Financial Literacy for Low Income People
Lessons from Soldiers and Implications for Financial Reform

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Federal Reserve Board

With assistance from Catherine Bell and Matthew Gross, Federal Reserve. The analysis and conclusions set forth in this presentation represent the work of the authors and do not indicate concurrence of the Federal Reserve Board, the Federal Reserve Banks, or their staff. Mention or display of a trademark, proprietary product, or firm in the presentation by the authors does not constitute an endorsement or criticism by the Federal Reserve System and does not imply approval to the exclusion of other suitable products or firms.
Shameless commercial

**Goals**

1. **Increase Awareness of and Access to Effective Financial Education**
   - Ensure individuals and families are aware of the importance of financial literacy and have access to financial education resources.

2. **Determine and Integrate Core Financial Competencies**
   - Determine the personal finance knowledge and skills that individuals and families need to employ at various life stages and for particular life events to make informed financial decisions.
   - Integrate these competencies into effective resources and programs.

3. **Improve Financial Education Infrastructure**
   - Develop guidelines on content, training, and delivery channels for financial literacy and education providers.
   - Promote opportunities for partnerships and information sharing.

4. **Identify, Enhance, and Share Effective Practices**
   - Support research and evaluation to identify effective programs and practices.
   - Encourage the implementation and reproduction of evidence-based programs and practices for individuals and organizations.
What really matters

- Parental influence
- Human capital – education
- Experience
- Income
- Relevance of financial education programs/interventions
- Access to financial services – convenience, barriers, motivation
  - automation
Army Emergency Relief sponsored 2-day course

Taught by San Diego City College (Navy contractor)

Offered during AIT
Goals

▶ Did the financial education program improve financial management behaviors?

▶ What factors effect financial management behaviors?
Where did financial ed matter?

- Budgeting—formal or informal
- Understanding discretionary & non-discretionary expenses
- Vehicles
- Contribute to TSP
Why didn’t financial ed matter more?

- Measurement error
  - Stage of behavior change
- Timing
- Course implementation
  - Timing
  - Content
  - Pedagogy/format/teacher effectiveness
- Testing to signal what’s important
Data collection

Education group
- N = 4061
- Surveyed during course
- Follow up 6-18 months later
  - 199 matched surveys

Comparison group
- N = 293
- Surveyed same time as follow up
Questionnaire

- Demographics
- Pre-military history (family of origin)
- Financial products owned
- Financial behaviors & activities
- Attitudes, perceptions
- Financial self-assessment
FINRA surveys

- **Military**
  - 800 service members/spouses
  - Online

- **State-by-state**
  - 28,000+
  - Online
  - Can be weighted to national level
Comparisons

- **FRB/AER**
  - Baseline, follow up, comparison group

- **FINRA**
  - Young military, all military, young non-military from state surveys

- **FRB/AER & FINRA**
  - Young military, young non-military
Stylized facts

- Newly independent youth
  - Young (18-23)
  - Male (85%)
- Limited education & experience
  - 3/5ths have HS or GED
- Limited incomes (2010 figures)
  - E1 = $1,450/month ($17,400)
  - E4 = $1,990/month ($23,880, 2-3 years)
Core competencies

- Earning
- Spending
- Saving
- Borrowing
- Protecting
## Spending

<table>
<thead>
<tr>
<th>Financial education group</th>
<th>FRB/AER study</th>
<th>FINRA studies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
<td>Follow up</td>
</tr>
<tr>
<td>Bounce check</td>
<td>29.9</td>
<td>38.5</td>
</tr>
<tr>
<td>Own vehicle</td>
<td>35.0</td>
<td>45.7</td>
</tr>
</tbody>
</table>

