ISSN 2508-3155 eISSN 2508-464X

The International Review of Financial Consumers

CONTENTS

Vol. 7, No. 2, 2022

In Recognition of the Retirement of Professor Man CHO (on December 31, 2022)

In Recognition of the Retirement of Professor Man CHO (on December 31, 2022)

Curriculum Vitae

Man Cho, PH.D.

Employment Experience

2007~2022	Professor, KDI School of Public Policy & Management (KDIS)
2020~2022	Chairman, International Academy of Financial Consumers (IAFICO)
2011~2014	Adjunct Research Fellow, Korea Development Institute (KDI)
2015	Visiting Professor, National University of Singapore (NUS)
2004~2007	Adjunct Professor, Johns Hopkins University (USA)
1992~2007	Economist, Senior Director, Fannie Mae (USA)
1991~1992	Long-Term Consultant, The World Bank (USA)

Career Summary: Education, Teaching & Research

Final degree	Ph.D. in Applied Economics and Managerial Science (in 1991), The University of Pennsylvania (the Wharton School)
Courses taught	FinTech and Financial Regulations (at KDIS) Regional Development and Public Policy (at KDIS) Real Estate Finance (at KDIS & NUS) Credit Market and Risk Management (at KDIS) Asset Securitization (at KDIS) Analysis of Market and Public Policy (at KDIS) Financial Management (at the Johns Hopkins University) Corporate Finance (at the Johns Hopkins University)

Research Areas & Outputs:

Financial Innovation (FinTech) and Data Economy
Risk Management (Specialized in Credit Risk)
Real Estate Finance
Regional Development
Has published over 50 academic articles in the above fields, with total 558 total citations: https://www.researchgate.net/profile/Man-Cho-2/stats

The International Review of Financial Consumers, Volume.7 Issue.2(December, 2022), 1-2 pISSN 2508-3155 eISSN 2508-464X
https://doi.org/10.36544/irfc.2022.7-2.1

The International Review of Financial Consumers
www.eirfc.com

Editor's Introduction to the Issue

Sharon Tennyson†

The articles appearing in this issue of *The International Review of Financial Consumers* (*IRFC*) represent a selection of keynote speeches and panel presentations from the International Academy of Financial Consumers' (IAFICO) 9th annual *Global Forum for Financial Consumers* (*Global Forum*). The *Global Forum* supports IAFICO's objective to "serve as a global platform for sharing information, knowledge on financial products and services, regulations and supervision, institutions and culture, education and training in order to reasonably serve financial consumers' interests and well-being as well as to facilitate long-term financial development from an impartial perspective" (Jung, 2019 p. 44). By sharing academic research on these topics *IRFC* also supports this objective — and in this issue we link the two mediums of knowledge-sharing by publishing this selection of presentations.

This year's *Global Forum* was co-sponsored and co-hosted by VNU University of Economics & Business and the Banking Academy of Vietnam and was held August 4-5, 2022 — in hybrid form in Hanoi, Vietnam and online. The conference included an opening plenary session to elaborate on the state of financial consumer protections from different countries' perspectives, speeches from six keynote speakers, three panel discussions, and eight concurrent sessions of research presentations. Presenters included regulators, academics, and practitioners from 16 countries representing seven of the 15 subcontinents of the globe.

Global Forum presentations and discussions considered consumer behaviors, provider practices, legal frameworks, and regulatory enforcement issues across the spectrum of financial services industries including banking, insurance, investments, pensions, and financial planning. These presentations introduced participants to similarities and differences in markets, consumers, problems, and solutions around the globe, stimulating a meaningful exchange of ideas, opinions and conclusions. The articles included in this issue address topics of relevance to consumers and regulators across the financial services spectrum and provide important insights into current practices and trends in consumer financial protection.

Janis Pappalardo draws on decades of experience in consumer protection regulation at the U.S. Federal Trade Commission (FTC) and the Consumer Financial Protection Bureau (CFPB) to identify key factors that determine the effectiveness of consumer protection regulations (Pappalardo, 2022). Adele Atkinson similarly draws on her extensive work with the Organization for Economic Cooperation and Development (OECD) and other international bodies in analyzing two important trends in public policies aimed at promoting financial literacy (Atkinson, 2022). Lyn Haralson and Christiana Stoddard summarize how findings from CFPB research on financial knowledge and financial capability have been utilized to develop a coherent framework for youth financial education and highlight CFPB's database of specific building blocks and teaching strategies for educators (Haralson and Stoddard, 2022). Gianni Nicolini describes current trends and opportunities in using FinTech and Edutainment to provide more effective financial education for specific audiences (Nicolini, 2022). Brenda Cude provides an overview of the recently published *Routledge Handbook of Financial Literacy* (Nicolini & Cude, 2022), synthesizing for readers what can be learned

† Professor, Brooks School of Public Policy and Department of Economics Cornell University, USA, sharon.tennyson@cornell.edu

about financial literacy from the *Handbook* and identifying questions that still need to be addressed in financial literacy research and education.

I am grateful to these speakers for extending the reach of the *Global Forum* by making their speeches and presentations available for publication in written form. Readers are invited and encouraged to further explore IAFICO publications and events. We welcome your participation!

References

Atkinson, A. (2022). Financial Literacy Policy Trends. *The International Review of Financial Consumers*, 7(2), 13-20.

Cude, B.J. (2022). Financial Literacy and Education: What We Know and Still Need to Learn. *The International Review of Financial Consumers*, 7(2), 35-41.

Haralson, H. & Stoddard, C. (2022). Effective Youth Financial Education: Turning Research into Action. *The International Review of Financial Consumers*, 7(2), 21-26.

Jung, H. (2019). A review of the past five years of the IAFICO (2014-2019). *The International Review of Financial Consumers*, 4(2), 43-56.

Nicolini, G. (2022). The Role of FinTech and "Edutainment" in Financial Education. *The International Review of Financial Consumers*, 7(2), 27-33.

Nicolini, G. & Cude, B.J. (2022). *The Routledge handbook of financial literacy*. Routledge.

Pappalardo, J.K. (2022). Learning what matters for regulatory success: clear objectives, robust research, and clear communication. *The International Review of Financial Consumers*, 7(2), 3-11.

The International Review of Financial Consumers, Volume.7 Issue.2(December, 2022), 3-11 pISSN 2508-3155 eISSN 2508-464X
https://doi.org/10.36544/irfc.2022.7-2.2

The International Review of Financial Consumers

www.eirfc.com

Learning what matters for regulatory success: Clear objectives, robust research, and clear communication*

Janis K. Pappalardo†

A B S T R A C T

This article is an edited version of my August 3, 2022 keynote address at the International Academy of Financial Consumers Global Forum. In my remarks I share some general lessons I have learned in over 30 years of experience at the Consumer Financial Protection Bureau and the Federal Trade Commission about best practices for consumer protection regulation, based on both successes and failures. I particularly emphasize the critical role of research, including market monitoring research and intelligence, to detect and address conditions in consumer financial markets that can harm consumers.

Keywords: government regulation, consumer protection, consumer research, Consumer Financial Protection Bureau

Ⅰ. Introduction

I am humbled and honored by Professor Man Cho's invitation to kick off this year's International Academy of Financial Consumers Global Forum (IAFCGF). Although this is my first IAFCGF, based on pre-conference communications with Professors Cho and Sharon Tennyson, reading articles published in the *International Review of Financial Consumers* (IRFC), and reviewing the conference program, it was clear that we all share of the goal of learning from our collective experiences to improve the financial marketplace for the consumers we serve and whose lives we hope to improve.

While reading IRFC articles to prepare for the conference, I was struck by the words of Hongjoo Jung (2019), who eloquently highlights the importance of learning from our collective successes and failures: "According to a Chinese proverb, a wise man or country learns from others' mistakes and failures as well as from their success stories. Many experiences and ideas can be shared among first movers and their followers." *(p.45)*

Jung (2019) also describes the related goal of the International Academy of Financial Consumers (IAFICO):

> "The original founders and members of the academic institution aim to share relevant information, either successes or failures, for financial development, to discuss financial issues in an impartial manner from the perspective of financial consumers, to find long-/

† Associate Director for Research, Markets, and Regulations Consumer Financial Protection Bureau, US, Janis.Pappalardo@cfpb.gov

* **Acknowledgement**
Invited article.
I am sharing views as the Associate Director of the Research, Markets, and Regulations Division at the Consumer Financial Protection Bureau "CFPB or Bureau" on behalf of the Bureau. It does not constitute legal interpretation, guidance, or advice of the Bureau. I am also sharing my views regarding consumer protection economics based on over 30 years of experience at both the Bureau and the Federal Trade Commission I gratefully acknowledge colleagues who contributed to this article, including Scott Fulford, Simon Galed, Margaret Seikel, Nathaniel J. Weber, and Wei Zhang. I remain responsible for any errors.

short-term solutions for economic and social development, and to collectively suggest solutions to common issues across countries." (p.51)

I could not agree more with these lessons and goals. During my 36 years working as a consumer protection economist in the United States government, I have come to appreciate and treasure the value of stepping outside of my office to participate in conferences such as the IAFCGF that include people with different perspectives and training to exchange ideas and to learn from our failures and successes. Conferences offer a special time to focus on "big think" questions, away from day-to-day responsibilities, leading to improved understanding and generating new research questions and policy ideas. I learned the importance of communication in leading to collaboration and new research early in my career.

One of my favorite collaborations grew out of a conversation at an airport on the way back from a conference. I was a junior economist, a few years out of graduate school, and I posed a research question to fellow attendees about the effect of regulation on the flow of knowledge about diet and health in the popular press. These new colleagues recommended that I reach out to Debra Jones Ringold, who had expertise in content analysis. Debra was not at the conference. Yet, based on this conversation, I reached out to her. We joined forces, publishing an article using content analysis in the *Journal of Public Policy and Marketing* for which we earned a best paper award (Pappalardo & Ringold 2000). I hope that this conference, and every conference, spurs such collaborations, new research, and friendships!

Here, I focus on sharing some general lessons I have learned along the way about best practices for consumer protection regulation — both successes and failures — with a focus on the critical role of research, including market monitoring research and intelligence to detect and address conditions in consumer financial markets that can harm consumers. Although many different Divisions at the Consumer Financial Protection Bureau (CFPB or Bureau) have research and market monitoring roles, I will focus on the work of the Division I lead — the Division of Research, Markets, and Regulations (RMR). The bottom line is that I find that there are three general principles for developing consumer protection regulations that will really work to solve real problems for real people. First, clear objectives matter. Second, robust, policy relevant research matters. Third, clear, inclusive communications matter.

Ⅱ. About the Division of Research, Markets, and Regulation

I joined the Division of Research, Markets, and Regulations at the CFPB in 2020 after working as a consumer protection economist for over 30 years in the Bureau of Economics at the Federal Trade Commission (FTC). Our mission in RMR is to use a synthesis of social science research, market intelligence, legal analysis, and regulatory expertise to develop, recommend, and implement policy choices to promote a fair, competitive, and innovative financial marketplace that works as well as possible for all consumers, including the most vulnerable. I value this cross-disciplinary approach to consumer protection and believe in the synergies of tapping into different types of expertise to understand and solve real world problems.

RMR is comprised of our Office of Research, our Markets Offices, our Office of Regulations, and our Office of Competition and Innovation. Our Office of Research consists of Ph.D. economists and psychologists, research analysts, and other experts. Our Markets Offices are comprised of Markets Program Managers and Senior Fellows, most of whom come to the Bureau with many years of industry experience and who specialize in particular consumer financial markets. They are supported by market analysts. Our Regulations Office includes a staff of around 60 attorneys, the majority of whom came to the Bureau with experience at private sector law firms or financial institutions. Our Competition and Innovations Office is a recent addition to RMR. The new office will support the CFPB's general effort at increasing competition for the benefit of all consumers. Of course, RMR is just one of multiple Divisions at CFPB, and reflects only a subset of the tools we have available to achieve our mission. The Bureau also has supervisory and enforcement authority and uses consumer education and the power of shedding light through data and transparency to improve the financial marketplace.

Ⅲ. Objectives Matter

Clear policy objectives matter. Clarity and agreement on policy goals improves understanding, and increases opportunities for collaboration and efficient, effective problem-solving. This is certainly the case for consumer protection policy, where the objectives can be rather murky.

Traditional consumer protection policy objectives: Consumer protection is often tied to the goal of eliminating or reducing preventable consumer harm from marketplace practices. And the goal of protecting consumers is often linked with the goal of promoting competition in the marketplace as two sides of the same coin. In theory, competition leads to an efficient allocation of resources, which leads to innovation that consumers desire, with products and services being delivered efficiently, at prices equal to marginal costs. In practice, however, competition is often imperfect, due to factors, such as, externalities, asymmetric information, switching costs, and natural monopolies. These factors can lead to firm market power, with firms facing a downward sloping demand curve, and the concomitant ability to set prices above marginal cost.

Government regulations are often called upon to address marketplace imperfections, such as rate setting to address natural monopolies, improved information remedies to address asymmetric information and reduce consumer search costs, default standards to address switching costs, and direct product feature regulation to constrain the sale of products with the particularly harmful characteristics.

Yet, even if regulators succeed in ensuring that markets are relatively competitive, competition leads to efficiency, making the pie as big as possible for society -- a worthy goal -- but competition itself does not address who should get what piece of pie. Competition policy does not typically address other potential policy goals, such as, fairness, justice, or income distribution or re-distribution (Armstrong 2008). This leaves open the question of how to balance efficiency goals with other consumer protection goals regarding fairness and equity.

Economic analysis of supply and demand is useful to frame consumer protection problems, including defining and estimating consumer harm from deceptive practices (Pappalardo 2022) — practices that can artificially increase the price people are willing to pay (either with money or time) and the quantity they are willing to purchase. However, one limitation of demand analysis is that it does not register the preferences and needs of those without the ability to participate in those markets due to income constraints.

CFPB Mandate: Now, this is a time to acknowledge past policy failures. The CFPB was born out of the regulatory failures of the financial crisis and Great Recession — the failure of existing regulatory bodies to predict and take early action to limit consumer injury due to the collapse of mortgage markets (Date, 2011). The CFPB is a relatively new government agency — we just celebrated our 11th anniversary!

However, the overall purpose of the CFPB is consistent with that of other older consumer protection agencies, such as the FTC, which is over a century old. Both have mandates to protect consumers and promote competition. For example, Section 1021(a) of the Consumer Financial Protection Act of 2010, commonly referred to as the Dodd-Frank Act, which established the CFPB, sets a clear vision for the CFPB:

> Purpose ㅡ The Bureau shall seek to implement and, where applicable, enforce Federal consumer financial law consistently for the purpose of ensuring that all consumers have access to markets for consumer financial products and services and that markets for consumer financial products and services are fair, transparent, and competitive.

Yet, there are unique elements of the CFPB's mandate that reflect its birth in the wake of the financial crisis, with explicit attention to monitoring markets for early warning signs of risks to consumers. According to Section 1021(c)(3) one of the "primary functions of the Bureau" is "collecting, researching, monitoring, and publishing information relevant to the functioning of markets for consumer financial products and services to identify risks to consumers and the proper functioning of such markets."

Our research mandate is a critical part our mandate. Section 1013(b)(1) of Dodd Frank sets out specific functions of the Bureau's research office, which is part of RMR. It illustrates the core role of research, but also makes clear that our job is not only to examine what happens to consumers on average, but also to understand how people in different parts of the marketplace are faring, with a focus on *underserved consumers* and *underserved communities*. Under Dodd-Frank, we are called to research, analyze, and report on:

(A) developments in markets for consumer financial products or services, including market areas of alternative consumer financial products or services with high growth rates and areas of risk to consumers;
(B) access to fair and affordable credit for traditionally underserved communities;
(C) consumer awareness, understanding, and use of disclosures and communications regarding consumer financial products or services;
(D) consumer awareness and understanding of costs, risks, and benefits of consumer financial products or services;
(E) consumer behavior with respect to consumer financial products or services, including performance on mortgage loans; and
(F) experiences of traditionally underserved consumers, including un-banked and under-banked consumers.

Ⅳ. Research Matters

Robust and policy relevant research is key to identifying and correcting problems that harm consumers in the marketplace.

A. Identifying Consumer Problems

Consumer Surveys: One approach we have taken to spot issues early and understand the problems consumers face is to survey consumers directly. Over the last several years, we have conducted a series of surveys that we call the "Making Ends Meet" survey because our goal is to understand the problems that consumers face that lead them to have trouble making ends meet and how they deal with these problems. We are particularly interested in understanding the financial products that consumers use when they are facing problems. Products such as overdraft, payday loans, or Buy Now Pay Later, for example, may help some consumers with a problem but may lead to bigger problems later. An exciting facet of these surveys is that they are associated with the respondents' credit bureau data. This association means we can see how respondents are doing not just when we survey them but before and after the survey as well. And since credit bureau data does not contain important information — such as information about race, gender, or income — the surveys enrich one of our main data sources.

Having our own surveys allows us to pivot quickly to understand new issues affecting consumers. We have used this powerful combination in innovative ways. For example, in September 2021, we published a report (Dobre, Rush, and Wilson, 2021) using the surveys and credit bureau data showing that renters' finances appear highly sensitive to policy during the pandemic. Last summer, renters were doing well according to our financial measures. However, as pandemic aid policies ended, that appears to have reversed. We recently published a blog post (Fulford 2022, July 27) showing that low-income renters' credit card debt increased by nearly 40 percent in the past year and is now 20 percent above its level before the pandemic. Meanwhile, homeowners' credit card debt is still lower than before the pandemic.

In December, 2021, our researchers published a report (Fulford & Shupe 2021, December) based on one of our surveys during the pandemic. Combining whether someone had a student loan, a credit card, an auto loan, or a mortgage from the credit bureau data, we asked in the survey whether people were having trouble and whether they received assistance with that loan. We found that almost everyone who received some assistance said they were having trouble. For example, nearly 80 percent of people who received some mortgage flexibility also reported a significant income drop. And even better, the reverse is also true, at least for mortgages. Three quarters of people who had trouble with their mortgage received some sort of mortgage assistance.

