

# A New Personal Finance Index: Evidence and Implications

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### Personal finance in our daily life

- Individuals are in charge of many decisions more than in the past
- Decisions are made starting at a young age, ex: investment in education
- There are many differences in preferences & economic circumstances
- The final objective is well-being, not a single behavior



### **Personal finance**

- Every day we make small and big financial decisions
  - Some examples are provided next
- We have designed an index of personal finance
  - Covering 8 areas of interest
- This index complements simpler measures of financial literacy
  - More extensive
  - Measures "working knowledge"
- It will be repeated each year
  - We can assess changes over time
- Each year, there is a focus on a specific sub-group
  - In 2017, we focused on Hispanics
  - In 2018, we will focus on Millennials and their use of fintech



### Financial decisions in life

- Routine decisions
  - Where to shop and what to buy?
  - Cook dinner or eat out?
- Decisions made that are rarely revisited
  - Choosing the deductible on car insurance, on homeowner's insurance.
  - Choosing a bank.
- Decisions made on a regular, periodic basis
  - Vacation or staying home?
  - Health insurance annual enrollment.
- Decisions inevitably revisited with time
  - Where to live? Rent or own? Fixed or adjustable rate mortgage? Refinance?
  - Lease or purchase, new or used car?
- Decisions with both short- and long-term consequences
  - Go to college? Which college? How to pay?
  - Using credit and credit cards.
  - When, how and how much to save for various needs?



### The TIAA Institute-GFLEC Personal Finance Index (P-Fin Index)

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# The TIAA Institute-GFLEC Personal Finance Index: A New Measure of Financial Literacy

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#### Financial Literacy among U.S. Hispanics: New Insights from the *Personal Finance (P-Fin) Index*

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A joint project of the TIAA Institute and GFLEC.



### What makes the P-Fin Index unique?

#### What is it?

The *Personal Finance Index* measures knowledge and understanding which enable sound financial decisionmaking and effective management of personal finances.

#### Hasn't this been done?

The P-Fin Index is unique in the breath of topics covered.

 Examines financial literacy across eight areas in which individuals routinely function.

#### How was it done?

Online survey fielded among a representative sample of U.S. adults, ages 18 and older.

- 28 financial literacy questions, with 3 or 4 devoted to each functional area.
- Annual project that will result in cross-sectional trend data.

The *P-Fin Index*'s 28 questions cover eight functional areas:

- 1. Earning
- 2. Consuming
- 3. Saving
- 4. Investing
- 5. Borrowing
- 6. Insuring
- 7. Comprehending risk
- 8. Go-to information sources



# The eight functional areas

Functional areas	Description
Earning	Determinants of wages and take-home pay
Consuming	Budgets and managing spending
Saving	Factors that maximize accumulations
Investing	Investment types, risk and return
Borrowing	Relationship between loan features and repayments
Insuring	Types of coverage and how insurance works
Comprehending risk	Understanding uncertain financial outcomes
Go-to information sources	Recognizing appropriate sources and advice



### Methodology

- The P-Fin Index is based on responses to 28 questions
  - Each question is multiple choice with four response options: the correct answer, two
    incorrect answers and "don't know."
- The initial wave of the survey was fielded online in September 2016 with a nationally representative sample of U.S. adults, ages 18 and older.
- The survey was completed by 1,043 individuals.
- The sample was drawn from GfK's KnowledgePanel.
  - Online panel
  - Online access provided to panel members where necessary, but panelists are unable to participate using mobile devices.



### Sample question

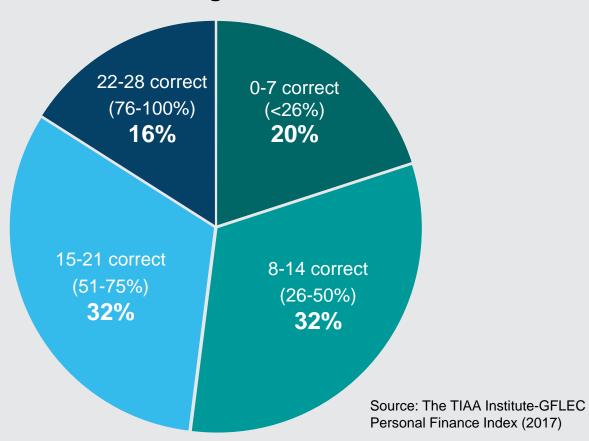
Anna saves \$500 each year for 10 years and then stops saving additional money. At the same time, Charlie saves nothing for 10 years but then receives a \$5,000 gift, which he decides to save. If both Anna and Charlie earn a 5% return each year, who will have more money in savings after 20 years?