In percentages
## Saving

<table>
<thead>
<tr>
<th>Have saving</th>
<th>FRB/AER study</th>
<th>FINRA studies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Financial education group</strong></td>
<td>Baseline</td>
<td>Follow up</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have saving</td>
<td>73.3</td>
<td>78.4</td>
</tr>
<tr>
<td>Emergency fund</td>
<td>31.9</td>
<td>38.1</td>
</tr>
<tr>
<td>Thrift Savings/401k</td>
<td>13.4</td>
<td>35.9</td>
</tr>
</tbody>
</table>

In percentages
## Saving

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</tr>
<tr>
<td></td>
<td>Baseline</td>
<td>Follow up</td>
</tr>
<tr>
<td></td>
<td>Age 18-29</td>
<td>All</td>
</tr>
<tr>
<td>Have saving</td>
<td>73.3</td>
<td>78.4</td>
</tr>
<tr>
<td>Emergency fund</td>
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## Borrowing

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<td></td>
</tr>
<tr>
<td></td>
<td>Baseline</td>
<td>Follow up</td>
</tr>
<tr>
<td>Have credit card</td>
<td>39.8</td>
<td>50.5</td>
</tr>
<tr>
<td>Paid late fee</td>
<td>33.8</td>
<td>34.8</td>
</tr>
<tr>
<td>Have vehicle loan</td>
<td>35.0</td>
<td>45.7</td>
</tr>
<tr>
<td>In percentages</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In percentages
# Borrowing -- AFS

## Financial Education Group

<table>
<thead>
<tr>
<th>Loan Type</th>
<th>Baseline</th>
<th>Follow up</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payday loan</td>
<td>5.4</td>
<td>2.1</td>
<td>5.0</td>
</tr>
<tr>
<td>Pawn shop loan</td>
<td>6.5</td>
<td>3.7</td>
<td>6.8</td>
</tr>
<tr>
<td>Title loan</td>
<td>3.3</td>
<td>0.0</td>
<td>3.9</td>
</tr>
</tbody>
</table>

## FINRA Studies

<table>
<thead>
<tr>
<th>Loan Type</th>
<th>FINRA Military Age 18-29</th>
<th>FINRA Military All</th>
<th>FINRA State Age 18-24</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payday loan</td>
<td>11.0</td>
<td>7.6</td>
<td>8.8</td>
</tr>
<tr>
<td>Pawn shop loan</td>
<td>10.0</td>
<td>10.0</td>
<td>22.3</td>
</tr>
<tr>
<td>Title loan</td>
<td>11.1</td>
<td>7.4</td>
<td>6.2</td>
</tr>
</tbody>
</table>

*In percentages*
## Attitudes

<table>
<thead>
<tr>
<th>Good money manager</th>
<th>FRB/AER study</th>
<th>FINRA studies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Financial education group</td>
<td>FINRA Military</td>
</tr>
<tr>
<td></td>
<td>Baseline</td>
<td>Follow up</td>
</tr>
<tr>
<td>In percentages</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Read, keep up w/fin. news</td>
<td>64.7</td>
<td>60.2</td>
</tr>
<tr>
<td></td>
<td>26.5</td>
<td>39.3</td>
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</tbody>
</table>
## Behavior indexes

<table>
<thead>
<tr>
<th>Bad Behaviors</th>
<th>Good Behaviors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>High</td>
<td>Low good, high bad</td>
</tr>
<tr>
<td>Medium</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td></td>
</tr>
</tbody>
</table>
### Behavior indexes

<table>
<thead>
<tr>
<th>Bad Behaviors</th>
<th>Good Behaviors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>High</td>
<td>10%</td>
</tr>
<tr>
<td>Medium</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td></td>
</tr>
</tbody>
</table>
Probabilities

Aware of parents finances

Not aware

- low good - high bad
- medium
- high good - low bad

16
5

7
13

0% 20% 40% 60% 80% 100%
Probabilities

No HS savings
- Low good - high bad: 6
- Medium: 15
- High good - low bad: 6

Had HS savings
- Low good - high bad: 14
- Medium: 6
- High good - low bad: 15
Probabilities