The March 2020 CARES Act required mortgage servicers for federally backed mortgages to grant forbearance and CFPB regulations generally require servicers to inform struggling homeowners of their options. That forbearance was widely available and used by most mortgage holders who were having trouble is starkly different than consumers' experience during the Great Recession when relatively few people with problems received assistance.

And we are looking ahead to other possible emerging problems or approach existing issues from new directions. Our most recent survey asked about Buy Now Pay Later products, for example. These products have grown quickly, but are not generally reported to credit bureaus, so it is hard to tell whether some consumers are building unsustainable debt. By collecting information from the consumer, we will get the full picture of a consumer's debts, assets, and income. We showed in the Fulford and Shupe (2021) report, for example, that nearly 30 percent of payday loan users could have borrowed on an available credit card at much lower interest rates.

Collecting Firm Data: We also have the statutory authority to collect data from business to help us monitor markets for risks to consumers in the offering or provision of consumer financial products and services. For example, we issued orders issued that required five different Buy Now, Pay Later lenders to provide information on the risks and benefits of their products. The CFPB also issued orders to tech firms *Facebook*, *Google*, *Apple*, *Amazon*, *Square*, and *PayPal* to help the CFPB monitor for consumer protection risks as payments technologies and markets evolve. The information collected will shed light on the firms' business practices and seek to illuminate the range of these consumer payment products and their underlying business practices. The orders focus on data harvesting and monetization, access restrictions and user choice, and other consumer protection issues.

B. Solving Consumer Protection Problems due to Market Imperfections

Research is not only important to identify risks of consumer harm in the financial marketplace; research is often necessary to develop policy solutions that will effectively solve identified problems. It is common in policy analysis to talk about "unintended consequences" of regulation. Yet, in many cases such consequences are predictable from theoretical analysis or empirical research (Pappalardo, 2012).

Although one must weigh the benefits and costs of additional research and analysis to address policy concerns before taking actions to prevent harm (and the harm from failing to act quickly), I believe that consumer research is probably justified more than used in practice because policy makers often fail to recognize that what appear to be "no downside risk solutions" to consumer protection problems can actually harm the very people we are trying to help.

Mortgage Disclosures: One case in point comes from research on consumer mortgage disclosures. Back when I was a staff economist at the FTC, I worked on consumer protection law enforcement cases that led me to believe that mortgage disclosures required by the federal government might not be working, as intended, and could be inadvertently misleading consumers. Many years later, I worked with my colleague, James Lacko, to propose a combination of qualitative and quantitative, randomized, controlled research to test this hypothesis. This research followed earlier randomized, controlled research we had conducted on possible mortgage broker compensation disclosures (Lacko & Pappalardo, 2004). We found that some disclosures were so confusing that they were downright misleading. This was the first public research on how consumers understood federally required disclosures. We also developed alternative disclosures based on first principles of consumer research and our research revealed that they were significantly better for real people (Lacko & Pappalardo, 2007, 2010). Our research methodology was later used to test the "Know Before You Owe" mortgage disclosures developed by the CFPB (CFPB, 2018) — disclosures that have recently been recognized in a design publication as a good example of consumer information provision (Hammari, June 22, 2022).

The work of two economists considering the potential of regulatory failures and fixes had the effect of shining light on problems with required disclosures, leading to a better information environment for mortgage shoppers. There are a few lessons from this experience. First, as you work on consumer protection regulation issues, ask big picture questions to consider where there may be systemic problems not just of market failure, but also of regulatory failure. Second, keep a record of possible research ideas. Our mortgage disclosure work was tied in part to a research idea that sat in the back of a drawer for years before having an opportunity to implement it. Third, there is benefit from having researchers integrated in consumer protection law enforcement and policy development — this is a natural incubator for policy-relevant research ideas. Finally, here is benefit in combining qualitative and quantitative consumer research to understand problems real consumers are facing, and to test and propose real solutions.

Financial Education: Consumer financial education is also an area where, perhaps surprisingly, regulators can also do more harm than good and an area where remedies benefit from research. In a recent article in your journal, Kae Kyung Yang (2021) reviews the literature on financial education, financial literacy, and financial behavior, and finds that "Evidence of the effectiveness of financial education on financial literacy and financial behaviors from previous studies are mixed." (p. 1). Yang points to the need for more randomized-controlled research on interventions, more clarity about the goal of financially literacy programs, and the benefits of providing consumer information closer to the point of sale to reduce search costs.

The CFPB created the "Five Principles of Effective Financial Education" (Ratcliffe, 2017) to provide research-based guidance to the field on effective approaches to financial education. It is a great resource for helping people take control of their money habits and financial well-being. To establish the principles, Bureau researchers leveraged financial well-being research on how people make financial decisions assembled from many fields of study and gathered input from experts and practitioners in this field. As CFPB researchers noted, there is no single right way to provide financial education, just as there is no single right way everyone should conduct their financial lives. Many approaches can work, reflecting the diversity of people's circumstances, opportunities, aspirations, and the ingenuity of those helping people take steps to improve their financial well-being. (Ratcliffe, 2021).

The CFPB Director Rohit Chopra is the Vice Chair of the U.S. Financial Literacy and Education Commission, which was set up to develop a national strategy on financial education. At a recent public meeting of the Commission, Director Chopra (CFPB, July 2022) highlighted, "Going forward, we must focus on financial education that allows families know how to spot risks, where to get help, and how to assert their rights when something goes wrong."

Ⅴ. Communication Matters

Harkening back to where I began, communication among academic researchers and regulators across the globe, sharing our successes and failures, is critical to making consumer protection policy work as effectively as possible for households. One way of doing this is through the Global Financial Innovation Network (GFIN). The GFIN is a collaborative knowledge and policy sharing network aimed at advancing effective regulatory responses to the use of emerging and more traditional technologies in financial services, by sharing experiences, working jointly on emerging issues and facilitating responsible cross-border experimentation of new ideas.

The primary functions of GFIN are to focus on emergent technology at a cross-sectoral level to identify gaps in the regulatory ecosystem; act as a surveillance tool to be more effective at spotting issues before they can cause harm; run collaborative data focused activities; and engage in market facing services and initiatives to gather insights from global markets and regulators on emerging technology trends and policy. The CFPB joined GFIN in August 2018, and upon its formal launch in January 2019, the Bureau became a Coordinating Group Member. The Coordination Group is made up of GFIN Members and sets the overall direction, strategy and annual work program of the GFIN. As of July 2022, the Bureau is the only US regulator that is a Coordinating Group Member.

The Office of Competition and Innovation, within RMR, with participation from the CFPB's Technology and Innovation (T&I) team, leads the Bureau's membership in GFIN. We have found that the Bureau has benefited from the information-sharing platforms provided by GFIN. Additionally, we have created relationships with GFIN members who are formulating a regulatory response to emerging technologies and business models that are also faced by the CFPB, and we benefit from understanding their findings and approach.

Although coordination across jurisdictions is challenging due to GFIN's diverse set of members, all with different remits and priorities, there is nonetheless a great deal of value in shared learnings and pooled efforts. For example, the CFPB was able to stand up an effective tech sprint program leveraging the knowledge and experience of the FCA and other GFIN members. We have also benefited from research and best practices contributed by other members of the organization.

Another important means of communication is to make data available to researchers and policy makers. Please check out our website to see the range of data we have available, including data on mortgages, consumer complaints, and credit cards. Our credit card data provides a prime example of how we focus on our policy mandates, using best available technology, to make data available for research to improve the consumer financial marketplace. Our work in this area also illustrates the principles of clear objectives, robust research, and clear communication to improve consumer protection policy.

In 2009, Congress enacted the Credit Card Accountability Responsibility and Disclosure Act ("CARD Act") in order to "establish fair and transparent practices related to the extension of credit" in the credit card market. (Tech Specs, Pub. L. 111-24, 123 Stat. 1734 (2009)). The CFPB's Credit Card Agreement Database, an online database available to the public, was created pursuant to the CARD Act. It contains most credit card agreements available to consumers. A financial institution must submit their credit card agreement, which also includes the pricing information for the credit card plan. Pricing information is defined to include credit card annual percentage rates (APR) and fees, among other things. The regulation also provides that, except in certain circumstances, card issuers must post and maintain on their publicly available websites the credit card agreements that the issuers are required to submit to the Bureau.

Recent technological investments in text analysis software allow the Bureau to present some initial findings from more than 10,000 cardholder agreements submitted by credit card issuers pursuant to those CARD Act requirements over the past five years. Previous Bureau reports utilized only a sample of documents from the database to examine agreement length, readability, and late fee terms. (CFPB, September 2021) Several months ago, the CFPB published a report finding that all but two of the top 20 issuers by outstanding balances contracted a maximum late fee at or near the safe harbor amount of $40 in 2020. However, the most common maximum late fee charged in agreements submitted to the CFPB was $25, as driven by the practices of smaller banks and credit unions not in the top 20 issuers by asset size. (CFPB, March 2022)

On June 22, 2022, the CFPB announced it was taking the first step toward addressing credit card company penalty policies costing consumers $12 billion each year, starting by looking at late fees. The CFPB has published an Advance Notice of Proposed Rulemaking to determine whether adjustments are needed to address late fees. The press release cited the report, Credit Card Late Fees: "many major issuers charge the maximum late fee allowed under the immunity provisions; 18 of the top 20 issuers set late fees at or near the established maximum level." (CFPB, June 2022)

Of course, conferences such as this are central to communication, collaboration, and the development of new research and policy solutions. In the spirit following through on the research collaborations that I hold dear, please keep an eye out for our conferences, including our 2022 research conference, for which we welcomed a range of research papers (CFPB, 2022). We encouraged research from a broad range of fields, including economics, finance, law and economics, and cognitive and behavioral science and hoped that submissions would cover

> ... a broad range of research work. Topics include, but are not limited to: competition and market power in the financial sector; technological innovation in financial markets and consumer impacts, including the use of big data and the presence of algorithmic biases; access to fair and affordable credit for traditionally underserved consumers and communities; spatial disparities across communities; enforcement mechanisms and their effectiveness including remedies to deter misconduct (monetary and non-monetary); climate change and household finance; the ways consumers and households make decisions about borrowing, saving, and financial risk-taking; how the salience of fees and terms affect choices; the structure and functioning of consumer financial markets; and relevant innovations in modeling or data.

I hope you will join us at our conference on December 15-16, 2022. And if not this year, then in the future.

Ⅵ. Conclusion

In closing, I thank you for the opportunity to share a few insights from my experience as a consumer protection economist with a focus on the importance of being clear about our objectives, developing robust research to identify consumer protection problems and effective solutions, and communicating and collaborating ― sharing stories of our success and failures ― to ensure that we are identifying and effectively addressing the marketplace imperfections that harm consumers and threaten the security of households. Although this was my first time participating in International Academy of Financial Consumers Global Forum, I hope that this is just the beginning of continued learning and sharing from one another.

I also thank you for the opportunity to share a bit about a relatively new regulatory agency, the CFPB, and my Division, RMR. I hope you see what I see every day. RMR represents the best in government — a dedicated team of leaders, subject matter experts, analysts, and administrative staff who work together within RMR, across the CFPB, and with outside stakeholders to deliver research and evidence-based policies designed to make the marketplace works as well as possible for everyone. Check out the CFPB website[1] for the latest on CFPB work, using all the CFPB's tools, including research, law enforcement, supervision, market monitoring, financial education, and regulation and reach out if you would like more information or share your latest findings.

References

Armstrong, M. (2008). Interactions between Competition and *Consumer Policy, Competition Policy International*, Volume 4, Number 1, Spring, 97-147. https://ora.ox.ac.uk/catalog/uuid:ff166fcf-c3c1-4057-9cf5-10e295b66468/download_file?file_format=application%2Fpdf&safe_filename=Text.pdf.

Consumer Financial Protection Bureau (2013). 12 CFR Parts 1024 and 1026 [Docket No. CFPB 2012-0028] RIN 3170-AA19 Integrated Mortgage Disclosures under the Real Estate Settlement Procedures Act (Regulation X) and the Truth in Lending Act (Regulation Z). *Federal Register, 77*, 51116-51457. https://www.consumerfinance.gov/rules-policy/final-rules/2013-integrated-mortgage-disclosure-rule-under-real-estate-settlement-procedures-act-regulation-x-and-truth-lending-act-regulation-z/

Consumer Financial Protection Bureau (2018). *Mortgage shopping study overview and methodology: Know before you owe: Mortgage shopping study - brief #1*. Report. Washington, DC: Consumer Financial Protection Bureau. https://files.consumerfinance.gov/f/documents/bcfp_mortgages_shopping-study_brief-1-methodology.pdf

Consumer Financial Protection Bureau. (2021, September 29). *The consumer credit card market*. https://files.consumerfinance.gov/f/documents/cfpb_consumer-credit-card-market-report_2021.pdf.

Consumer Financial Protection Bureau. (2022). *Call for papers for 2022 CFPB research conference*. https://www.consumerfinance.gov/data-research/cfpb-research-conference/2022-cfpb-research-conference/call-for-papers/

Consumer Financial Protection Bureau. (2022, March 29). *Credit card late fees*. https://files.consumerfinance.gov/f/documents/cfpb_credit-card-late-fees_report_2022-03.pdf.

Consumer Financial Protection Bureau. (2022, June 22). *CFPB Initiates Review of Credit Card Company Penalty Policies Costing Consumers $12 Billion Each Year* [Press release]. https://www.consumerfinance.gov/about-us/newsroom/cfpb-initiates-review-of-credit-card-company-penalty-policies-costing-consumers-12-billion-each-year/.

Consumer Financial Protection Bureau. (2022, July 14). *Director Chopra's Prepared Remarks to the Financial Literacy and Education Commission* [Press release]. https://www.consumerfinance.gov/about-us/newsroom/director-chopras-prepared-remarks-to-the-financial-literacy-and-education-commission/

Date, R. (2011). *Lessons learned from the financial crisis: the need for the CFPB*. https://www.consumerfinance.gov/about-us/newsroom/lessons-learned-from-the-financial-crisis-the-need-for-the-cfpb/.

Dobre, A., Rush, M., and Wilson, E. (2021, September). *Financial conditions for renters before and during the COVID-19 pandemic,* CFPB Research Brief No. 2021-9. https://www.consumerfinance.gov/data-research/research-reports/financial-conditions-for-renters-before-and-during-covid-19-pandemic/.

Fulford, F. (2022, July 27). *Housing inflation is hitting low-income renters*, Consumer Financial Protection Bureau blog. https://www.consumerfinance.gov/about-us/blog/office-of-research-blog-housing-inflation-is-hitting-low-income-renters/.

Fulford, F. & Shupe, C. (2021, December). *Consumer finances during the pandemic: Insights from the Making Ends Meet Survey*, Consumer Financial Protection Bureau Data Point No. 2021-3. https://www.consumerfinance.gov/data-research/research-reports/consumer-finances-during-pandemic-insights-making-ends-meet-survey/.

Fulford, F. & Shupe, C. (2021, May). *Consumer use of payday, auto title, and pawn loans: Insights*

[1] https://www.consumerfinance.gov/

from the Making Ends Meet Survey, CFPB Research Brief No. 2021-1. https://www.consumerfinance.gov/data-research/research-reports/consumer-use-of-payday-auto-title-and-pawn-loans-insights-making-ends-meet-survey/.

The Global Financial Innovation Network. (2022, October 5.) The Global Financial Innovation Network Homepage. https://www.thegfin.com/

Jung, H. (2019). A review of the past five years of the IAFICO (2014-2019). *The International Review of Financial Consumers*, 4, 2 (October), 43-56. https://www.iafico.org/_files/ugd/e9e42a_4d4349b2058d4bb8b94e65fe46b4def5.pdf

Hammani, S. (2022, June 22). *Today's Design is Shaped by Likes. And That's a Problem. Design has become intertwined with the most harmful dynamics of the social web*. https://eyeondesign.aiga.org/todays-design-is-shaped-by-likes-and-thats-a-problem/

Lacko, J. M., & Pappalardo, J. K. (2004). *The effect of mortgage broker compensation disclosures on consumers and competition: A controlled experiment*. Washington, DC: Federal Trade Commission. https://www.ftc.gov/reports/effect-mortgage-broker-compensation-disclosures-consumers-competition-controlled-experiment

Lacko, J. M., & Pappalardo, J. K. (2007). *Improving consumer mortgage disclosures: An empirical assessment of current and prototype disclosure forms*. Washington, DC: Federal Trade Commission. https://www.google.com/search?q=Lacko%2C+J.+M.%2C+%26+Pappalardo%2C+J.+K.+(2007).+Improving+consumer+mortgage+disclosures%3A+An+empirical+assessment+of+current+and+prototype+disclosure+forms.+Washington%2C+DC%3A+Federal+Trade+Commission.

Lacko, J. M., & Pappalardo, J. K. (2010). The failure and promise of mandated consumer mortgage disclosures: Evidence from qualitative interviews and a controlled experiment with mortgage borrowers. *American Economic Review*, 100, 516-521. https://www.aeaweb.org/articles?id=10.1257/aer.100.2.516

Pappalardo, J. K. (2012). Are Unintended Effects of Marketing Regulations Unexpected? *Marketing Science*, 31(5), 739-744.

Pappalardo, J.K. (2022). Economics of Consumer Protection: Contributions and Challenges in Estimating Consumer Injury and Evaluating Consumer Protection Policy. *Journal of Consumer Policy* 45, 201-238. https://doi.org/10.1007/s10603-021-09482-4

Pappalardo, J.K. & Ringold, D. J. (2000). Regulating commercial speech in a dynamic environment: Forty years of margarine and oil advertising before the NLEA. *Journal of Public Policy & Marketing*, 19, 74-92.

