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Decision-Making by Individual Investors in Japan: Verification Using a Binary Response Model with Survey Data

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Abstract

Purpose: In line with the government's initiative to shift "from savings to investment," the small investment tax-free system (Nippon Individual Savings Account) was introduced in Japan in January 2014. This paper compares and analyzes the holding motivations of the old systems of "General NISA" and "Tsumitate (Accumulated) NISA" as of 2018 and 2023.

Design/Methodology/Approach: The data used is from the Japan Securities Dealer-s Association's "Survey on Attitudes of Individual Investors Regarding Securities Investment". We estimated probability model using a probit model.

Findings: For General NISA, the findings show that investment probability is an increasing function of age and is for entertainment purposes. It also complements stock investments and is an alternative to investment trusts. For Tsumitate NISA, investment probability is a decreasing function of age and an increasing function of living expenses during retirement. Therefore, long-term factors are thought to be strong. Additionally, it is considered a substitute for stock investments and a complement to investment trust. Furthermore, while financial literacy is an important factor for the General NISA, it is less important for the Tsumitate NISA.

Practical Implications: This study examines the possibility that tax exemptions could promote stock investment in Japan. Expanding stock investment in Japan is a major challenge.

Originality/Value: The analysis is conducted using survey data from 5,000 people in Japan.

Paper type: Research paper

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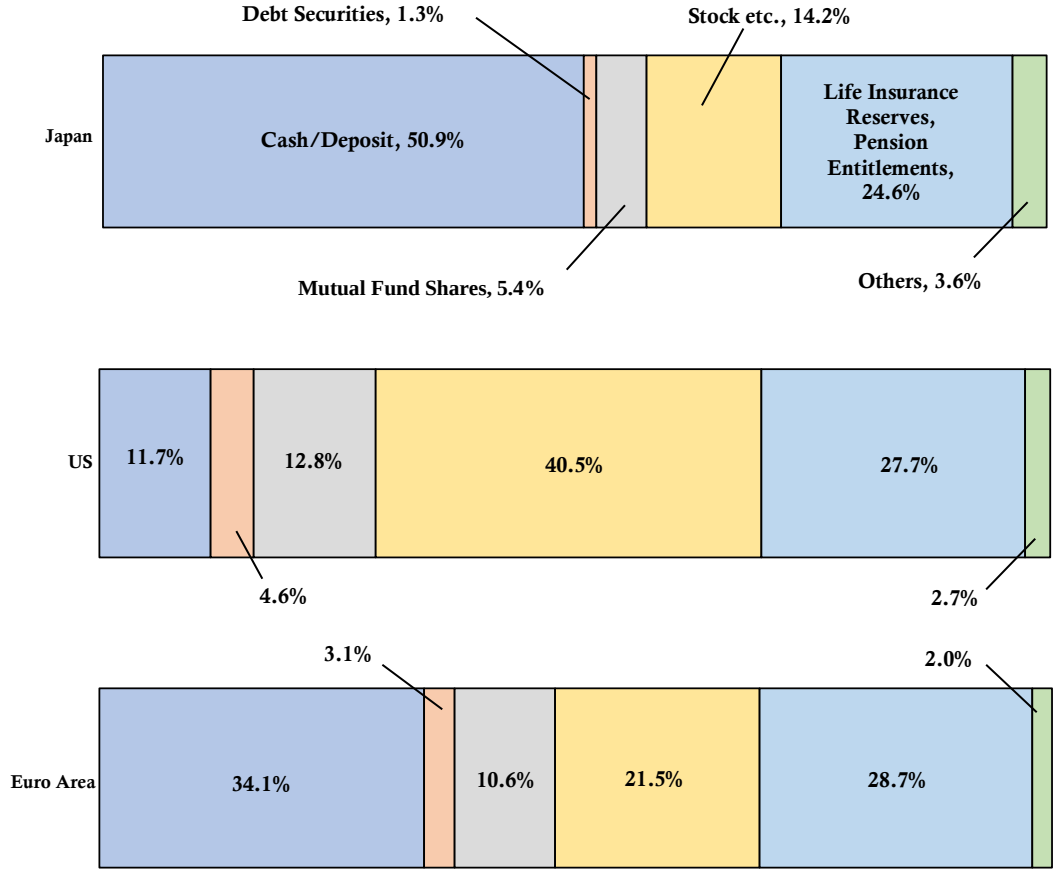
INTRODUCTION

