

# European Investment Bank Institute: Financial Literacy Programme

## Final Report

Programme Coordinators:

Rob Alessie

Professor of Micro-econometrics

University of Groningen

&

Annamaria Lusardi

Academic Director, Global Financial Literacy Excellence Center

Denit Trust Chair Professor of Economics and Accountancy

The George Washington University School of Business

September 30, 2016

## Overview

In the last few decades, financial markets around the world have become increasingly accessible to the 'small investor' as new products and financial services have come on the market. Nonetheless, many of these products are complex and difficult to understand, especially for financially unsophisticated investors. At the same time, changes in the pension landscape are demanding increased self-reliance when it comes to financial security in retirement. Prior to the 1980s, individuals in many countries relied mainly on Social Security and employer-sponsored defined benefit (DB) type pension plans. Today, by contrast, individuals must increasingly rely on defined contribution (DC) type plans to help finance their retirement years. The transition to the DC retirement saving model has the advantage of permitting more worker flexibility and labor mobility than in the past, yet it imposes on employees a greater responsibility to save, invest, and decumulate retirement wealth sensibly. Furthermore, the spread of DC plans means that workers today are directly and immediately exposed to financial market risks, a reality that was less the case in the old DB system.

How people borrow money and manage their liabilities has also undergone major change. Prior to the recent financial crisis, consumer credit had expanded rapidly, as had mortgage borrowing. And consumers who borrowed via credit cards or subprime mortgages were in the historically unusual position of being in charge of deciding how much they could afford to borrow. Alternative financial services, such as payday lending, have also become widespread in many countries.

But how well-equipped are today's savers and investors to make complex financial decisions in the face of often high-cost and high-risk financial instruments? What is their level of financial literacy and who knows the most and the least? What are the consequences and costs of financial illiteracy? And what are the most effective programs to promote financial literacy and informed financial decision making?

To answer these questions and build on the foundations of the financial literacy field, a multi-disciplinary group of financial literacy experts across nine countries (Germany, Italy, the Netherlands, Portugal, Spain, Sweden, Switzerland, Turkey, and the United States) conducted a three-year programme funded by the European Investment Bank Institute. Finalized in September of 2016, the programme culminated in a body of working papers, a set of online resources, and a series of conferences and events. Specifically, over the past three years this programme has produced

- i) 13 working papers/reports,
- ii) a website,
- iii) an online financial literacy toolkit,
- iv) a consortium of finance museums, and
- v) 12 conferences/events.

A complete list of all components of this programme can be found at the end of this report. The following sections detail each of the components and how they have had an impact on the financial literacy field globally.

## Research

The goal of the research component of this programme was to draw on the researchers' extensive experience and provide innovative new insights so as to significantly expand upon the current literature. Each of the 13 working papers/reports that were completed provides important findings and have significantly impacted the financial literacy field. For example, the first paper completed as a part of this programme analyzed the financial literacy of individuals in Switzerland in relation to retirement planning. Titled "**Financial Literacy and Retirement Planning in Switzerland**," the paper written by Martin Brown and Roman Graf found that financial literacy is strongly correlated with retirement savings, and it is lowest among low-income, less-educated, and immigrant non-native households.

A great deal of the research analysis for the Financial Literacy Programme found that, around the world, financial literacy is lowest among women. For example, the paper focusing on this gender gap in financial literacy titled "**How Financially Literate are Women? An Overview and New Insights**" by Tabea Bucher-Koenen, Annamaria Lusardi, Rob Alessie, and Maarten van Rooij, documented strikingly similar gender differences in the United States, the Netherlands, and Germany. In particular, the paper found that women demonstrate lower objective and subjective levels of financial literacy across these countries. The same group of researchers used additional survey data from the Netherlands to further analyze the gender gap in the paper "**Women, Confidence, and Financial Literacy**." Interestingly, the paper found that the gender gap is due to a combination of a lack of confidence and a lack of knowledge among women.

Given these findings, another group of researchers wrote a paper using data from the Programme for International Student Assessment (PISA) to understand whether these gender differences are present among high school students as well as among adults. Laura Bottazzi and Annamaria Lusardi's paper "**Gender Differences in Financial Literacy: Evidence from PISA Data in Italy**" confirmed that gender differences exist as early as high school in Italy, and found that students' family and environment play an important role in explaining financial literacy levels among the young. In "**Financial Literacy Among High School Students in the United States: Evidence from the 2012 Programme for International Student Assessment (PISA)**," Annamaria Lusardi and Andrea Lopez used the 2012 PISA data to analyze financial literacy levels and their determinants among high school students in the United States. They found that many factors play a role in explaining financial literacy, but socioeconomic status is one of the strongest predictors. This finding points to the fact that financial literacy is quite unequally distributed among young people.

