WEALTH STORAGE IN THE DIGITAL ECONOMY: A PERSPECTIVE ON EMERGING MARKETS

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Abstract

The swift digital transformation of economies is fostering increased interactions and information flows. Alongside traditional currency, contemporary economies provide diverse avenues for value storage, including financial and digital assets (Gerunov, 2022). This study examines asset holding and factors influencing wealth accumulation in Thailand’s digital age. Employing a quantitative approach, questionnaires collected data from 1,126 participants via convenience sampling between September 2022 and December 2022. Binary regression analysis revealed wealth storage patterns linked to score, gender, education, businessperson status, monthly income, savings, traditional and online media engagement, print media, and seminar attendance. To cultivate a secure, transparent, affordable, and inclusive environment, the government should support both financial and digital assets through accessible services. A robust financial market is pivotal for a nation’s growth, facilitating the flow of savings, investments, and capital accumulation, ultimately contributing to the production of goods and services. Additionally, digital assets offer avenues to amplify global financial system leadership. This study provides empirical insights into digital-era wealth accumulation, offering policy implications, highlighting digital assets’ financial landscape role, and advancing our grasp of digital transformation’s wealth management impact.

Keywords: Wealth, Storage, Financial Assets, Digital Assets

1. INTRODUCTION

Wealth is the total value of all valuable assets owned by an individual, community, business, or country. Wealth is calculated by deducting all debts from the total market value of all physical and intangible assets owned. Wealth is essentially the accumulation of scarce resources. When individuals, organisations, or nations amass a large number of valuable resources or goods, they are said to be wealthy. Wealth and income differ in that wealth is a stock and income is a flow, and they can be viewed in absolute or relative terms (The Investopedia Team, 2022a). Moreover, wealth is defined as the size of one’s net assets, which are calculated by subtracting one’s total assets from one’s liabilities, resulting in a positive value. People who have great wealth can continue to increase their wealth to become stable (Barber & Odean, 2000; Gilder, 2012). Furthermore, purchasing collectables is considered an alternative
asset investment. Paintings, artwork, stamps, wine, luxury watches, classic cars, and other similar items are examples of alternative assets. Because of the market price mechanism, these collectibles will yield a higher capital gain. They also provide the satisfaction of possessing them. These alternative assets can provide benefits to investors by, for example, lowering the portfolio risk, increasing the yield, and protecting against inflationary risk (Agarwals et al., 2019; Nozari, 2022; Schaar & Kampakis, 2022). To be able to pass wealth on to the next generation, financial planning to increase wealth, specifically the size and value of investment assets such as real estate, stocks, mutual funds, and various types of securities, is, therefore, an important factor leading to stability (Hayes, 2023).

In general, accumulation means gathering or increasing the quantity of something. In finance, accumulation can refer to increases in the position size of an asset that is built up over multiple transactions. Accumulation can also refer to the overall addition of positions to a portfolio (Mitchell, 2022). Asset accumulation is the acquisition of financial assets that have value or generate income. Interest, dividends, rents, royalties, fees, and capital gains are all examples of income. The value of these assets is determined by a contractual claim rather than a tangible quality. Stocks, bank deposits, and bonds are all examples of non-physical financial instruments (The Investopedia Team, 2022b). Financial assets are non-physical assets, the value of which is derived from ownership of another contractual instrument or financial asset for one party and a contractual claim rather than a tangible quality. As the value of financial assets varies due to environmental factors that we cannot control, such as economic or market conditions, it can be affected negatively or positively. Hence, wealth storage is a crucial topic to explore.

Advan et al. (2021) conducted a study on the distribution of wealth in the United Kingdom and examined the characteristics of households with high wealth. Schmidt and Sevak (2006) conducted a study in the United States, exploring the variations in household wealth based on gender and family type. Still, few studies have examined the level of asset holding and the factors influencing asset accumulation for wealth in Thailand. Therefore, this study aims to investigate the level of asset holding for wealth accumulation and the factors affecting the holding of assets for wealth accumulation in the digital age. A quantitative approach collected data from 1,126 participants via online questionnaires and utilised binary regression analysis. Results highlighted associations between Wealth storage and variables such as Score, Gender, Education, Businessperson status, Monthly income, Monthly savings, Traditional media usage, Online media engagement, Print media, and Seminar attendance.