- High stress: 26 (low good - high bad: 2), medium: 24, high good - low bad: 0
- Moderate stress: 16 (low good - high bad: 5), medium: 11, high good - low bad: 0
- Some stress: 10 (low good - high bad: 8), medium: 2, high good - low bad: 0
- Low stress: 4 (low good - high bad: 17), medium: 0, high good - low bad: 0
Probabilities

- Single:
  - Low good - high bad: 12
  - Medium: 6

- Married:
  - Low good - high bad: 6
  - Medium: 16
Probabilities

- **E5 or higher**: 4 (Low good - high bad), 21 (Medium), 13 (High good - low bad)
- **E4**: 8 (Low good - high bad), 13 (Medium), 10 (High good - low bad)
- **E3**: 10 (Low good - high bad), 10 (Medium), 5 (High good - low bad)
- **E2**: 16 (Low good - high bad), 5 (Medium), 9 (High good - low bad)
- **E1**: 8 (Low good - high bad), 9 (Medium), 0 (High good - low bad)
Probabilities

2 or 4 yr degree
- Low good - high bad: 2
- Medium: 21

Some college
- Low good - high bad: 9
- Medium: 13

HS or GED
- Low good - high bad: 11
- Medium: 8

Legend:
- Low good - high bad
- Medium
- High good - low bad
# Vehicles

<table>
<thead>
<tr>
<th></th>
<th>Financial education group</th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
<td>Follow up</td>
<td>Comparison</td>
</tr>
<tr>
<td>Own</td>
<td>43.9</td>
<td>57.6</td>
<td>49.5</td>
</tr>
<tr>
<td>Lease</td>
<td>7.5</td>
<td>8.2</td>
<td>20.1</td>
</tr>
<tr>
<td>Don’t own</td>
<td>49.5</td>
<td>34.1</td>
<td>30.4</td>
</tr>
<tr>
<td>Have a loan</td>
<td>35.0</td>
<td>45.7</td>
<td>53.2</td>
</tr>
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In percentages
## Vehicles

### Financial education group

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<tr>
<th></th>
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<th>Follow up</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Amt of loan</strong></td>
<td>$15,047</td>
<td>$13,369</td>
<td>$15,091</td>
</tr>
<tr>
<td><strong>Downpmt</strong></td>
<td>$2,709</td>
<td>$2,878</td>
<td>$1,984</td>
</tr>
<tr>
<td><strong>Downpmt/loan</strong></td>
<td>.18</td>
<td>.27</td>
<td>.17</td>
</tr>
<tr>
<td><strong>Loan term</strong></td>
<td>52.5</td>
<td>47.6</td>
<td>53.1</td>
</tr>
<tr>
<td><strong>Mo. payment</strong></td>
<td>$310</td>
<td>$339</td>
<td>$358</td>
</tr>
</tbody>
</table>
Limitations

▲ Limited sample
▲ Measurement error
  ➢ Stage of behavior change
▲ Timing
▲ Course implementation
  ➢ Timing
  ➢ Content
  ➢ Pedagogy/format/teacher effectiveness
▲ Testing to signal what’s important
What really matters

- Parental influence
- Human capital – education
- Experience
- Income
- Relevance of financial education programs/interventions
- Access to financial services – convenience, barriers, motivation
  - automation
Does Financial Education Affect Soldiers’ Behaviors?

Better Deals on Wheels: The Effects of Financial Education on Car Buying
http://www.minneapolislisfed.org/publications_papers/pub_display.cfm?id=4399

Teaching for the Test, and Life Is the Final Exam
http://6aa7f5c4a9901a3e1a1682793cd11f5a6b732d29.gripelements.com/documents/conferences/2009_afcpe_conference_proceedings.pdf
(page numbers are 22-32; pages 32-42 of the pdf file)

What Makes a Good Money Manager Good? Insights from an Evaluation of an Education Initiative
(page numbers are 61-71; pages 65-75 of the pdf file)

Emergency Funds and Savings among Service Members Forthcoming in ACCI 2011 conference proceedings