Other research focusing on the financial literacy of the young studies the link between self-control and financial literacy. Specifically the working papers "**Patience, Self-Control and the Demand for Commitment: Evidence from a Large-Scale Field Experiment**," by Sule Alan, and "**Good Things Come to Those Who (Are Taught How to) Wait: Results from a Randomized Educational Intervention on Time Preference**," by Sule Alan and Seda Ertac, identified that (i) the majority of children in Turkey are present-based, which can lead them to

not make sound financial decisions, and (ii) students' self-control can be greatly improved through the use of incentivized experimental tasks. Similarly, Martin Brown, Caroline Henchoz, and Thomas Spycher's paper "**Culture, Financial Literacy, and Self-Control**" found that higher financial literacy is linked with higher patience, or self-control, among high school students in Switzerland. Moreover, the paper found that there are substantial differences in financial literacy and self-control across language groups, and that culture seems to exert a strong influence on both financial literacy and self-control.

Meanwhile, other researchers focused on best practices in financial education. In particular, researchers in the Netherlands analyzed the effectiveness of a financial education intervention among Dutch children to find the most effective components. The paper, titled "**Financial Literacy of Dutch Children: Does Education Matter?**" by Anna Van der Schors, Tamara Madern, Rob Alessie, and Minou van der Werf, found that interventions should focus on improving specific elements of financial education rather than general knowledge. Moreover, in the report "**Understanding What Works: Case Studies in Financial Education**" Melissa Avery, Carlo de Bassa Scheresberg, and Francesca Guiso provided a comprehensive review of case studies of financial education interventions in the workplace, schools, communities, and online across countries, as well as a list of "lessons learned" for each venue.

Interestingly, another paper in this programme, "**Accounting and Finance Literacy and Self-Employment: An Exploratory Study**," by Marco Trombetta, compared the financial literacy levels of non-entrepreneurs to entrepreneurs in Spain. While the paper did not document differences between these two groups, it did find that serially successful entrepreneurs better understand diversification and the potential danger of uncontrolled growth.

Moreover, one of the most recent papers from the programme, "**Attitudes Toward Debt and Debt Behavior**," by Johan Almenberg, Annamaria Lusardi, Jenny Save-Soderberg, and Roine Vestman, attempted to shed light on the determinants of household debt using new data from Sweden. The paper found that those who report being uncomfortable with their debt have considerably lower levels of debt, and being uncomfortable with one's level of debt is strongly correlated between parents and children, suggesting an intergenerational transmission of behavior and attitudes toward debt.

Finally, the paper by Martin Brown, Benjamin Guin, and Stefan Markoetter, "**Deposit Withdrawals from Distressed Commercial Banks**," explored individuals' relationship with banks following the financial crisis that affected so many countries around the world. In particular the paper studied retail deposit withdrawals from European commercial banks, which incurred investment losses in the wake of the US mortgage crisis. The authors documented a strong propensity of households to withdraw deposits from distressed banks, especially when a bank had received a public bailout. In addition, the findings provide empirical support to the Basel III liquidity regulations, which emphasize the role of well-established client relationships for the stability of bank funding.

All of the papers are posted on the EIB webpage that we have constructed as part of the programme. The link is [here](#).

## **Financial Literacy Toolkit**

The Financial Literacy Toolkit was developed in conjunction with the research on the best practices for financial education. The online toolkit, housed on the programme's website, translates the research findings into an easily accessible website, which includes resources for designing financial education programs in schools, workplaces, communities, and online. Resources available include the Council for Economic Education's National Standards for Financial Literacy, the "Five Steps to Planning Success" video sequence for workplace programs, and the National Endowment for Financial Education (NEFE)'s resources for consumers, as well as many others.

## **Research Dissemination**

Some of the work completed as a part of this programme has already been published or accepted for publication. For example, Martin Brown and Roman Graf's paper titled "Financial Literacy and Retirement Planning in Switzerland" was published in *Numeracy* in 2013. Moreover, "How Financially Literate are Women? An Overview and New Insights" by Tabea Bucher-Koenen, Annamaria Lusardi, Rob J. M. Alessie, and Maarten C. J. van Rooij is forthcoming in the *Journal of Consumer Affairs*. Other papers are currently being peer reviewed for publication in other academic journals, and they have been circulated and posted on the [Financial Literacy eJournal](#) that GFLEC supports.