The structure of this paper is as follows. Section 2 provides the literature review. Section 3 presents the research methodology. Section 4 introduces the results. Section 5 discusses the study. Section 6 contains the conclusions, limitations, and recommendations.

2. LITERATURE REVIEW

In emerging markets, the digital economy presents both opportunities and challenges for wealth storage. It allows individuals and businesses in these markets to access global financial networks, expand their investment portfolios, and leverage digital platforms for wealth accumulation. The concept of wealth storage in the digital economy refers to the various methods and mechanisms available for individuals and businesses to safeguard and accumulate their financial assets and resources in digital form. With the advent of digital technologies and the rise of emerging markets, new opportunities and challenges have emerged in the realm of wealth storage (Miao, 2021; Muthukannan et al., 2021; Varadarajan et al., 2022). In the digital economy, wealth storage extends beyond traditional forms of currency and physical assets. It encompasses financial assets such as stocks, bonds, and cryptocurrencies, as well as digital assets like intellectual property, digital currencies, and online investments. These digital assets offer unique advantages, including ease of transfer, increased accessibility, and potential for growth and diversification. Wealth storage in the digital economy is influenced by several factors. Technological advancements play a crucial role in shaping the landscape of digital wealth storage, with innovations like blockchain technology providing secure and transparent means for asset ownership and management. Regulatory frameworks and legal considerations also impact the feasibility and legality of certain forms of digital wealth storage (Bamakan et al., 2022; Global X ETFs, 2022; Lu, 2022).

According to Price (2021), financial assets are liquid assets that derive their value from a contractual claim or ownership of an underlying asset, such as stock equity or bank deposits. A commodity or a piece of real estate can be an underlying asset. Tangible assets are linked to financial assets, such as commodity futures or real estate investment trusts (REITs). Bank deposits and investment portfolios are the most common types of personal financial assets. The majority of personal financial assets in the United States are held specifically in current accounts, with retirement accounts ranking second. Additionally, the Corporate Finance Institute (CFI) (n.d.) stated that financial assets are assets derived from contractual agreements on future cash flows or from ownership of another entity’s equity instruments. A financial instrument is a contract that creates a financial asset for one party and an equity instrument or financial liability for the other. As stated by Frankenfield (2022), a digital asset is anything digital that has monetary value, has established ownership, and can be found. Photos, manuscripts, documents, data, cryptocurrencies, and other digital assets are examples of digital assets. Digital assets are becoming more important as they are becoming more integrated into our professional
and personal lives while remaining critical for businesses and governments. Digital assets have evolved beyond the words, images, videos, audio, and documents that we associate with the term. The blockchain — a distributed public ledger secured by a consensus mechanism — was introduced with Bitcoin in 2009. The concept was not novel because data had evolved into a valuable, digital asset requiring security, management, and storage. Distributed ledgers and the data contained within them had existed for a while. Most people who lived and worked outside data science, management, analysis, or any other field requiring large, distributed data networks were unaware of it. To be considered an asset, a digital asset must first have the potential to create value by being used in a way that generates value for the owner. The digital asset should then be able to transfer ownership, as well as the value that the item can bring, to someone else via purchase, gifting, or other means. It must also be discoverable or stored in a location where it can be found.

Tulasombat and Chuchuen (2017) investigated the two determinants influencing the investment decisions of organic agribusiness small and medium enterprises (SMEs) by determining the relationship between financial factors and investment decisions. The findings show that there are significant positive relationships between capital budgeting evaluation, debt financing, equity financing, and investment decisions. However, there is a negligible relationship between working capital management and investment decisions for SMEs in organic agriculture. Furthermore, SMEs in the organic agribusiness sector must pay closer attention to all the financial factors that can help them to make investment decisions and benefit their organic agribusiness. Moreover, Ming-Yen Teoh et al. (2013) studied the factors influencing Malaysian consumers’ perception of electronic payment. The results of multiple linear regression show that benefits, self-efficacy, and ease of use have a significant influence on consumers’ attitudes towards electronic payment. However, the insignificant results obtained for trust and security warrant further investigation. Additionally, Amin et al. (2011) examined the effects of attitude, social influence, religious obligation, government support, and pricing on the intention to use Islamic personal finance. The study discovered three significant determinants influencing the intention to use Islamic personal financing, namely attitude, social influence, and Islamic personal financing pricing. Religious commitment and government support were discovered to be insignificant predictors.

