption->Income	4,58	9,03***
Education->Income	-0,01	-0,28
Credit-> Income	-0,3	-2,19**
Consumption->Income-> Household savings	2,88	8,36***
Education->Income->Household savings	-0,004	0,28
Credit->Income->Household savings	-0,19	-2,18**

Notes: ***p<0,01; **p<0,05; *p<0,10
Source: Data Processed (2024)

The significant positive coefficient (β = 3.27, t-value = 14.38***) indicates that higher levels of consumption are associated with increased household savings, contrary to the expectation that higher consumption reduces savings. In business contexts, higher consumption often reflects higher income levels, allowing households to increase both spending and savings.

Business owners may tie increased consumption to investments that generate higher revenue and personal income. This

understanding challenges the traditional view and underscores the need for tailored financial strategies that account for specific economic behaviors of different demographic groups.

This relationship aligns with findings by Chan et al. (2022), who noted the significant impact of cultural values on saving rates in China, and Brown et al. (2021), who observed that economic stability influences consumption and savings patterns. Anukriti et al. (2022) provided evidence from rural India showing how cultural practices like dowry can affect saving patterns.

Additionally, Azariadis et al. (2019) highlighted that while access to credit can provide necessary liquidity for consumption, excessive reliance on credit can lead to debt accumulation, negatively impacting savings. Higher education levels also enhance financial literacy and prudent financial management, supporting both consumption and savings, as indicated by Ghosh & Nath (2023) and Eren & Genç İleri (2022).

The significant positive coefficient (β = 0.04, t-value = 3.81***) indicates that higher levels of education are associated with increased household savings. This aligns with existing literature suggesting that higher educational attainment leads to better financial literacy and management practices, promoting saving behavior.

Educated individuals are more likely to understand the importance of saving, engage in financial planning, and utilize financial products that facilitate savings (Mahasuweerachai and Mahariwirasami, 2019). Higher education often correlates with higher income levels, providing more disposable income for savings.

Ghosh & Nath (2023) demonstrated that educational attainment positively correlates with savings rates in India, suggesting that education fosters long-term financial planning. Similarly, Andriati & Huda (2015) found that educational interventions improve saving behaviors among poor households by providing better financial knowledge and skills.

Do et al. (2023) emphasized that higher education levels instill a forward-looking mindset conducive to saving, while Eren & Genç İleri (2022) highlighted that education influences the ability to plan for future financial needs and take advantage of saving opportunities.

The negative coefficient (β = -0.09, t-value = -1.84*) indicates that higher levels of credit usage are associated with decreased household savings. This aligns with the expectation that increased reliance on credit reduces disposable income available for savings.

Debt repayment, including principal and interest payments, consumes a significant portion of income, leaving less for savings (Chen et al., 2020; Mahasuweerachai & Mahariwirasami, 2019). This debt burden can discourage savings and lead to financial distress, particularly if credit is used for consumption rather than investment. Credit usage might also create a false sense of financial security, reducing the motivation to save.

Azariadis et al. (2019) discussed how incomplete credit markets and borrowing constraints negatively affect savings by increasing financial strain. Excessive reliance on credit can lead to debt accumulation, hindering financial stability and growth.

Mohanta & Dash (2022) found that financial consultants can help mitigate these negative impacts by guiding households towards better financial management. Without such guidance, debt can overwhelm the financial

capacity to save. This issue is especially relevant in developing economies where access to affordable credit is limited, and high-interest loans exacerbate financial strain (Eren & Genç İleri, 2022). Cultural practices emphasizing immediate consumption over savings can further exacerbate the negative effects of credit on savings (Anukriti et al., 2022). Additionally, perceived economic risks influence how households manage credit and savings (Brown *et al.*, 2021).

The significant positive coefficient (β = 0.63, t-value = 22.21***) indicates a strong association between higher income levels and increased household savings. Higher income provides households with more disposable income, allowing them to allocate surplus funds towards savings after meeting immediate consumption needs. This underscores income as a critical determinant of saving behavior (Apriani and Faozan, 2023).