Technical Specifications for Credit Card Agreement and Data Submissions Required Under TILA and the CARD Act (Regulation Z), 86 Fed. Reg. 46953 (Aug. 23, 2021). https://www.consumerfinance.gov/rules-policy/final-rules/technical-specifications-for-credit-card-agreement-and-data-submissions-required-under-tila-and-the-card-act-regulation-z/

Yang, H. K. (2021). The relationship among financial education, financial literacy, and financial behavior. *The International Review of Financial Consumers*, 6, 2, 1 - 9. https://www.iafico.org/_files/ugd/e9e42a_c97cdfd9682147b08b586ce1f7dfbe9c.pdf

---

Received/ 2022. 10. 15
Revised/ 2022. 11. 03
Accepted/ 2022. 11. 14

The International Review of Financial Consumers, Volume.7 Issue.2(December, 2022), 13-20 pISSN 2508-3155 eISSN 2508-464X
https://doi.org/10.36544/irfc.2022.7-2.3

The International Review of Financial Consumers

www.eirfc.com

Financial Literacy Policy Trends*

Adele Atkinson†

A B S T R A C T

The term financial literacy refers to knowledge, attitudes, and behaviour around money matters. Low levels of financial literacy are a policy concern, as evidenced by various recommendations from international organisations and action amongst national policy makers. This paper looks at two trends in the policy narratives around financial literacy. It discusses 1) a shift in content and delivery, to incorporate digitalisation and 2) a shift in focus, so that policies are more clearly aligned with the goal of increasing financial well-being. It argues that policy makers should now explicitly address financial well-being in the digital environment, considering both supply and demand-side issues.

Keywords: financial literacy, public policy, financial well-being, digitalisation

Ⅰ. Introduction

The term financial literacy refers to knowledge, attitudes, and behaviour around personal money matters (see Table 1). Various national and international studies have raised concerns that levels of financial literacy are too low (Atkinson et al., 2016; Atkinson & Messy, 2011; OECD, 2020a). Policies aimed at improving financial literacy through widespread provision of financial education have been promoted at the international level implemented at the national level for over 20 years (OECD, 2013, 2015). Approximately 100 countries now have a national strategy designed to address stubbornly low levels of financial literacy (Gradstein et al., 2021). Such strategies are based on the argument that people need to be financially literate to make financial decisions that are in their own best interest, and that they therefore need financial education so that they can learn to manage their own financial lives.

Financial literacy policies are typically motivated by evidence from a variety of sources. In particular, they:

- Often draw on national data or international evidence that many people lack the knowledge, skills, behaviour and attitude that are considered to reflect levels of financial literacy (see for example Atkinson et al., 2007a, 2016; OECD, 2018, 2020b);
- Reference studies exploring the association between higher levels of financial literacy and positive outcomes such as being able to overcome a financial shock or effectively manage a complex financial product such as a mortgage (Bialowolski et al., 2021; Gerardi, 2010; Klapper & Lusardi, 2020; Lusardi et al., 2011); and,
- Turn to recent meta-analyses offering evidence that it is possible to improve financial literacy through financial education, albeit with various caveats (see for example Kaiser et al., 2020).

At the same time, there is a tendency for some policy makers to base financial literacy policies on economic

† Professor, University of Birmingham, UK, a.atkinson@bham.ac.uk
* **Acknowledgement**
Invited article.

Table 1. Definitions of key concepts drawn from a range of organisations[1]

Financial inclusion (GPFI)
• Effective and quality access to and usage of - at a cost affordable to the customers and sustainable for the providers - financial services provided by formal institutions
Financial capability (President's Advisory Council on Financial Capability)
• The capacity, based on knowledge, skills, and access, to manage financial resources effectively
Financial literacy of adults (OECD, G20)
• A combination of awareness, knowledge, skill, attitude and behaviour necessary to make sound financial decisions and ultimately achieve individual financial well-being
Digital financial literacy (AFI)
• Acquiring the knowledge, skills, confidence and competencies to safely use digitally delivered financial products and services, to make informed financial decisions and act in one's own best interest per individual's economic and social circumstance
Financial health or well-being (UNSGSA)
• The extent to which a person or family can smoothly manage their current financial obligations and have confidence in their financial future

models suggesting that people who are fully informed will make rational decisions. These models under-estimate the complexity of human decision making and can lead to an excessive focus on imparting knowledge, rather than skills. Some actors and advisors have addressed this tendency, and started to incorporate a better understanding of the biases and psychological traits that may prevent people from making appropriate choices (Ariely & Kreisler, 2017; IOSCO & OECD, 2018; OECD, 2019).

In some cases, the stated purpose of a demand-side strategy for financial literacy goes beyond the outcomes for individuals and includes aims such as reducing the risk of future financial crises, reducing the regulatory burden on financial service providers, supporting financial stability, increasing levels of financial inclusion, and counteracting the risk to individuals of policies designed to increase personal responsibility for financial planning. These broader aims appear to reflect a need to tune in to both public sentiment and policy priorities. In such cases, there is an implicit assumption that low levels of financial literacy among the general population create macro-economic vulnerabilities or reduce the viability of other policies, an argument that gained traction in the wake of the 2008 global financial crisis (Gerardi, 2010; OECD, 2009).

This tendency towards highlighting the potential economic benefits of financial literacy policies has resulted in discussion of the importance of financial literacy in the wake of changing economic circumstances. Most recently, this has included exploration of the role of financial literacy in helping people to manage the income shocks created by the COVID-19 pandemic (C. Matthews, M. Reyers, J. Stangl & P. Wood, 2021; OECD, 2020b, 2021b; Wilson et al., 2020) and recent cost-of-living increases in many countries.

The discussions triggered by recent events appear to have contributed to new trends in the policy narratives around financial literacy. This paper considers two such trends, and the possible consequences for policy makers and consumers.

The first policy trend described in this paper is a rapidly increasing focus on digitalisation. It can be characterised as a shift in *content* and *delivery*, in the sense that policies have been developed to incorporate digital financial services (DFS) within the *content* of financial literacy initiatives, and to employ digital tools in the *delivery* process.

The second major trend is towards a greater emphasis on financial health or well-being (FWB). FWB is frequently identified as the ultimate end-goal of other policies, but until recently it was neither defined nor measured. This is changing, and it is now starting to be seen as a measurable outcome, which aligns closely with the UN Sustainable Development Goals. This trend can be characterised as a shift in *focus*. This new *focus* has allowed those policy makers with responsibility for financial consumers to create a broader policy toolkit that looks beyond the role of education in improving outcomes.

[1] (Administration of Barack H. Obama, 2010; AFI, 2021; GPFI, 2020; OECD, 2018b; UNSGSA, 2021)

Ⅱ. A Shift in Content and Delivery

For some time, policy recommendations have highlighted the importance of simultaneously addressing financial inclusion, financial literacy, and financial consumer protection (G20, 2010). More recently, policy advice has suggested updates to regulation, supervision, financial consumer protection and financial education to take into account increasing role of digitalisation in financial inclusion(G20, 2016).

The relevance of such updates became especially evident during the recent COVID-19 pandemic. Digitalisation played a vital role in supporting physical distancing measures across various domains during the pandemic, including finance (C. Matthews, M. Reyers, J. Stangl & P. Wood, 2021; CGAP, 2020; OECD, 2021b). Policy makers recognised that financial consumers needed new competencies to manage this rapid change. In particular, there was widespread awareness in the policy world of the increased risks faced by financial consumers such as falling victim to various cybercrimes such as scams, fraud and data theft; or making mistakes due to poor digital skills, low levels of financial literacy, misunderstanding or the complexity of the DFS on offer (AFI, 2019, 2021; OECD, 2020b). As the trend towards incorporating digitalisation in financial literacy policy gained momentum, the term digital financial literacy started to take hold, leading to a focus on digital skills as well as more traditional financial competencies, as highlighted by the following quotes (own emphasis added).

> "Digital financial literacy (DFL) is likely to become an increasingly important aspect of education for the Digital Age. [⋯] Consumers will need to have increasing financial sophistication to make effective use of financial technology (fintech) products and avoid fraud and costly mistakes. G20 countries need to agree on a standardized definition of digital financial literacy, design tools to assess it, and develop strategies and programs to promote digital financial education, including special programs for vulnerable groups." (p1. Morgan et al., 2019).

> "Moreover, the results hint at the potential of digital literacy to surpass financial literacy by providing a more efficient and less costly tool to stimulate financial behaviors that build resilience, precisely in settings where DFS are developing."(p25. Lyons et al., 2020)

Traditionally, financial literacy competencies have been widely considered to include knowledge, attitudes and behaviour relating to budgeting, making ends meet, planning ahead, staying informed and choosing and using financial (Atkinson et al., 2007; Atkinson & Messy, 2011). However, recognising the new risks faced, recent policy papers have stressed the importance of competencies related to DFS including knowledge of new kinds of products and services and ways to avoid falling victim to cybercrime (AFI, 2021; Morgan et al., 2019).

In response to these changes, international and national policy bodies have developed new competencies, started to gather demand-side data on digitalisation and promoted effective use of digital delivery methods for financial education. Recent competencies frameworks include the Financial Inclusion Global Initiative's Digital Financial Services Consumer Competency Framework, a comprehensive document that states that 'Consumers need a set of competences to engage in DFS transactions, to make informed choices, identify and report suspicious products and service providers, to increase their welfare, efficiently enforce their rights, and to have confidence and trust in the digital financial system' (p10. ITU, 2020). The European Commission and OECD have included digital competencies in their general financial literacy competency framework for adults (EC/OECD, 2022). This covers digital currencies, digital tools and payment methods, crypto-assets, personal data and personal data protection, digital financial products and services, robo-advice, online scams and fraud, and cyber risks.

The UN, World Bank and OECD have all started to look at ways to capture levels of digital financial literacy. UNCDF have developed a new survey tool to capture financial and digital literacy across the Pacific (UN, 2021), the World Bank's Findex has become increasingly focused on digitalisation (Demirguc-Kunt et al., 2018; World Bank, 2022) and the OECD 2022 toolkit on financial literacy now includes digital financial literacy questions (OECD, 2022).

The OECD has also addressed the opportunity to harness digital tools for delivering financial education. Whilst they recognise the potential benefits of such an approach, they also note that 'Public authorities must also ensure that the use of digital technologies does not lead to digital exclusion, and take into account the needs of those with lower digital literacy and access.' (OECD, 2021a).

Ⅲ. A Shift in Focus

The second trend described in this paper is more subtle but may create bigger opportunities and challenges for policy makers in years to come. Increasingly policy makers with a responsibility for financial education or literacy are shifting their focus and specifically setting out to increase financial well-being (sometimes referred to as financial health). In part, this reflects their growing concern about the growing number of people in financially vulnerable circumstances as a result of recent economic shocks, and a recognition that financial inclusion could have adverse effects if it does not explicitly aim to support financial health (OECD, 2020b; UNSGSA, 2021). It is also likely that it indicates a more nuanced understanding of the role and limitations of increased financial literacy in helping people to achieve positive outcomes.

The term financial well-being has been used for some time, and many definitions of financial literacy or capability refer to it as the ultimate outcome. Across anglophone countries various public bodies have also developed ways to monitor it. For example, in the US, the Federal Reserve (FED) has measured economic well-being within the Survey of Household Economics and Decision-making since 2013 and the Consumer Financial Protection Bureau has developed a significant body of work on this topic (CFPB, 2015; *Federal Reserve Board - Survey of Household Economics and Decisionmaking*, 2022). The Australian Securities and Investments Commission (ASIC) has created a Financial Well-being network drawing together over 200 organisations (Good Design Australia, 2020).

The acceleration in interest in financial well-being is most clearly evidenced by publications from international policy bodies, and also illustrated by the shift in focus of the UK Money and Pensions Service from strategies on Financial Capability to a 'Strategy for Financial Wellbeing' (MaPS, 2020). At the international level, the UNCDF has recently published a White Paper (2021) stating that 'The measurement of financial health offers a nuanced alternative to the binary measure of financial inclusion, offering intermediate outcomes to a realization of the SDGs - a policy priority for governments across the world' (UNCDF, 2021). The UNSGSA notes a: 'danger of access to financial services without consideration to how it meets customers' needs and well-being' and points out that 'unregulated products can lead to debt stress' (UNSGSA, 2021). UNEP Finance Initiative guidance also enables FSP to align their core business with various SDGs and the WB (2021) suggests that 'A consensus is emerging that financial well-being is the ultimate measure of success for financial education efforts' (Gradstein et al., 2021; UNEP Finance Initiative, 2021).

Publications from policy organisations suggest that financial well-being is related to various personal and socio-economic characteristics, and also depends on factors such as national interest rates, policies designed to incentivise savings or build resilience, levels of financial literacy, levels of income, assets and debts, and access to financial products and services (Atkinson, 2019; FCAC, 2019; Money and Pensions Service, 2019; UNSGSA, 2021). Some of these issues can be tackled through financial education, but financial literacy policies alone may not be sufficient to make a difference to levels of financial well-being. A more comprehensive approach to financial well-being stands a greater chance of success and is also consistent with G20 recognition that consumers require a combination of financial inclusion, financial literacy, and financial consumer protection.

For authorities with a responsibility for financial literacy it seems likely that this shift in focus will require additional coordination with other bodies, increased analysis regarding the contribution of education in improving the final outcome, and outcome measures that fully reflect the intention to change financial well-being rather than financial literacy.

Coordination is already a common part of most national strategies for financial literacy, so small changes in this aspect should not be difficult. However, the other two aspects will require careful management. For example, financial education in schools may not lead to immediate changes in financial well-being, but there is now mounting evidence that this can be an effective approach to shape attitudes and behaviours in young people, helping them to manage financial decisions in early adulthood. This suggests that more emphasis should be made on exploring the pathways to financial well-being. This approach will also help with measurement. At the moment, there are several survey instruments that could be used to measure financial well-being, but these may not adequately reflect the impact of initiatives designed to make improvements. For example, since financial literacy is only one component of financial well-being it may be that financial literacy improves but something else gets worse (such as the economic climate), leaving well-being measures unchanged.

Ⅳ. Conclusion and Points for Consideration

Financial literacy policies have been promoted as effective ways to support and empower consumers, complementing supply-side initiatives to increase financial inclusion, regulation and supervision of financial service providers and consumer protection policies. In recent years we have also seen two new trends in such policies. The first relates to digitalisation and can be characterised as a shift in content of financial literacy initiatives and delivery mechanisms employed. The second trend relates to a shift in focus, with additional attention being paid to financial well-being as the ultimate end goal.

Whilst the current trends stand to benefit consumers, this paper concludes by offering three points for consideration by policy makers and researchers.

First, consider the impact of digitalisation as a whole and address it accordingly. Policy makers responsible for financial literacy have been quick to shift the focus of their initiatives to cover emerging topics such as access to, and safe use of, digital financial services. However, the way in which consumers access technology and technological based solutions traverses many domains including health, education, finance, and access to government services. The competencies required to set up a digital ID are very similar to those required to open a digital wallet, for example, and the risks faced are also similar (especially the risk of fraud, scams, and data theft). Consequently, there is considerable scope for a more integrated, and potentially cost-efficient approach to address the challenges and risks of digitalisation, irrespective of which public authority's remit they fall under. Such an approach may also incorporate digital delivery methods.

Second, keep in mind that overly complex products and services may need supply-side solutions. Some policy makers have argued that consumers will need to be able to keep up with the increasing complexity of the financial landscape in the wake of digitalisation. This has resulted in a tendency to talk about the need for high levels of financial literacy or 'increasing sophistication'. Whilst it is a laudable aim, this approach is likely to fall short of its intended goals. Many consumers already struggle with simple financial decisions and are unlikely to have the time or inclination to increase their sophistication. Expecting them to do so gives the impression that policy makers believe that such people should be responsible for their own mistakes. However, it could be argued that consumers with lower levels of financial sophistication would benefit more from knowing that regulators, supervisors, and bodies responsible for cybercrime are putting steps in place to protect them from harm. Access to high-quality advice and guidance could also be beneficial.

Finally, policy makers should combine the two trends in a meaningful discussion on financial well-being in the digital environment. Such a discussion could address the impact of digitalisation across various domains, whilst focusing on the financial implications for consumers. Additional research will be required to ascertain the appropriate balance of policies to support financial well-being in a digital world.

References

Administration of Barack H. Obama. (2010). *Executive Order 13530-President's Advisory Council on Financial Capability*. https://www.govinfo.gov/content/pkg/DCPD-201000062/pdf/DCPD-201000062.pdf

AFI. (2019). *Cybersecurity for Financial Inclusion: Framework and Risk Guide*. Alliance for Financial Inclusion. https://www.afi-global.org/wp-content/uploads/2020/07/AFI_GN37_DFS_AW_digital_0.pdf

AFI. (2021). *Digital Financial Literacy*. https://www.afi-global.org/wp-content/uploads/2021/05/AFI_Guideline45_Digi_Finance_Literacy_aw5.pdf

Ariely, D., & Kreisler, J. (2017). *Dollars and Sense. How We Misthink Money and How to Spend Smarter*. HarperCollins Publishers.

Atkinson, A. (2019). Financial Well-being and Inclusiveness. In *Inclusiveness and Finance*. OECD publishing. https://www.oecd.org/finance/Financial-markets-insurance-pensions-inclusiveness-and-finance.pdf

Atkinson, A., & Kempson, H. (2008). *Measuring and* *improving financial capability: Designing an approach for Kenya*. FSD Kenya. https://research-information.bris.ac.uk/en/publications/measuring-and-improving-financial-capability-designing-an-approac

Atkinson, A., McKay, S., Collard, S., & Kempson, E. (2007). Levels of financial capability in the UK. *Public Money and Management*, 27(1), Article 1. https://doi.org/10.1111/j.1467-9302.2007.00552.x

Atkinson, A., & Messy, F.-A. (2011). Assessing financial literacy in 12 countries: An OECD/INFE international pilot exercise. *Journal of Pension Economics & Finance*, 10(4), Article 4.

Atkinson, A., Monticone, C., & Messy, F.-A. (2016). *OECD/INFE international survey of adult financial literacy competencies*. OECD publishing.