With the proliferation of crypto assets, non-fungible token (NFT) technology has become increasingly popular on social media platforms. The concept of uniqueness is at the heart of the NFT technology that is used to make digital assets tradeable and registerable. Efordioğlu (2022) investigated the impact of social media interaction and the desire for uniqueness on NFT purchase intention. The findings emphasise the importance of the need for uniqueness in leveraging NFT purchase intention. According to the findings, social media interactions, creative choice, unpopular choice, and avoidance of similarity all have a positive and significant impact on purchasing intention.

Furthermore, Ferri et al. (2021) focused on the factors that influence auditors’ decision to use blockchain technology. The findings show that performance expectancy and social influence are the most important predictors of auditors’ intention to use blockchain. Furthermore, auditors’ effort expectation in relation to the implementation and use of this technology appears to be a reasonable and reliable predictor. In addition, Arias-Oliva et al. (2019) examined the key factors for the successful development of a cryptocurrency from the standpoint of consumer behaviour. Using a theoretical framework for technology acceptance, a model is able to explain nearly 85% of the intention to use cryptocurrencies. Surprisingly, risk does not play a role. This could be because the majority of respondents thought that working with cryptocurrencies is risky. The lack of variability in their responses to questions about perceived risk could explain this lack of explanatory power. However, willingness to manage cryptocurrency risk may be required before adoption. The most important factor in a cryptocurrency's success is its expected performance. The study was conducted in Spain with college-educated adults who had basic Internet knowledge.

3. RESEARCH METHODOLOGY

This study used a quantitative approach as a research strategy. Closed-ended questionnaires were employed to collect the data. The questionnaire items were developed based on reliable and valid research data, and the questionnaire was pre-tested on 30 respondents to obtain a dedicated questionnaire, as recommended by Limna et al. (2023), Sithipon et al. (2022), and Thetlek et al. (2023). In addition, the measurement instruments’ validity was assessed, as well as their dependability and accuracy. To ensure ethical integrity, this study’s questionnaire was validated by five professionals in the field of business and social science, confirming its applicability. Moreover, individuals below 18 years old were excluded from participating in the study. The research objective was clearly explained, and participants were informed of their right to discontinue their participation at any point, following the recommendations of Jangjarat, Kraiwant, Limna, et al. (2023). Additionally, participants were required to answer all questions to submit their responses, automatically excluding those who did not complete the entire questionnaire. The respondents were Thai people over 18 years of age who lived in Thailand. The sample in this study contained 1,126 participants identified through convenience sampling. Convenience sampling is a non-probability sampling technique where participants are selected based on their easy accessibility and availability to the researcher. In this sampling method, individuals who are conveniently accessible or readily available are chosen to participate in the study (Nikolopoulou, 2022). The data collection period for the online survey spanned four months, from September 2022 to December 2022, ensuring the capture of timely and pertinent information, enabling the observation of trends and variations, and bolstering the accuracy and reliability of the research findings.
The researchers concluded the data collection phase once they obtained promising results.

In order to analyse the gathered data, statistical analysis software was used to perform both descriptive and inferential analyses. Score, Gender, Education, Businessperson, Monthly income, Monthly savings, Traditional media, Online media, Print media, and Seminars were the independent variables in this study. The dummy variables included Gender (0 for female, 1 for male), Businessperson (0 for no, 1 for yes), Traditional media (0 for no, 1 for yes), Online media (0 for no, 1 for yes), Print media (0 for no, 1 for yes), and Seminars (0 for no, 1 for yes). According to Boateng and Abaye (2019), Gomila (2021), and Shaengchart and Kraiswattan (2023), in statistics, and more specifically regression analysis, a binary regression calculates the relationship between one or more explanatory variables and a single binary output variable. Therefore, binary regression was employed to analyse the data.

