CONSUMER FINANCIAL PROTECTION BUREAU INFORMATION COLLECTION REQUEST – SUPPORTING STATEMENT PART A

DEVELOPMENT OF METRICS TO MEASURE FINANCIAL WELL-BEING OF WORKING-AGE AND OLDER AMERICAN CONSUMERS (OMB CONTROL NUMBER: 3170-XXXX)

TERMS OF CLEARANCE: Not applicable. This is a request for a new collection of information.

ABSTRACT: Under the Dodd-Frank Wall Street Reform and Consumer Protection Act, Public Law No. 111-203, the Bureau's Office of Financial Education ("OFE") is responsible for developing and implementing a strategy to improve the financial literacy of consumers that includes measurable goals and initiatives, in consultation with the Financial Literacy and Education Commission, consistent with the National Strategy for Financial Literacy. In addition, the Office of Financial Protection for Older Americans (OA) within the CFPB is charged with conducting research to identify methods and strategies to educate and counsel seniors, and developing goals for programs that provide seniors with financial literacy and counseling.

The CFPB intends to collect quantitative data through questionnaires with working-age (age 18-61) and older American (age 62 and older) consumers in order to develop and refine instruments that will enable the CFPB to reliably and accurately measure adult consumers' financial well-being and financial ability. The primary anticipated data collection strategy is through internet-based questionnaires. The core objective of the data collection is to iteratively test, refine, and produce valid and reliable measures of consumer financial well-being and financial ability that will create a strong, standardized basis for setting measurable goals, and evaluating financial education strategies and programs. This project focuses on scale development and is not intended to evaluate substantitive hypotheses, inform policy, or any other activity that falls outside standard scale (also called metric, item bank, questionnaire, or instrument) development protocols.

A. JUSTIFICATION

1. Circumstances Necessitating the Data Collection

The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (Pub. L. 111-203) ("the Dodd-Frank Act" or "the Act") requires the Consumer Financial Protection Bureau (CFPB) to regulate the offering and provision of consumer products or services under Federal consumer financial law. The Act also established the Office of Financial Education (OFE) within the CFPB, which is responsible for developing and implementing a strategy to improve the financial literacy of consumers that includes measurable goals and objectives, in consultation with the

Financial Literacy and Education Commission (FLEC)¹, and, together with the CFPB's Office of Research, for conducting research related to financial education and counseling. In addition, the Act established the Office of Financial Protection for Older Americans (OA) within the CFPB, which is charged with conducting research to identify methods and strategies to educate and counsel seniors, and developing goals for programs that provide seniors with financial literacy and counseling.

There are at least three challenges in formulating and setting measurable goals for effective financial education initiatives. First, there is inadequate evidence regarding which financial education strategies are most effective. According to a June 2011 Government Accountability Office (GAO) report on financial literacy, "relatively few evidence-based evaluations of financial literacy programs have been conducted, limiting what is known about which specific methods and strategies are most effective.²" Second, there are no standard or rigorously tested measures of consumer financial knowledge, behavior, or well-being outcomes that can provide a gauge to measure the effectiveness of financial education or capability programs, products, or services. FLEC's Research & Evaluation Working Group has identified the development of "key metrics' for financial education/capability, including measures of knowledge, behaviors, and well-being" as one of its top priority areas for research.³ Third, there is limited evidence of the precise role financial knowledge plays in improving financial decisions and financial well-being and whether it is relatively more important in this respect than, for example, numeracy, patience, cognitive abilities or social aspects of financial choices and financial behavior.

In order to help the CFPB, other FLEC agencies, and the broader financial education field develop and support strategies and programs that lead to better financial outcomes for American consumers, the CFPB is engaging in a major research project ("this Project" or "the Project") focused on making significant progress toward learning:

- 1. What knowledge and behavior predict financial well-being;
- 2. What the importance of financial knowledge is relative to other factors (personal traits and social context) in improving financial well-being; and,
- 3. How to effectively measure key financial knowledge, behavior, and well-being concepts.

The products of this Project should allow the CFPB, other FLEC agencies, and the broader financial education field to develop well-informed approaches to improving consumer financial

¹ The Financial Literacy and Education Commission was established under the Fair and Accurate Credit Transactions Act of 2003. The Commission was tasked to develop a national strategy on financial education. It is chaired by the Secretary of the Treasury, vice-chaired by the Director of the CFPB, and made up of the heads of 20 additional federal agencies.

