State Financial Education Mandates: It's All in the Implementation

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DISCLAIMER

- The views expressed in this talk are those of the authors and do not necessarily represent the views of the Federal Reserve Board, the Federal Reserve System, or their staffs.
- This research was supported by a grant from the FINRA Investor Education Foundation. All results, interpretations and conclusions expressed are those of the research team alone, and do not necessarily represent the views of the FINRA Investor Education Foundation or any of its affiliated companies.
- I am currently serving part-time as a visiting researcher under the CFPB's IPA program. The work I am presenting today is based on my own research and does not implicate or represent the CFPB in any way.

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FINANCIAL LITERACY

Financial Literacy amongst young adults in the U.S. is particularly weak:

- Performed at the OECD average on the 2015 PISA.
- 7 out of 15 participating countries and economies.
- $<$ 1 in 3 Americans aged 23 - 28 possess basic knowledge of interest rates, inflation and risk diversification. (Lusardi, Mitchell, and Curto 2010).

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- greater use of high cost financial services and higher levels of debt (Lusardi and Tufano 2009; Meier and Springer 2010).

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FINANCIAL EDUCATION IN U.S. HIGH SCHOOLS

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- An existing body of research on the effectiveness of personal finance education yields conflicting findings (Fernandes et al. 2013).
    - Does financial education improve financial decisions (Bruhn et. Al. 2013)? Or not (Cole et. Al. 2013; Willis 2011)?

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    - Does financial education improve financial decisions (Bruhn et. Al. 2013)? Or not (Cole et. Al. 2013; Willis 2011)?
- Our research asks how effective financial education in high school is in 3 states with rigorous curriculum and course mandates.

WHY PREVIOUS STUDIES MAY BE FLAWED

Errors could lead previous literature to find that financial education is ineffective:

1. The education is usually not implemented for another 3 or 4 years after the law is passed. Previous studies do not always account for this.
2. Some states do not require school districts to implement the curriculum.
3. Cole et. Al. (2013) and Brown et. Al. (2013) assume all financial education is the same, even though some states simply require schools to discuss personal finance for one day in social studies class and others require a course, teacher training, and testing.

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- We chose 3 states with intensive mandates post-2000: Georgia, Idaho, Texas.
- We determined exactly what financial education entailed:
  - sample curricula.
  - graduation requirements began with class of 2007.
  - teacher training.
  - taught within High School Economics.
  - no other course requirement changes in the study period.

Model Curricula

All three states contain the following topics in their sample curricula:

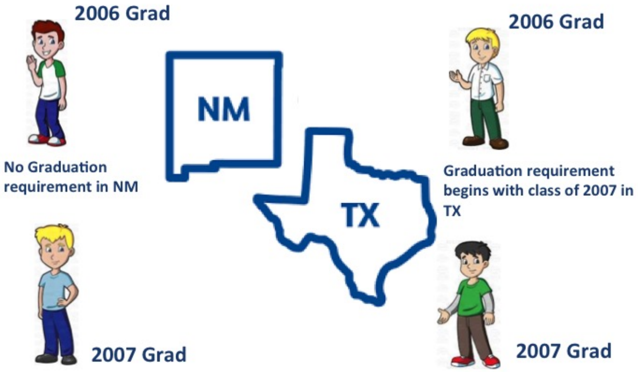
- Understanding interest.
- Credit, debt, banking.
- The role of insurance.
- Understanding credit scores.
- Interactions between global and domestic economies.
- Encourage participation in stock market game simulations.

DATA AND METHOD

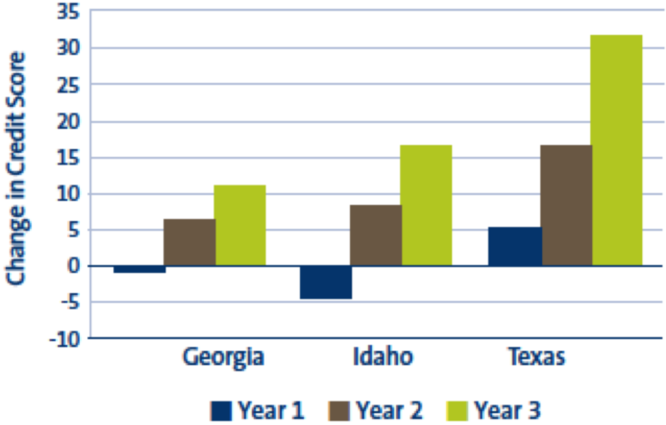
The data in our study come from the Federal Reserve Bank of New York's Consumer Credit Panel.

- 5% sample of all U.S. credit files from Equifax.
- Compare each of these states to one state that it borders but does not have a financial education requirement, as well as students within the same state before and after the education began.
- This tells us what students in Georgia, Idaho, and Texas *would have* looked like if they never had the education.
- Look at the first three graduating classes exposed to the mandate to see if and when the education became effective.
- Follow students from 18-22 years of age.

Method


2006 Grad
NM
No Graduation requirement in NM
2006 Grad
TX
Graduation requirement begins with class of 2007 in TX
2007 Grad
2007 Grad

Fin Ed Increases Credit Scores



Fin Ed Increases Credit Scores

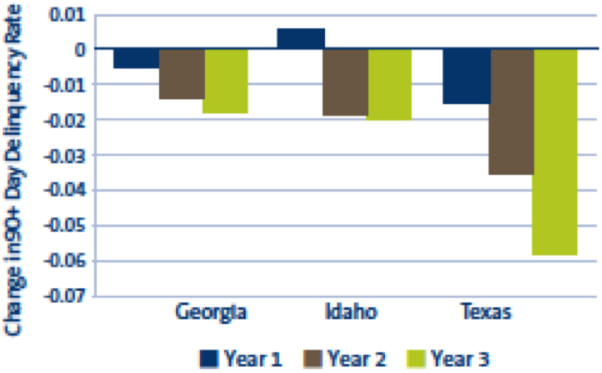
For the first graduating class that received financial education, there is no measurable change in credit scores for any state.

Georgia: 2^{nd}: $\uparrow$ 6 points.
3^{rd}: $\uparrow$ 11 points.

Idaho: 2^{nd}: $\uparrow$ 8 points.
3^{rd}: $\uparrow$ 16 points.

Texas: 2^{nd}: $\uparrow$ 16 points.
3^{rd}: $\uparrow$ 32 points.

Fin Ed Reduces 90+ Day Delinquency Rates



FIN ED REDUCES 90+ DELINQUENCY RATES

Effect size by graduating class

GEORGIA: 1^{st}: no change.
2^{nd}: $\downarrow$ 1.2 percentage points.
3^{rd}: $\downarrow$ 1.8 percentage points.

IDAHO: 1^{st}: no change.
2^{nd}: $\downarrow$ 1.9 percentage points.
3^{rd}: $\downarrow$ 2.0 percentage points.

TEXAS: 1^{st}: $\downarrow$ 1.4 percentage points.
2^{nd}: $\downarrow$ 3.4 percentage point.
3^{rd}: $\downarrow$ 5.8 percentage points.

Why is the Effect Different in Each State?

- Each state has a different demographic composition.
- Each state has a different implementation.
- Each state has a different baseline average.

	Average Credit Score	Average 90+ Day Default Rate
Georgia	606.5	18.18%
Idaho	632.3	12.17%
Texas	609.3	17.81%

Takeaways

- Previous research finding no effect of K-12 financial education does not distinguish between the types of education offered.
- Our research suggests that rigorous education, tailored to a state's population affect early-life delinquency and credit scores.
- Implementation is key. A mandate alone does not improve behaviors.

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