4. RESULTS

In this study, the researchers classified two types of Wealth storage: financial assets less than digital assets, assigned the value one, and financial assets more than digital assets, assigned the value zero, as dummy dependent variables. The majority of the respondents (58.9%) classified financial assets as more important than digital assets. Regarding reliability statistics, Cronbach’s Alpha equaled 0.720.

Table 1 indicates that the chi-square was 651.880, with a degrees of freedom (df) equal to 10. The dependent variable can be explained by all the independent variables at the significance level of 0.05.

Acccording to Table 2, the model can explain approximately 61.1% of the variation in the result with a significance value of 0.05.

According to Table 3, the classification indicates that the model with all the independent variables was able to predict the Wealth storage in Thailand with an accuracy rate of 90.5% of cases when there was a cut-off value of 0.500 or 50%.

Table 4. Variables in the model using all the independent variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>Standard error</th>
<th>Wald</th>
<th>df</th>
<th>p-value</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score</td>
<td>0.416</td>
<td>0.080</td>
<td>27.211</td>
<td>1</td>
<td>0.000</td>
<td>1.516</td>
</tr>
<tr>
<td>Gender</td>
<td>-1.338</td>
<td>0.265</td>
<td>25.544</td>
<td>1</td>
<td>0.000</td>
<td>0.262</td>
</tr>
<tr>
<td>Education</td>
<td>3.439</td>
<td>0.384</td>
<td>73.972</td>
<td>1</td>
<td>0.000</td>
<td>28.477</td>
</tr>
<tr>
<td>Businessperson</td>
<td>0.700</td>
<td>0.244</td>
<td>8.199</td>
<td>1</td>
<td>0.004</td>
<td>2.398</td>
</tr>
<tr>
<td>Monthly income</td>
<td>0.875</td>
<td>0.151</td>
<td>33.339</td>
<td>1</td>
<td>0.000</td>
<td>2.308</td>
</tr>
<tr>
<td>Monthly savings</td>
<td>-1.664</td>
<td>0.156</td>
<td>113.057</td>
<td>1</td>
<td>0.000</td>
<td>0.189</td>
</tr>
<tr>
<td>Traditional media</td>
<td>1.210</td>
<td>0.123</td>
<td>96.247</td>
<td>1</td>
<td>0.000</td>
<td>3.354</td>
</tr>
<tr>
<td>Online media</td>
<td>-0.444</td>
<td>0.135</td>
<td>10.858</td>
<td>1</td>
<td>0.001</td>
<td>0.642</td>
</tr>
<tr>
<td>Print media</td>
<td>-0.506</td>
<td>0.122</td>
<td>17.136</td>
<td>1</td>
<td>0.000</td>
<td>0.060</td>
</tr>
<tr>
<td>Seminars</td>
<td>0.202</td>
<td>0.086</td>
<td>5.304</td>
<td>1</td>
<td>0.019</td>
<td>1.224</td>
</tr>
<tr>
<td>Constant</td>
<td>-10.362</td>
<td>1.162</td>
<td>79.575</td>
<td>1</td>
<td>0.000</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Note: a. Variables entered in Step 1: Score, Gender, Education, Businessperson, Monthly income, Monthly savings, Traditional media, Online media, Print media, and Seminars.

The predictive regression equation of Model 1 from Table 4 can be described by the following equation:

Model 1

\[ P = \frac{1}{1 + e^{-Z}} \]  

(1)

where:

\[ P = \text{the Wealth storage in Thailand;} \]

\[ Z = 10.362 + 0.416 \times \text{Score} - 1.338 \times \text{Gender} + 3.349 \times \text{Education} + 0.700 \times \text{Businessperson} + 0.875 \times \text{Monthly income} - 1.664 \times \text{Monthly savings} + 1.210 \times \text{Traditional media} - 0.444 \times \text{Online media} - 0.506 \times \text{Print media} + 0.202 \times \text{Seminars}. \]
5. DISCUSSION