Moreover, the research conducted as part of this programme has been presented at a variety of conferences. For example, Annamaria Lusardi, together with Rob Alessie and Maarten van Rooij, presented the paper "Women, Confidence, and Financial Literacy" at an invited session on financial literacy at the European Economic Association held in Toulouse, France, in August 2014. Moreover, Annamaria Lusardi was invited to organize a session on financial literacy at the American Economic Association held in San Francisco in January 2016, where she presented the research on financial literacy using the PISA data. One additional speaker in that session was Laura Bottazzi, who presented the paper on financial literacy in Italy, titled "Gender Differences in Financial Literacy: Evidence from PISA Data in Italy."

The research performed in these papers gained wide media attention from major news outlets. Moreover, Annamaria Lusardi has written blogs for both the *Wall Street Journal* and *Forbes* regarding topics covered in papers written as a part of this programme, including the gender gap in financial literacy and the impact of financial literacy on decision making. Examples of these articles are posted here:

[What's Behind the Financial Literacy Gender Gap?](#)  
[How Financial Ignorance Can Ruin Retirement](#)

Moving forward, the researchers plan to continue utilizing these and other platforms to circulate the new and innovative financial literacy findings that relate to the research completed for this programme, to maximize the impact on the financial literacy field.

## **The Financial Literacy Programme Website**

As part of the programme, the research team developed a website that can be found at: <http://globalfinancialliteracyproject.org>. All working papers and reports related to the EIB programme are posted on the website under the “research” section, and presentations can be found under the “events” section.

## **Events**

In addition to developing a body of research, the team of researchers hosted and sponsored a series of events and initiatives as a part of the programme. The research team convened initially at the headquarters of the OECD, in Paris, France, in 2013 for a workshop to discuss and launch the programme. The research team met again at the OECD, in Paris, France, for a second workshop one year later, in 2014, to determine the progress of the programme and discuss next steps. These workshops were organized alongside the annual OECD/GFLEC Global Policy Research Symposium to Advance Financial Literacy in order to allow the researchers to attend and participate in these symposia. Martin Brown of the University of St. Gallen joined a panel at the 2013 OECD/GFLEC Global Policy Research Symposium to Advance Financial Literacy to discuss his research on the role of institutions, such as schools, workplaces, and financial infrastructures, and culture in shaping financial behavior. At this 2013 symposium, Annamaria Lusardi of GFLEC also presented research during a session on financial literacy around the world.

As a part of the programme, the researchers established the International Federation of Finance Museums (IFFM) with the goal of providing a framework for greater collaboration among museums to develop and implement ideas and programs to advance financial literacy globally. The founding institutions are the Global Financial Literacy Excellence Center (GFLEC), the Chinese Museum of Finance (CMF), the Museum of American Finance (MoAF), and the Turin Museum of Savings (MoS). These founders launched the federation with an initial meeting in June 2013 at the Museum of American Finance in New York City. With support from the EIB as a part of this programme, the IFFM convened for their second and third annual meetings in Turin, Italy, and Beijing, China, respectively. The meetings served as an opportunity to engage media, academics, policymakers, and the financial literacy industry in order to inspire innovations in the practices and promotion of financial literacy globally.<sup>1</sup>

In order to further share the findings from these research papers globally, three annual conferences were organized as a part of the programme. The first was the Global Financial

---

<sup>1</sup> More information can be found at: [gflec.org/initiatives/international-federation-finance-museums-iffm/](http://gflec.org/initiatives/international-federation-finance-museums-iffm/)

Literacy Summit (GFLS), a daylong conference held in Amsterdam in 2013 that provided an opportunity to convene top academics and policymakers from around the world to analyze financial literacy initiatives globally. Speakers from the conference discussed critical topics including financial literacy in schools and the link between pensions, retirement security, and financial literacy, as well as methods for educating financial education teachers.

The second and third conferences were held in Paris in 2014 and 2015. This symposia series is titled the Global Policy Research Symposium to Advance Financial Literacy. The 2014 symposium focused on working toward a more inclusive society. At this event Annamaria Lusardi offered opening and closing remarks. The 2015 event concentrated on the issue of harnessing financial education to spur entrepreneurship and innovation. Lusardi made two presentations at this event. Her first presentation looked at the relationship between financial literacy and entrepreneurship. Harnessing financial education to spur entrepreneurship and innovation was the topic of her second presentation. Both symposia provided another opportunity to discuss financial literacy globally, address key research directions, and develop practical solutions. In particular, the conference focused on key topics such as financial literacy around the world, evidence and implications, influencing behavior, the impact of institutional framework, innovations across fields, and techniques for translating research into policy and practices.<sup>2</sup> The researchers were pleased that Luisa Ferriera from the EIB Institute was able to attend all three of these events.