- Anna (correct answer)
- Anna and Charlie will have the same amount
- Charlie
- Don't know



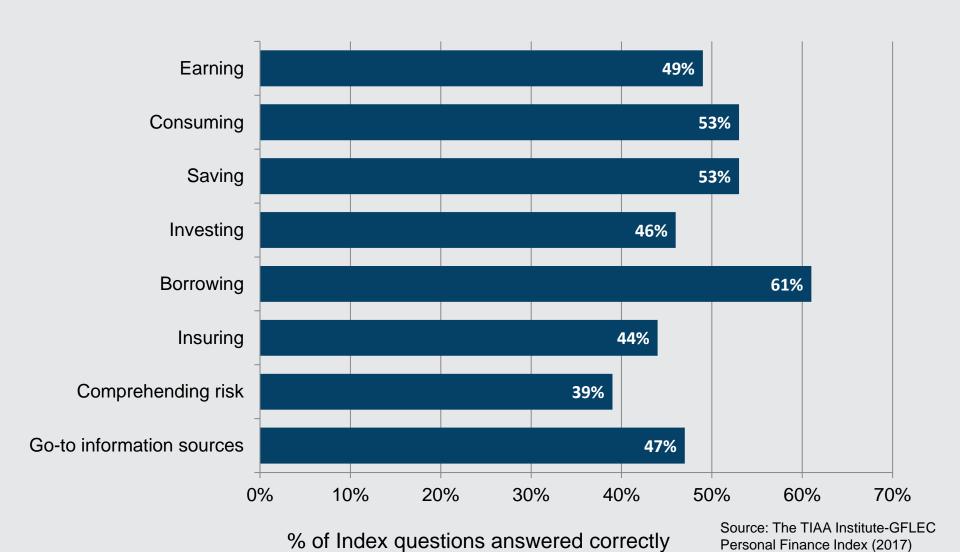
# P-Fin Index findings

# Distribution of Correct Answers to Index Questions Among U.S. Adults





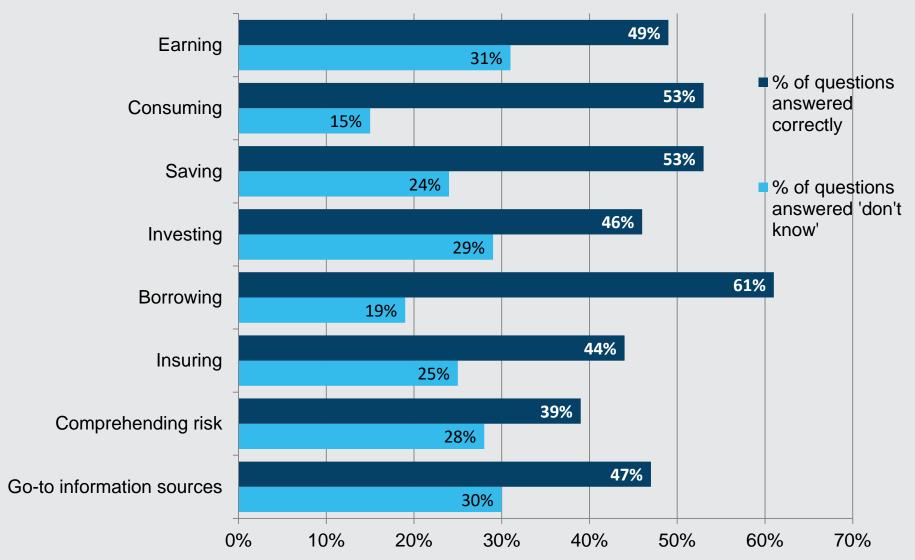