In a June 2023 study, for the General NISA, findings indicate that investment probability is an increasing function of age and is for entertainment purposes. It also complements stock investments and is an alternative to investment trusts. For the Tsumitate NISA, investment probability is a decreasing function of age and an increasing function of living expenses during retirement. Therefore, long-term factors are considered significant. Additionally, it is considered a substitute for stock investments and a complement to investment trust. Furthermore, while financial literacy is an important factor for the General NISA, it is less important for the Tsumitate NISA. "The First Year of Doubling Asset Income - From Savings to Investment," Prime Minister Kishida stated, "This year will be the first year of doubling asset income, and we will boldly and fundamentally advance the shift from savings to investment." The term "save to invest" originated from Japan's investment tax cuts in 2003. "From investment to savings" means shifting savings, such as large bank deposits, into investments such as stocks and investment trusts.

The background to this includes Japan's declining birthrate, aging population, and concerns about pensions. To address these issues, it is important for individuals to build assets. It is also believed that preventing corporate investment funds from remaining in banks promotes corporate growth leading to societal revitalization. As part of government policies, tax incentives have been introduced to promote investment, such as the Nippon Individual Savings Account (NISA) and the Individual-type Defined Contribution Pension Plan (iDeCo).

Figure 1 illustrates the composition of household financial assets (as of 2023). Japan's total household assets are 2,199 trillion yen, with approximately 51% held in cash and deposits. Insurance, annuities, and fixed guarantees account for 24.6%, similar to the United States and Eurozone. However, Japan's combined holdings in stocks and investment trusts account for 19.6%, significantly lower than those of the United States (53.3%) and the Eurozone (32.1%). As evident from this, in Japan, funds tend to remain in households and banks. Whether funds flow into the economy depends on the behavior of households, banks, and macroeconomic trends. The effective use of household financial assets that remain as cash and deposits is considered a challenge in Japan.



Source: Bank of Japan, FRB, ECB

Note: In the US, "stock etc." includes Corporate Equity, Proprietors' Equity in Noncorporate Business, Equity Investment by Parent Holding Company, and Foreign Direct Investment. The Eurozone includes Listed Shares, Unlisted Shares, and Other Equity.

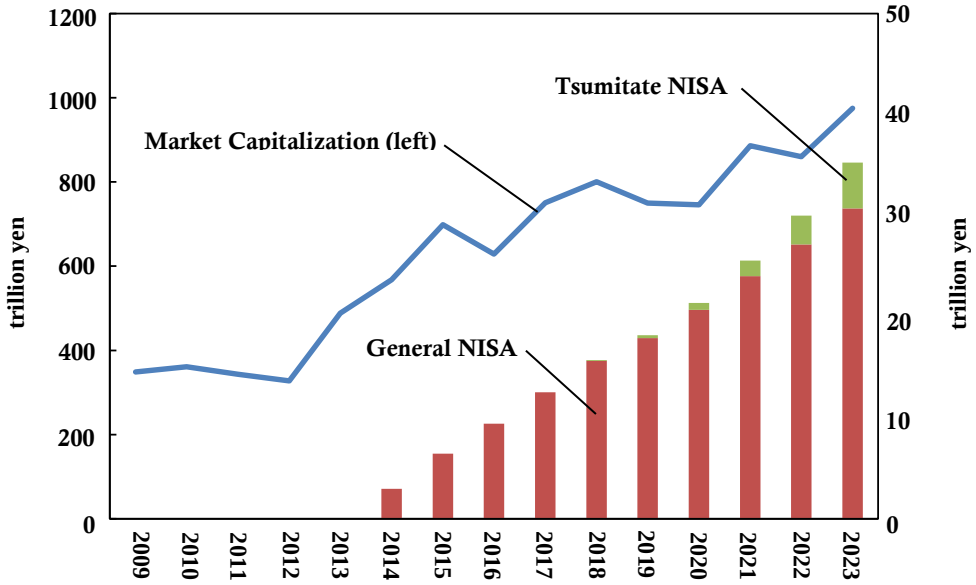
Figure1. Composition of household financial assets