Bialowolski, P., Weziak-Bialowolska, D., & McNeely, E. (2021). The Role of Financial Fragility and Financial Control for Well-Being. *Social Indicators Research*, 155(3), Article 3. https://doi.org/10.1007/s11205-021-02627-5

C. Matthews, M. Reyers, J. Stangl & P. Wood. (2021). *Young New Zealanders and Financial Resilience in the Time of Covid-19: A Longitudinal Study Update*. Massey University. https://www.massey.ac.nz/massey/fms/Colleges/College%20of%20Business/School%20of%20Economics%20&%20Finance/FinEd/documents/LS%20interim%20study%202020_final.pdf?E9820C96260DDA43F960B8FF98F3169E

CFPB. (2015). *Measuring Financial Well-being*. https://files.consumerfinance.gov/f/201512_cfpb_financial-well-being-user-guide-scale.pdf

CGAP. (2020). *Digital Cash Transfers in the Time of COVID*. https://www.cgap.org/sites/default/files/publications/2020.Digital-Cash-Transfers-in-Times-of-COVID-19-Opportunities-and-Considerations-for-Womens-Inclusion-and-Empowerment.pdf

Demirguc-Kunt, A., Klapper, L., Singer, D., Ansar, S., & Hess, J. (2018). *The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution*. World Bank. https://doi.org/10.1596/978-1-4648-1259-0

EC/OECD. (2022). *Financial competence framework for adults in the European Union*. https://www.oecd.org/daf/fin/financial-education/financial-competence-framework-for-adults-in-the-European-Union.pdf

FCAC. (2019). *Financial Well-being in Canada*. https://www.canada.ca/content/dam/fcac-acfc/documents/programs/research-surveys-studies-reports/financial-well-being-survey-results.pdf

Federal Reserve Board—Survey of Household Economics and Decisionmaking. (2022, January 30). Board of Governors of the Federal Reserve System. https://www.federalreserve.gov/consumerscommunities/shed.htm

G20. (2010). *G20 Principles for Innovative Financial Inclusion*. http://www.g20.utoronto.ca/2010/to-principles.html

G20. (2016). *G20 High-Level Principles for Digital Financial Inclusion | GPFI*. G20/GPFI. https://www.gpfi.org/publications/g20-high-level-principles-digital-financial-inclusion

Gerardi, K. (2010). *Financial Literacy and Subprime Mortgage Delinquency: Evidence from a Survey Matched to Administrative Data*. DIANE Publishing.

Good Design Australia. (2020). *Creating ASIC's Financial Wellbeing Network*. Good Design. https://good-design.org/projects/creating-asics-financial-wellbeing-network/

GPFI. (2020). *G20 2020 Financial Inclusion Action Plan*. https://www.gpfi.org/sites/gpfi/files/sites/default/files/G20%202020%20Financial%20Inclusion%20Action%20Plan.pdf

Gradstein, H., Abbas, S., & Tomilova, O. (2021). *Building a Financial Education Approach: A Starting Point for Financial Sector Authorities - Financial Inclusion Support Framework : Technical Note*. https://documents.worldbank.org/en/publication/documents-reports/documentdetail/883771629960132032/Building-a-Financial-Education-Approach-A-Starting-Point-for-Financial-Sector-Authorities-Financial-Inclusion-Support-Framework-Technical-Note

IOSCO & OECD. (2018). *The Application of Behavioural Insights to Financial Literacy and Investor Education Programmes and Initiatives*. IOSCO. http://www.oecd.org/pensions/TheApplication-of-Behavioural-Insights-to-Financial-Literacy-and-Investor-EducationProgrammes-and-Initiatives.pdf

ITU. (2020). *DFS Consumer Competency Framework*.

Kaiser, T., Lusardi, A., Menkhoff, L., & Urban, C. (2020). *Financial Education Affects Financial Knowledge and Downstream Behaviors*. https://www.nber.org/system/files/working_papers/w27057/w27057.pdf

Klapper, L., & Lusardi, A. (2020). Financial literacy and financial resilience: Evidence from around the world. *Financial Management*, *49*(3), Article 3. https://doi.org/10.1111/fima.12283

Lusardi, A., Tufano, P., & Scheider, D. (2011). *Financially Fragile Households: Evidence and Implications*. https://www.brookings.edu/bpea-articles/financially-fragile-households-evidence-and-implications/

Lyons, A. C., Kass-Hanna, J., Liu, F., Greenlee, A. J., & Zeng, L. (2020). *Building financial resilience through financial and digital literacy in South Asia and Sub-Saharan Africa*. *No 1098*, 58.

MaPS. (2020). *UK Strategy for Financial Wellbeing 2020-2030*. https://moneyandpensionsservice.org.uk/wp-content/uploads/2020/01/UK-Strategy-for-Financial-Wellbeing-2020-2030-Money-and-Pensions-Service.pdf

Money and Pensions Service. (2019). *What is financial wellbeing?* https://moneyandpensionsservice.org.uk/what-is-financial-wellbeing/

Morgan, P., Huang, B., & Trinh, L. (2019). *The Need to Promote Digital Financial Literacy for the Digital Age*. https://t20japan.org/wp-content/uploads/2019/03/t20-japan-tf7-3-need-promote-digital-financial-literacy.pdf

OECD. (2009). *Financial Education and the Crisis: Policy Paper and Guidance*. https://www.oecd.org/finance/financial-education/50264221.pdf

OECD. (2013). *Advancing National Strategies for Financial Education*. OECD publishing. http://www.oecd.org/finance/financial-education/G20_OECD_NSFinancialEducation.pdf

OECD. (2015). *National Strategies for Financial Education.* OECD publishing. https://www.oecd.org/daf/fin/financial-education/National-Strategies-Financial-Education-Policy-Handbook.pdf

OECD. (2018a). *Levels of financial literacy in Eurasia*. OECD publishing. http://www.oecd.org/financial/education/financial-literacy-cis-countries-survey-EN.pdf

OECD. (2018b). *OECD/INFE Toolkit for Measuring Financial Literacy and Financial Inclusion*. OECD publications. http://www.oecd.org/daf/fin/financial-education/2018-INFE-FinLit-Measurement-Toolkit.pdf

OECD. (2019). *Smarter Financial Education: Key lessons from behavioural insights for financial literacy initiatives*. https://www.oecd.org/financial/education/smarter-financial-education-behavioural-insights.pdf#:~:text=Combining%20traditional%20ways%20of%20teaching%20with%20the%20insights,in%20ways%20that%20could%20improve%20their%20financial%20well-being.

OECD. (2020a). *OECD/INFE 2020 International Survey of Adult Financial Literacy*. EOCD.

OECD. (2020b). *Supporting the financial resilience of citizens throughout the COVID-19 crisis*. OECD publishing. https://read.oecd-ilibrary.org/view/?ref=129_129607-awwyipbwh4&title=Supporting-the-financial-resilience-of-citizens-throughout-the-COVID-19-crisis

OECD. (2021a). *Digital Delivery of Financial Education: Design and Practice*. OECD publishing. http://www.oecd.org/financial/education/digital-delivery-of-financial-education-design-and-practice.htm

OECD. (2021b). *Financial consumer protection and financial literacy in Asia in response to COVID-19*. OECD. https://www.oecd.org/daf/fin/financial-education/Financial-consumer-protection-and-financial-literacy-in-asia-in-response-to-covid-19.pdf

OECD. (2022). *OECD/INFE Toolkit for Measuring Financial Literacy and Financial Inclusion 2022*. https://www.oecd.org/financial/education/2022-INFE-Toolkit-Measuring-Finlit-Financial-Inclusion.pdf

UN. (2021). *Pacific Digital Economy Program Annual Report 2021*. https://unctad.org/system/files/information-document/PDEP_2021_Annual_Report_01Mar2022_Final.pdf

UNCDF. (2021). *Delivering Financial Health Globally*. MetLife Foundation and UNCDF. https://www.uncdf.org/article/7008/delivering-financial-health-globally-a-collection-of-insights-approaches-and-recommendations

UNEP Finance Initiative. (2021). *Financial Inclusion and Financial Health*. https://www.unepfi.org/wordpress/wp-content/uploads/2021/05/PRB-Guidance-Financial-Inclusion.pdf

UNSGSA. (2021). *Financial Health Introduction for Policymakers*. https://www.unsgsa.org/sites/default/files/resources-files/2021-09/UNSGSA%20Financial-health-introduction-for-policymakers.pdf

Wilson, J. M., Lee, J., Fitzgerald, H. N., Oosterhoff, B., Sevi, B., & Shook, N. J. (2020). Job Insecurity and Financial Concern During the COVID-19

Pandemic Are Associated with Worse Mental Health. *Journal of Occupational and Environmental Medicine*, *62*(9), Article 9. https://doi.org/10.1097/JOM.0000000000001962

World Bank. (2022). *The Global Findex 2021* [Text/HTML]. World Bank. https://www.worldbank.org/en/publication/globalfindex/Report

Received/ 2022. 09. 04
Revised/ 2022. 11. 03
Accepted/ 2022. 11. 10

The International Review of Financial Consumers, Volume.7 Issue.2(December, 2022), 21-26 pISSN 2508-3155 eISSN 2508-464X
https://doi.org/10.36544/irfc.2022.7-2.4

The International Review of Financial Consumers

www.eirfc.com

Effective Youth Financial Education: Turning Research Into Action*

Lyn Haralson† · Christiana Stoddard**

A B S T R A C T

Skills, habits, attitudes, values, and knowledge acquired in childhood and adolescence are fundamental for achieving financial well-being in adulthood, particularly given the current levels of complexity in the financial marketplace. Until recently it has been hard for educators to access an evidence-based pedagogy that laid out the skills and capabilities that youth need to acquire at the appropriate developmental stage. The Consumer Finance Protection Bureau (CFPB) has conducted extensive research to develop a coherent framework to build youth capabilities. The approach is based on three key building blocks: developing overall executive functioning, acquiring automatic financial norms and habits used in day-to-day decision making, and mastering the financial knowledge and decision-making skills required to make informed plans and financial choices. The CFPB has also developed a rich database of associated activities for both educators and families to assist children and youth in achieving both financial security and the freedom to make choices in their adult lives. Building these skills in children and youth is an important mechanism for ensuring greater equity for communities that have historically had less access to experience in financial markets, been traditionally marginalized, or that are targeted by predatory practices.

Keywords: financial education pedagogy, your financial capability, Consumer Financial Protection Bureau

Ⅰ. Introduction

The financial marketplace is more complex than ever, with technology, products, and financial alternatives that can be opaque and difficult for consumers to navigate. This environment can lead to conditions ripe for the abuse or exploitation of consumers. This is especially true for young adults with limited financial experience. It is even more of a risk for youth and children from communities that have historically been excluded from financial markets or have otherwise been disadvantaged. Many states have begun implementing various forms of financial education in schools, but to date there has not been a consensus framework for educators that lays out the key skills needed for young adults to achieve the financial capabilities necessary for today's financial landscape. The Consumer Finance Protection Bureau (CFPB) has conducted extensive research to develop a coherent framework for educators, parents and caregivers to build youth capabilities. This approach is based on several research-based components: a defined goal of financial well-being, clearly identified building blocks that children and youth need to develop financial capabilities, and an effective pedagogy for educators to help youth acquire the core habits, skills, and knowledge that will lead to improved outcomes in life.

† Financial Education Program Analyst, Consumer Finance Protection Bureau, US, lyn.haralson@cfpb.gov

* **Acknowledgement**
Invited article.

** Professor, Montana State University and Visiting Scholar, Consumer Financial Protection Bureau, US, cstoddard@montana.edu

Ⅱ. Financial Well Being: The Goal of Financial Education

To determine if financial education is effective, it must be measured against a specific goal. The CFPB, along with other researchers and practitioners in the field, has moved towards a comprehensive goal, which is that of financial well-being.[1] Financial well-being is defined as a state of being wherein a person can fully meet current and ongoing financial obligations, can feel secure in their financial future, and is still able to make choices to enjoy life. Being able to make decisions with the resources a person has is key to experiencing peace of mind—that is, a sense of well-being. This is a consumer-driven definition and is achievable at both lower and higher income levels. It is currently the ultimate goal of all efforts at the CFPB, whether those efforts are related to empowering consumers or enforcing financial regulations to protect consumers from predatory practices.

Research has identified four fundamental elements of financial well-being. The first, and perhaps the most obvious, is security in the present—having control over day-to-day or month-to-month finances. Coupled with this is the second element, freedom of choice in the present, which is the financial freedom to make choices to enjoy life. Financial well-being also implies that these two elements of security and choice extend into the future. Security in the future specifically means having the capacity to absorb a potential financial shock. Finally, freedom of choice in the future implies that an individual on track to meet financial goals.

Ⅲ. The Building Blocks to Achieve Adult Financial Well Being

What knowledge, habits and skills do youth need to acquire to achieve financial well-being in adulthood? The CFPB built on previous research about adult financial well-being to identify the ways children and youth develop the knowledge, skills, and behaviors that lead to adult financial capability.[2] The result of this research was an evidence-based developmental model. This model lays out three key "Building Blocks" that are instrumental in the development of financial capability. This model is illustrated in Figure 1. The figure shows the three main building blocks in the columns and the developmental stages associated with each in each row.

The first column lists the first building block to develop, that of Executive Function. *Executive function* includes the cognitive processes related to self-control, planning, and problem-solving skills. These processes are needed to set goals, to focus attention, to remember information, and to juggle multiple tasks, all necessary for adult financial capability. The second building block is *Financial Habits and Norms*. These are the values, standards, routine practices, and rules of thumb a person lives by to help navigate day-to-day financial life and routine money management. These habits can be unconscious or automatic decisions making strategies that emerge in response to social norms, individual values and emotions, and environmental cues. Finally, the third building block for adult financial capability is *Financial Knowledge and Decision-Making Skills*. These are the conscious analysis and research skills coupled with factual knowledge that enable an individual to make informed decisions, mange money, and make intentional financial plans. This building block is the one that most people think of when considering financial education, but the three building blocks are inter-related in making progress towards adult financial well-being.[3]

[1] The CFPB's initial report on financial well-being is *Financial well-being: the goal of financial education*, Consumer Financial Protection Bureau (2015). It is available at https://files.consumerfinance.gov/f/201501_cfpb_report_financial-well-being.pdf . Brüggen et al (2017) also provides a helpful overview of the concept of financial well-being.

[2] This research involved (1) analyzing interviews of adults about financial well-being to understand the experiences in youth that contributed to their financial identities and values, (2) an extensive review of published research, and (3) consultation with national experts in a range of disciplines. This research is summarized in *Building Blocks to Help Youth Achieve Financial Capability: A new model and recommendations*, Consumer Financial Protection Bureau (2016). It is available at https://files.consumerfinance.gov/f/documents/092016_cfpb_BuildingBlocksReport_ModelAndRecommendations_web.pdf The research described in that report was conducted by Prosperity Now (formerly, the Corporation for Enterprise Development), under contract to the Bureau. The research team included experts in financial capability and educational and developmental psychology from the University of Wisconsin-Madison and the University of Maryland, Baltimore County, as well as ICF International. See Dreyer et al (2015) for additional research on foundations of financial well-being for children and youth.

[3] The CFPB has a Building Blocks YouTube playlist with videos about each of these building blocks and how they are related to explain

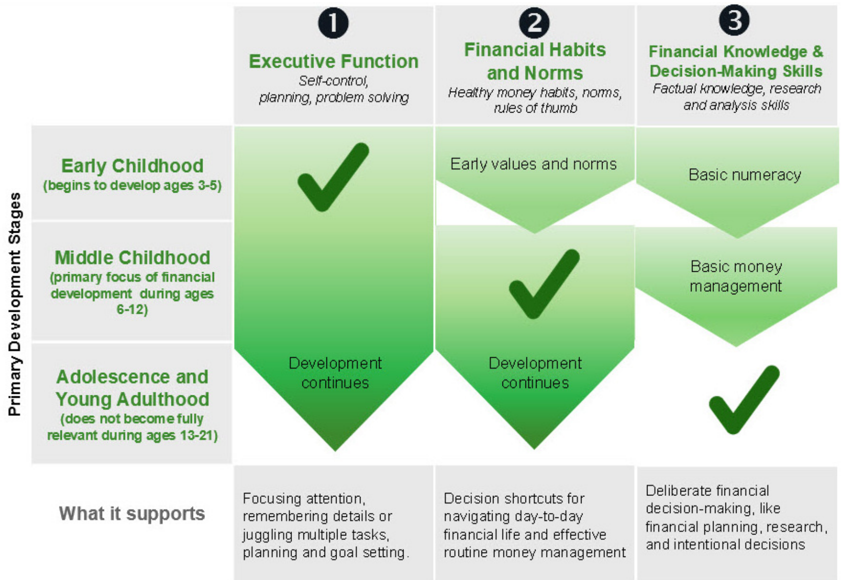

Figure 1. Three Building Blocks of Youth Financial Capability

Figure 1 also shows how these building blocks develop over the course of a child's life. In early childhood, roughly corresponding to ages 3 through 5, children begin the important task of developing executive functioning. The check mark in the chart in the first row and column indicates that early childhood is the optimal developmental stage to begin to acquire the skills associated with executive functioning, although these skills can be further extended and improved throughout childhood and early adulthood. During this early period, children also begin to develop the values and norms that will feed into their future financial habits and norms. Early childhood is also a period of developing basic numeracy, a requirement for financial knowledge and decision making.

Middle childhood, roughly the ages of 6 through 12, is the primary focus of most financial development. Executive functioning continues to develop, and the explicit development of financial norms and habits typically begins in this period. These include norms and attitudes around planning, savings, spending, financial goals, and self-control. In this period, children begin to establish financial identities, and make observations about how family members and others deal with finances and money. Basic money management begins in middle childhood as well.

Adolescence and youth adulthood is the phase when individuals typically begin to fully develop financial knowledge and decision-making skills. In this period, the early skills of numeracy and basic money management allow individuals to develop deliberate financial decision-making skills, like how to develop financial plans, how to research and analyze options, how to recognize predatory practices, and how to make intentional decisions. Although this is the primary stage for developing financial knowledge and decision-making skills, both executive functioning and financial norms and habits continue to develop through this period.