This study investigated the level of asset holding for wealth accumulation and the factors affecting the holding of assets for wealth accumulation in the digital age. The findings indicated that Wealth storage could be described by Score, Gender, Education, Businessperson, Monthly income, Monthly savings, Traditional media, Online media, Print media, and Seminars. The Score, likely indicating a measure of financial literacy or knowledge, was found to have a positive relationship with Wealth storage. This suggests that individuals with higher score tend to have higher levels of asset accumulation. Gender was another influential factor, with Wealth storage being significant for males compared to females. This indicates a gender disparity in asset holding, with males more likely to accumulate wealth compared to females. Education was strongly associated with Wealth storage, as each unit increase in education was linked to a significant rise in wealth accumulation. This finding suggests that higher levels of education can contribute to better financial decision-making and wealth-building strategies. The occupation of being a Businessperson was found to have a positive impact on Wealth storage. This suggests that individuals engaged in business activities may have greater opportunities for wealth accumulation. Monthly income showed a positive correlation with Wealth storage, indicating that higher income levels contribute to increased asset accumulation. Interestingly, Monthly savings displayed an inverse relationship with Wealth storage. This suggests that individuals who save more on a monthly basis may allocate a smaller portion of their savings to wealth storage. The use of Traditional media was associated with higher Wealth storage, highlighting the importance of traditional media channels in financial knowledge and decision-making. On the other hand, the use of Online and Print media had a negative correlation with Wealth storage, implying that individuals relying more on online and print media may have lower levels of asset accumulation. Finally, attending Seminars was found to have a positive impact on Wealth storage, indicating that participation in educational seminars or financial workshops can enhance wealth-building capabilities. These findings underscore the significance of various factors in wealth accumulation and provide valuable insights for individuals, policymakers, and financial institutions. Understanding these factors can inform strategies to promote inclusive wealth accumulation in the digital age.

The findings were consistent with several studies. Jangjarat, Kraiwanit, Thanawiwat, et al. (2023) found that income, financial instrument investments, savings, media perception, and cognition of initial coin offerings (ICOs) were significant predictors of ICO acceptance for investment in the Bangkok metropolitan area. Wannasawang and Kraiwanit (2023) revealed that the level of education has a significant impact on individuals’ adoption of the Central Bank of Thailand’s digital currency. The findings were also consistent with the research of Petty et al. (2009) indicating that the media have the ability to sway large audiences to an extent that was previously unthinkable. Nonetheless, the technological advances in the last century—from the first primitive radio broadcasts to today’s high-speed mobile Internet devices—have enabled individual communicators to reach an unprecedented number of potential message recipients, and recipients are bombarded with messages on a continuous basis. Every year, millions of dollars are spent around the world to try to change people’s attitudes towards political candidates, consumer products, health and safety practices, and charitable causes. In most of these cases, the ultimate goal is to persuade people to vote for specific politicians or referendums, buy specific goods, and donate money to various religious, environmental, and non-profit organisations and institutions. The findings were consistent with the research of Mohd Thas Thaker et al. (2021), which examined the social media advertisement factors that predict the intention to subscribe to Islamic banking products in Malaysia. The intention to purchase Islamic banking products via a social media platform was found to have a statistical relationship with perceived relevance, informativeness, and perceived expectancy. Kapoor et al. (2022) investigated the growth of NFTs, identified Twitter users who promoted NFT assets, and assessed the impact of Twitter features on the virality of an NFT. They also investigated the effectiveness of various social media and NFT platform features by experimenting with various machine learning and deep learning models to predict the value of an asset. According to the findings, social media features improve ordinal classification accuracy by 6% over baseline models that only use NFT platform features. Among social media features, the number of user membership lists likes, and replies were important. OpenSea features, such as offer entered, bid withdrawn, bid entered, and presale, on the other hand, proved to be significant predictors.