Particularly, the NISA is expected to encourage individual investments. NISA is a tax-free system for investment gains and dividends introduced in Japan in 2014 and modeled on the UK Individual Savings Account (ISA). Its features include (i) tax exemptions, (ii) the ability to invest from small amounts, and (iii) the benefits of long-term management. There are three types of NISAs: General NISA, Tsumitate NISA, and Junior NISA, which differ in terms of investment limits and target products.

General NISA was introduced in January 2014 with an annual tax-free amount of 1,200,000 yen, and dividends and capital gains are tax-free. The tax exemption period is five years. Eligible users are people aged 20 or older living in Japan (however, from January 1, 2023, this will change to those aged 18 or older). Financial products eligible for investment include listed stocks, equity investment trusts, exchange traded funds (ETFs), and Japan real estate investment trusts (J-REITs).

Tsumitate NISA was introduced in January 2018, and the annual tax-free amount is 400,000yen. Dividends and capital gains are tax free. This amount is smaller than that of the general NISA; however, the tax-free period is 20 years. In addition, unlike the general NISA, this is a long-term investment plan. Therefore, since a fixed amount is saved into NISA every month, it is a beneficial system for those who want to make their own long-term asset plans. Additionally, we cannot simultaneously use the General NISA and Tsumitate NISA.

In fact, looking at the composition of household financial assets, cash and deposits have decreased from 55.1% in 2010 to 50.9% in 2023, while the combined total of listed stocks and investment trusts have increased from 9.8% to 19.6%. Figure 2 shows the trends in the market capitalization of stocks on the Tokyo Stock Exchange and NISA balances.



Source: Financial Services Agency

Figure2. Stock market capitalization and NISA balance

We can see that Japan's asset balance has been steadily increasing, but its size is less than 1% of that of the United States. On the other hand, market capitalization and NISA are linked. In addition, since NISA is composed only of risk assets, the expansion of NISA is expected to change household asset formation.

This study examines how investor psychology, basic finance knowledge, and financial literacy influence NISA choices. The data comes from a survey of 5,000 individuals conducted by the Japan Securities Dealers Association in the "Survey on Attitudes of Individual Investors Regarding Securities Investment." The remainder of this paper is organized as follows: Section 2 reviews previous research on individual investment, Section 3 outlines analytical methods and data, and Section 4 presents estimates and discussion.

RELATED LITERATURES

Many studies have focused on individual investments. Horioka and Watanabe (1997) used microdata from a Japanese government survey to estimate how total savings from 12 different motives contribute to

total household savings. Generally, household saving motives are classified into (i) life-cycle motives, (ii) precautionary motives, and (iii) bequest motives. Horioka and Watanabe (1997) points out that of the 12 motives, retirement and two preventive motives (illness and peace of mind) are the most significant, while net savings from bequest motives account for only 3.23% of the total.

Assuming a simple two-period model, savings in the current period will become consumption in the next period. If we perform a long-term analysis based on a short-term Keynesian economic model, savings will accumulate each period by the marginal propensity to save.

