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Financial literacy, financial education, and financial well-being during the Covid-19 pandemic

Evidence from Japan

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1. Research Question

- Although it is widely documented that **financial literacy and financial education** are beneficial in making wiser and prudent financial decisions, it is not clear *whether and how* they can help weather the economic fallout induced by the COVID-19 pandemic?
  - Stantcheva (2022) showed that vulnerable groups, such as low-income workers, were affected more severely and recovered less quickly during the COVID-19 pandemic across OECD countries .

2. The developmental framework

Consumer Financial Protection Bureau (2016)

TABLE 2: PRIMARY DEVELOPMENTAL STAGES FOR YOUTH BUILDING BLOCKS OF FINANCIAL CAPABILITY

	1 **Executive function** *Self-control, working memory, problem-solving*	2 **Financial habits and norms** *Healthy money habits, norms, rules of thumb*	3 **Financial knowledge and decision-making skills** *Factual knowledge, research and analysis skills*
Early childhood (ages 3–5)	✓	Early values and norms	Basic numeracy
Middle childhood (ages 6–12)		✓	Basic money management
Adolescence and young adulthood (ages 13–21)	Development continues	Development continues	✓

2. The developmental framework

- Consumer Financial Protection Bureau (2016) argues that **family and school** are the primary platforms for youth to acquire financial capability.
- Financial education provided **at the workplace** aims to increase employees' financial literacy and prepare them for complex decisions, such as retirement planning (Bayer et al., 2009).

3. Hypothesis

- Research has compiled benefits of financial literacy and education.
- They can help one cope with economic impact of COVID-19 pandemic.
  - more savings or emergency funds helps to weather reduced wages or job loss.
  - understanding of risk mitigates the losses associated with stock market slumps
  - avoid unnecessary debt burdens when borrowing or restructure loan payments
  - deal with public offices or know where or how to access emergency funds.
  - more likely to find another source of compensatory income.

4. Data

- Data were collected from a survey on Japanese individuals
- Implemented in March 2022 by the NTTCom Online Marketing Solutions.
- In total, there is an effective same of 3,492 respondents.

4. Variables on financial literacy and education experience

- Survey asked "big five" questions to measure one's **objective financial literacy**.
- Survey also asked for self-evaluation of one's **subjective financial literacy**.
- Two survey questions asked **financial education** received *at home or school or workplace* in the past.
  - if "your parents or guardians taught you how to manage your finances";
  - if "financial education was offered by a school or college you attended or a workplace where you were employed."

4. Variables on financial well-being during the pandemic

- Questions asked how the **annual income** (wages, yield, pension) and **financial assets** (e.g., deposit/stocks) in 2021 changed relative to 2019 before the outbreak of the COVID-19 pandemic.
- Another question asked, "Overall, thinking of your assets, debts, and savings, **how satisfied** are you with your current personal financial condition?" (March 2022)

4. Model specification

- **Ordered probit model**
- *Dependent variables* are categorical variables for financial well-being during the pandemic.
- *Independent variables* pertain to financial literacy and financial education experience.
- Other control variables
  - age, gender, marital status, jobs, annual income, residential area, educational attainment, the habit of receiving pocket money, and the family's economic condition during childhood.

5. Results (1) on financial literacy

- **Financial literacy**, whether subjective or objective, is more likely to be associated with *financial education received at school or in the workplace*.
- Financial literacy is positively associated with *family economic background* and the *habit of receiving pocket money during childhood*.
  - Consistent with Sansone et al. (2019) analyzing Dutch adults.

5. Results (2) on financial well-being during pandemic

- Only the **"Fin. education at school/work only"** group has a significantly *lower* chance (3% lower) of **income decline during the pandemic.**
  - "Fin. teaching by parents only" group has no significant effect.
- Those with both education experiences have 4~5% lower chance of income decline, which are also significant.
- *Financial literacy* is significant but the marginal effect is relatively low (1%).

5. Results (2) on financial well-being during pandemic

- "**Fin. education at school/work only"** group has a significantly *lower* chance (by 2%) of **financial asset decline during the pandemic**.
- "Fin. Teaching by parents only" group only showed a marginally significant effect (by 1%).
- Those with both educational experiences have 3% lower chances (significant).
- *Financial literacy* is significant but the marginal effect is relatively low (by 1.5%).

5. Results (2) on financial well-being during pandemic

- **"Fin. education at school/work only"** group has a greater predicted probability than the "Fin. teaching by the parent-only group" for **the financial satisfaction** level (as of March 2022).
- "Fin. education at school/work only" group has an 8.9% higher chance of "quite satisfied," compared with 2.2% for the "Fin. teaching by the parent-only" group.
- *Financial literacy* is significant but the marginal effect is relatively low.

5. Results (2) on financial well-being during pandemic

- In summary, how one fared financially during the COVID-19 pandemic can be associated with financial literacy and *financial education (particularly at school or the workplace).*
- However, the benefits seem to be of only a mild magnitude to prevent a decline in income or financial assets.

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5. Results (3) based on propensity scores matching

- Whether one receives financial teaching from parents or school can be determined endogenously.
- Using PSM, each individual who experienced a certain type of financial teaching is matched with a "control" individual with similar characteristics but without financial teaching either by parents or school/workplace.
- The PSM results remains the same.

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5. Results (4) men vs women

The effect on financial well-being during pandemic	Men	Women
“financial teaching by parents”	Not significant	Significant
“financial education at school or the workplace”	Significant <	Significant
Both financial education	Significant <	Significant

6. Summary and discussion (1)

- Financial education can increase one's financial literacy and confidence.
- However, the primary source seems to be financial education received at school or in the workplace (rather than financial teaching by parents).
- Financial education in the family helps youth acquire execution functions, financial values and habits.
- School or workplace education provides more consistent financial knowledge for better preparation for complex decisions (Bayer et al., 2009).

6. Summary and discussion (2)

- Those with **financial education at school/workplace** better weather the negative impacts of pandemic.
- Parents' financial teaching is either statistically insignificant or limited.
- *The more structured financial teaching at school and the workplace are more effective in preparing one for making complex decisions.*
- *However, the effect is only modest. What one can do to protect one's income or wealth is limited in such an impactful financial disturbance.*

6. Summary and discussion (3)

- Effect of parents' financial teaching is not observed for men, but for **women**.
- In general, the effect of financial education is greater for **women**.
- *One possibility: women are in a disadvantaged position than men. Financial education or literacy is more pronounced in economically-disadvantaged populations.*
- *Another speculation: female spouses predominantly engage in household financial decisions, and spend more time with their children in Japan.*

6. Limitations (4)

- Endogeneity issues may not be completely accounted for.
- Survey data may entail recall errors.
- Survey did not identify the types and duration of financial education received.

6. Implications (5)

- The results highlight the importance of financial education, particularly at school or in the workplace.
- … illustrate the necessity of providing training programs targeted at employees in financial planning and managing investment risk.
- For policymakers, enhancing financial literacy via financial education, particularly for vulnerable groups of the population, can be an effective way to reduce income inequality.