6. CONCLUSION

This study explored factors influencing asset holding for wealth accumulation in the digital age. The findings revealed that Wealth storage was influenced by variables such as financial literacy (Score), Gender, Education, occupation (Businessperson), Monthly income, Monthly savings, traditional media usage (Traditional media, Online media, and Print media), and attendance of Seminars. Higher financial literacy scores and education levels were associated with increased wealth storage. Males had higher levels of wealth accumulation compared to females. Businesspersons and individuals with higher incomes also had higher wealth storage. Interestingly, higher monthly savings were associated with lower wealth storage. Traditional media usage positively influenced wealth storage, while reliance on online and print media had...
a negative correlation. Attendance of seminars positively impacted wealth storage. These findings offer insights for individuals, policymakers, and financial institutions in promoting inclusive wealth accumulation in the digital age. Regarding policy recommendations, the government should support both financial assets and digital assets by creating services that are secure, dependable, affordable, and accessible to all. A well-developed and smoothly operating financial market is critical to a country’s growth and efficiency. It enhances the efficient direct flow of savings and investments into the economy, facilitating capital accumulation and contributing to the production of goods and services. Moreover, digital assets may present opportunities to strengthen global financial system leadership.

The practical contributions of this study provide guidance for individuals, inform policy decisions, drive the development of financial services, promote investor education and awareness, encourage international financial integration, and stimulate technological innovation in the realm of wealth accumulation and asset management in the digital age. Moreover, this study contributes to the existing literature by providing empirical insights into wealth accumulation behaviours in the digital age, offering policy implications, and highlighting the role of digital assets in the evolving financial landscape. It adds to our knowledge and understanding of the implications of the digital transformation of economies and its impact on wealth management.

A limitation of this study is the use of convenience sampling, which may introduce bias and limit the generalizability of the findings. Additionally, the study focused on asset holding and wealth accumulation within the specific context of Thailand, which may limit the applicability of the findings to other countries or regions. To overcome the limitations and enhance future research, it is recommended to employ a larger and more diverse sample to ensure greater representativeness. Random sampling techniques can be used to increase the generalizability of the findings. Furthermore, conducting similar studies in different countries or regions would provide a more comprehensive understanding of the factors influencing asset holding and wealth accumulation in the digital age. Additionally, incorporating qualitative research methods, such as interviews, could provide deeper insights into individuals’ experiences and perspectives related to asset holding and wealth accumulation.

REFERENCES

APPENDIX. QUESTIONNAIRE

Part 1. General information

1. Gender
   - □ Male
   - □ Female

2. How old are you currently?
   - □ Under 35 years old
   - □ 35–44 years old
   - □ 45–55 years old
   - □ Over 55 years old

3. Marital status
   - □ Single
   - □ Married/No children
   - □ Married/With children
   - □ Widowed/Divorced
   - □ Other

4. Highest level of education
   - □ Lower than a Bachelor’s degree
   - □ Bachelor’s degree or equivalent
   - □ Master’s degree or higher

5. Current occupation
   - □ Government employee/Civil servant
   - □ Private sector employee/Contractor
   - □ Self-employed
   - □ Student

6. Average monthly income.
   - □ Less than 15,000 baht
   - □ 15,000–25,000 baht
   - □ 25,000–50,000 baht
   - □ 50,000 baht or more

7. How much do you save per month?
   - □ 1,000–5,000 baht
   - □ 5,000–10,000 baht
   - □ 10,000–15,000 baht
   - □ 15,000–20,000 baht
   - □ 20,000 baht or more

Part 2. Source of information for investment

1. Traditional media
   - □ Yes
   - □ No

2. Online media
   - □ Yes
   - □ No

3. Print media
   - □ Yes
   - □ No

4. Seminars
   - □ Yes
   - □ No

Part 3. Wealth storing asset

1. Which type of asset do you think provides the highest returns in line with the digital economy?
   - □ Gold
   - □ Common stocks
   - □ Real estate/land
   - □ Digital assets
   - □ Mutual funds
   - □ Debt instruments
   - □ None

2. Types of digital assets of interest
   - □ Bitcoin (BTC), Ethereum (ETH)
   - □ Binance Coin (BNB), KUB (Exchange-issued coins)
   - □ Meme coins (DOGE, INU, etc.) — Coins created for entertainment purposes
   - □ Stable coins (USDT, USDC) — Coins pegged to stable assets like gold-backed tokens
   - □ NFTs — Non-fungible tokens, a type of digital asset
   - □ Not accumulated and not interested