Income stability and growth are pivotal in financial planning and savings accumulation, particularly for business actors with variable income streams. Higher and stable income enhances the ability to save, offering a financial cushion against potential business risks and uncertainties. It also facilitates better access to financial products and services, such as savings accounts, retirement funds, and other financial instruments, thereby enhancing financial security.

This aligns with the life-cycle hypothesis, which suggests individuals plan their consumption and savings behavior over their lifetime to ensure long-term financial stability (Grigoli, Herman and Schmidt-Hebbel, 2018). Studies like Yang (2023) in China and Azhar Mehmood et al. (2022) in Pakistan have shown that income growth significantly influences savings rates. Stable income sources, such as regular tax refunds or government benefits, also positively affect savings behavior (Gallagher et al., 2020).

Educational attainment enhances income and savings by fostering financial literacy and prudent financial management (Ghosh & Nath, 2023). Conversely, incomplete credit markets and borrowing constraints can limit savings by diverting income towards debt repayment (Azariadis et al., 2019). Financial education programs emphasizing saving, even as income increases, can reinforce this positive behavior, ensuring households build robust financial foundations for their future (Aini, Dianta and Pratama, 2023).

The significant positive coefficient (β = 4.58, t-value = 9.03***) indicates that higher levels of consumption are associated with increased income, particularly in the context of business actors. This relationship suggests that increased consumption reflects heightened economic activity and investment in business operations. Business owners who spend more on inputs like raw materials, marketing, and expansion can drive revenue growth and, consequently, personal income (Faisal, Tursoy and Resatoglu, 2016).

Increased consumption often signifies reinvestment into the business, enhancing productivity and market reach, leading to higher sales volumes and improved service offerings, which ultimately boosts earnings. This dynamic highlights the importance of viewing consumption as a critical driver of income rather than merely an expense, especially in entrepreneurial environments. The multiplier effect also plays a role, where increased business and household spending stimulates broader economic activity, leading to higher overall

income levels within the community (Mahasuweerachai and Mahariwirasami, 2019).

Brown et al. (2021) noted that economic stability and perceived risks influence consumption and savings patterns, with stable conditions promoting both higher consumption and income generation. Chan et al. (2022) highlighted the impact of cultural values on economic outcomes.

Anukriti et al. (2022) provided evidence from rural India showing how cultural practices linked to consumption can affect income levels. Levenko (2020) discussed how perceived economic uncertainty drives financial behavior, emphasizing the need for responsible financial management to balance consumption and ensure sustainable growth.

The non-significant coefficient (β = -0.01, t-value = -0.28) indicates that higher education levels do not directly affect income among business actors in this sample. This finding challenges the common belief that higher education leads to increased income.

While education typically enhances skills and knowledge for better job opportunities and earnings (Chen et al., 2020), income for business actors may be more influenced by entrepreneurial skills, business acumen, and market conditions rather than formal education. Business success often depends on practical experience, networking, and the ability to capitalize on opportunities, which are not always linked to educational qualifications (Mahasuweerachai and Mahariwirasami, 2019).

Consequently, education might improve financial literacy and decision-making but may not significantly impact income levels for business actors, thus not affecting savings indirectly through income. Ghosh & Nath (2023) found that educational attainment generally correlates with higher savings rates by promoting financial literacy and prudent management.

However, this pathway may not hold in all contexts. Andriati & Huda (2015) noted that educational interventions improve saving behaviors among poor households but may not immediately increase income if market conditions do not support income growth. This disconnect explains the lack of a significant mediation effect of income in the education-savings relationship.

Do et al. (2023) and Eren & Genç İleri (2022) suggest education's influence on long-term financial habits and planning is more significant than its immediate impact on income. The weak alignment between educational qualifications and economic opportunities may further limit income gains (Aini, Dianta and Pratama, 2023).

The significant negative coefficient (β = -0.3, t-value = -2.19**) indicates that higher levels of credit usage are associated with decreased income. This suggests that increased reliance on credit negatively impacts household income due to the financial burden of debt repayment. Heavy reliance on credit requires allocating a significant portion of income to debt servicing, including interest and principal payments, which reduces disposable income available for saving (Chen et al., 2020).