# **Knowledge across functional areas**



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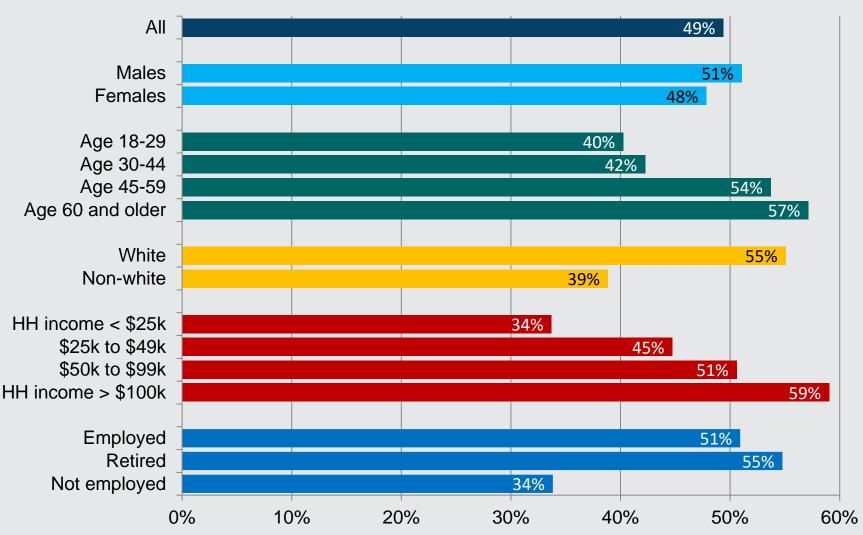
# "Do not know" responses across functional areas





### **Demographic variations**

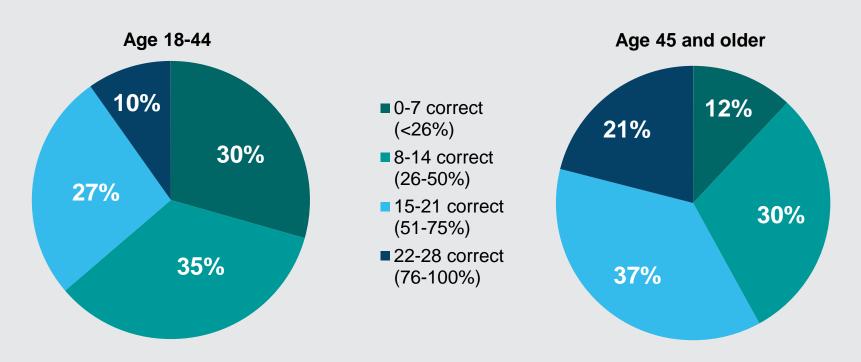
### % of Index Questions Answered Correctly



