The Effects of Financial Education Standards in Oklahoma on Credit Behaviors

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February 24, 2016
Disclaimer

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Financial literacy across the world is generally low, but financial knowledge amongst young adults is particularly weak:

- 1 in 3 adults worldwide show an understanding of basic financial concepts (Klapper, Lusardi, van Oudheusden 2015).

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Why is Financial Literacy Important?

Low levels of financial literacy have been associated with:

- lower rates of planning for retirement, asset accumulation, stock market participation (Lusardi and Mitchell 2007, 2014; Lusardi et al. 2010; van Rooij et al. 2012).

- 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 Literacy of Young Adults

Young adults more often struggle to pay bills and manage money due to more “mistakes”

For 23-25 year olds, a GFLEC study finds:

- 42% use alternative financial services, such as payday loans, tax refund advances, and auto title loans.
- 30% overdraw on their checking accounts.
- 53% carried over a credit card balance in the last 12 months.
- 50% could not come up with $2,000 if an unexpected need arose next month.
To combat low levels of financial literacy, especially for young adults, policymakers have implemented high school personal finance graduation requirements.

- Some research finds financial education is ineffective (Cole et. al. 2014, Brown et. al. 2014).
- This work lumps together states with course requirements and states that recommend offering financial education.
- Urban et. al. (2015) show that financial education reduces delinquency rates and improves credit scores in states with rigorous, well-implemented mandates.
In Oklahoma, students beginning with the class of 2014 were required to be proficient in 14 areas of personal finance.

Local districts choose what point between grades 7 and 12.

Successful completion recorded with a “Personal Financial Literacy Passport”

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Data

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

- 5% sample of all U.S. credit files from Equifax plus the remainder of credit files in the household.
- Look at those 18 years of age.
- 42,875 18 year-olds in OK; 20,184 18 year-olds in NE.
- 2,496 18 year-olds in OK exposed to education; 1,183 18 year-olds in NE would have been exposed to the education if lived in OK.
Method

- Need to determine how personal finance standards affect credit behaviors.
- How can we tell what *would have* happened if there was no mandate?

- Compare OK 18 year-olds after the mandate to OK 18 year-olds before the mandate.
- Compare NE 18 year-olds after OK’s mandate to NE 18 year-olds before OK’s mandate.
- Compare the *difference* in credit scores in OK to the *difference* in credit scores in NE.
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- Compare the **difference** in credit scores in OK to the **difference** in credit scores in NE.
Estimate the **causal effect** of personal finance standards on credit behaviors.

- Tells us what OK students *would have* looked like if they never had the education.
- Urban et. al. (2015) use this method to estimate the effect of financial education on credit behavior in GA, ID, TX.
- Accounts for differences in credit behaviors across time.
- Controls for county-level unemployment rates.
- Look at first 2 graduating classes exposed to the mandate to see when the education was effective (2014, 2015).
Financial Education Increases Credit Scores

- $1^{st}$ graduating class: there is no measurable change in credit scores.
- $2^{nd}$ graduating class: credit scores improved by roughly 6.5 points.
- Average credit scores were approximately 628 for OK young adults. Effect size is 1% of the mean credit score.
The null effect in year one is similar to GA, ID, and TX.

The year two effect size is similar to GA (6 points) and smaller than ID (8 points) and TX (16 points).

Credit scores were lower in most of these states at the start of the graduation requirement (606, 630, and 610, respectively).

As a percent of the average, the effect sizes are 1.3%, 1.0%, and 2.6%, respectively.

The financial education requirement began the same time as the financial crisis in ID, GA, and TX, stacking the deck against them.
1\textsuperscript{st} graduating class: no measurable change in 90+ day defaults.

2\textsuperscript{nd} graduating class: decreased 90+ day default rates by 1.3 percentage points.

Average 90+ day defaults are high in OK, roughly 48% of those 18 year olds with credit files are behind.