High levels of indebtedness can lead to financial distress and negatively affect income generation capabilities. For business actors, excessive debt limits their ability to reinvest in operations, hindering growth and income potential. Debt servicing costs can also divert funds from other income-generating activities, reducing overall financial stability and income levels. Azariadis et al. (2019) highlighted that

incomplete credit markets and borrowing constraints increase financial strain and limit investment in income-generating activities.

Excessive credit use leads to high debt repayment obligations, consuming business revenues and reducing net income. Mohanta & Dash (2022) noted that businesses without proper financial guidance might fall into debt traps, impacting income and financial health. Kirsch & Burghof (2018) emphasized that savings-linked relationship lending enhances financial stability.

However, without access to favorable credit terms and financial management support, the negative effects of credit on income are pronounced. Lotto (2022) noted that high-interest rates and unfavorable credit terms significantly reduce business income, particularly in East Africa. Effective interventions addressing the interactions between credit usage and income can support business financial stability and sustainable income growth (Aini et al., 2023; Grigoli et al., 2018).

The significant indirect effect (β = 2.88, t-value = 8.36***) indicates that income mediates the relationship between consumption and household savings. This suggests that higher consumption leads to higher income, which in turn increases savings.

For business actors, increased consumption often reflects greater economic activity and investment in operations. Spending more on raw materials, marketing, and expansion can drive revenue growth, boosting personal income (Chen et al., 2020). Thus, higher consumption among business actors is an investment in income-generating activities, enhancing business performance and profitability. As income rises, households have more disposable income to allocate towards savings, demonstrating the interconnected nature of consumption, income, and savings (Mahasuweerachai and Mahariwirasami, 2019).

Chen et al. (2020) emphasized the significant impact of cultural values and consumption behaviors on economic outcomes, with higher income levels leading to greater savings capacity. Investments in operations, marketing, and expansion stimulate revenue growth, which then facilitates higher savings. Brown et al. (2021) found that perceived economic stability and risk influence consumption, income, and savings patterns.

In stable economic conditions, increased consumption through investments leads to higher income and more savings, consistent with the mediation effect observed in hypothesis tests. Additionally, Levenko (2020) highlighted that in predictable economic environments, increased consumption due to higher confidence can lead to higher income and savings.

Anukriti et al. (2022) showed how cultural and economic activities linked to consumption affect income levels, reinforcing the pathway from consumption to income to savings. This integrated approach ensures long-term financial stability and economic resilience (Aini et al., 2023; Grigoli et al., 2018).

The non-significant indirect effect (β = -0.004, t-value = 0.28) indicates that income does not mediate the relationship between education and household savings for business actors in this sample. This suggests that higher education levels do not directly translate into increased income, which would then lead to higher savings. Typically, education is viewed as a pathway to higher income and better financial management, fostering greater savings (Chen et al., 2020). However, for business actors,

practical experience, entrepreneurial skills, and market conditions may play a more critical role in income generation than formal education (Mahasuweerachai and Mahariwirasami, 2019).

Education might enhance financial literacy and decision-making skills but may not significantly impact income levels for business actors, thus not affecting savings indirectly through income. Ghosh & Nath (2023) found that educational attainment correlates with higher savings rates by enhancing financial literacy and promoting prudent financial management.

However, the direct pathway from education to income, and subsequently to savings, may not always be significant. Practical skills, market conditions, and entrepreneurial acumen may have a more direct impact on income than formal education.

Andriati & Huda (2015) noted that educational interventions improve saving behaviors among poor households by equipping them with better financial knowledge and skills, but these interventions might not immediately translate into higher income. This disconnect can explain the lack of significant mediation effect of income between education and household savings. Do et al. (2023) and Eren & Genç İleri (2022) emphasized the long-term financial habits fostered by education rather than direct income boosts.

