## What Do We Really Know About "Don't Know"? Re-Assessing the Measurement of Financial Knowledge

Kyoung Tae Kim, University of Alabama<sup>1</sup>
Melissa J. Wilmarth, University of Alabama<sup>2</sup>
Tae-Young Pak, Sungkyunkwan University, Korea<sup>3</sup>

This study provides empirical support for the lack of validity of financial knowledge questions when DK response is presented. Specifically, we examined (a) whether the present knowledge scale is contaminated by systemic personality effects and (b) how this reduced validity influences empirical modeling of the knowledge effect. Our analyses proceed in two steps. First, we estimated the potential correlations between Big Five personality traits and the propensity to choose DK, using data drawn from the 2014-2016 Health and Retirement Study (Study 1). Second, we demonstrated changes in correlations between the objective financial knowledge score and behavioral outcomes depending on how DK is addressed in scale construction (Study 2), using the 2009-2018 National Financial Capability Study (NFCS) data and replicates the published works with the DK response modeled separately. Results of Study 1 demonstrated a strong correlation between openness to experience and the propensity to give DK response, which in an indicator of one's intellectual curiosity. This result provides preliminary support for our claim that the DK response induces underlying personality takes part in the measurement of financial knowledge. Moreover, Study 2 presented suggestive evidence that the effect of financial knowledge prior research has reported comes primarily from worse financial outcomes of those who chose DK. We found only small differences in financial outcomes between those who answered with the correct response and those who answered with an incorrect response, and a large negative effect of those who selected DK in reference to those who answered incorrectly. We have demonstrated that the DK response and incorrect responses are foundationally different and should not be grouped into a single category in empirical analyses. Further study is needed to understand the role of DK responses in measuring financial knowledge and to improve survey protocols.

<sup>&</sup>lt;sup>1</sup> Kyoung Tae Kim (ktkim@ches.ua.edu), Associate Professor, Department of Consumer Sciences

<sup>&</sup>lt;sup>2</sup> Melissa J. Wilmarth (mwilmarth@ches.ua.edu), Associate Professor, Department of Consumer Sciences

<sup>&</sup>lt;sup>3</sup> Tae-Young Pak (typak@skku.edu), Assistant Professor, Department of Consumer Sciences