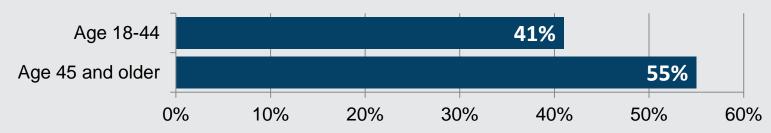


# Young adult personal finance knowledge

#### **Distribution of Correct Answers to Index Questions**

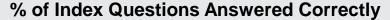


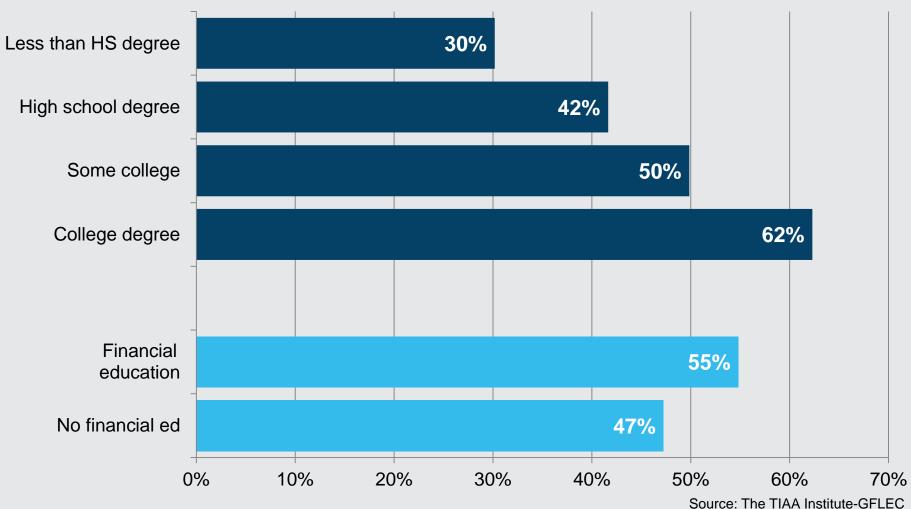
### % of Index Questions Answered Correctly





# Variation by education



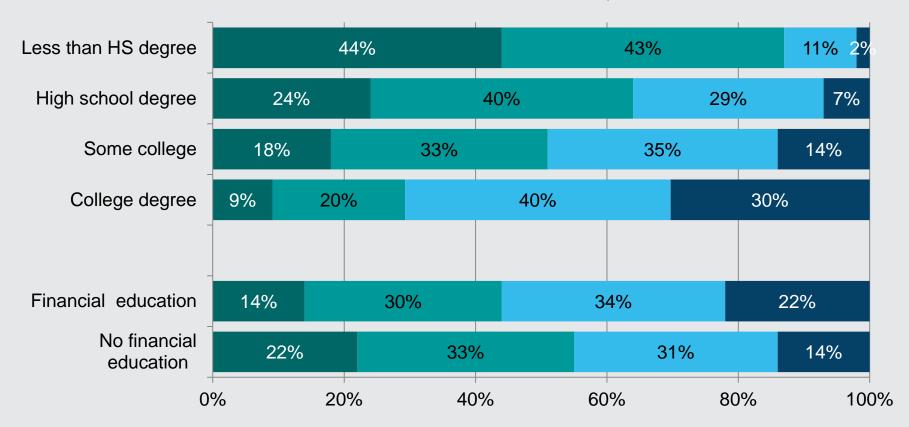


Personal Finance Index (2017)



### Distribution of correct answers to index questions across education

#### **Distribution of Correct Answers to Index Questions**



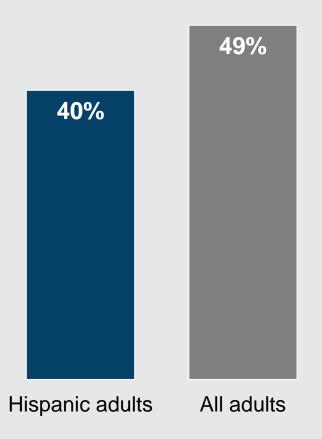
- <26% of questions answered correctly</p>
- 51%-75% of questions answered correctly
- 26%-50% of questions answered correctly
- 76%-100% of questions answered correctly

Source: The TIAA Institute-GFLEC Personal Finance Index (2017)