Ⅳ. Putting the Building Blocks into Practice: An Effective Pedagogy

Based on these three building blocks, the CFPB has developed a comprehensive pedagogy to organize how to teach personal finance skills to children. Prior to this pedagogy, educators had indicated that such a financial

these concepts to the general public. It can be accessed here: https://www.youtube.com/playlist?list=PLrfmdUlWzRF2JIfycHB_pxpFK09kHhPWl

Figure 2. Teaching Tool for Youth Personal Finance Pedagogy

education pedagogy did not exist. There are four parts to this approach:

(1) Improve executive functioning skills, such as planning and problem solving
(2) Create and encourage positive financial habits and effective money management
(3) Build financial research skills to compare and contrast options
(4) Design safe opportunities for youth the practice financial decision making.

Based on this framework, the CFPB compiled research on the most effective teaching techniques and learning strategies to help students develop each building blocks. This research included a field scan of more than 200 programs and practices in youth financial education and youth development, consultations with experts in youth financial education and related fields, and analysis of gaps in existing programs to identify key elements of the developmental model that were not present.[4] The result is a comprehensive framework of building blocks, the appropriate learning strategies for each, and easy access to supporting activities and tools for educators, parents and caregivers.

Figure 2 provides an overview of this research-based framework, linking each building block with the evidence-based teaching techniques and specific learning strategies that have been found to be most effective.[5]

[4] This research is summarized in *A review of youth financial education: Effects and evidence*, Consumer Finance Protection Bureau (2019). It is available at https://files.consumerfinance.gov/f/documents/cfpb_youth-financial-education_lit-review.pdf.

[5] For a summary of each of the strategies and techniques, see https://files.consumerfinance.gov/f/documents/cfpb_strategies_to_teach_building_blocks.pdf.

Ⅴ. Tools and Resources to Implement the Youth Personal Finance Pedagogy

How can these strategies and techniques be implemented by families and educators? The Youth Financial Education webpage provides a gateway to the tools and resources to help educators understand best practices in financial education, evaluate financial education curricula, explore relevant research and find classroom and home-based activities.[6] One key platform on the website is the "Engaging Financial Activities" section. To facilitate using the research-based pedagogical approach, the CFPB compiled and developed 270 unique classroom activities. Each is designed to be completed in a single class period, and they can be used in personal finance classes or can be integrated into many different subject areas. The activities all come with a teacher guide and supporting student material, facilitating implementation. Further, all activities align with the National Jump$tart and CEE standards, as well as the "My Money Five" principles developed by the Financial Literacy and Education Commission. Educators can choose activities using different search criteria.

Based on the approach modeled in Figure 2, one method would be to select a specific building block and teaching strategy. The interactive website then can filter activities to those appropriate to the grade level, available time, or My Money Five topic.

For example, suppose a teacher wants to focus on the building block of "Financial knowledge and decision-making skills." This building block is developed throughout late childhood and adolescence, and so educators from a range of grades would find this appropriate for their classrooms. The diagram in Figure 2 indicates that according to research, one highly effective learning technique is project-based learning and simulations, which are hands-on activities using real-world scenarios that promote critical thinking and applied learning. The linked CPFB resources include activities for all age ranges that develop this building block by incorporating this technique. For example, an elementary school teacher could choose "Play-acting ways to protect," where students develop skits that highlight choices and actions to minimize risks. A high school class could use the activity "Reporting fraud of identity theft to authorities" to identify appropriate responses to real world scenarios of fraud or theft that were attempted using current technologies and strategies.

This activity could easily be incorporated into a career and technical education course, but could also be appropriate for social studies, health, or language arts courses. Both simulation activities are hand-on, engaging, and give students salient practice with up-to-date financial risks and the types of technologies that are used to take advantage of consumers.

The CFPB has developed a second broad based platform for parents and caregivers, the "Money as You Grow" webpage.[7] Again this platform is rooted in the fundamental building blocks. The webpage is designed to make it easy for parents and caregivers to find tools, activities, and information to help them talk to their children about money. The resources provided through this page are also appropriate for school parent centers, for school libraries, and to extend home learning. Many of these are structured around specific conversations for parents and caregivers for developmentally appropriate periods. The CFPB approach is two-pronged in pairing the information and skills delivered to students by educators with the conversations for families. This enables information about consumer protections in financial markets to reach communities where adult consumers may be less informed about their rights.

Ⅵ. Conclusion

Skills, habits, attitudes, values, and knowledge acquired in childhood and adolescence are fundamental for achieving financial well-being in adulthood. These capabilities are particularly important in today's climate with many risks to consumers. Until recently it has been hard for educators to access an evidence-based pedagogy that laid out the most central skills and capabilities that youth need to develop, the specific techniques and strategies that are the most effective in that process, and to easily access activities in a systematic approach to supporting financial capabilities. The research conducted by the CFPB

[6] The website can be accessed at https://www.consumerfinance.gov/consumer-tools/educator-tools/youth-financial-education/teach/

[7] https://www.consumerfinance.gov/consumer-tools/money-as-you-grow/

has identified three key building blocks: overall executive functioning, the more automatic financial norms and habits used in day-to-day decision making, and the explicit financial knowledge and decision-making skills required to make informed plans and choices. The CFPB has also developed a pedagogical framework and a rich database of associated activities for both educators and families to assist children and youth in achieving both financial security and the freedom to make choices in their adult lives. Building these skills in children and youth is an important mechanism for ensuring greater equity for communities that have historically had less access to experience in financial markets, and communities that are often targeted by predatory practices, and other traditionally marginalized or vulnerable communities.

References

Brüggen, E. C., Hogreve, J., Holmlund, M., Kabadayi, S., & Löfgren, M. (2017). Financial well-being: A conceptualization and research agenda. *Journal of business research*, 79, 228-237.

Bureau, C. F. P. (2015). Financial well-being: the goal of financial education.

Bureau, C. F. P. (2016). Building blocks to help youth achieve financial capability: A new model and recommendations.

Bureau, C. F. P. (2019). A review of youth financial education: Effects and evidence. *April*, *1*, 2019.

Drever, A. I., Odders-White, E., Kalish, C. W., Else-Quest, N. M., Hoagland, E. M., & Nelms, E. N. (2015). Foundations of financial well-being: Insights into the role of executive function, financial socialization, and experience-based learning in childhood and youth. *Journal of Consumer Affairs*, *49*(1), 13-38.

Received/ 2022. 09. 30
Revised/ 2022. 11. 03
Accepted/ 2022. 11. 15

The International Review of Financial Consumers, Volume.7 Issue.2(December, 2022), 27-33 pISSN 2508-3155 eISSN 2508-464X
https://doi.org/10.36544/irfc.2022.7-2.5

The International Review of Financial Consumers

www.eirfc.com

The Role of FinTech and "Edutainment" in Financial Education*

Gianni Nicolini†

A B S T R A C T

Financial education refers to any initiative with the potential to increase peoples' financial literacy. The quality of the educational content represents a pivotal driver of the success (or failure) of a financial education program. However, a pivotal role is played even by the way the content is organized and delivered to the final recipients. This article analyses the main available options and stresses the potential role of FinTech and Edutainment in the evolution of financial education. The pros and cons of different delivery options are described to highlight how developers of financial education programs can take benefits from one or another according, for instance, to the age of the target group, or the digital literacy of the recipients. Some best practices are described to show how FinTech and Edutainment can reshape the approach to financial education.

Keywords: financial education pedagogy, fintech, edutainment, digital literacy

Ⅰ. Introduction

The last 20 years of research on consumer interests related to financial literacy and financial education strongly support the hypothesis that those who are more financially literate tend to show positive financial behaviours (Allgood and Walstad 2011, Almenberg and Dreber 2015, Song 2020), to be more likely to avoid financial mistakes (Gutiérrez-Nieto et al. 2017, Ranyard et al. 2017, Engels et al. 2020, Wei et al. 2021), and doing so they can achieve financial well-being more easily than people who lack financial knowledge, skills, and attitudes (Zhong et al. 2017, Fan and Henager 2021).

The positive role of financial literacy on peoples' financial well-being supports the will to promote financial education, under the assumption that financial education helps people to increase their financial literacy and doing so they will be better financial consumers, being more knowledgeable of the functioning of financial products, financial services, and financial markets, and being more aware of the possible consequences of their financial decisions.

However, if the chance to increase financial literacy by financial education sounds reasonable, we need evidence about that. We need to test if financial education is able to affect peoples' financial literacy, we need to assess the magnitude of such improvement, and we need to test how long the effect of financial education last, accounting for a possible decay of the acquired knowledge over time.

When addressing these research topics (which can be summarized as the assessment of the effectiveness of financial education) it is easy to understand the complexity of this area of research. The chance that financial education curricula will increase peoples' financial literacy is affected by several factors, including (1) the initial degree of financial literacy of the participants, (2) the motivation to learn

† Full Professor of Banking and Finance, Department of Management and Law (DML) University of Rome "Tor Vergata" (Rome, Italy), gianni.nicolini@uniroma2.it

* **Acknowledgement**
Invited article.

of the attendees, (3) the innate quality of the materials, and (4) the ergonomics of the financial education initiatives.

A course cannot increase peoples' financial literacy when it is too easy or too complex for the recipients. Those who already knows the topics addressed by a financial education program will not take any benefit in terms of improvement of their financial literacy. At the same time, those who attend a course that is too advanced, because it requires some preliminary basis knowledge that the participant lack, will not take any (or small) advantage from the course.

People without a strong motivation to learn about finance may not pay enough attention and will not be really engaged in the learning process. Of course, the quality of the materials and the whole learning process matters, and the effectiveness of the financial education, for instance, will suffer from a poor quality of the learning experience. However, another pivotal element we need to account for when we want to assess the effectiveness of financial education is the possibility that different delivery methods of financial education fit better with different targets of recipients and in different scenarios than others.

Regardless of the contents and the quality of the financial education, the motivation of the participants and other aspects able to affect the success or the failure of financial education, the delivery methods of financial education represent a pivotal point that we need to take into account, and that can strongly affect the success of a financial education program. The aim of this study is to stress the relevance of the delivery options in financial education, and to stress the potential of new delivery options based on FinTech and Edutainment.

The following paragraphs will analyse the alternative available options to deliver financial education, stressing how some of them fit better with some targets of recipients than others. Special attention will be paid to alternative options that recently developed to take advantage of the linking of new technologies and finance (the so-called FinTech) and the opportunity to apply schemes and logics from gaming and entertainment environments in the delivery of financial education. A description of some best practices of the joining of financial education, FinTech, and Edutainment completes the analysis of the study.

Ⅱ. How to Deliver Financial Education

The typical standard options to help people learn about finance are those related with teaching. Hence, an on-site course or class is one option to deliver financial education contents. People will be physically gathered in a room to attend a single or multiple classes interacting with a teacher. This option fits pretty well when the target of recipients are students, who will add the class (or the course) to their schedule. The pros of such delivery option include the interaction between students and teachers and the chance for the teachers to adjust the contents of the course according to the interest of the attendees. For instance, they can use some personal experiences shared by the audience to address some topics of the course, and to make the course experience more personal and empathic. If students show more interest in some topics, the teacher will have the chance to spend a bit more time on them than others. There are also some cons with on-site classes. To gather people in a single place at the same time can be challenging when the target audience is not students. In case of adults, an on-site class risks becoming a time-consuming initiative that includes spending the time of the class, and the time to go and come back from the class. The fact that the class is scheduled on a certain day of the week and at a certain time represents an additional constraint that could discourage attendance of those who do not have a strong motivation. If these cons can be already enough to jeopardize the success of a financial education initiative, from the organizational point of view this option might not fit for a program or a campaign that targets a massive audience. To target thousands or more recipients the organization and the logistical issues can become a critical point of the initiative. A massive on-site financial education campaign will even require coordinating the work of several teachers, including "teaching the teacher".

The recent experience of the COVID-19 pandemic pushed most of the educational organizations and companies online. Distance learning is now more familiar than it was, and it represents an alternative delivery method for contents and materials. Online financial education initiatives were available even before the pandemic, but the chance to access contents remotely in a learning experience is probably now less perceived as a weird option. The use of real-time video-streaming classes can reduce the access cost of an on-site class (e.g. time, transportation, etc.) and makes financial education more accessible, for instance, to individuals who live in rural areas and could not attend financial education initiatives if organized in the city. The remote access can extend the number of potential attendees quite beyond the capacity of a single room and can gather in a single virtual room participants from different cities or different countries. However, the interaction between the speaker and the audience, and the interaction between participants are not as good as those of an on-site class. But online financial education can be based not only on real-time video classes, but on other materials — including pre-recorded videos, reading, case analysis, etc. — that do not require interaction between participants or teachers. Distance learning makes financial education easier to access and quite scalable: participants have no time constraint in the attendance (which is possible 24h/7d), and the financial education program can be accessed by a large number of participants at the same time with almost null marginal costs. However, these pros are not free. The lack of interaction with teachers and a lack of flexibility in the learning experience represent cons of online curricula. For example, the need to use devices that may not be available and the possible lack of "digital literacy" represent two additional challenges of this delivery options, and risks making financial education not accessible to some groups (e.g. the elderly) or in some areas (e.g. areas with poor internet connections).

Sometime financial education curricula are promoted as part of national strategies or public campaigns whose main goals are to raise awareness of the need to be financial literate and to stimulate people to take care about their finances. These campaigns are usually placed out of educational institutions (e.g. schools, colleges, universities, etc.) and concentrated in a specific timeframe (e.g. "financial literacy month", "world investor week", etc.). These kinds of events have the pro to benefit from high visibility from the media and help people to develop consciousness of the need to take care about their finances and help them to develop their motivation to learn. Keeping in mind that motivation to learn is a pivotal trigger to convince people to approach a financial education program, the utility of such events is clear. The main con of these initiatives is the short available time to really transfer financial knowledge and, by consequence, the short-term horizon of the stimulus effect: with the end of the campaign and the media coverage on the initiative, people tend to lose interest and do not keep going on their learning path.

Ⅲ. Alternative Options for Financial Education: the role of Fintech and Edutainment

Traditional delivery options for (financial) education, based on the interaction between teachers and students remain a useful and effective alternative when the chance to gather people in a program based on face-to-face classes is not an issue (e.g. K-12 students, colleges, universities, military programs, etc.). At the same time, online courses can help to provide financial education, targeting those who will be otherwise hard to reach, and to promote knowledge of basic financial principles through an entire population. However, the set of the available options for financial education is not limited to traditional teaching methods. Two interesting areas of development in financial education concern the potential benefit of FinTech in educating people, and the chance to apply the logics and the schemes of gaming and entertainment industry to make the learning experience of individuals more engaging and effective.

About FinTech, Morgan (2021) states that "*Financial technology (Fintech) refers using software, applications, and digital platforms to deliver financial services to consumers and businesses through digital devices such as smartphones*" (pp. 239). For instance, smartphones represent in many countries a common personal device used not only to communicate by phone, or messaging, but even to organize our lives in a much broader sense (e.g. personal agendas, notes and alarms, maps, etc.), that includes specific areas such physical wellness (e.g. step counting apps, alert in case of extended seating, etc.), health (e.g. monitoring of heartbeats, blood pressure, etc.), and finance (e.g. e-banking, mobile payments, etc.).

The daily use of smartphones is an opportunity to make people think about their finances and to improve their financial knowledge and skills out of the traditional learning schemes. The possible pros of the use of FinTech in financial education include the chance to use FinTech to make a financial decision easier to take. FinTech can help to compare different products or to visualize data in an easier-to-use format, helping people to take the most from their financial literacy. In the meantime, FinTech can support individuals providing "pills" of financial education unpackaging and reshaping the learning process of a typical curriculum in several micro-contents to be delivered when they are more needed in a just-in-time delivery approach. Doing so, it is possible to avoid the risk that people will not be willing to attend an entire course on finance if they are more open to invest their time when the topic of a learning unit will not take too much time and it is perceived as relevant to a real financial decision. Moreover, FinTech can play a role to help people to keep track of their finances, reminding people of their coming expenses or alerting them when relevant information is available.

However, the several pros related with the use of FinTech in financial education are counterbalanced by some cons. For instance, Morgan (2021) highlights how the benefits of FinTech could not be equally distributed across the population, due to the presence of a digital gap, for instance, across generations. Those who are less prone or less comfortable in using technology will not be able to benefit from the financial education delivered by FinTech solutions. At the same time the author (Morgan 2021) reports results from studies of FinTech adoption in different countries (e.g., China, Japan, and Vietnam), where it seems that the adoption of FinTech is more likely in high-income groups than low-income groups, and that men are more prone than women to adopt technology in their financial management (Morgan and Trinh 2020; Yoshino et al. 2020). Keeping in mind that usually income is positively related with financial literacy, and men tend to systematically outperform women in financial literacy tests, the risk is that financial education provided by FinTech solutions will not reach those that need it the most.

An alternative (and fascinating) way to educate people about finance is one that tries to merge financial education, gaming, and entertainment to develop an output that is at the same time an educational tool and an entertainment tool, to be used not necessarily as a formal learning tool but even in leisure time for entertainment. The cross between those areas is referred to as "Edutainment" and it stresses both the educational and entertaining nature of the output. Kalmi and Sihvonen (2021) provides a clear overview and a classification of the possible applications of gaming and entertainment logics and schemes to financial education. To support the chance to develop financial literacy by games they report results from previous studies that have already proven the effectiveness of games in education (Harter and Harter, 2010; Kalmi and Rahko, 2020; Maynard et al., 2012). If gaming has already been used in general education, there is room to extend its application to other areas, such as financial education.

A potential pro of the edutainment approach is the chance to help people develop not only financial knowledge (e.g. "what it a financial product and how it works"), but even financial skills (e.g. "when and how to use it to solve an issue"). This precious ability could be developed thanks to a learning process based on a learning-by-doing effect, where individuals play and learn at the same time. An additional pro of edutainment is the chance to bypass the diffidence and the lack of motivation to learn about finance of those who think finance is "too complex", thinking that any investment in financial education is worthless. To play a game can be perceived as more interesting and more fun than to read materials about financial topics. If the chance to deliver the contents of an entire financial education program by gaming activities can be too optimistic, the chance to use edutainment to make people be more familiar with basic financial principles and more prone to advance their knowledge represent a valuable goal. Even in this case, as in others, the pros of the edutainment are counterbalanced by some cons. The main issues of such financial education projects are the fact they are usually big budget projects and require cooperation between different areas of knowledge (e.g. finance, ICT, etc.), with the resulting organizational and cooperation costs.