² U.S. Government Accountability Office, GAO-11-614, *Financial Literacy: A Federal Certification Process for Providers Would Pose Challenges* (June 28, 2011), available at http://www.gao.gov/assets/330/320203.pdf.
³ Financial Literacy and Education Commission, *2012 Research Priorities and Research Question*, available at http://www.treasury.gov/resource-center/financial-education/Documents/2012%20Research%20Priorities%20-%20May%2012.pdf

well-being. By creating psychometrically sound metrics for outcomes of primary interest in consumer financial research (i.e., financial well-being and financial ability), this project will facilitate comparisons between programs and interventions and help toconsolidatie the rapidly expanding and piecemeal consumer financeliterature. The use of these metrics in future projects will help eliminate idiosyncratic definitions of the constructs and reduce variation due to the use of different metrics to measure the noted constructs. These metrics will provide a solid foundation for the development of a body of relevant and actionable knowledge in the field of consumer finance. Further, by creating and vetting rigorously developed metrics (measures) of consumer financial well-being and financial ability, the Project will create a strong basis for evaluating financial education policies and programs, including the ability for direct cross-study comparisons among research projects that utilize the metrics in the future. More specifically, these metrics should significantly increase the ability of the CFPB, other FLEC agencies, and private researchers to undertake a wide range of program and policy effectiveness testing to determine which approaches make the biggest difference in consumer outcomes.

The CFPB's Office for Older Americans (OA) will use these metrics to inform the development of evidence-based goals for financial education and counseling programs that serve seniors, as well as to inform and/or be used to assess current OA projects and programs, including:

- Money Smart for Older Adults: A training and educational program with the FDIC to help seniors protect themselves and others from financial exploitation and fraud, which currently includes an evaluation questionnaire that assesses the participants' knowledge and outcomes. The validated metrics will be used to enhance this questionnaire.
- Financial Advisers/Financial Caregiver Work: Many Americans rely on someone else from professionals to family members- to manage their money. OA has developed a number of reports and products aimed at this population. Yet, there is very limited research on the financial well-being of those who rely on someone else to manage their money. A set of validated financial well-being metrics will be used for future research –internal or by outside partners- to study the relationship between a consumers' financial well-being and their reliance on someone else to manage their money.
- Older Consumers and Debt: Research shows that more seniors are carrying debt into their retirement years, and in larger amounts, than a decade ago. The availability of an alternative and validated way to measure financial well-being will help us explore whether debt is inherently a barrier to financial well-being or whether for some seniors holding debt or taking on debt is a way to maintain their financial well-being.

This Project is anticipated to encompass three phases:

(1) Qualitative research to inform definitions of financial well-being⁴ and financial ability for

⁴ Financial well-being has been defined in various different ways in the literature, mostly depending on the purpose of the study and the data sources used. The initial phase of the project involved devoping a definition of financial well-being grounded in *consumer* insights. By proposing a definition of financial well-being based on input from a large, diverse sample of consumers, this work is intended to provide a definition and measurement approach that can facilitate comparisons between financial capability interventions.

both working-age and older Americans, and the development of clear hypotheses regarding the drivers of financial well-being. This phase has been completed. In addition, the qualitative research informed the wording of candidate items.

- (2) Rigorous development, testing, and refinement of items to measure the constructs (variables) of financial well-being and financial ability, including preliminary validation of the developing scales.
- (3) A quantitative test of the hypotheses developed in phase one, using instruments developed during phase two. This phase is not being proposed here and will be examined in future studies using new rounds of data collection.

The information collected through these processes will increase the CFPB's understanding of consumers' financial experiences and outcomes and therefore what type of financial education and empowerment programs and practices may improve financial decision-making skills and outcomes for consumers.

The Office of Management and Budget (OMB) has previously approved information collection for phase one, the qualitative research, to inform hypotheses about financial well-being and the wording of items to assess the noted constructs, which has been completed. Through this new Information Collection Request, "Development of Metrics to Measure Financial Well-being of Working-Age and Older American Consumers," the CFPB seeks approval to conduct the second phase of this project (#2 above): rigorous development, testing, and refinement of items to measure the constructs (variables) hypothesized in phase one to relate to financial well-being.

2. Use of the Information

In order to support the development of financial well-being metrics, the CFPB has contracted with the Corporation for Enterprise Development (CFED). CFED, in turn, has subcontracted with the Center for Financial Security at the University of Wisconsin-Madison (CFS) and Vector Psychometric Group (VPG), to conduct cognitive interviews and field three rounds of items. CFED and its subcontractors will work with Survey Sampling International (SSI) to coordinate fielding of the item pools and item refinements.