Skinner (1988) estimated plausible parameters for income uncertainty and consumer risk aversion in a life-cycle model and finding that precautionary motives account for most of total savings. Zhou (2003), using microdata for Japan from the 1990s, concludes that income dispersion negatively impacts consumption, and that 5.6% of financial assets for working households and 64.3% of financial assets for self-employed households are precautionary savings. Ishihara and Doi (2004) noted that employment risk causes precautionary savings. Additionally, Dynan et al. (2004) found that savings rates are positively correlated with lifetime income.

Kotlikoff and Summers (1981) point out that approximately 81% of household assets in the United States are the result of intergenerational transfers, and that savings resulting from the life cycle are small. On the other hand, when estimating Japanese data using the same method as Kotlikoff and Summers (1981), estimates suggest that transferred assets account for at most 30% (Hayashi 1986; Campbell 1997; Dekle 1989, 1990). Otake and Horioka (1994) used the results of the "Public Opinion Survey on Savings" to examine bequest motives. As a result, they found that unconditional bequest motives (which Kotlikoff and Spivak 1981) call the implicit pension contract) were 32% in 1989 and 29% in 1990, while reward-based bequest motives (which Kotlikoff and Spivak 1981) call the bequest preference) were 20% in 1989 and 16% in 1990.

Meanwhile, an increasing number of studies investigate the relationship between financial literacy and individual investment[1]. Recent studies include those by Yamori and Ueyama (2021) and Sekita et al. (2022). For example, Sekita et al. (2022) used the Financial Literacy Survey (2016) to clarify how individual financial literacy in Japan affects financial asset savings.

van Rooij et al. (2011) point out that using data from the Netherlands, people with lower financial literacy tend to obtain information from their parents and friends. Brown et al. (2008) also shows that in the United States, information sharing with neighbors promotes individual stock market participation. Bernheim and Garrett (2003) use 1994 data from the United States to show that financial education in the workplace increases the use of private pension plans[2]. In addition, Goda et al. (2014) analyzed stock investment through mutual funds. They found that people who belong to a group that receives more information contribute more. The results so far show that information and education are important in promoting investment.

Finally, we will introduce research that points out the possibility that tax systems can promote investment. Brown et al. (2017) classify US retirement pension systems into two types. One is the traditional Individual Retirement Account (IRA), and the other is the Roth IRA, which was introduced in 1997. The former is an EET type in which the contribution amount is deducted from income, and the latter is a TEE type in which there is no tax reduction when contributing but instead no tax is imposed when withdrawing. In Japan, the former can be considered as iDeCo and the latter as NISA. If progressive income taxes are not taken into account, asset accumulation through a Roth IRA would be preferable because uncertainty about future income tax rates creates uncertainty about the size of the tax benefit through the income deduction. Second, the progressive income tax system makes an IRA more favorable because your income will be higher during your working years than after retirement, allowing you to get a larger tax benefit from the earned income deduction.

DATA AND METHOD

Data

This study focuses on NISA and examine whether investor attitudes have changed since the introduction of the system several years ago. Given that Tsumitate NISA was introduced in 2018, this study

[1] Lusardi and Mitchell (2014) provide a survey on financial literacy.

[2] There are problems with the results of this analysis. For example, financial literacy may be low in workplaces where financial education is required. In this case, the effect of financial education on stock market participation will be underestimated. Conversely, there may be cases where the higher the financial literacy in a workplace, the greater the demand for financial education. In this case, the effect of financial education will be overestimated. This issue may also arise in the empirical analysis of this paper, and is left as a topic for future study.

compares estimated results for 2018 and 2023. The data used is the same for 2018 and 2023. The data used is from the Japan Securities Dealers Association's "Survey on Attitudes of Individual Investors Regarding Securities Investment." The survey is conducted among 5,000 people who have opened financial accounts. In 2018, the usage rate of General NISA was 55.3%, and that of Tsumitate NISA was 10.5%. In 2023, the usage rate of General NISA is 51.2%, and that of Tsumitate NISA is 29.6%. The analysis is divided into two categories: "those who hold the General NISA" and "those who hold the Tsumitate NISA" in the old NISA. In each case, the dependent variable is a binary indicator, equal to 1 if the investor holds an NISA, and 0 otherwise.