Ⅳ.Some Best Practices

Both FinTech and Edutainment represent the current frontiers of financial education, but their potential and applications are still mainly unexpressed and need to be investigated. This section describes some examples of these kinds of initiatives to help to appreciate the possible outputs of these alternative options to deliver financial education.

A. Financial Football by VISA

Financial Football by VISA is an example of gamification of financial education. This app is one of the initiatives promoted by the payment circuit VISA and provided by the https://practicalmoneyskills.com/ website. The age target of Financial Football is quite large, for individuals with the age of 11 and upwards. The interesting trigger used in this app is (American) football. People can play individually or as a team, and "head-to-head" games with two opponents playing against each other is also possible. People can select teams from the official list of the NFL (National Football League) and the graphic of the game visualizes the teams on the playing fields, including the background noise of the crowd. The player(s) can choose between a quick 5-minute game, or one of the longer options available (10 minutes, 20 minutes, 30 minutes). During the game, the performance of the team is driven by the answers to true/false or multiple-choice questions. There are different topics to deal with, that include debt, budgeting, saving, and life events. For each topic there are questions with different degrees of difficulty: the higher the difficulty, the higher are the points received for a correct answer. Correct answers help the team to play well (e.g. to gain yards or to achieve a touch-down), while wrong answers penalize the team's performance.

The game can be played online or downloaded as an app from the website https://www.financialfootball.com.

B. One Million Dollar Question

This financial education game uses the scheme of typical TV-shows based on quizzes. The player is invited to answer a series of multiple-choice questions, and every correct answer allows them to move on in the path and to increase the jackpot of the game. As an educational tool, no real money is included. People can register by a nickname and put a game in stand-by, coming back later to complete the game. Players can play on specific areas of contents, choosing between one of ten available options: Cash and Money management, Financial History, Payment cards, Bank accounts, Debt, Bond and Stocks, Saving and Investments, Financial Derivatives, Insurance, Pension and Planning. Otherwise, the game can randomly select questions from all these areas. The path to the "one-million-dollar question" is made by 15 questions. Each of the 15 levels has different questions, to allow the player to learn about different content and to make the gaming experience more entertaining. After each answer, the player receives feedback that can explain why the answer was right or, in case of a wrong answer, which is the right option and why it is so.

The game is available on a website (http://www.consumer-finance.org/million2021/) but it is optimized for use from tablets and mobile phones too. This tool is promoted by the Consumer Finance Research Center (CFRC)[1] and in the last years was regularly part of the program of the "Financial Literacy Month" promoted by the Italian National Committee for Financial Education[2]. As an initiative that targets Italians, it is currently available only in Italian.

C. The Stock Market Game

The Stock Market Game is an example of portfolio simulation designed to support (mainly) students to foster knowledge and understanding of the financial markets. As a learning-by-doing tool, people experience the functioning of the stock market and its volatility through the management of a (virtual) $100,000 investment portfolio, in order to develop awareness of the fundamental principles of risk-and-returns and other investment related concepts.

The initiative is promoted by the Securities Industry and Financial Markets Association (SIFMA) Foundation and the tool is available at https://www.stockmarketgame.org/.

D. Me and My City

Me and My City belongs to the category of role-playing games and simulation. It is a Finnish project that takes children from the sixth year of elementary education to spend a day in a miniature city where they simulate real life activities, including working life, earning a salary, paying taxes, and managing their own expenses. The program starts with teaching materials with ten lessons

[1] For details please refer to http://www.consumer-finance.org/)

[2] "Comitato per la programmazione e il coordinamento delle attività di educazione finanziaria" or "Comitato EduFin" (http://www.quelloche conta.gov.it/it/).

based on the national curriculum. After these classes, there is a one-day-visit to the learning environment "My City". The location is a 500 square meter miniature city, built of mobile walls. As reported by the description of the initiative[3], "the environment includes real businesses such as energy and telephone companies, public services, and its own banking system. For one day, the students work, earn a virtual salary and act as members of society and consumers, under the constant supervision of a teacher. Among the activities are applications for job vacancies and interviews. They also have to pay taxes and learn how to manage their expenses and their free time". To make the experience more real, each MyCity environment reflects the characteristics of business life in the region of the country.

This educational program, which goes even beyond financial education, took place for the first time in 2010 in Helsinki and currently 70% of the sixth-year elementary students in the country have had access to the program.

E. Conectadas

Conectadas is a clear example of the application of FinTech to financial education. This program is a financial and entrepreneurship education program promoted by Grameen Foundation and Millicom to support women entrepreneurs in South America. The full title of the program is "Conectadas: Building Financial Capabilities and Entrepreneurship Skills among Latin American Women and Girls via Mobile Technology".

The program is based on educational content that was developed to be delivered through a mobile phone application. The aim of the program is to teach women entrepreneurs how to grow their businesses and manage their finances using various technology platforms. The program includes short videos (one to two minutes), followed by quizzes to reinforce the learning.

Launched in Guatemala in 2017, it is planned to expand to other Latin American countries, such El Salvador, Honduras, Costa Rica, Paraguay and Bolivia.

[3] See http://innoveedu.org/en/me--mycity

Ⅴ. Conclusion

The aim of this study is to stress the relevance of the delivery options in financial education, and to stress the potential of new delivery options, based on FinTech and Edutainment. The analysis of different delivery options for financial education helps to understand that the success of a financial education program is driven not only by the quality of the educational contents, but several other aspects including the choice of the delivery options for the program. Traditional delivery options, based on face-to-face meetings between a speaker and an audience (e.g. teaching class) work well in some contexts and have several pros, like the interaction between participants and the chance to make a real time fine-tuning of the learning experience.

At the same time, the new opportunities offered by FinTech and the chance to take advantage of gamification of the learning experience are the evidence that financial education can be extended beyond traditional schemes with the hope of improving the effectiveness of financial education. A wide set of delivery options allows to customize financial education and to address different targets of recipients in different manners. Looking forward, the chance to advance the learning experience of financial consumers, offered by artificial intelligence and the metaverse, looks like additional fascinating scenarios for financial educators.

References

Allgood S., Walstad, W. (2011). The Effects of Perceived and Actual Financial Knowledge on Credit Card Behavior *SSRN electrionic journal* DOI: 10.2139/ssrn.1896365

Almenberg J., Dreber, A. (2015). Gender, Financial Literacy and Stock Market Participation, *Economic Letters*, Vol.137, pp.140-142

CFRC (Consumer Finance Research Center) - One Million Dollar Question - http://www.consumer-finance.org/million2021/

Engels C. Kumar K., Phillip D. (2020). Financial Literacy and Fraud Detection *The European Journal of Finance*, 26(4) 420-442. https://doi.org/10.1080/1351847X.2019.1646666

Fan L., Henager R. (2022). A Structural Determinants Framework for Financial Well-Being, *Journal of Family and Economic Issues*, 43 415-428. https://doi.org/10.1007/s10834-021-09798-w

Gutiérrez-Nieto B., Serrano-Cinca C., de la Cuesta Gonzalez M. (2017). A multivariate study of over-indebtedness' causes and consequences, *International Journal of Consumer Studies*, 41(2), 188-198. https://doi.org/10.1111/ijcs.12324

Harter, C., Harter, J. F. (2010). Is financial literacy improved by participating in a stock market game? *Journal for Economic Educators*, *10*(1), 21-32. https://libjournals.mtsu.edu/index.php/jfee/article/view/1459

Kalmi P., Sihvonen T. (2021). Education or Entertainment? On the Potential of Games in Financial Education, In Nicolini G., Cude B. (eds.), *The Routledge Handbook of Financial Literacy*. Routledge. ISBN 9780367457778

Kalmi, P., Rahko. J. (2020). *The effects of game-based financial education: New survey evidence from lower secondary school students in Finland* [Paper presentation], Allied Social Sciences Conference, San Diego.

Maynard, N. W., Mehta, P., Parker, J., Steinberg, J. (2012). *Can games build financial capability? Financial entertainment: A research overview* (RAND Corporation Working Paper WR-963-SSA).

Morgan P. (2021). Fintech, Financial Literacy and Financial Education, In Nicolini G., Cude B. (eds.), *The Routledge Handbook of Financial Literacy*. Routledge. ISBN 9780367457778

Morgan, P. J., & Trinh, L. Q. (2020). Fintech and financial literacy in Viet Nam (ADBI Working Paper Series No. 1154). https://www.adb.org/sites/default/files/publication/616781/adbi-wp1154.pdf

Ranyard R., Mchugh S., McNair S. (2018). The Psychology of Borrowing and Over-Indebtedness, In Ranyard R. (ed.), *Economic Psychology*. Wiley ISBN:9781118926482. DOI:10.1002/9781118926352

SIFMA Foundation - The Stock Market Game - https://www.stockmarketgame.org/

Song, C. (2020). Financial Illiteracy and Pension Contributions: A Field Experiment on Compound Interest in China, *Review of Financial Studies* 33(2), pp.916-949.

VISA - Practical Money Skills. Financial Football - https://www.financialfootball.com.

Wei L., Peng M., Wu W. (2021). Financial Literacy and Fraud Detection - Evidence from China. International Review of Economics & Finance. Vol.76 pp.478-494. https://doi.org/10.1016/j.iref.2021.06.017

Yoshino, N., Morgan, P. J., & Trinh, L. Q. (2020). *Financial literacy and fintech adoption in Japan* (ADBI Working Paper 1095). https://www.adb.org/publications/financial-literacy-fintech-adoption-japan

Zhong C., Wang Z., Xiao J., Weigian Z. (2017). Financial Literacy, Portfolio Choice and Financial Well-Being, *Social Indicator Research*, 132, 799-820. https://doi.org/10.1007/s11205-016-1309-2

Received/ 2022. 08. 29
Revised/ 2022. 09. 19
Accepted/ 2022. 11. 10

The International Review of Financial Consumers, Volume.7 Issue.2(December, 2022), 35-41 pISSN 2508-3155 eISSN 2508-464X
https://doi.org/10.36544/irfc.2022.7-2.6

The International Review of Financial Consumers

www.eirfc.com

Financial Literacy and Education: What We Know and Still Need to Learn*

Brenda J. Cude†

A B S T R A C T

This article provides a high-level overview of the 32 chapters in *The Routledge Handbook of Financial Literacy*. Among the observations are the importance of the definitions researchers and educators choose to guide their work in financial literacy, the importance of measurements that are consistent with the definitions, and the importance and challenges of customizing financial education to match the needs of the audience. The article also highlights a number of questions for future researchers to investigate.

Keywords: financial literacy, financial education

Ⅰ. Introduction

In 2021-2022, Gianni Nicolini, University of Rome, and I had the privilege of co-editing *The Routledge Handbook of Financial Literacy*. The book includes 32 chapters from 50 different authors; half of the authors were from outside the U.S. and represented 17 different countries. In this article, I share a high-level overview of what we learned about financial literacy from this project as well as questions I think financial literacy educators and researchers still need to address.

Ⅱ. What We Have Learned

A. About Financial Literacy

The definition of financial literacy that researchers choose matters. Cude (2022a), Haupt (2022), Lyons and Kass-Hanna (2022), and Nicolini (2022a) all describe the multitude of definitions of financial literacy previously used in research. Far too often researchers do not even define what they mean by financial literacy; when they do, there is little consensus across definitions about what "the" definition should be.

Yet, the definition a researcher chooses is important. For example, several researchers have used the Organisation for Economic Co-operation and Development's (OECD, 2020) definition:

> Financial literacy is a combination of financial awareness, knowledge, skills, attitudes and behaviors necessary to make sound financial decisions and ultimately achieve individual financial well-being. (p. 1)

† Professor Emeritus, Department of Financial Planning, Housing and Consumer Economics University of Georgia, bcude@uga.edu

* **Acknowledgement**
Invited article.

Research guided by the OECD's definition would likely be very different from research based on a narrower definition of financial literacy as, for example, objectively measured financial knowledge. In fact, Cude (2022a) argues that researchers should not describe work in which the sole focus is financial knowledge as financial literacy research.

Researchers have established that self-assessed knowledge (which some describe as confidence or self-efficacy) may be more important than objectively measured knowledge in explaining some consumer behaviors (Cude, 2022a; Walstad & Allgood, 2022). It is unclear, however, whether the explanation for this finding is because we have not yet arrived at an ideal, comprehensive objective measure of financial knowledge or because confidence in one's knowledge is truly a more important influence than one's objective knowledge.

Cude (2022a) also highlights the variety of terms related to financial literacy that are sometimes used as synonymous with financial literacy and other times defined as having a different meaning. These terms include financial capability, financial fragility, financial inclusion, financial resilience, and financial well-being. She argues for more precision in terminology in future research.

Among the alternatives to the term financial literacy, financial capability has captured attention internationally. For example, policymakers in both New Zealand and the United Kingdom have focused on financial capability. A report about financial capability in New Zealand defined financial capability as "a complex set of behaviours, knowledge and attitudes" (Te Ara Ahunga Ora Retirement Commission, 2021, p. 3). Sherraden (2013) defined financial capability as the ability "to understand, assess and act in their best interest" (p. 20). Both definitions are similar to some definitions of financial literacy. However, Sherraden distinguished financial capability from financial literacy when she stated that financial capability also requires access to "appropriate" financial products, suggesting a conceptualization of financial capability that is similar to what others have termed financial inclusion. The confusion in the use of terms is an obstacle to the advancement of research.

B. About Measurements of Financial Literacy

Following the need for researchers to define financial literacy, it is important that operational measurements of financial literacy be consistent with the definition chosen (Cude; 2022a; Nicolini, 2022a). Many studies have relied on single dimension measures of financial literacy, primarily financial knowledge. Frequently, researchers have used a limited number of items to measure knowledge, as in those studies that adopted Lusardi and Mitchell's (2008) Big Three measures. While the Lusardi and Mitchell measures may be useful in basic research when the goal is comparison across sectors, Cude (2022a), Haupt (2022), and Lyons and Kass-Hanna (2022) all make the case that we need more multi-dimensional measurements in future research. Cude and Haupt both argue that if the definition in research is multi-dimensional, to, for example, include attitudes and behaviors as well as knowledge, then the measures of financial literacy in that research must include the same dimensions. Haupt describes the multi-dimensional measurements in the OECD/INFE Toolkit that are consistent with the OECD's multi-dimensional definition of financial literacy to include knowledge, behavior, and attitudes. Lyons and Kass-Hanna make the case for measuring *digital* financial literacy, which they define using multiple dimensions to include the knowledge and skills to operate digital devices, conduct digital financial transactions, and for self-protection in the digital marketplace. Nicolini (2022a) highlights the greater flexibility that researchers have when they use a larger number of items to measure financial literacy.

Several chapter authors, including Lyons and Kass-Hanna (2022) and Nicolini (2022a), discuss methodological issues in measuring financial literacy. Nicolini describes the challenge presented in determining whether to include a "do not know" option as an answer choice. Offering that choice can reduce possible guessing. However, as Nicolini indicates, researchers have suggested that different groups of respondents, who differ in personality traits, may be more or less likely to choose the "do not know" option. In addition, those who lack confidence in their knowledge may be more likely to select "do not know" than those who have more confidence.

Lyons and Kass-Hanna (2022) recommend that researchers consider weighting when the financial literacy measure includes multiple dimensions but a different number of items to measure each dimension. They also recommend robustness checks such as the Cronbach's alpha statistic when constructing new multi-dimensional measures of financial literacy.

C. About Financial Education

Cude (2022a) argues that financial literacy and financial education are two different concepts, although sometimes they are used synonymously. Perhaps this confusion in terminology dates back to the 2005 OECD definition of financial literacy as "*the process* by which financial consumers/investors improve their understanding of financial products and concepts and, through information, instruction and/or objective advice, develop the skills and confidence to become more aware of financial risks and opportunities, to make informed choices, to know where to go for help, and to take other effective actions to improve their financial well-being" (emphasis added). Today, Cude distinguishes between financial literacy and financial education in this way: Financial literacy is "a component of human capital that includes knowledge, skills, attitudes, and confidence related to financial decision-making" (2022, p. 5). Financial education is "a diverse set of interventions designed to change one or more of the components of financial literacy" (2022, p. 5).

The book chapters provide a broad overview of financial education (and financial literacy) across the globe, including in the U.S. (Cude, 2022b), Canada (Letkiewicz, 2022), Central America and the Caribbean (Danns & Danns, 2022), South America (Carrillo Rivero, 2022), Western Europe (Arrondel et al., 2022), Northern Europe (Raijas, 2022), Eastern Europe (Cwynar, 2022), Africa (Anong et al., 2022), Asia (Xiao, 2022), and Australia and New Zealand (Worthington & West, 2022).

Some countries, including the United States (Cude, 2022b), Canada (Letkiewicz), Australia, New Zealand (Worthington & West), Mexico (Danns & Danns), Denmark (Raijas), and Africa (Anong et al.), have collected their own data to inform their financial education efforts. Others rely on external and multinational data sources, primarily the Standard and Poor's Global Financial Literacy Survey; surveys by the OECD, including the PISA (Programme for International Student Assessment); the European Consumer Payment Report; the Global Findex Database of the World Bank; the Financial Inclusion Insights surveys; or work from the Asian Development Bank Institute. Research by academic scholars also informs financial education strategies in some countries; using a bibliometric analysis, Goyal and Kumar (2020) identified the top five countries from which financial literacy research originates as the U.S., England, Australia, Germany, and Italy. However, there are scholars in many countries who are engaged in research about financial literacy and/or financial education. Data about not only financial knowledge but also financial attitudes and behaviors facilitate the creation of a more targeted financial education strategy.