Of the approximately 14,800 questionnaires that will be completed by a sample of Americans ages 18 and over:

- 11,300 questionnaires will be fielded online in two rounds of increasing size by Survey Sampling International. SSI together with another subcontractor will then field a third round of 3,000 questionnaires using mixed presentation modes (online, telephone and pencil-paper) in order to compare responses of individual questions across methods of administration;
- 7,800 questionnaires will be completed by working-age Americans (ages 18-61) and 6,500 will be completed by older Americans (age 62 and older).

In addition, before fielding the items (question and answer sets), the team will complete 12 cognitive interviews; 6 with Americans between the ages of 18-61, and 6 with Americans over the age of 61.

Cognitive interviews			Round 1 preliminary			Round 1 main			Round 2		Round 3 (mode testing)	
Total	12		700			3800			6800		3000	
	WA	OA	WA	OA		WA	OA		WA	OA	WA	OA
	6	6	400	300		2100	1700		3800	3000	1500	1500

Survey Sampling International (SSI) will recruit two online samples: one that includes working-age Americans (ages of 18-61) and another that includes older Americans (age 62 and older). The sampling design is not intended to result in statistically representative samples of the American population, however, both the working-age and older American samples will conform to quotas on key demographic variables to achieve a dataset that is diverse in terms of income, education, employment status, marital status, age, gender, race/ethnicity, presence/ages of children, and geography of the participants. While statistically representative samples are not required for the planned scale refinement, for the analyses to have validity, large samples with demographic diversity will provide for more stable parameter estimation.

Working-Age American Samples

CFED will conduct 6 one-on-one "think aloud" cognitive interviews in order to guage respondents' comprehension of terms included in the items (e.g. do resondents understand the term "financial goal"?), item intent (e.g. are respondents thinking of "large purchases" from their perspective, as we've intended, or from the perspective of what they believe society at large feels is a "large purchase") and appropriate response mapping (e.g. have we included the "does not apply" option everywhere it is applicable?). Respondents of a variety of ages, income levels and ethnicities will be recruited in public locations such as laundromats and parks to participate in the interviews. The interviews will be one-on-one because people may not be willing to share information regarding their personal finances with a larger group. CFED will pay respondents \$25 for their participation, require informed consent and have the cognitive interview protocol approved by an IRB. Results of these interviews will be summarized in a memo and they will inform item development.

Following the cognitive interviews, SSI will administer three rounds of items to working-age Americans. No respondent will be asked to complete more than one questionnaire. The first round will consist of a preliminary round of 400 completed questionnaires followed by a main round of 2,100 completed online questionnaires. The preliminary round of questionnaires will test whether or not there are any large problems with our item bank. It gives the team the option to "pull the plug" and undertake significant revisions before proceeding with testing with larger samples.

The second round will consist of 3,800 completed online questionnaires.

The third round (mode testing) will consist of 1,500 questionnaires: approximately 500 completed online, 500 completed over the phone and 500 completed using a pencil-paper questionnaire. Survey Sampling International will field both the online and phone questionnaires during this third round. 350 questionnaires will be administered to persons with landline phones and 150 questionnaires will be administered to persons with cell phones. The online and phone samples will have the same general socio-demographic profile as the respondents in the first two rounds of item testing.

CFED has received bids to conduct the mail (paper-pencil) questionnaires from a mail house that regularly partners with both SSI clients and the Wyoming Survey and Analysis Center (WYSAC). Surveys will be mailed to 2,500 addresses of persons who have the same general socio-demographic profile as the respondents in the first two rounds of item testing; we anticipate a 20% return rate netting us two samples of roughly 500.

The objective of the third round of data collection is to compare responses of individual questions across methods of administration and to further refine questions for the final instruments. In this stage, IRT-based psychometric analysis will focus on response differences by delivery mode as opposed to any socio-demographic characteristics.

Older Americans Samples

CFED will also conduct 6 cognitive interviews with older Americans. Cognitive interviews with older Americans will follow the same protocol as the one we described above for the working age group.

SSI will administer three rounds of questionnaires to older Americans. No respondent will be asked to complete more than one questionnaire. The first round (which includes the preliminary round describe ablove) will consist of 2,000 completed online questionnaires (300 of which will take place during the preliminary round). The second round will consist of 3,000 completed online questionnaires.

The third round (mode testing) will consist of 1,500 questionnaires: approximately 500 completed online, 500 completed over the phone and 500 completed using a pencil-paper questionnaire. Survey Sampling International will field both the online and phone questionnaires during this third round. 350 questionnaires will be administered to persons with landline phones and 150 questionnaires will be administered to persons with cell phones. The online and phone samples will have the same general socio-demographic profile as the respondents in the first two rounds of item testing.