The significant indirect effect (β = -0.19, t-value = -2.18**) indicates that income mediates the relationship between credit usage and household savings. This means higher credit usage leads to lower income, which in turn reduces savings. The financial burden of debt repayment, including interest and principal payments, reduces disposable income available for saving (Chen et al., 2020).

High levels of indebtedness can strain finances and limit saving capacity. For business actors, excessive debt can restrict the ability to reinvest in business operations, hindering growth and income potential (Mahasuweerachai and Mahariwirasami, 2019).

Azariadis et al. (2019) noted that incomplete credit markets and borrowing constraints can exacerbate financial strain, further reducing disposable income for savings. High-interest rates and unfavorable credit terms amplify this effect, making debt repayment a significant financial burden. Mohanta & Dash (2022) highlighted the role of financial consultants in mitigating negative impacts by guiding better financial management. Without such guidance, businesses and households risk falling into debt traps, severely affecting their income and savings.

Kirsch & Burghof (2018) suggested that better access to favorable credit terms and financial management support can alleviate these negative impacts. Lotto (2022) observed that in East Africa, high-interest rates and unfavorable credit terms significantly reduce income. Policies promoting access to affordable credit with favorable terms can help households use credit for financial growth without jeopardizing their income and savings potential (Aini et al., 2023; Grigoli et al., 2018).

CONCLUSION

This research aimed to analyze and determine the mediating role of income in the relationships between consumption, education, credit, and household savings among business actors.

Based on the results and discussions, it can be concluded that income significantly mediates the effect of consumption and credit on

household savings, while it does not mediate the effect of education on household savings.

Specifically, higher levels of consumption are associated with increased income, which in turn leads to higher household savings. This indicates that for business actors, increased consumption reflects greater economic activity and income generation, facilitating both higher spending and savings.

On the other hand, higher levels of credit usage negatively impact income due to the financial burden of debt repayment, which subsequently reduces household savings. Education directly enhances household savings by improving financial literacy and saving behavior, although it does not significantly impact income, suggesting that practical business skills may be more critical for income generation in this context.

This research has limitations that should be addressed in future studies. The sample is limited to business actors in a specific economic context, which may not be generalizable to other populations. Furthermore, the cross-sectional design limits the ability to infer causality.

Future research should consider longitudinal studies to better understand the causal relationships between these variables and expand the sample to include diverse demographic and socioeconomic groups for a more comprehensive analysis of household savings behavior.

The findings from this research have several important implications. For business actors, it highlights the importance of strategic consumption and responsible credit management to enhance income and savings. For policymakers and financial educators, it underscores the need to promote financial literacy and provide support for responsible credit use to improve household financial stability.

Additionally, the results suggest that while education is crucial for enhancing saving behavior, complementary strategies that focus on practical business skills and economic opportunities are essential for increasing income among business actors.

REFERENCES

Aini, Q., Dianta, K. and Pratama, A. (2023) 'Factors That Influence Generation Z Saving Behavior'.

Andriati, R. and Huda, N. (2015) 'The Influences of Productive Zakah Mentoring To Saving Behavior and The Prosperity of Poor Housewife', Al-Iqtishad: Jurnal Ilmu Ekonomi Syariah, 7(2), pp. 207–216. Available at: https://doi.org/10.15408/aiq.v7i2.1698.

Anukriti, S., Kwon, S. and Prakash, N. (2022) 'Saving for dowry: Evidence from rural India', Journal of Development Economics, 154, p. 102750. Available at: https://doi.org/https://doi.org/10.1016/j.jdeveco.2021.102750.

Apriani, D. and Faozan, A. (2023) 'Pengaruh Tingkat Pendidikan dan Pendapatan terhadap Minat Menabung', Jurnal Pendidikan dan Kewirausahaan, 11(2), pp. 548–559. Available at: https://doi.org/10.47668/pkwu.v11i2.739.

Azariadis, C. et al. (2019) 'Incomplete credit markets and monetary policy', Journal of Economic Dynamics and Control, 103, pp. 83–101. Available at: https://doi.org/https://doi.org/10.1016/j.jedc.2019.03.005.

