

An Alternative Approach to Examine Financial Knowledge Overconfidence and Financial Behaviors among Millennials

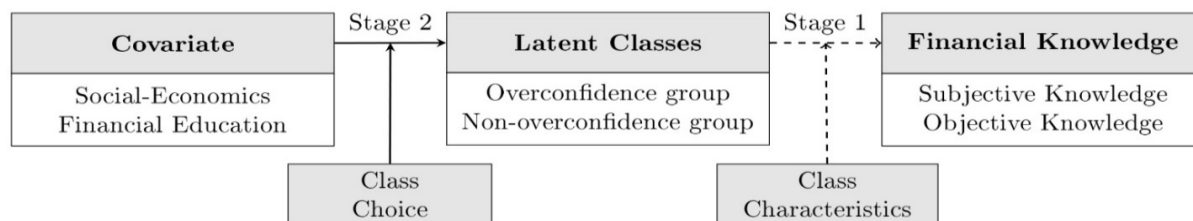
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There is ample empirical evidence to suggest that people overestimate their own abilities (Banerjee, Humphery-Jenner, & Nanda, 2015; Cesarini, Lichtenstein, Johannesson, & Wallace, 2009; Larkin & Leider, 2012; Robb, Babiarz, Woodyard, & Seay, 2015). Several researchers, such as Cesarini et al. (2009), Robb et al. (2015), and Harvey et al. (2018) suggested methods to determine overconfidence of financial knowledge. Their methods are arbitrary, but not evidence-based. Thus, their result could vary depending on the researcher's judgment.

We propose an alternative method, a latent class analysis, to identify overconfidence groups. This estimation statistically and endogenously identifies unobserved categorical latent variables that represent groups called classes. As Figure 1 shows, the first stage is model fitting to determine "class characteristics" by using conditional probabilities. Another stage is model fitting to determine the factors that affect "class choice." to determine unobserved categories of overconfidence in financial knowledge.

To verify our method, we examined the 2015 NFCS survey data and successfully investigated categorical latent classes hidden in data and identify which latent class represents the overconfidence group by latent class analysis. To further this study, we will investigate the effect of overconfidence in financial knowledge on bad financial behaviors including on the misuse of alternative financial services and credit card.

Figure 1. Latent Class Analysis for Overconfidence



References

- Banerjee, S., Humphery-Jenner, M., & Nanda, V. (2015). Restraining overconfident CEOs through improved governance: Evidence from the Sarbanes-Oxley Act. *The Review of Financial Studies*, 28(10), 2812-2858.
- Cesarini, D., Lichtenstein, P., Johannesson, M., & Wallace, B. (2009). Heritability of overconfidence. *Journal of the European Economic Association*, 7(2-3), 617-627.
- Larkin, I., & Leider, S. (2012). Incentive schemes, sorting, and behavioral biases of employees: Experimental evidence. *American Economic Journal: Microeconomics*, 4(2), 184-214.
- Robb, C. A., Babiarz, P., Woodyard, A., & Seay, M. C. (2015). Bounded rationality and use of alternative financial services. *Journal of Consumer Affairs*, 49(2), 407-435.
- Harvey, M., Burke, J., Serido, J., & Shim, S. (2018). What Drives Financial Overconfidence among Young Adults? *Consumer Interests Annual*, 64.

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