CFED has received bids to conduct the mail (paper-pencil) questionnaires from a mail house that regularly partners with both SSI clients and the Wyoming Survey and Analysis Center (WYSAC). Surveys will be mailed to 2,500 addresses of persons who have the same general

socio-demographic profile as the older American respondents in the first two rounds of item testing; we anticipate a 20% return rate netting us two samples of roughly 500.

The objective of the third round of data collection is to compare responses of individual questions across methods of administration and to further refine questions for the final instruments. In this stage, IRT-based psychometric analysis will focus on response differences by delivery mode as opposed to any socio-demographic characteristics.

Information to be Collected

SSI collects a range of socio-demographic information from panelists when they sign up with SSI that they makes available to organizations that contract with them. Each iteration of the questionnaire will ask questions regarding:

- financial well-being; and
- financial ability.

And be followed by items addressing:

- financial knowledge;
- financial behaviors and decisions;
- personality traits; and
- social context

which will be used for preliminary analyses examining construct validity.

The goal of these questionnaires is to develop a final set of items to measure individually, financial well-being and financial ability. The final items included in each metric should be easily comprehended by the average American consumer and should provide a statistically reliable measure of each concept. To achieve this goal, cognitive interviewing and an iterative process is used with continuous refinement of the wording of each item, as well as a weeding out of poor or irrelevant items. Individual question and answer sets may change each time the item pool is fielded based on the analysis of the results of the previous questionnaire, such as the elimination of poorly performing items or a reduced number of response options for items in consideration of the distribution of previously observed responses.

In its simplest form, the process can be described as follows:

Step 1: Generate a large pool of candidate items (see *Item Bank*, attached as Appendix A) based on a literature review and qualitative research undertaken in a previous phase of the project.

Step 2a: Revise the candidate items with the panel of experts associated with the project in order to refine item wording and weed out poor questions.

Step 2b: Revise the candidate items using results from cognitive interviews in order to futher

refine item wording, response options, and weed out poor questions.

Step 3: Field the first round of the item pool online to test the items and use psychometric techniques (e.g., exploratory and confirmatory factor analysis and item response theory-based methods) to analyze the items' performance. Promising questions will be retained and poor performing questions will be weeded out. There will be a preliminary phase to this first round that will allow the team to "pull the plug" on the data collection should there be any large problems with the items.

Step 4: Field the second round of the item pool online with the revised items to refine and validate the work from round one. The results of this step lead to recommended measures for the selected concepts (i.e., financial well-being, financial ability).

Step 5: Field a third, final round in order to test the items' performance when administered online, over-the-phone and as a pencil-and-paper test. Psychometric analyses will focus on eliminating items that perform inconsistently across the three modes (online, P&P, and phone). Additionally, preliminary analyses related to the construct validity (specifically, discriminant and convergent validity) of the new metrics will also be conducted.

No population inferences will be made using these data.

3. <u>Use of Information Technology</u>

The contractor will collect data electronically through the use of online electronic data collection (EDC) software. Such software will help reduce errors by:

- automatically skipping questions, where appropriate, based on prior answers to questions;
- randomizing how certain questions, or groups of questions, are presented (e.g., asking certain consumers about financial behaviors before asking about financial well-being and asking about financial well-being before asking about financial behaviors) to mitigate the effects of potential biases caused by the order the questions are presented;
- ensuring that some questions cannot be skipped; and.
- rejecting invalid responses or data entries.

Additionally, the contractor can collect data on the length of time respondents spent answering the questionnaire and unit and item non-response rates. This type of information can be used to improve the question and answer sets.

4. Efforts to Identify Duplication

The CFPB is not aware of any similar data collection efforts aimed at testing the accuracy, statistical reliability, and respondent comprehension of candidate items and response sets intended to measure financial well-being and financial ability. While existing data collection efforts on financial topics are on-going (e.g., ALP, HRS), it is emphasized that these surveys do not contain psychometrically rigorous and validated metrics for the measurement of financial

well-being or financial ability, as such metrics do not currently exist per the literature review conducted in the qualitative phase of this project. See also the World Bank's 2013 publication "Making Sense of Financial Capability Surveys around the World: A Review of Existing Financial Capability and Literacy Measurement Instruments⁵" for an extremely thorough review of measurement tools in this space. It describes no existing tools for either the direct concept of financial well-being, or for the type of financial skill described in our proposed concept of financial ability.