Next, we examine the explanatory variables. The variable "life stage" is assigned a value of 1 for respondents who answered "to purchase a home," "to purchase durable consumer goods," or "to save for my own wedding," and a value of 0 for no response in response to the question "for what purpose have you used (or plan to use) General NISA or Tsumitate NISA?." The variable "children/grandchildren" is a binary variable that is assigned a value of 1 if either "educational funds for children/grandchildren" or "funds to leave to children/grandchildren" is selected, and a value of 0 if neither is selected.

The Japan Securities Dealers Association survey asked simple financial questions. This was treated as a financial literacy variable, and a value was assigned according to the number of correct answers. Those who answered all questions correctly received a score of 3, while those who answered all incorrectly received a score of 0[3].

Furthermore, the variable "time preference" is based on the question, "Assuming you will definitely receive the money, if you had two options — (1) receiving 100,000 yen now or (2) receiving 110,000 yen in one year, you would choose (1)." The answers to this question were "I think so," "I can't say," and "I don't think so," so the numbers 2, 1, and 0 are assigned to each answer. Finally, for the variable "risk assessment," we used the question, "if an investment of 100,000 yen results in a 50/50 chance of either a capital gain of 20,000 yen or a capital loss of 10,000 yen, I would not invest."

Additionally, we included dummies variables for opening accounts at securities companies, banks, credit unions, credit associations, and dummies for holding stocks and investment trusts.

Method

The dependent variable used in the analysis is a binary variable: having assets or not having assets. The dependent variable is binary taking the value of 1 if the investor invests and 0 otherwise. When estimating a probability model using OLS, issues can arise in measuring marginal effects. Therefore, we estimated it using a probit model[4]. The model to be estimated is a binary response type as follows:

$$\Pr(y = 1|\boldsymbol{x}) = G(\beta_0 + \boldsymbol{x\beta}) \tag{1}$$

where $0 < G(z) < 1$ for real z and $\boldsymbol{x\beta} = \beta_1 x_1 + \beta_2 x_2 + \cdots$.

The well-known logit and probit models assume that $G(z)$ is logistic and standard normal distributed, respectively. Therefore,

$$G(z) = \frac{\exp(z)}{1 + \exp(z)} = \Lambda(z) \tag{2}$$

is used in the case of the logit model, and the following is used in the case of the probit model:

$$G(z) = \int_{-\infty}^{z} \phi(v)dv = \Phi(z) \tag{3}$$

where $\phi(z)$ is the standard normal density:

[3] The questions asked were as follows:

1. Investments with higher than average of returns also carry higher than average risks.
2. Buying shares in a single company is usually a safer investment than buying a mutual fund (a financial product that invests in multiple stocks).
3. When interest rates rise, bond prices fall.

[4] Although it is also possible to estimate using the logit model, we use the probit model for our analysis because the only difference between the probit and logit models is the complexity of the calculations, and the results do not significantly differ.

$$\phi(z) = (2\pi)^{-1/2} \exp(-z^2/2) \tag{4}$$

As can be seen from equation (1), β_j cannot be a useful measure of marginal effect. As can be seen from equation (1), β_j cannot be a useful measure of the marginal effect because the model function is specified by nonlinear G. If $g(z)$ is the probability density function, the marginal effect in this case is measured as follows:

$$\frac{\partial p(\boldsymbol{x})}{\partial x_j} = g(\beta_0 + \boldsymbol{x}\boldsymbol{\beta})\beta_j \tag{5}$$

Now, if $x_1 = 0 \; or \; 1$ is a binary variable, the marginal effect of changing x_1 from 0 to 1 is calculated as:

$$G(\beta_0 + \beta_1 + \beta_2 x_2 + \cdots + \beta_k x_k) - G(\beta_0 + \beta_2 x_2 + \cdots + \beta_k x_k) \tag{6}$$

For example, if this is positive, it means that when $x_i = 1$ in the margin, the probability $y = 1$ increases.