Moreover, the researchers participating in this programme gave a series of annual presentations to the European Investment Bank Institute to provide an update on the progress of the programme and detail some of the main findings. Additionally, Annamaria Lusardi presented the research on inequality and financial literacy at a seminar held at the European Investment Bank as part of an initiative with the University of Luxembourg. The presentations can be found at the following links:

- [Presentation of Projects in Year 1](#), Luxembourg, 2014
- [Presentation on Inequality and Financial Literacy](#), Luxembourg, 2014
- [Presentation of Projects in Year 2](#), Luxembourg, 2015
- [Presentation of Projects in Year 3](#), Luxembourg, 2016

## **Complete List of Research, Online Resources, and Events**

### **Research**

- 1) “Culture, Financial Literacy, and Self-Control”
  - Martin Brown, Caroline Henchoz, and Thomas Spycher
- 2) “Attitudes Toward Debt and Debt Behavior”
  - Johan Almenberg, Annamaria Lusardi, Jenny Save-Soderberg, and Roine Vestman
- 3) “Accounting and Finance Literacy and Self-Employment: An Exploratory Study”
  - Marco Trombetta
- 4) “Understanding What Works: Case Studies in Financial Education”

---

<sup>2</sup> More information can be found at: [gflec.org/event-category/oecd-infe-gflec-symposium/](http://gflec.org/event-category/oecd-infe-gflec-symposium/)

- Melissa Avery, Carlo de Bassa Scheresberg, and Francesca Guiso
- 5) “Financial Literacy Among High School Students in the United States: Evidence from the 2012 Programme for International Student Assessment (PISA)”
  - Annamaria Lusardi and Andrea Lopez
- 6) “Women, Confidence, and Financial Literacy”
  - Tabea Bucher-Koenen, Rob J.M. Alessie, Annamaria Lusardi, and Maarten C.J. van Rooij
- 7) “Gender Differences in Financial Literacy: Evidence from PISA Data in Italy”
  - Laura Bottazzi and Annamaria Lusardi
- 8) “Financial Literacy of Dutch Children: Does Education Matter?”
  - Anna Van der Schors, Tamara E. Madern, Rob J.M. Alessie, and Minou van der Werf
- 9) “How Financially Literacy Are Women? An Overview and New Insights”
  - Tabea Bucher-Koenen, Annamaria Lusardi, Rob J. M. Alessie, and Maarten C.J. van Rooij
- 10) “Deposit Withdrawals from Distressed Commercial Banks”
  - Martin Brown, Benjamin Guin, and Stefan Morkoetter
- 11) “Patience, Self-Control, and the Demand for Commitment: Evidence from a Large-Scale Field Experiment”
  - Sule Alan
- 12) “Good Things Come to Those Who (Are Taught To) Wait: Results from a Randomized Educational Intervention on Time Preference”
  - Sule Alan and Seda Ertac
- 13) “Financial Literacy and Retirement Planning in Switzerland”
  - Martin Brown and Roman Graf

### Online Resources

- Program website
  - <http://www.globalfinancialliteracyproject.org>
- Financial literacy and financial education toolkit
  - <http://www.globalfinancialliteracyproject.org/toolkit>

### Events/Conferences

- Workshops to develop the programme
  - Meetings of research team in Paris, France, in 2013 and 2014
- IFFM Meetings
  - Launch meeting of the IFFM in New York City, USA, in 2013
    - <http://qflec.org/event-category/international-federation-of-finance-museums-meetings/?filter-seminar=2013>
  - Second annual meeting of the IFFM in Turin, Italy, in 2014
    - <http://qflec.org/event-category/international-federation-of-finance-museums-meetings/?filter-seminar=2014>
  - Third annual meeting of the IFFM in Beijing, China, in 2015
    - <http://qflec.org/event-category/international-federation-of-finance-museums-meetings/?filter-seminar=2015>
- Presentations to the EIB
  - Presentation on Inequality and Financial Literacy in 2014
    - <http://www.globalfinancialliteracyproject.org/presentations-to-eib>
  - Annual presentations on findings in 2014, 2015, and 2016
    - <http://www.globalfinancialliteracyproject.org/presentations-to-eib>



- OECD/GFLEC Global Policy Research Symposium to Advance Financial Literacy
  - Held in Paris, France, in 2014 and 2015
    - <http://www.globalfinancialliteracyproject.org/conferences>
- Global Financial Literacy Summit (GFLS)
  - Held in Amsterdam, the Netherlands, in 2013
    - <http://www.globalfinancialliteracyproject.org/conferences>