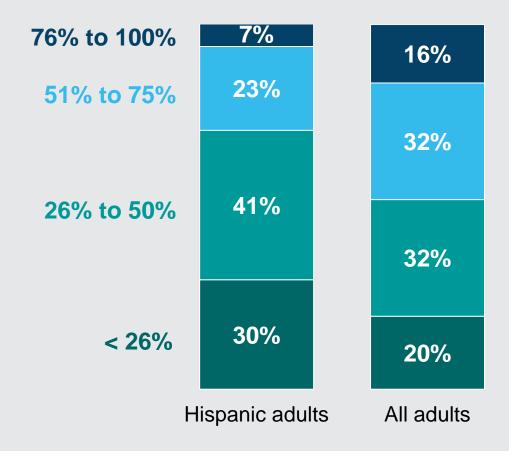


### P-Fin Index levels among Hispanics

# % of Index questions answered correctly



# Distribution of Index questions answered correctly

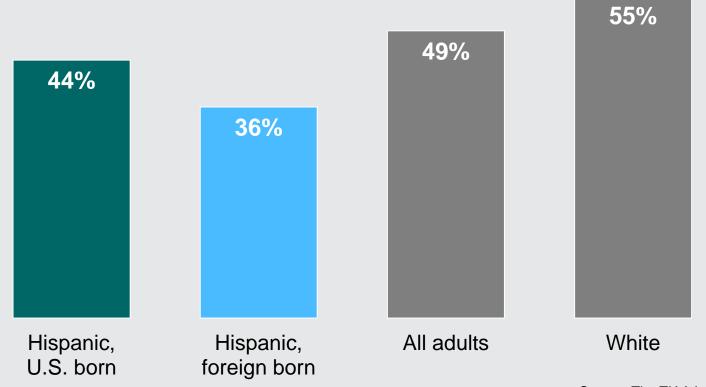




# P-Fin Index levels among Hispanics (cont.)

U.S.-born Hispanics have greater financial literacy than foreign-born Hispanics.

### % of Index questions answered correctly



Source: The TIAA Institute-GFLEC Personal Finance Index (2017)



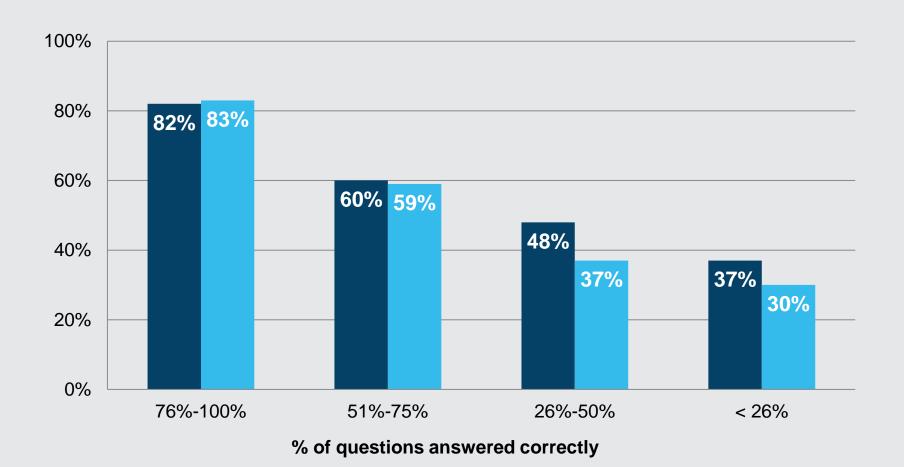
### P-Fin Index and personal finance outcomes

As the percentage of *P-Fin Index* questions answered correctly increases, individuals are:

- Less likely to be financially fragile.
- More likely to have precautionary savings sufficient to cover living expenses for three months.
- More likely to have planned for retirement.
- More likely to have financial investments, aside from retirement accounts.
- More likely to be current on credit card and loan payments.



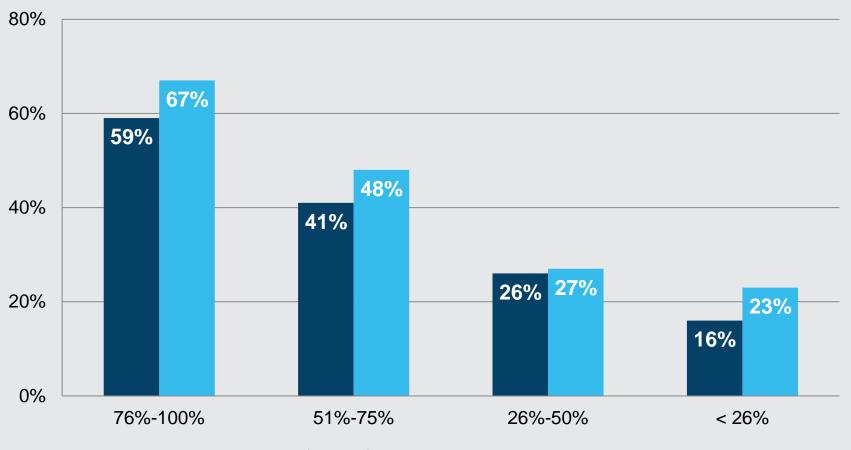
### P-Fin Index and having the ability to handle financial shocks