This is a reduction equal to 2.7% of mean default rates.
These effects were similar in magnitude to GA, who had lower delinquency rates (18%).

These effects were 50% larger in ID, who had lower delinquency rates (12%).

These effects were roughly double the size in TX, who had lower delinquency rates (18%).

As a percent of average default rates, these effect sizes are much higher in GA, ID, and TX: 6.7%, 11.0%, and 18.0% of mean severe delinquency rates, respectively.
City vs. Rural

When comparing the effect sizes in cities in OK (& NE) to the effect sizes in rural areas in OK (& NE):

- the effect of financial education on credit scores is larger in cities (11 points vs. 3 points).
- the effect of financial education on severe default is larger in cities (1.6% vs. 1.3%).
- the average credit scores and default rates are roughly the same across areas.
- Rural areas lag behind. Fewer resources? Less oversight on implementation?
Why is Education Ineffective in Year 1?

Potential Reasons:

- When course requirements are unfunded, school districts have to finance the added course (TX has largest effect in year 1 and is funded).
- It may take a few years to accumulate enough resources to offer the course well.
- The teachers with flexibility in their schedules are often art, physical education, or social studies teachers. They are often not trained in financial education.
- It may take these teachers a year or two to adjust to the new curriculum.
One More Comparison: Missouri

Personal Finance Mandate in 2010

- Required a 0.5-unit course OR testing if the content was incorporated into another curriculum.
- No personal finance knowledge required of teachers.
- Effect sizes on credit scores (7.5 points) and 90+ day default rates (1.3 percentage points).
- Average credit scores (633) slightly higher, and average 90+ day default rates much lower (25%) to start with.
- As a percentage of mean, 1.2% and 5.2% for credit scores and defaults, respectively.
  - Effect sizes larger than OK.
Policy Recommendations

1. Require a standalone active, classroom-based financial education course in all high schools.
   - Online education less effective (Anstine and Skidmore 2005; Brown and Liedholm 2002).

2. Teach the content in one specific course, in one specific grade (i.e., 11th or 12th, instead of 7th-12th)

3. Teacher training: teacher proficiency is key.

4. Standardized testing on the material.

5. State-based funding.
Stay Tuned

- Continue to update findings as students age and more data become available.
- Direct comparisons with other states are useful but not the end.
- Need older students to make direct comparison.
**Big 3 Questions (Lusardi and Mitchell 2008, 2011)**

1. Suppose you had $100 in a savings account and the interest rate was 2 percent per year. After 5 years, how much do you think you would have in the account if you left the money to grow: more than $102, exactly $102; less than $102; do not know; refuse to answer.

2. Imagine that the interest rate on your savings account was 1 percent per year and inflation was 2 percent per year. After 1 year, would you be able to buy: more than, exactly the same as, or less than today with the money in this account; do not know; refuse to answer.

3. Do you think that the following statement is true or false? “Buying a single company stock usually provides a safer return than a stock mutual fund.” [true; false; do not know; refuse to answer]
Financial Literacy in Oklahoma

Picture of Oklahoma’s Young Adults:

- Average Credit Scores: 627.
  - Other states: KY (629), MO (633), NE (647)
- Average Balances on all Accounts: $4,560
  - Other states: KY ($7,341), MO ($7,680), NE ($3,743)
- Average number of accounts (1.3)
  - Other states: KY (2.1), MO (1.9), NE (1.4)
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Why is the Effect Different in Each State?

Each state has a different demographic composition:

- Idaho has a predominantly white population (94%), an agriculture-based society, and a low rate of college attendance (45%).
- Texas has a high proportion of Hispanics (44%), a large petroleum and natural gas industry, and a slightly higher rate of college attendance (56%).
- Georgia has a high proportion of African Americans (32%), a largely service-based economy, and the highest rate of college attendance (68%).
- Oklahoma is somewhere in between: 75% white, 7.7% African American, 9% Native American, 10% Hispanic, largest sector is energy, 60% college attendance rate.