

Japan and Financial Literacy

Financial literacy is defined in a variety of ways, Fig.1, but the core is practical knowledge: financial literacy means understanding the value of money and how to maximize the benefits of money utilization. ⁽¹⁾

Fig.1 Selected Financial Literacy Definitions	
US financial Literacy & Education Commission of 2007, and OECD ^(2, 3)	The ability and awareness to use knowledge and skills to manage financial resources to achieve maximum financial well-being
Asian Development Bank ⁽⁴⁾	Financial literacy is multi-dimensional, reflecting not only knowledge but also skills, attitudes, and actual behavior
Kadoya and Khan ⁽¹⁾	Our study defines financial literacy as the ability to understand the implications of interest, inflation, risks, and diversification. This definition provides the benefit of measurability, which enables researchers to relate financial literacy to a country's demographic and socio-economic environment
Source: As noted in the references, Conceptasia, April 2022	

The importance of financial literacy is now widely understood, for example Fig.2 below.

Fig.2 Some academic study conclusions for the benefits of Financial Literacy	
Banks, 2010 ⁽⁵⁾	People need financial literacy to determine their retirement savings and costs for healthcare and long-term care
Lusardi and Mitchell, 2011 ⁽⁶⁾	Financial literacy improves retirement planning
Van Rooij et al., 2011 ⁽⁷⁾	Leads to the ability to save and invest in complex financial assets
Van Rooij et al, 2012 ⁽⁸⁾	Enables wealth accumulation through better retirement planning, savings plans, and stock market investments
Note: Above as quoted in <i>What determines financial literacy in Japan?</i> by Yoshihiko Kadoya and Mostafa Saidur Rahim Khan, 2018	
Source: Kadoya and Khan (note above), Conceptasia, April 2022	

The next issue is how financial literacy is obtained. Flowing from this is the need for objective education. Non-government organizations (NGO) are stepping into the void.

The Bank of Japan published in October 2016 the results of an online survey of 25,000 individuals regarding financial literacy in Japan. ⁽⁹⁾ Using the BOJ data, the ADB ⁽⁴⁾ compiled Fig.3. Just 6.6% of surveyed Japanese had received any financial education. This is substantially less than the 21.0% of Americans who have received education related to financial matters:

Fig.3 Financial education in Japan and the United States	
	% With Financial Education
Japan	6.6
Age 18-29	10.7
Student (age 18-24)	14.4
Age 30-59	6.0
Age 60-79	5.5
USA	21.0
Note: ADB report ⁽⁴⁾ and the authors' calculation (for Japanese data) and Central Council for Financial Service Information (2016) for US data.	
Source: ADB (note above), Conceptasia, April 2022	

The comprehensive BOJ survey comprised 18 questions on financial knowledge (relating to interest rates, compound interest, inflation and so on) and 7 questions on financial decision-making skills (relating to family budgeting, personal expense management, investments). Together, scoring each of the questions one point, the financial literacy maximum score is 25. On average, respondents achieved 13.9, with a standard deviation of 7.0. Only one-fifth of the participants were able to answer correctly at least 21 questions, the standard the researchers judged as the minimal desirable level, Fig.4.

	All	Male	Female
All	20.9	26.5	15.5
Age: less than 30	10.1	12.9	7.2
Age: Greater than 30 and under 40	16.6	22.7	10.3
Age: Greater than 40 and under 50	20.7	26.6	14.8
Age: Greater than 50 and under 60	25.8	30.8	20.9
Age: Greater than 60 and under 70	28.1	35.1	21.9
Age: Greater than 70	23.9	31.8	16.8
Note: BOJ survey data, ADB report and the author's calculations			
Source: ADB, ⁽⁴⁾ Conceptasia, April 2022			

Men scored higher than women, and scores improved with age until 70 years of age.

The percentages are low, but it should be noted that with only 6.6% of participants having received any financial education, Fig.3, it could have worse.

The Kadoya and Khan ⁽¹⁾ study investigates the factors affecting financial literacy in Japan using data from Osaka University's Preference Parameter Study. It concludes:

The results indicate that the demographic factors of gender, age, and education; the socio-economic factors of income and occupation; and the psychological factor of perceptions of the future significantly affect the level of financial literacy. The results are robust to different measures of financial literacy and emphasize that social contact and people's future orientation can improve financial literacy levels in Japan.

Fig.5 and Fig.6 provide more detail. Fig.5 shows that the most financially literate are the highly educated, those between the ages of 45 and 64 and men.

The study used additional variables in addition to age, gender, and education, which, after being combined into a financial literacy model, allows sensitivity estimates to be generated, Fig.6.

From Fig.6, it appears that one's parents' education is not a material factor, but unsurprisingly, those working in the financial services industry are more financially literate – which is reassuring. Being employed or not, at the time of the survey, does not appear to be a material factor. Those who believe that thinking about the future is a waste of time also have less financial literacy.