Financial education strategies are diverse. However, many emphasize promotion of desired knowledge, skills, and attitudes from an early age, often through the schools, as in the U.S. (Cude, 2022b; Henager & Kabaci, 2022); Canada (Letkiewicz, 2022); the Bahamas and Belize (Danns & Danns, 2022); Spain, Sweden, Switzerland, Norway, and Finland (Arrondel et al., 2022); and in Brunei, Malaysia, Russia, and some Middle East countries (Xiao, 2022). Many countries, including Italy (Arrondel et al.); the U.S. (Cude); Canada (Letkiewicz); Denmark, Finland, and Norway (Raijas, 2022) have built one or more websites as a component of their financial education strategy. Many also declare a week or month (e.g., April is Financial Literacy Month) to focus attention to their efforts. Financial education strategies often include targeted approaches for specific groups, such as women or the elderly, or those who face unique situations, such as immigrants in Sweden (Raijas) and Indigenous peoples in Australia (Worthington & West, 2022).

Bartholomae and Fox (2022) note that attempts in the empirical literature to establish a causal link between financial education, financial literacy, and financial outcomes have produced, at best, mixed results. They argue that we need much more rigor in financial education evaluation. Bartholomae and Fox describe randomized control trials as the "gold standard" in program evaluation, while noting that not all education programs are suited to this type of evaluation.

Bartholomae et al. (2022), Henager and Kabaci (2022), Anong et al. (2022), Okech et al. (2022), Carrillo Rivero (2022), and Worthington and Marzuki (2022) all emphasize the importance of customizing financial education to the needs of the audience. Henager and Kabaci focus on financial education in schools. Three chapters highlight the needs of unique audiences: consumers in less-developed countries (Anong et al.), victims of human trafficking (Okech et al.), and those who practice the Islamic faith (Worthington & Marzuki). Carrillo Rivero notes that an individual who finds it difficult to finance daily needs, a common issue in developing countries, may define "long term" differently than an individual who is more financially stable. She attributes the lack of financial literacy in South

America, in part, to the lack of social, labor, and economic inclusion. Anong et al. describe the ineffectiveness of financial education efforts in South Africa as related to the failure to adapt the programs to "address the real-life challenges of the dualistic economies that prevail" (p. 433). In developing countries, the majority of adults use informal options, such as microfinance institutions, individual money lenders, and family members, instead of formal financial services to conduct many of their transactions. A financial education initiative built around that reality would be very different than a traditional financial education program in a more economically developed country.

Customized financial education can be difficult to achieve. Bartholomae et al.'s (2022) chapter about adult education includes best practices that could be helpful to anyone planning financial education.

There are many challenges associated with financial education as Cude (2022b) and Carrillo Rivero (2022) highlight. Among these are a lack of consensus about what the objectives of financial education "should" be. For example, if financial literacy is composed of knowledge, attitudes, and behaviors, should all financial education attempt to influence all three? And, if so, should that effort be in a single campaign or in separate campaigns? Notions about the appropriate objectives also likely vary based on which sector is initiating the financial education. Carrillo Rivero comments that private sector participants in financial education tend to focus on the segment of the population and the developments of capacities that are most related to the business objective. Thus, in Carrillo Rivero's example, fintech companies, investment companies, and microfinance companies would each prioritize different financial education objectives.

Other challenges in financial education that Cude (2022b) and Carrillo Rivero (2022) identify include limited coordination among and across sectors that finance and deliver financial education, ensuring that financial education content keeps pace with changing marketplace practices, identifying ways to reach as many people as possible with limited resources, maintaining continuity in financial education strategies, and determining not only how to improve digital skills and knowledge but also the limits of virtual financial education.

Ⅲ. What We Still Need to Learn

Each of the 32 chapters in the book generates multiple research questions for the thoughtful reader. A selection of those questions follows along with references to the book chapters most relevant to each question.

A number of questions relate to definition and measurement. For example:

- What *should* be the definition of financial literacy? What methods to measure that definition of financial literacy are most reliable and valid (Cude, 2022a; Haupt, 2022; Nicolini, 2022a)?
- How should we define and measure financial literacy in the digital age? Lyons and Kass-Hanna (2022) argue for a separate definition and measurement of *digital* financial literacy.
- Is numeracy a component of financial literacy or an influence on financial literacy (Cude, 2022a; Darriet et al., 2022)? Must consumers be numerate to be financially literate? What are the most valid and reliable measures of numeracy?
- What are best practices to customize measures of financial literacy to account for cultural and economic differences (Anong et al., 2022; Nicolini, 2022b)?

Important research questions about financial education include:

- How can we increase participation in financial education (Bartholomae & Fox, 2022)?
- How should we update financial education to include digital technology and fintech (Morgan, 2022)?
- How can we best incorporate gamification into financial education (Kalmi & Silvonen, 2022)?
- Does financial education really have the quite limited effect that has been demonstrated in research? How can we improve financial education to have a more direct effect on the desired outcomes? How can we improve the ways in which we evaluate financial education (Bartholomae & Fox, 2022)?
- Is improving financial education the most realistic path to better financial outcomes? Or, should we embrace other approaches? For example, perhaps we should work toward better brain development in infants which may lead to improved financial decision making; providing more professional and technical assistance, such as counseling or software,

to consumers; and/or improving enforcement of anti-fraud, anti-discrimination, and antitrust laws (Willis, 2022).

Other interesting questions that future researchers might explore are broader:

- What are the most important influences on financial literacy in different life stages (Choi & Cude, 2022; Drever & Else-Quest, 2022; Serido, 2022)?
- How does financial literacy influence a host of decisions, including electoral participation and choice (Fornero et al., 2022)?
- How has COVID affected financial literacy, especially financial attitudes and behaviors, and the importance of financial literacy (Fornero et al., 2022)?
- How can we better incorporate behavioral finance into efforts to influence financial literacy (Ferreira et al., 2022)?
- Should we focus more on the outcomes, such as financial well-being and financial inclusion, that we hope to achieve by improving financial literacy than on measuring financial literacy? For example, perhaps research about financial well-being (Warmath, 2022) will provide greater insights than yet another study measuring a population's financial literacy. The U.S. Consumer Financial Protection Bureau has defined financial well-being as a perception of one's current and future financial situation and created a measurement instrument using psychometric methods (Consumer Financial Protection Bureau, 2018). Another important outcome of financial literacy is financial inclusion (Grohmann & Menkhoff, 2022), which is generally defined as access to formal financial services. The World Bank has created measures of financial inclusion. At the basic level, the measure is ownership of an account; second and third order levels of inclusion measure active use of an account and rational use of an account, respectively (Grohmann & Menkhoff, 2022).

Ⅳ. Conclusions

A reader of *The Routledge Handbook of Financial Literacy* will likely generate their own knowledge as well as a list of potential questions for future research. That was among the editors' goals. We sought to produce a book that would be useful to scholars who are new to the topic of financial literacy, to experienced researchers who want to enrich their knowledge, to policymakers seeking a broader understanding and an international perspective, and to practitioners who seek knowledge of best practices as well as innovative approaches. The many authors who contributed to this project made our goals achievable.

References

Anong, S. T., Aboagye, J., & Yoo, J. (2022). Financial literacy and financial education in Africa. In G. Nicolini and B. J. Cude, *The Routledge handbook of financial literacy* (pp. 420-437). Routledge.

Arrondel, L., Haupt, M., Mancebón, M. J., Nicolini, G., Wälti, M., & Wiersma, J. (2022). Financial literacy and financial education in Western Europe. In G. Nicolini and B. J. Cude, *The Routledge handbook of financial literacy* (pp. 363-381). Routledge.

Bartholomae, S., & Fox, J. J. (2022). Overview of financial education. In G. Nicolini and B. J. Cude, *The Routledge handbook of financial literacy* (pp. 173-186). Routledge.

Bartholomae, S., Kiss, D. E., & Pippidis, M. (2022). Financial education for adults: Effective practices and some recommendations. In G. Nicolini and B. J. Cude, *The Routledge handbook of financial literacy* (pp. 204-222). Routledge.

Carillo Rivero, C. (2022). Financial literacy and financial education in South America. In G. Nicolini and B. J. Cude, *The Routledge handbook of financial literacy* (pp. 344-362). Routledge.

Choi, S. L., & Cude, B. J. (2022). Financial literacy among older adults. In G. Nicolini and B. J. Cude, *The Routledge handbook of financial literacy* (pp. 48-60). Routledge.

Consumer Financial Protection Bureau. (2018). *Measuring financial well-being: A guide to using the CFPB Financial Well-Being Scale*. http://www.consumerfinance.gov/data-research/research-reports/financial-well-being-scale/

Cude, B. J. (2022a). Defining financial literacy. In G. Nicolini and B. J. Cude, *The Routledge handbook of financial literacy* (pp. 5-17). Routledge.

Cude, B. J. (2022b). Financial literacy and financial education in the United States. In G. Nicolini and B. J. Cude, *The Routledge handbook of financial literacy* (pp. 295-309). Routledge.

Cwynar, A. (2022). Financial literacy and financial education in Eastern Europe. In G. Nicolini and B. J. Cude, *The Routledge handbook of financial literacy* (pp. 400-419). Routledge.

Danns, D. E., & Danns, G. K. (2022). Financial literacy and financial education in Central America and the Caribbean. In G. Nicolini and B. J. Cude, *The Routledge handbook of financial literacy* (pp. 324-343). Routledge.

Darriet, E., Guille, M., & Vergnaud, J-C. (2022). Financial literacy and numeracy. In G. Nicolini and B. J. Cude, *The Routledge handbook of financial literacy* (pp. 96-109). Routledge.

Drever, A. I., & Else-Quest, N. M. (2022). Financial literacy among children: Supporting the achievement of financial well-being in adulthood. In G. Nicolini and B. J. Cude, *The Routledge handbook of financial literacy* (pp. 18-30). Routledge.

Ferreira, V. R. M. (2022). Financial literacy and behavioral economics: Knowledge, nudging, and the psychology of decision-making. In G. Nicolini and B. J. Cude, *The Routledge handbook of financial literacy* (pp. 489-504). Routledge.

Fornero, E., Lo Prete, A., & Oggero, N. (2022). Now more than ever: Why financial literacy is a key element in post-COVID-19 recovery. In G. Nicolini and B. J. Cude, *The Routledge handbook of financial literacy* (pp. 137-152). Routledge.

Goyal, K., & Kumar, S. (2020). Financial literacy: A systematic review and bibliometric analysis. *International Journal of Consumer Studies, 45*(1), 80-105. https://doi.org/10.1111/ijcs.12605

Grohmann, A., & Menkhoff, L. (2022). The relationship between financial literacy and financial inclusion. In G. Nicolini and B. J. Cude, *The Routledge handbook of financial* literacy (pp. 517-530). Routledge.

Haupt, M. (2022). Measuring financial literacy: The role of knowledge, skills, and attitudes. In G. Nicolini and B. J. Cude, *The Routledge handbook of financial literacy* (pp. 79-95). Routledge.

Henager, R., & Kabaci, M. J. (2022). Financial education in schools. In G. Nicolini and B. J. Cude, *The Routledge handbook of financial literacy* (pp. 187-203). Routledge.

Kalmi, P., & Silvonen, T. (2022). Education or entertainment: On the potential of games in financial education. In G. Nicolini and B. J. Cude, *The Routledge handbook of financial literacy* (pp. 259-273). Routledge.

Letkiewicz, J. (2022). Financial literacy and financial education in Canada. In G. Nicolini and B. J. Cude, *The Routledge handbook of financial literacy* (pp. 310-323). Routledge.

Lusardi, A., & Mitchell, O. S. (2008). Planning and financial literacy: How do women fare? *American Economic Review, 98*(2), 413-417. http://doi.org/10.1017/S1474747211000448

Lyons, A. C., & Kass-Hanna, J. (2022). A multidimensional approach to defining and measuring financial literacy in the digital age. In G. Nicolini and B. J. Cude, *The Routledge handbook of financial literacy* (pp. 61-76). Routledge.

Morgan, P. J. (2022). Fintech, financial literacy, and financial education. In G. Nicolini and B. J. Cude, *The Routledge handbook of financial literacy* (pp. 239-258). Routledge.

Nicolini, G. (2022a). Assessment methodologies in financial literacy: Best practices and guidelines. In G. Nicolini and B. J. Cude, *The Routledge handbook of financial literacy* (pp. 110-123). Routledge.

Nicolini, G. (2022b). Customizing financial literacy. In G. Nicolini and B. J. Cude, *The Routledge handbook of financial literacy* (pp. 124-133). Routledge.

Okech, D., Bolton, C., & Schroeder, E. (2022). Financial education in human trafficking interventions: Implications for research, programming, and policy. In G. Nicolini and B. J. Cude, *The Routledge handbook of financial literacy* (pp. 223-238). Routledge.

Organisation for Economic Co-operation and Development. (2020). *OECD/INFE 2020 International Survey of Adult Financial Literacy*. http://www.oecd.org/financial/education/launchoftheoecdinfeglobalfinancialieracysurveyreport.htm

Raijas, A. (2022). Financial literacy and financial education in Northern Europe. In G. Nicolini and B. J. Cude, *The Routledge handbook of financial literacy* (pp. 382-399). Routledge.

Serido, J. (2022). Financial literacy among young adults. In G. Nicolini and B. J. Cude, *The Routledge handbook of financial literacy* (pp. 31-47). Routledge.

Sherraden, M. S. (2013). Building blocks of financial capability. In J. M. Birkenmaier, M.S. Sherraden, & J. C. Curley (Eds.), *Financial capability and asset building: Research, education, policy, and practice* (pp. 1-43). Oxford University Press.

Te Ara Ahunga Ora Retirement Commission. (2021). *New Zealand financial capability survey 2021.* https://assets.retirement.govt.nz/public/Uploads/Research-2020/TAAO-RC-NZ-FinCap-Survey-Report.pdf

Walstad, W. B., & Allgood, A. (2022). The likely influence of financial literacy on financial behaviors. In G. Nicolini and B. J. Cude, *The Routledge handbook of financial literacy* (pp. 153-170). Routledge.

Warmath, D. (2022). Financial literacy and financial well-being. In G. Nicolini and B. J. Cude, *The Routledge handbook of financial literacy* (pp. 505-516). Routledge.

Willis, L. E. (2022). Alternatives to financial education. In G. Nicolini and B. J. Cude, *The Routledge handbook of financial literacy* (pp. 274-292). Routledge.

Worthington, A., & Marzuki, A. (2022). Financial literacy, financial education, and Islamic finance. In G. Nicolini and B. J. Cude, *The Routledge handbook of financial literacy* (pp. 470-485). Routledge.

Worthington, A., & West, T. (2022). Financial literacy and financial education in Australia and New Zealand. In G. Nicolini and B. J. Cude, *The Routledge handbook of financial literacy* (pp. 453-469). Routledge.

Xiao, J. J. (2022). Financial literacy and financial education in Asia. In G. Nicolini and B. J. Cude, *The Routledge handbook of financial literacy* (pp. 438-453). Routledge.

Received/ 2022. 07. 06
Revised/ 2022. 07. 07
Accepted/ 2022. 09. 18

Editorial Principles

1. Mission

The International Review of Financial Consumers (IRFC) aims to offer a communication platform for scholars, regulators, and practitioners to share their latest academic research on financial consumers and related public policy issues in both advanced economies and emerging market countries. All theoretical, empirical, and policy papers of relevancy are welcome, with the following as the topics to cover:
① protection for financial consumers
② business ethics of financial institutions
③ market discipline of financial industries
④ corporate social responsibility of financial institutions
⑤ renovation or innovation of law and regulations related to financial consumption
⑥ public policies for financial consumption
⑦ fair trading of financial products
⑧ dispute resolution for financial consumption
⑨ case studies of best practices for financial consumption
⑩ international comparison on any of the above topics

2. Publication schedule and contents

IRFC, the affiliated journal of the International Academy of Financial Consumers (IAFICO), will be published twice a year - April and October each year - and will pursue to be the first international academic journal focusing on the research related to financial consumers. As the contribution of financial consumption becomes increasingly important to the national economy for most countries, how to maintain an efficient and equitable financial market is an imminent issue for research. The trend of globalization and liberalization policies has reinforced the challenges in financial markets. Not only the financial instruments become more complicated and hard to understand by the public, but also the frequent changes in regulations and business practices cause confusions to the financial consumers. Consumption disputes regarding the financial products have drawn attention by the media in recent years. IRFC attempts to serve as a forum to publish and share original and innovative research, both academic and policy-oriented, on all the above issues.

3. On ethics for research

The range of research misconducts
① Misconducts related to academic research (“misconducts” hereafter) means that fabrication, falsification, plagiarism, unfair showing of papers' author, during research proposal, research performing, research report and research presentation,

etc. It is as follows.

1) “Fabrication” is the intentional misrepresentation of research results by making up data or research result.

2) “Falsification” is the distortion of research contents or results by manipulating research materials, equipment and processes, or changing or omitting data or results.

3) “Plagiarism” is the appropriation of another person's ideas, processes or results, without giving appropriate approval or quotation.

4) “Self-plagiarism” is the reusing a large portion of their own previously written research.

5) “Unfair showing of papers' author” is not qualifying people, who have been contributing to research contents or results scientifically, industrially and politically, as an author without just reason, or qualifying people, who have not been contributing the same, as an author with an expression of thanks or respectful treatment.

6) Obstructing investigation about misconducts of their own or others, or harming an informant.

7) Action which is out range of usually acceptable in the course of the research.

8) Action which is suggestion, pressure or threat to others to do the above things.

4. On plagiarism

Types of plagiarism

Following two forms are defined the representative action of research misconducts (Plagiarism).

① Using the original author's idea, logic, unique terms, data, system of analysis without indicate the source.

② Indicating the source but copying the original paper's words, idea, data and so on without quotation marks.