Binary response models are estimated by maximum likelihood methods. The procedure begins by constructing a weight function such as:

$$f(y|\boldsymbol{x}_i; \boldsymbol{\beta}) = [G(\beta_0 + \boldsymbol{x}\boldsymbol{\beta})]^y [1 - G(\beta_0 + \boldsymbol{x}\boldsymbol{\beta})]^{1-y}, \;\; y = 0,1 \tag{7}$$

that represents the density function of y_i given x_i. This function indicates that when $y = 1$, $f = G$, and when $y = 0$, $f = 1 - G$. By taking the logarithm of both sides, we can obtain the log-likelihood like

$$\ell_i(\boldsymbol{\beta}) = y_i \log G + (1 - y_i) \log[1 - G] \tag{8}$$

When the sample size is n, the model log-likelihood is $L(\boldsymbol{\beta}) = \sum_{i=1}^{n} \ell_i(\boldsymbol{\beta})$. The $\boldsymbol{\beta}$ maximizing this is the maximum likelihood estimator $\widehat{\boldsymbol{\beta}}$.

Finally, we will briefly explain the method for deriving the marginal effects used in this paper. The effect of x_j on the response probability is:

$$\Pr(\widehat{y = 1}|\boldsymbol{x}) \approx \left[g\left(\hat{\beta}_0 + \boldsymbol{x}\widehat{\boldsymbol{\beta}}\right)\hat{\beta}_j\right] \tag{9}$$

However, the density function depends nonlinearly on all explanatory variables, making it difficult to integrate marginal effects. To address this, we calculate the average partial effects. This is defined as the individual marginal effects averaged across the sample, as follow[5]:

$$n^{-1} \sum_{i=1}^{n} g\left(\hat{\beta}_0 + \boldsymbol{x}_i\widehat{\boldsymbol{\beta}}\right) \tag{10}$$

ESTIMATION RESULTS

First, we review the decision-making factors for stock and mutual fund selection as a benchmark, and then examine NISA (until 2023) decision-making. Additionally, NISA's analysis compares the results of analyses for 2018 and 2023. However, since the same individuals are not traced, it is impossible to observe changes in the decision-making of the same individuals.

[5] Another solution is to use the Partial Effect at the Average method, which replaces each explanatory variable with its sample mean. However, the following problems have been pointed out:

i. When some of the explanatory variables in the model are discrete, their means no longer represent the sample means.
ii. Problems also arise when continuous explanatory variables are combined as nonlinear functions.

Stock and mutual funds

Stock investments involve buying shares in individual companies and making profits based on the company's growth and performance. Naturally, stock investment is a high-risk, high-return investment because stock prices fluctuate greatly, and while it is possible to make huge returns in a short period, it can also result in huge losses. Furthermore, unlike the complete model, this requires a relatively heavy amount of capital.

In contrast, investment trusts involve collecting money from many investors and managing it as a single fund, with professional managers diversifying investments into stocks, bonds, and other assets. Compared to stock investments, investment trusts have lower returns, but the risk can be reduced by diversifying investments. Therefore, stocks are for investors who want to earn huge returns in the short run, whereas investment trusts are for investors who want to limit risk and increase their assets in the long run.

Table 1 presents the results of the probit estimation of the binary response models for stocks and mutual funds[6]. The estimation results suggest that differences exist in decision-making between stock investments and mutual funds. For example, stocks are positively affected by age, whereas mutual funds are adversely affected by age. Additionally, while household income positively impacts both, its effect on stock investment is clearly greater. Furthermore, when examining the items categorized by purpose, stock investment is influenced by relatively short-term objective factors, while investment trusts are not influenced by such items, and are positively influenced only by "life after retirement[7]." Thus, we understand that investment trusts are held for long-term purposes, whereas stocks are managed for short-term living and entertainment. Financial literacy positively impacts on both. Thus, a certain level of financial knowledge may provide a sense of security when making investments decisions. Risk assessment also has a positive impact on both, but its influence on stock investment is greater, suggesting that stock investors tend to be more risk tolerant. However, there is a significant difference in time preference. This result shows that stock investors want to earn money in the short term, while mutual fund investors are willing to invest in the long term if they expect a certain level of return.