Prior to initial development of items for these instruments, the contractor conducted an extensive review of academic literature and available instruments intending to measure individuals' financial knowledge⁶, behavior⁷, and overall financial capability⁸. While these prior studies refer to the concept of financial well-being, they neither rigorously defined the concept nor provided metrics for its measurement. Many studies in the consumer science literature have focused heavily on explicit financial knowledge or numeracy: e.g. asking respondents to identify the correct answer when presented with a mathematical word problem on a financial topic such as calculating compound interest or inflation. ⁹ A review of the broader literature on knowledge and

5 Available at: http://responsiblefinance.worldbank.org/~/media/GIAWB/FL/Documents/Misc/Financial-Capability-

⁶ See Allgood, Sam, and William Walstad. 2011. "The Effects of Perceived and Actual Financial Knowledge on Credit Card Behavior." Networks Financial Institute Working Paper 15. Indianapolis, Indiana: Networks Financial Institute.; Atkinson, Adele, and Flore-Anne Messy. 2012. "Measuring Financial Literacy: Results of the OECD / International Network on Financial Education (INFE) Pilot Study." Finance, Insurance and Private Pensions Working Paper 15. Washington, D.C.: Organization for Economic Cooperation and Development.; Gerardi, Kristopher, Lorenz Goett, and Stephen Meier. 2010. "Financial Literacy and Subprime Mortgage Delinquency: Evidence from a Survey Matched to Administrative Data." Atlanta Federal Reserve Bank Working Paper 2010-10. Atlanta, GA: Federal Reserve Bank of Atlanta.; Knoll, Melissa A.Z., and Carrie R. Houts. 2012. "The Financial Knowledge Scale: An Application of Item Response Theory to the Assessment of Financial Literacy." Journal of Consumer Affairs 46(3), 381-410.; Hilgert, Marianne A., Jeanne M. Hogarth, and Beverly, Sondra G., 2003. "Household Financial Management: The Connection between Knowledge and Behavior." Federal Reserve Bulletin 89: 309-322.; Lusardi, Annamaria, and Olivia S. Mitchell. 2009. "How ordinary consumers make complex economic decisions: Financial literacy and retirement readiness." National Bureau of Economic Research Working Paper 15350. Cambridge, MA: National Bureau of Economic Research.; Van Rooij, Maarten, Annamaria Lusardi and Rob Alessie. 2011. "Financial literacy and stock market participation." Journal of Financial Economics 101(1): 449-472.

⁷ See Dew, Jeffery, and Jing Jian Xia. 2011. "The Financial Management Behavior Scale: Development and Validation." Journal of Financial Counseling and Planning 22(1): 43-59.; Hilgert, Marianne A., Jeanne M. Hogarth, and Beverly, Sondra G., 2003. "Household Financial Management: The Connection between Knowledge and Behavior." Federal Reserve Bulletin 89: 309-322.; Lynch, John G., Richard G. Netemeyer, Stephen A. Spiller, and Alessandra Zammit. 2010. "A Generalizable Scale of Propensity to Plan: The Long and the Short of Planning for Time and Money." *Journal of Consumer Research* 37(1): 108-128.

⁸ See Taylor, Mark. 2011. *The Long Term Impacts of Financial Capability: Evidence from the BHPS*. Colchester, Essex: The University of Essex. *Consumer Financial Education Body* Research Report 03.; Shim, Soyeon, and Joyce Serido. 2011. Young Adults' Financial Capability. Tuscan, AZ: University of Arizona. A Pathway to Life Success for University Students Research Brief Wave 2.

⁹ The best example of questions commonly used in other studies to measure financial literacy comes from Lusardi, Annamaria, and Olivia S. Mitchell. 2007. "Financial Literacy and Retirement Preparedness: Evidence and

well-being related behaviors in the education, psychology and health fields conducted as a part of this study suggests, however, that consumers' knowledge of financial facts likely is not the sole relevant predictor of their financial well-being.

5. Efforts to Minimize Burdens on Small Entities

The data collection is not anticipated to burden small entities because the questionnaires will only collect information from individuals.

6. Consequences of Less Frequent Collection and Obstacles to Burden Reduction

The CFPB would be less able to meet its obligation to develop measurable goals and objectives that support increasing the financial literacy of consumers, or to develop goals for programs that provide seniors with financial literacy and counseling, as specified by the Dodd-Frank Act, without undertaking the proposed questionnaires to develop measures of financial well-being.

7. Circumstances Requiring Special Information Collection

There are no special circumstances. The collection of information is conducted in a manner consistent with the guidelines in 5 CFR 1320.5(d)(2).