- Have savings sufficient to cover living expenses for three months
- Certainly could come up with \$2,000 if an unexpected need arose within next month



### P-Fin Index and planning for retirement

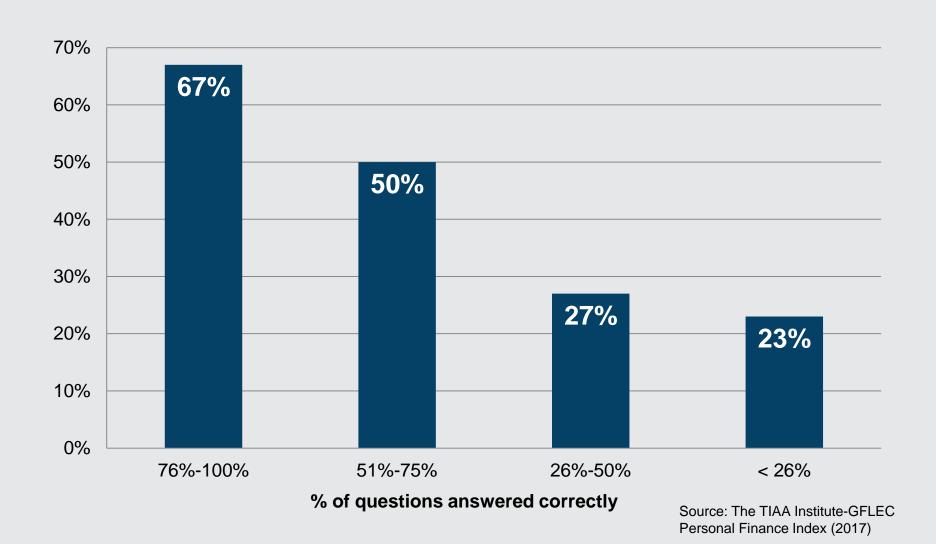


% of questions answered correctly

- Have tried to determine how much need to save for retirement (among non-retirees)
- Tried to determine how much needed to save before retiring (among retirees)

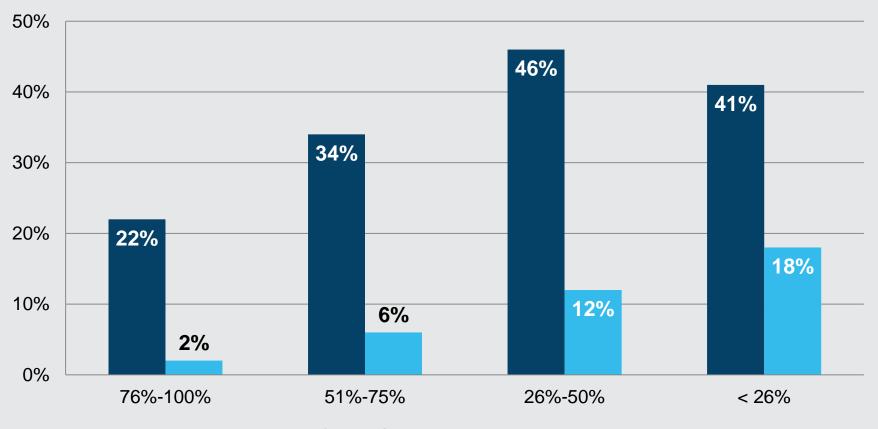


# **P-Fin Index** and having financial instruments other than retirement accounts





### P-Fin Index and keeping current on credit card and loan payments



% of questions answered correctly

- Have not generally paid credit card bills in full each month during the past two years (among cardholders)
- Currently behind on loan payments (among those with outstanding loans)