Author Guidelines

General

The IRFC publishes rigorous and original research related to protection of financial consumers. IRFCs shall be published twice a year, in April and in October. Papers submissions shall be accepted throughout the year. Editorial Board will evaluate manuscripts in terms of research contribution to the field and paper's quality. Research area includes but is not limited to the following topics:

1. Protection for financial consumers
2. Business ethics of financial institutions
3. Market discipline of financial industries
4. Corporate social responsibility of financial institutions
5. Renovation or innovation of law and regulations related to financial consumption
6. Public policies for financial consumption
7. Innovation or fair trading of financial products
8. Dispute resolution for financial consumption
9. Case studies of best practices for financial services or their consumption
10. International comparison of protection for financial consumers.

Publication Ethics

When authors submit their manuscripts to IRFC for publication consideration, they agree to abide by IRFC's publication requirements. In particular, authors confirm that:

- The manuscript is not under review for publication elsewhere, and will not be submitted to another publication entity during the review period at IRFC
- The empirical results of the manuscript have not been previously published.
- The manuscript has not previously been submitted to IRFC for review. Submission of manuscripts previously presented at a conference or concurrently considered for presentation at a conference does not disqualify a manuscript from submission to IRFC.
- Working papers, prior drafts or final versions of the submitted manuscripts posted on a website will be taken out of it during the review process for the purposes of blind review.

Submission Fee

There is no fee for a submission of an article at the IRFC journal.

Preparing a Manuscript for Submission

1. Papers must be submitted in Microsoft Word format. The structure of the work should be as suggested by the Publication Manual of the American Psychological Association 6 edition:
   - Title
   - Author's name and institutional affiliation
   - Author note
   - Abstract
   - Introduction
   - Method
   - Results
   - Discussion
   - References
   - Appendices and supplemental materials.

2. Manuscripts should be written as concisely as possible without sacrificing meaningfulness and clarity. They should be no longer than 40 double-spaced pages with one-inch margins and Times New Roman 12-point font, including references, tables, figures and appendixes.

3. Submitted papers should be in English, with grammar, spelling and punctuation thoroughly checked.

4. Make sure lettering and sizing of your manuscript, as well as bullet points and numerals are uniform.

5. The title page must include the title of the paper and an abstract of no more than 200 words. Indicate not more than seven key words after the abstract.

6. Please provide author name(s) contact information in a separate page.

7. Sections, including introduction, should be numbered in Roman numerals. Subsection headings should be in letters, e.g. A, B, C.

8. Tables must be typewritten, not in the form of pictures, and given Arabic numerals. They should have a descriptive name following the table number. Tables can be placed either after the text in the paper or in appendix section, if too detailed.

9. Figures must be given Arabic numbers as well and must not include any explanatory materials, which should go to the legend or to the caption. Captions should include a brief description of the figure. Please ensure that figures are of as high quality as possible.

10. The last section of a paper should include main conclusions of the research.

11. References should be placed at the end of the paper. All references must be in the style of American Psychological Association 6^{th} edition, the basics can be found here. Make sure all in-text citations are presented in the reference list. The examples of reference entries are as follows:

For monographs:

Henderson, J. (2012). *Health economics and policy* (5th ed.). Mason, OH: South-Western, Cengage Learning.

For contributions to collective works:

Leonidou, L. (Eds.). (2018). Advances in global marketing: A research anthology.

For periodicals:

Nam, S. (2006). A study on the causality between the insurance and economic growth, *Korea Insurance Journal* 74, 169-197.

Communication

With any issues regarding the publication of your paper, please email the IRFC Editor, Professor Sharon Tennyson, at irfc@cornell.edu.

Review Process

- Initial review process
  When a manuscript is first received, the editor makes a preliminary screening of a manuscript to assess whether it fits the criteria of IRFC's mission and publication principles.

- Normal review process
  For each manuscript that passes the initial review stage, the editor assigns one qualified reviewer from the IRFC's Editorial Board and one other qualified reviewer. All submissions will be blind reviewed.

Research Ethics

We are committed to publishing only high quality research. Our policy on research ethics is based on recommendations of the Committee on Publication Ethics (COPE). COPE is an internationally recognized non-profit organization, dedicated to educating editors and publishers in publication ethics. Hence, authors are encouraged to study the IRFC's ethics principles and abide by them.

Authorship and Contributorship

Authorship misconducts (or "misconducts") may include fabrication, falsification, plagiarism, unfair representation of some authors. Misconduct may occur during research proposal, research performing, and research report and research presentation. By submitting their manuscript, authors confirm they are not engaged in any of these actions:

1) Fabrication is the intentional misrepresentation of research results by making up data or research result.
2) Falsification is the distortion of research contents or results by manipulating research materials, equipment and processes, or changing or omitting data or results.
3) Plagiarism is the appropriation of another person's ideas, processes or results, without giving appropriate approval or quotation. We define two types of plagiarism:
    3.1) Using the original author's idea, logic, unique terms, data, system of analysis without indicating the source.
    3.2) Indicating the source but copying the original paper's words, ideas, data and so on without quotation marks.
4) Self-plagiarism is the reusing of a large portion of author's own previously written research.

Other misconducts include:

5) Indicating as authors those who did not contribute but are credited ("guest", or "gift" authorships), and those who contributed but are not credited ("ghost" authors).
6) Obstructing investigation of their own or other authors' misconducts.
7) Pressure on, suggestion or threat to others to do the above things.
8) Any other action which is usually unacceptable in the course of research.

In case that the Editorial Board reveals or suspects any misconduct, it will contact the author for clarification or contact an author's institution for further investigation. Allegations of ethical misconducts may lead to rejection of the manuscript submitted for publication. If an ethical misconduct is revealed after publication of a manuscript, the article may be retracted or removed. We encourage authors and readers of the Journal to notify the Editorial Board of any alleged misconducts. The Board will keep the names of those who have notified anonymous.

Conflict of Interest

We are committed to identifying a conflict of interest whenever it arises. IRFC policies on the conflict of interest include responsibilities for authors, editors, board members and reviewers.

Conflict of interest arises whenever a personal interest of an author, editor, board member or reviewer may affect objectivity of the research or the fulfillment of journal related obligations. This may include financial (e.g. employment, stock ownership, providing consulting services), intellectual (e.g. patent ownership), political, religious or other personal interests. Authors should disclose their conflict of interest in a Manuscript submission form when sending their manuscript. Editors, editorial board members and reviewers should submit a statement prior to engaging in these roles for a manuscript.

Funding information is considered separately from conflicts of interest. IRFC requires authors to whether funding has been received for research, as well as funding sources.

Complaints and appeals

If you are a Journal reader and recognize any thoughts, ideas or other materials that are used in a published IRFC article without giving credit to the initial author, we encourage you to notify the Editorial Board. Authors who contributed to the published research but were not given credit for it should also contact the Journal's Board. The Board will reply to all complaints and notify the complainant of its decision and following actions. The Board shall not reveal any information on those who notify it on possible misconducts. All notifications will be considered and investigated.

In case of any complaints against the Journal, its staff or Editorial Board members, you should submit your statement to the Board explaining your position and reasoning. Staff or Board members against whom a complaint is submitted will not participate in further investigation and consideration of the case.

Data and Reproducibility

IRFC does not charge for access to our journals, and makes all articles available online.

The Journal may ask authors to provide any raw data necessary to understand and assess the research, including input data and computer codes. Any restrictions and objections to this policy should be disclosed when submitting the article, otherwise will not be considered as valid later.

Research Ethics

Authors should comply with all standards adopted by their institution and industry in relation to research involving hazards, human or animal objects. If a manuscript contains images or personal data of individuals participating in the research, authors should have individuals' consent and ethics committee approval. When submitting an article, an author should provide necessary statements of compliance.

Fundamental Errors

If an author identifies any significant error in their paper after its publication, it is the author's responsibility to notify the Editorial Board promptly. Authors should provide their assistance in implementing retractions or corrections of the paper. We also encourage readers to notify the Board should they identify any errors in the published materials.

Bylaws of the International Academy of Financial Consumers (IAFICO)

March 31, 2015
First revision on April 19, 2016
Second revision on September 30, 2019

Section 1 General Provisions

Article 1 (Official Name)

The official name of this academic society shall be the “International Academy of Financial Consumers (IAFICO hereafter)”.

Article 2 (Registered office and Branch offices)

The registered office is to be in Seoul, South Korea. Branch offices may be established in provincial cities in Korea or overseas should the need arise.

Section 2 Objectives and Undertakings

Article 3 (Objectives)

*Pending
The IAFICO is a non-profit association aiming at promoting and developing at an international level collaboration among its members for the study of various issues relating to financial consumers, including its education, legislation, creation of best practices, supervision, and policy advancement to contribute to the development of the global economy and financial market, through investigation or research into financial consumers, and other academic activities.

Article 4 (Undertakings)

The following activities shall be carried out in order to achieve the objectives of the IAFICO.

1. Publication of journal and other literature
2. Hosting of academic conferences
3. Additional undertakings corresponding to the objectives of the academic society which are deemed necessary at the board of directors meeting or the general meeting

Section 3 Membership

Article 5 (Requirements and Categories)

The IAFICO shall have following categories of membership:

① Individual member
Individual members are categorized further into a regular member or an associate member.

1. Regular member shall be a specialist in the area such as finance, consumer studies, economics, management, law, or education etc, and must be a full-time instructor at a domestic or overseas university, a researcher at a research institute with equivalent experience, or should hold equal credentials to those mentioned previously, and shall become its member by the approval of the board of directors. Regular members attend general meetings and may participate in discussions, hold the right to vote, and are eligible to be elected to a director or other status of the IAFICO.
2. Associate members shall be divided into either a student member, who is a current domestic or overseas graduate school student, or an ordinary member, who works for a financial institution or a related organization. Associate members do not hold the right to vote and are not eligible to be elected to a director or other status of IAFICO.
3. Both regular member and associate member must pay the membership fee to the IAFICO every year.
4. In the case that a decision is made by the Board of Directors to expel a member due to a violation of the objective of the society, or demeaning the society, or in the case that a member fails to pay the membership fees for two years continuously without prior notice, their membership shall be revoked.

② Institutional member

1. Institutional member shall be organizations related to financial consumers who do not damage the impartiality of the IAFICO subject to approval of the Board of Directors. Institutional members do not hold the right to vote and are not eligible for election.
2. Institutional member must pay its membership fee to the IAFICO every year.

Section 4 Organization

Article 6 (Designation of Board of Director)

The following Directors are designated to constitute the Board of Directors to run the IAFICO.

1. Chairperson
2. Vice-Chairperson
3. President
4. Vice-President
5. ordinary Directors
6. Auditor

Article 7 (Election of Board Members and Director)

① The Chairperson, Directors, and Auditors shall be elected or dismissed at the general meeting.
② Appointment of the Directors may be entrusted to the Chairperson pursuant to the resolution of the general meeting.
③ The Vice-Chairperson, President, and Vice-President shall be appointed and dismissed by the Board of Directors.

Article 8 (General Meetings)

① General meeting shall decide following matters relating to the activities of the IAFICO.
1. Amendments to the Bylaws
2. Approval of the budget and settlement of accounts
3. Election or Dismissal of the Chairman
4. Election or dismissal of Auditors
5. Regulations concerning the duty and rights of members
6. Resolutions regarding items submitted by the President or Board of Directors
7. Other important matters

② The Chairperson must call a regular general meeting at least once a year and report on the undertakings of the IAFICO. Provisional general meetings may also be held by the call of the Chairperson, or at the request of at least a quarter of current regular members, or according to the resolution of the Board of Directors.
③ At a general meeting, a quorum is formed by one third of regular members. However, regular members who are not able to participate in the general meeting in person may be represented by proxy, by entrusting a specific regular member attending the general meeting with their attendance or voting right. In this case the letter of proxy is included in the number of attendees.
④ Resolutions at the general meeting will be made according to the majority vote of the attending members who hold the right to vote.
⑤ In principle, the general meeting shall be held with face-to-face meeting, however, it may be held web-based meeting when needed.

Article 9 (Auditors)

① The auditors shall audit financial affairs, accounts and other transactions of IAFICO, shall participate in, and may speak at board meeting, and must present an auditor’s report at the regular general meeting.
② There shall be two appointed auditors.
③ Auditors are elected at the general meeting.
④ An auditor shall serve a term of two years and may be reappointed.

Article 10 (Board of Directors)

① The Board of directors shall be made up of chairperson and fewer than 80 directors.
② The Board of Directors shall decide a plan of operation and establish the budget, in addition to matters on the running of IAFICO.
③ Board meeting requires a quorum of at least one third of current board members. Resolutions at the Board meeting will be made according to the majority vote of the attending members. However, board members

who are not able to participate in the board meeting in person may be represented by proxy, by entrusting another specific board member attending the board meeting with their attendance or voting right.
④ A board member shall serve a term of two years, with a possibility of serving consecutive terms.
⑤ A number of sub-committees or branches in each country or region may be set up under the Board of Directors to support the running of the IAFICO.

Article 11 (Steering Committee)

① The Board of Directors may entrust some decisions relating to the conducting of business to the Steering Committee.
② The Steering Committee shall be comprised of the Chairperson, Vice-Chairperson, President, and the heads of each subcommittee.
③ Temporary task forces may be established by the Steering Committee when necessary to run the business of the Steering Committee.

Article 12 (Chairperson)

① The Chairperson shall represent the IAFICO and chair its general meeting and board meeting.
② There shall be one appointed Chairperson who serves a term of three years.
③ In the case of an accident involving the Chairperson, the Vice-Chairperson shall complete the remaining term of office of less than one year. If it lasts longer than one year, a new Chairperson shall be elected at the general meeting.
④ A new Chairperson should be elected at the general meeting one year prior to the end of the current Chairperson's term of office.
⑤ Should it be judged that it is difficult for the Chairperson to carry out their duty any longer, he or she may be dismissed from their post by the decision of the Board of Directors and general meeting.

Article 13 (Vice-Chairperson)

① The Vice-Chairperson shall assist the Chairperson, and serve as a member of the Board of Directors.
② The Vice-Chairperson shall serve a term of two years, or the remaining term of office of the Chairperson, whichever is shortest.
③ The Vice-Chairperson shall be elected from one of the regular members at a meeting of the Board of Directors, according to the recommendation of the Chairperson.
④ The Vice-Chairperson may be reappointed.

Article 14 (President)

① During its term of office, the President shall become the head of the organizing committee supervising international conferences, and serves for a term of one year. The President shall attend the board meeting as a member of the Board of Directors.
② The succeeding President shall be elected by the Board of Directors after considering their ability to organize and host the following year's conferences. The succeeding President shall also attend board meeting as a member

of the Board of Directors.

③ The Board of Directors may elect the next succeeding President should the need arise. The next succeeding President shall also attend board meeting as a member of the Board of Directors.

④ The President, succeeding President, and the following President may appoint a Vice- President respectively by obtaining approval of the Board of Directors.

⑤ The appointment and dismissal of the President is decided at the board meeting.

Article 15 (Vice-President)

① A Vice-President is a member of the Board of Directors and shall assist the President, supervise applicable international conferences.

② A Vice-President is recommended by the President and shall be approved by the Board of Directors.

③ Multiple Vice-Presidents may be appointed.

④ A vice-President shall serve a term of one year, the same as the term of President.

⑤ In the event of an accident involving the President, a Vice-President shall fulfil the President’s duties during the remaining term of office.

Article 16 (Editorial Board)

① The Editorial Board shall be responsible for editing of journals and other materials to be published by the IAFICO.

② The head of the Editorial Board shall be appointed by the Board of Directors, and shall serve a term of office decided by the Board of Directors.

③ The head of the Editorial Board shall be a member of the Board of Directors.

④ Additional matters concerning the running of the editorial board shall be decided separately by the Board of Directors.

Article 17 (Advisory Board and Consultants)

① The Chairperson may select individuals who could make a large contribution to the development of the IAFICO, and appoint them as advisors subject to the approval of the Board of Directors.

② The Chairperson may appoint consultants subject to the approval of the Board of Directors in order to receive advice relating to all business matters of the IAFICO, such as development strategies, conferences, research plans, and research projects etc.

③ Advisors and consultants shall serve terms of one year and may be reappointed.

Section 5 Financial Affairs

Article 18 (Accounting and Revenue)

① The fiscal year of the IAFICO shall run from the 1st of January to the 31st of December each year.

② The finance required to operate the IAFICO shall be sourced from membership fees, member contributions, society participation fees, and other incomes. Related matters shall be decided by the Board of Directors or the Steering Committee.
③ Should the need arise, the IAFICO may accept sponsored research, donations or financial support from external parties in order to support the business performance of the IAFICO. The Chairperson shall report the details of these at the board meeting.
④ Chairperson should report all the donation from outside and their usage of the year at the IAFICO homepage by the end of March of the next accounting year.

Section 6 Supplementary Rules

Article 19 (Revision of the Bylaws)

① Any other matters not stipulated by this Bylaws shall be resolved by the Board of Directors.
② Revision of the Bylaws shall be carried out, by the proposition of the Board of Directors, or at least one-tenth of regular members, at a general meeting where at least one-third of the total regular members are in attendance, or at a provisional general meeting, with the agreement of at least two-thirds of current members.

Article 20 (Dissolution)

Should the IAFICO intend to be dissolved, it must be decided upon at a general meeting with the agreement of at least two-thirds of current members, and permission must also be received from the Fair Trade Commission. Except for bankruptcy, the dissolution must be registered and reported to the Ministry of Strategy and Finance within three weeks, accompanied by a certified copy of register.

Article 21 (Residual Property upon Dissolution)

Should the IAFC be dissolved, according to article 77 of the Korean civil law, all remaining assets of IAFICO shall belong to the state, local government, or other non-profit corporations carrying similar objectives.

Additional Clause

These Bylaws shall become effective from the 1st April 2015

The International Review of Financial Consumers

Vol.7 No.2

Printed	2022. 12. 31.
Published	2022. 12. 31.
Publisher	Man Cho
Editor-in-Chief	Sharon Tennyson
Publishing Institute	The International Academy of Financial Consumers
	32516 Dasan Hall of Economics, SKKU, 25-2, Sungkyunkwan-ro, Jongno-gu, Seoul, Korea
	Tel : +82 2 760 1283
	Fax : +82 2 766 0527
	E-mail : iafico@kdis.ac.kr