8. Consultation Outside the Agency

In accordance with 5 CFR 1320.8(d)(1), on August 8, 2013, the Bureau published a notice in the *Federal Register* allowing the public 60 days to comment on this proposed new collection of information (78 FR 48422). Further and in accordance with 5 CFR 1320.5(a)(1)(iv), the Bureau has published a notice in the *Federal Register* allowing the public 30 days to comment on the submission of this information collection request to the Office of Management and Budget. No comments were received.

9. Payments or Gifts to Respondents

The incentives respondents will receive are based on their pre-existing agreements with Survey Sampling International (SSI) and are not specific to this project. Respondents will come from existing panels managed by SSI. Agreements regarding incentive payments were established between SSI and the panelist at the time s/he was recruited. For example, when signing up for OpinionWorld, a panel administered by SSI, respondents can choose from a variety of incentives including donations to a preferred charity, entries into a drawing for a monetary prize, etc. SSI offers a wide variety of incentives in order to increase diversity of its sample frames because different types of rewards will motivate different respondents to participate in a project.

Rewards offered vary by questionnaire length and the characteristics of the population being

targeted. SSI uses a reasonable level of reward based on the amount of effort required and subpopulation interests (iTunes credits are popular among younger panelists, for example). These levels in whatever currency was agreed for that particular respondent are set based on extensive research to balance motivation to respond and impact on the content of that response.

For the length of questionnaires proposed in this collection, the typical dollar value of the incentive ranges from \$1.50 to \$2.

10. Assurances of Confidentiality

An email or online invitation to participate in the project (attached as Appendix B) will direct respondents to an informed consent statement (attached as Appendix C). This statement will tell respondents about the study's purpose, that cooperation is voluntary, and that directly identifying information, such as name and email address, will not be provided to the CFPB or to any third party outside of SSI¹0 (SSI's privacy policy is attached as Appendix D). If they agree to the terms described in the informed consent statement, respondents will select the link provided to enter the project.

The CFPB has specified in its contract with the data collection contractor CFED that the CFPB does not own and cannot receive personally identifiable information ¹¹ in order to protect the privacy of respondent data and ensure the pledges of privacy made to respondents by the CFED research team.

In addition, no personally identifiable information will be stored in the data file or provided to the contractor. Survey Sampling International protects the identifying information on its panelists and does not share it with any agency or company conducting research with its panel. This means that neither the contractor nor the CFPB will be able to reference or disclose such personally identifiable information about the participants. The contractor and the CFPB will analyze data and report results only in the aggregate.

11. Justification for Sensitive Questions

Respondents will be asked to provide basic demographic and socio-economic information including their race/ethnicity, income level, employment status, gender and age. This information will be used to ensure that a socio-demographically diverse data set is collected, per the requirements for stable IRT parameter estimation . Respondents will also be asked questions about their current objective financial circumstance (e.g., liquid savings, credit scores, bill payment behavior, employment status, retirement savings, etc.). This information will be used to provide preliminary construct validation of the developing financial well-being and financial ability scales.

¹¹ The contract language includes the following: "Contractor shall not provide CFPB any personally identifiable information that could reasonably be used to identify individuals participating in the project."

¹⁰ SSI will not share any personally identifiable information with the research team. Rather, the research team (CFED and its subcontractors) will only receive information on respondent demographics, along with their responses to the questions.

12. Estimated Burden of Information Collection

The table below presents the burden hours for the proposed questionnaire, split up by type of respondent. The last round of data collection, the implementation assessment, is expected to take less time than the first two rounds, so the table splits these respondents out.

Data Collection	Hours per Respondent	Number of Respondents	Burden hours per task			
Working-Age Americans	_					
Cognitive interviews	40 minutes	6	4			
Rounds 1 & 2: Metric Development &	17 minutes	6,300	1,785			
Validation - online						
Round 3: Implementation Assessment –	15 minutes	1,500	375			
online/telephone/paper						
Older Americans						
Cognitive interviews	40 minutes	6	4			
Round 1 & 2: Metric Development &	17 minutes	5,000	1,417			
Validation - online						
Round 3: Implementation Assessment –	15 minutes	1,500	375			
online/telephone/paper						
Total Burden Hours: 3,960						

13. Estimated Total Annual Cost Burden to Respondents or Recordkeepers

There are no capital/start-up or ongoing operation/maintenance costs associated with this information collection.

14. Estimated Cost to the Federal Government

There will be no annualized capital/start-up costs for the government to receive the questionnaire information. The testing is funded with non-appropriated funds. It will cost approximately \$860,000 to collect and analyze these data.

The Blanket Purchase Agreement, under which the questionnaire will be conducted, was awarded through a competitive bidding process.

15. Program Changes or Adjustments

This is the first request for a new collection.