Table 1. Stock and mutual fund selection analysis

Explanatory variables	Stocks	Mutual fund
Age	0.1727***	-0.1525***
	(0.0150)	(0.0148)
Gender	-0.5719***	0.1463**
	(0.0699)	(0.0657)
Household Income	0.1238***	0.0329*
	(0.0220)	(0.0186)
Life stage	0.0045	-0.0765
	(0.1154)	(0.1074)
Hobby	0.2764**	-0.0254
	(0.1106)	(0.0955)
Living expenses	0.2485***	-0.1183
	(0.0907)	(0.0804)
Children / Grandchildren	-0.1958*	0.1706*
	(0.1005)	(0.0997)
Life after retirement	-0.3511***	0.8855***
	(0.0220)	(0.0633)
Literacy	0.0980**	0.2972***
	(0.0409)	(0.0372)
Time preference	0.1525***	-0.1415***
	(0.0382)	(0.0339)
Risk evaluation	0.2833***	0.0806**
	(0.0446)	(0.0407)
Log-likelihood	-2640.539	-3075.964
Pseudo R^2	0.0695	0.0755

Note: Numbers in parentheses indicate standard deviations. Furthermore, note that "*" indicates significance at the 10%, "**" at the 5%, and "***" at the 1% level.

[6] Note that the results presented are not marginal effects but merely estimated results.

[7] Similarly, note that stock investment reacts negatively to "life after retirement."

NISAs

A major feature of the NISA is its tax-free status, although there are limitations regarding time and amount. For the General NISA, the annual tax-free amount is 1,200,000 yen, and the tax-free period lasts five years. Similarly, under the Tsumitate NISA, the annual tax-free amount is 400,000 yen, but the tax-free period extends to 20 years. Furthermore, while it has been permitted since the introduction of the new NISA, previously, holding both the General and Tsumitate NISA accounts simultaneously was not allowed.

Table 2 presents the results of the analysis of factors affecting the choice between the General and Tsumitate NISA. The estimated results show the marginal effects of the probit model and cover the years 2018 and 2023. First, we examine the estimation results for the General NISA. The variable "Age" increases the probability of choosing the General NISA in 2018 and 2023. This trend reflects the fact that the General NISA is considered a short-term investment. Other results are consistent with those of the stock investment analysis, with the notable difference being that household income is negative. This may reflect the fact that NISA is a small investment. Comparing the results from 2018 and 2023, it is interesting to note that "Hobby" has changed from negative to positive. Meanwhile, "Life stage" is negative and significant, whereas "Living expenses" is not significant. This is considered an indication that General NISA is a short-term, small-amount investment, and investors want to secure spending for entertainment.

Next, let us look at Tsumitate NISA. In Tsumitate NISA, "Age" has an adverse effect, while "Life after retirement" has a positive effect. This shows that the Tsumitate NISA is purchased for long-term investments. Simultaneously, since "children and grandchildren" are insignificant, the aspect of inheritance purposes is excluded, meaning the Tsumitate NISA is being used solely for one's benefit. Additionally, there is no difference between the General and Tsumitate NISA in terms of whether one holds an account with a securities company or bank, and both have a significantly positive impact.