Azhar Mehmood et al. (2022) 'Financial factors and saving behavior of salaried class: A case study of Rawalpindi, Pakistan', Journal of Management Info, pp. 284–298. Available at: https://doi.org/10.31580/jmi.v9i3.2627.

Brown, S. et al. (2021) 'The protective role of saving: Bayesian analysis of British panel data', Journal of Empirical Finance, 63, pp. 57–72. Available at: https://doi.org/https://doi.org/10.1016/j.jempfin.2021.05.002.

Chan, K.S., Lai, J. Te and Li, T. (2022) 'Cultural values, genes and savings behavior in China', International Review of Economics & Finance, 80, pp. 134–146. Available at:

https://doi.org/https://doi.org/10.1016/j.iref.2022.02.009.

Chen, B., Yang, X. and Zhong, N. (2020) 'Housing demand and household saving rates in china: Evidence from a housing reform', Journal of Housing Economics, 49, p. 101693. Available at: https://doi.org/https://doi.org/10.1016/j.jhe.2020.101693.

Do, H.L. et al. (2023) 'Investigating the Effect of Future Orientation on Saving Intention of Generation Z's University Students in Vietnam's Northern Region', International Journal of Business, Economics, and Social Development, 4(4), pp. 229–237. Available at: https://doi.org/10.46336/ijbesd.v4i4.534.

Eren, O. and Genç İleri, Ş. (2022) 'Life cycle analysis of savings accounts with matching contributions', Economic Modelling, 116, p. 106028. Available at: https://doi.org/https://doi.org/10.1016/j.econmod.2022.106028.

Faisal, Tursoy, T. and Resatoglu, N.G. (2016) 'Do Savings and Income Affect Energy Consumption? An Evidence from G-7 Countries', Procedia Economics and Finance, 39(16), pp. 510–519. Available at: https://doi.org/10.1016/s2212-5671(16)30293-3.

Gallagher, E.A. et al. (2020) 'Medicaid and household savings behavior: New evidence from tax refunds', Journal of Financial Economics, 136(2), pp. 523–546. Available at: https://doi.org/https://doi.org/10.1016/j.jfineco.2019.10.008.

Ghosh, S.K. and Nath, H.K. (2023) 'What determines private and household savings in India?', International Review of Economics & Finance, 86, pp. 639–651. Available at: https://doi.org/https://doi.org/10.1016/j.iref.2023.03.032.

Grigoli, F., Herman, A. and Schmidt-Hebbel, K. (2018) 'Saving in the world', World Development, 104, pp. 257–270. Available at: https://doi.org/https://doi.org/10.1016/j.worlddev.2017.11.022.

Kirsch, S. and Burghof, H.-P. (2018) 'The efficiency of savings-linked relationship lending for housing finance', Journal of Housing Economics, 42, pp. 55–68. Available at: https://doi.org/https://doi.org/10.1016/j.jhe.2018.05.003.

Levenko, N. (2020) 'Perceived uncertainty as a key driver of household saving', International Review of Economics & Finance, 65, pp. 126–145. Available at: https://doi.org/https://doi.org/10.1016/j.iref.2019.10.005.

Lotto, J. (2022) 'Households' saving pattern and behaviour in East Africa', Cogent Business and Management, 9(1). Available at: https://doi.org/10.1080/23311975.2022.2101418.

Mahasuweerachai, P. and Mahariwirasami, A. (2019) 'Benefiting from our biases: Inducing saving increases among Thai military officers', Journal of Asian Economics, 65, p. 101152. Available at: https://doi.org/https://doi.org/10.1016/j.asieco.2019.101152.

Mohanta, G. and Dash, A. (2022) 'Do financial consultants exert a moderating effect on savings behavior? A study on the Indian rural population', Cogent Economics and Finance, 10(1). Available at: https://doi.org/10.1080/23322039.2022.2131230.

Yang, D. (2023) 'Income growth, income uncertainty, and urban–rural household savings rate in China', Regional Science and Urban Economics, 99, p. 103855. Available at: https://doi.org/https://doi.org/10.1016/j.regsciurbeco.2022.103855.