16. Plans for Tabulation, Statistical Analysis, and Publication

Using responses from three distinct rounds of data collection, the contractor will develop metrics to assess two constructs of interest (i.e., Financial Well- and Financial Ability) using modern

psychometric methods (e.g., Netemeyer et al. 2003; Thissen and Wainer 2001; Wirth and Edwards 2007). A large pool of candidate items (questions and response sets) based on the finding from qualitative research, the project literature review, and a review of other financially related questionnaires was developed (see attached *Item Bank* document for an initial pool of questions on all anticipated topics). A panel of psychometric and content experts reviewed and refined the pool of candidate items so that the remaining items are targeted and well-worded. Cognitive interviewing of persons who would normally be good candidates for inclusion in our samples will further serve to refine the item pool and items. No more than 120 items (defined as a statement, typically one sentence, to which the participants will express their level of agreement) will be included in the refined item pool. This number of items is specified to ensure that respondents are not overly burdened when responding to the item pool.

In round I, SSI will field the candidate items online to approximately 2,500 working-age and 2,000 older Americans. Following any necessary data cleaning, preliminary data analyses, by age group, will then be conducted to examine the variables individually and in pairs to see if any response patterns need to be addressed before the next steps in data analysis. These will include one and two-way frequency tables for items and item pairs as well as a polychoric correlation matrix. Classical test theory analyses (e.g., Cronbach's alpha, item-total correlations, alpha if removed) for both individual items and the preliminary scales as a whole will also be conducted to see how well these items, individually and in groups, measure what we expect them to measure. Structural assessments (exploratory and confirmatory factor analysis) will be conducted to ensure that an appropriate number of dimensions are employed to model the relationships among the items for each construct, using analysis methods appropriate for the categorical nature of the data (Wirth and Edwards 2007). To ensure that preferred models are not over-fit to the data, each sample will be randomly divided into two sub-samples: one for exploratory modeling and the other for confirmatory modeling. Finally, item response theory (IRT) calibration analyses will be conducted within each age group for each construct individually using the preferred factor structure from the structural assessment results. Item parameter results from the IRT calibration of each construct will be presented in tables and in the form of trace line plots/item characteristic curves (ICCs) for each item. An ICC for a given item represents the probability of endorsing an item as a function of an individual's level on the underlying construct.

Using the IRT calibration results and expert opinion, the candidate items used in round I will be re-evaluated. Items that are performing poorly will be eliminated from further use. An examination of the remaining items will be conducted to determine any content areas that are not well-represented or areas on the construct continuum (e.g., ranges along the spectrum from low financial well-being to high financial well-being) that are not well-measured. Item development will be conducted to create items intended to fill any identified gaps.

Using the items that performed well in round I and the newly developed items, new iterations of the 2 financially- related metrics (well-being and ability) will be created. The second round of online questionnaires (round II) will be fielded to 3,800 working-age and 3,000 older Americans. Analyses will follow the same structure as outlined previously. As a final step, it is currently planned that analyses will be conducted to assess if the performance of items differs across the two age groups, working-age and older Americans. However, for these differential item

functioning (DIF) analyses to be conducted, it is necessary that there is a sufficient amount of overlap across age-groups, with respect to the well-performing items. A feasibility review will be conducted to determine, for each construct, if the overlap of items across age groups is sufficient to allow for comprehensive DIF testing across the age groups. At the end of round II, the IRT calibration and DIF results, if available, as well as expert opinion will inform the selection of items to the final versions of the metrics for each construct.

The final set of analyses is planned for the third round of data collection, which will contain responses from 1500 working-age and 1500 older Americans and use three different modes of item presentation: online, phone, and paper-and-pencil. Structural and IRT analyses will be performed, individually for each presentation mode. Next, DIF analyses will be conducted to identify any item performance changes across the three presentation modes. Items with poor or inconsistent performance across modes are candidates for removal. Finally, targeted analyses will be conducted to provide preliminary indications of the construct validity (e.g., convergent and discriminant validity) for the newly finalized metrics of financial well-being and financial ability. Appendix E provides a table of the validation measures we will include in the initial data collection, as well as the expected direction of the relationship for each variable/scale with the newly developed metrics. Analyses (e.g., correlational, ANOVA) will be conducted as appropriate for each combination of variables, in consideration of the measurement properties and response distributions of the variables in question.

The CFPB anticipates that data collection (all three rounds for working age and older Americans) will be completed within five months of OMB approval. The contractor will develop the initial analysis and summary of the study findings after data collection has been completed. This is to be completed within the four months after data has been collected. The CFPB plans to publish the research findings.