### Implications from research

What we learn so we can do better financial education programs

- Knowledge of personal finance is very low
  - Particularly low for risk and comprehending risk
- It is particularly low among young and changes very slowly with age
  - Young are an important target and could use time in their favor
  - Not much evidence of learning by doing
- Need targeted programs: one size does not fit all

• Even among Hispanics, there are sharp differences depending on where

they are born



### From research to applications

### Ideal venues for financial education

- > In schools
  - Easier to reach the young
  - Need a base on which to build

- > In the workplace
  - Easier to reach the adults

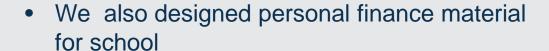
- > In libraries, local communities, museums
  - Where people go to learn

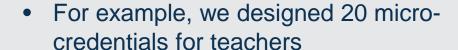




### Personal finance course at the George Washington University

- GFLEC designed the curriculum joint with a mathematician
- Using a rigorous quantitative approach
- It covers saving and investing, retirement planning, personal taxes, insurance, etc.
- Material available for free on our website

















### Program for the workplace: Five steps to planning success

# Set-up:

- Design of a low-cost, easily-replicable financial education program called «Five Steps»
- Covering five basic financial planning concepts that relate to retirement
- Delivery models: written narratives and online videos

### **Program:**

- Targeted to young workers
- Covered concepts that people know the least, for example risk, in a simple story
- Made it applicable to real life situations





### Results from five steps to planning success

- ➤ After being exposed to videos, the performance on financial literacy improved
- ➤ While young were targeted, the videos affected all age groups
- ➤ 25-33% of the knowledge gain is still observable 8 months after the intervention
- Simple program has effects both in the short and medium run



### Building a tool for financial decision-making (FinVis)

### Addressing lack of risk literacy through visualization

# Goals of FinVis:

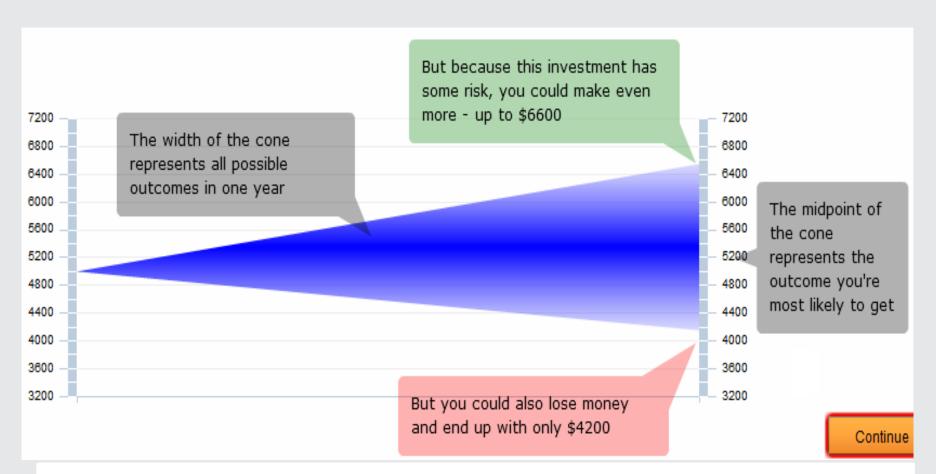
# Help the user to:

- 1. understand risk profiles of different types of stocks
- understand the impact of different rates of return, different standard deviations and correlations of assets
- 3. learn why it is important to diversify across stocks
- 4. learn why it is important to diversify across asset classes





### **FinVis**



FinVis: Don't put all your eggs in one basket



# **Employee financial literacy and retirement plan behavior: a case study**

### **Program:**

- Conducted with employees from the Federal Reserve System
- Study of the participation and contributions of employees to their employer sponsored plan
  - DC plan (Thrift Saving Plan)
- Employees could complete a learning module about retirement planning



### Findings:

Employees who completed the learning module were

- more likely to start contributing to their retirement account
- less likely to have stopped contributing post-survey
- More likely to boost contributions and equity allocations after the intervention



### A saving museum in Turin, Italy







### **Final remarks**

Personal finance and financial literacy is about the future.

The question is: Which future do we want to build?





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