Table 2. Marginal effects of choosing between General NISA and Tsumitate NISA

	General NISA		Tsumitate NISA	
Independent variables	2018	2023	2018	2023
Age	0.0184***	0.0522***	-0.0074***	-0.0400***
	(0.0030)	(0.0027)	(0.0010)	(0.0019)
Gender	0.0147	-0.0010	-0.0013	0.0148
	(0.0120)	(0.0127)	(0.0047)	(0.0100)
Household income	-0.0121***	-0.0089**	-0.0004	-0.0047
	(0.0035)	(0.0036)	(0.0015)	(0.0030)
Life stage	-0.0695***	-0.0539***	0.0044	-0.0312**
	(0.0253)	(0.0197)	(0.0083)	(0.0137)
Hobby	-0.0455***	0.0407**	-0.0061	-0.0306**
	(0.0172)	(0.0183)	(0.0060)	(0.0133)
Living expenses	-0.0043	0.0184	0.0020	-0.0008
	(0.0161)	(0.0152)	(0.0063)	(0.0117)
Children / Grandchildren	-0.0530***	-0.0295*	0.0111	0.0216
	(0.0200)	(0.0178)	(0.0075)	(0.0138)
Life after retirement	-0.0093	-0.0302**	0.0223***	0.1040***
	(0.0122)	(0.0126)	(0.0049)	(0.0101)
Literacy	0.0201***	0.0170**	-0.0011	-0.0057
	(0.0067)	(0.0074)	(0.0028)	(0.0059)
Time preference	0.0050	-0.0002	-0.0070**	0.0020
	(0.0064)	(0.0065)	(0.0027)	(0.0052)
Risk Evaluation	0.0048	0.0050	0.0018	-0.0078
	(0.0076)	(0.0078)	(0.0030)	(0.0061)
Securities companies	0.5536***	0.4161***	0.1873***	0.0566***
	(0.0113)	(0.0120)	(0.0203)	(0.0124)
Banks, credit unions,	0.4206***	0.3617***	0.0943***	0.0707***
and credit associations	(0.1331)	(0.0183)	(0.0203)	(0.0196)
Stock holdings	0.0307*	0.0921***	-0.0149**	-0.1027***
	(0.0169)	(0.0154)	(0.0063)	(0.0133)
Mutual fund holdings	-0.0050	-0.0600***	0.0080	0.0703***
	(0.0130)	(0.0141)	(0.0055)	(0.0113)

Note: Numbers in parentheses indicate standard deviations. Moreover, note that "*" indicates significance at the 10%, "**" at the 5%, and "***" at the 1% level.

Finally, we examine the differences between the General NISA and Tsumitate NISA. The first

difference is observed in the variable "Literacy." The General NISA was significantly positively affected, but the Tsumitate NISA was not. This is so because the Tsumitate NISA selects only funds recommended by financial institutions. This suggests that the Tsumitate NISA could be a useful entry point for beginner investors. Differences also emerge in the dummy variables for "stockholdings and "investment/trust holdings." In the General NISA, stock holdings are positive and investment trust holdings are negative. In contrast, the Tsumitate NISA, investment trust holdings are positive and stock holdings are negative. This suggests that the General NISA may play a complementary role in stock holdings, whereas the Tsumitate NISA may play a complementary role in investment trust.

CONCLUDING REMARKS

This study examined the choice between stocks, mutual funds, and the decision-making process for NISA. Focusing on NISA, the findings indicate that the General NISA is for short-term purposes, and Tsumitate NISA is for long-term purposes. However, it appears that the inheritance motive is not at work when it comes to holding the Tsumitate NISA, and that holding is simply a consideration of consumption activities in retirement.

Financial literacy was found to be high among investors who invested in stocks, purchased investment trusts, and had regular NISAs, but it had no significant effect on Tsumitate NISAs. If the government's goal is to promote investment, Tsumitate NISAs may play a role. Nevertheless, the possibility of capital outflows to foreign countries cannot be overlooked.

The new NISA system will be adopted from 2024, making it possible to hold the General NISA and Tsumitate NISA simultaneously. Moreover, the tax-free period and tax-free amount have been significantly expanded. How these will contribute to the inflow of funds into NISA will be an issue for future studies using new survey data.

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