17. Display of Expiration Date

The CFPB plans to display the expiration date for OMB approval of the information collection on all instruments.

18. Exceptions to the Certification Requirement

The Bureau certifies that this collection of information is consistent with the requirements of 5 CFR 1320.9, and the related provisions of 5 CFR 1320.8(b)(3) and is not seeking an exemption to these certification requirements.

Bibliography

Allgood, Sam, and William Walstad. 2011. "The Effects of Perceived and Actual Financial Knowledge on Credit Card Behavior." Networks Financial Institute Working Paper 15. Indianapolis, Indiana: Networks Financial Institute.

Atkinson, Adele, and Flore-Anne Messy. 2012. "Measuring Financial Literacy: Results of the OECD / International Network on Financial Education (INFE) Pilot Study." Finance, Insurance

and Private Pensions Working Paper 15. Washington, D.C.: Organization for Economic Cooperation and Development.

Cortina, Jose M. 1993. "Interaction, Nonlinearity, and Multicollinearity: Implications for Multiple Regression." *Journal of Management* 19 (4): 915-922.

Dew, Jeffery, and Jing Jian Xia. 2011. "The Financial Management Behavior Scale: Development and Validation." *Journal of Financial Counseling and Planning* 22(1): 43-59.

FLEC. Financial Literacy and Education Commission Research and Evaluation Working Group. 2012. "2012 Research Priorities and Research Questions." http://www.treasury.gov/resource-center/financial-education/Documents/2012%20Research%20Priorities%20-%20May%2012.pdf

GAO Highlights. 2011. "Financial Literacy: A Federal Certification Process for Providers Would Pose Challenges." GAO-11-614 http://www.gao.gov/assets/330/320203.pdf

Gerardi, Kristopher, Lorenz Goett, and Stephen Meier. 2010. "Financial Literacy and Subprime Mortgage Delinquency: Evidence from a Survey Matched to Administrative Data." Atlanta Federal Reserve Bank Working Paper 2010-10. Atlanta, GA: Federal Reserve Bank of Atlanta.

Knoll, Melissa A.Z., and Carrie R. Houts. 2012. "The Financial Knowledge Scale: An Application of Item Response Theory to the Assessment of Financial Literacy." *Journal of Consumer Affairs* 46(3): 381-410.

Hilgert, Marianne A., Jeanne M. Hogarth, and Beverly, Sondra G., 2003. "Household Financial Management: The Connection between Knowledge and Behavior." Federal Reserve Bulletin 89: 309-322.

Lusardi, Annamaria, and Olivia S. Mitchell. 2009. "How ordinary consumers make complex economic decisions: Financial literacy and retirement readiness." National Bureau of Economic Research Working Paper 15350. Cambridge, MA: National Bureau of Economic Research.

Lusardi, Annamaria, and Olivia S. Mitchell. 2007. "Financial Literacy and Retirement Preparedness: Evidence and Implications for Financial Education." *Business Economics* 42(1): 35-44.

Lynch, John G., Richard G. Netemeyer, Stephen A. Spiller, and Alessandra Zammit. 2010. "A Generalizable Scale of Propensity to Plan: The Long and the Short of Planning for Time and Money." *Journal of Consumer Research* 37(1): 108-128.

Netemeyer, Richard G., William O. Bearden, and Subhash Sharma. 2003. *Scaling Procedures: Issues and Applications*. Thousand Oaks, CA: Sage Publications.

Shim, Soyeon, and Joyce Serido. 2011. Young Adults' Financial Capability. Tuscan, AZ:

University of Arizona. A Pathway to Life Success for University Students Research Brief Wave 2.

Taylor, Mark. 2011. *The Long Term Impacts of Financial Capability: Evidence from the BHPS*. Colchester, Essex: The University of Essex. *Consumer Financial Education Body* Research Report 03.

Thissen, David, and Howard Wainer (Eds.). 2001. *Test Scoring*. Mahwah, NJ: Lawrence Erlbaum Associates.

Van Rooij, Maarten, Annamaria Lusardi and Rob Alessie. 2011. "Financial literacy and stock market participation." *Journal of Financial Economics* 101(1): 449-472.

Wirth, R. J., & Michael C. Edwards. 2007."Item factor analysis: Current approaches and future directions." *Psychological Methods* 12: 58-79.

Attachments

- Supporting Statement Part B
- Appendix A Survey Question Item Bank
- Appendix B Survey Invitations
- Appendix C– Informed Consent and Link to Enter Survey
- Appendix D SSI Privacy Policy
- Appendix E Preliminary Validation Items