Fig.5 Financial Literacy in Japan: Age, Gender, Education Factors		
Factor		Financial Literacy Score
Age	Less than 30 years	0.491
	31 to 44 years	0.504
	45 to 64 years	0.616
	Greater than 64 years	0.602
Gender	Male	0.641
	Female	0.528
Education	Less than 12 years	0.435
	12 to 16 years	0.628
	Greater than 16 years	0.805
<p>Note: The financial literacy scores are the average of the scores for that group of participants, based on the answers to the following four questions with one given for a correct answer, and zero for an incorrect answer. For example, two correct answers out of four would result in a score of 0.500.</p> <p>Q.1: Suppose you had ¥10,000 in a savings account, with an interest rate of 2% per year, and you never withdraw money or interest payments. After 5 years, how much would you have in this account? <input type="checkbox"/> More than ¥10,200 <input type="checkbox"/> Exactly ¥10,200 <input type="checkbox"/> Less than ¥10,200 <input type="checkbox"/> Do not know <input type="checkbox"/> Refuse to answer</p> <p>Q.2: Imagine that the interest rate on your savings account is 1% per year and inflation is 2% per year. After 1 year, how much would you be able to buy with the money in this account? <input type="checkbox"/> More than today <input type="checkbox"/> Exactly the same <input type="checkbox"/> Less than today <input type="checkbox"/> Do not know <input type="checkbox"/> Refuse to answer</p> <p>Q.3: Please indicate whether the following statement is true or false: 'Buying a company stock usually provides a safer return than a stock mutual fund.' <input type="checkbox"/> True <input type="checkbox"/> False <input type="checkbox"/> Do not know <input type="checkbox"/> Refuse to answer</p> <p>Q.4: If the interest rate falls, what should happen to bond prices? <input type="checkbox"/> Rise <input type="checkbox"/> Fall <input type="checkbox"/> Stay the same <input type="checkbox"/> None of the above <input type="checkbox"/> Do not know <input type="checkbox"/> Refuse to answer</p>		
Source: Kadoya and Khan, ⁽¹⁾ Conceptasia, April 2022		

Fig.6 Financial Literacy in Japan: Regression Coefficients		
Factor	Based on Questions 1-3	Based on Questions 1-4
Gender	0.084	0.088
Age	0.005	0.014
Marital status	-0.014	-0.022
Education	0.035	0.030
Father's education	0.003	0.003
Mother's education	0.002	0.003
Household income	0.000	0.000
Household assets	0.000	0.000
Employment status	-0.013	-0.028
Occupation (if working in financial services)	0.109	0.173
Future orientation (if think future is uncertain)	-0.027	-0.024
Financial satisfaction	0.008	0.0100
Anxiety (about life during old age)	0.001	0.000
(Model adjusted R ²)	14.63	17.17
Note: For details of questions one to four see Fig.5		
Source: Kadoya and Khan, ⁽¹⁾ Conceptasia, April 2022		

Returning to the BOJ survey and data, Fig.7 shows how a) financial education, b) financial literacy and c) financial product purchases (defined as buying at least one product) varies with income groups.

	Financial education (%)	Financial Literacy (%)	Financial product purchases (%)
No income	5.6	9.4	17.0
Less than ¥ 2.5 million a year	6.7	12.7	30.0
¥2.5 million to ¥5 million a year	5.5	14.6	42.0
¥5 million to ¥7.5 million a year	7.9	15.4	45.4
¥7.5 million to ¥10 million a year	9.5	16.3	52.7
¥10 million to ¥15 million a year	11.1	16.7	59.3
Greater than ¥15 million a year	13.1	16.6	65.3
Do not know, did not say	4.0	11.2	28.6

Note: BOJ survey data, ADB report and the author's calculations
Source: ADB, ⁽⁴⁾ Conceptasia, April 2022

Rising income appears strongly related to financial product purchases (Fig.7, shaded).

Whilst both the prevalence of financial education and financial literacy increase with income, the increases are quite modest.

Japan's low financial education and literacy scores could reflect the basic conservatism of the Japanese, Fig.8.

	Agree			Disagree		Spread (1+2) minus (4+5)
	1	2	3	4	5	
1. I pay my bills on time	63.5	21.0	11.3	2.7	1.5	+80.3
2. I set long term financial goals and strive to achieve them	17.6	29.9	36.0	11.0	5.6	+30.9
3. I tend to live for today and let tomorrow take care of itself	3.9	13.2	28.3	25.6	28.9	-37.4
4. I have too much debt right now	4.4	7.0	14.8	13.3	60.6	-62.5
5. I am prepared to risk some of my own money when saving or making an investment	8.1	18.9	32.8	18.3	22.0	-13.3

Notes: Shaded areas represent imprudent financial behaviors. The percentages of non-respondents are not included.
Source: BOJ, Conceptasia, April 2022

Survey results ⁽⁹⁾ indicate Japanese households are overwhelmingly prudent in paying their bills on time (spread score of +80.3), more think long term (spread +30.9), whilst few live short-term (spread -37.4), and few have too much debt (spread -62.5). Risk aversion is further evidenced by the negative spread on those prepared to risk losses when investing.

References:

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