

Impact of Financial Education Mandates on Younger Consumers' Use of Alternative Financial Services

Melody Harvey

Post-Doctoral Fellow
Pardee RAND Graduate School

Cherry Blossom Financial Education Institute
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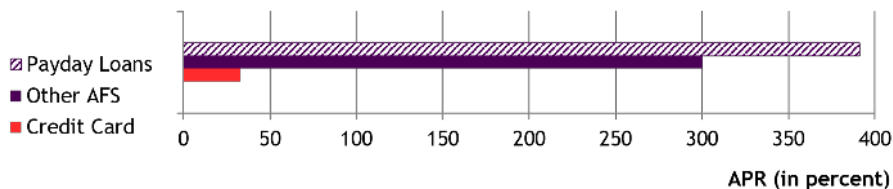
Alternative Financial Services Are Very Costly and Easily Misunderstood

(Motivation)

Alternative financial services (AFS) - a set of financial products or services offered outside of mainstream financial institutions

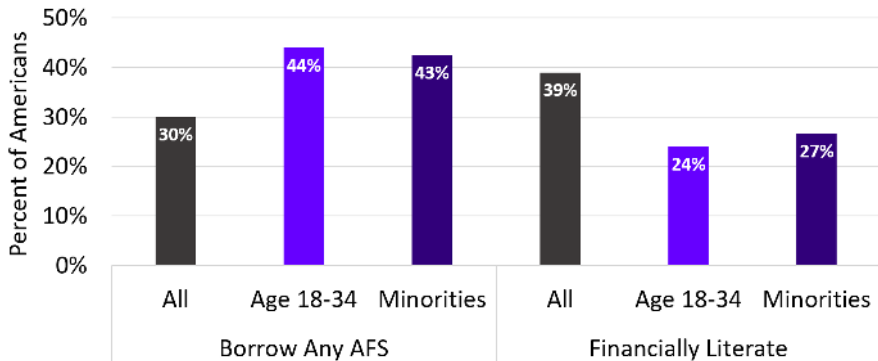
Regulated at the state level

Very costly because they are *short-term*:



Higher Proportions of Young Adults and Minorities Use AFS and Are Less Financially Literate

(Motivation)



* Financially literate: correctly answered more than 3 out of 5 of Lusardi's questions. Black, Latino, and Native American racial groups are categorized as underrepresented minorities.

Data Source: NFCS 2012

A Common Policy Response Is Mandating Financial Education in Schools, Despite Mixed Evidence (Motivation)

Authors	Research Design	Education Data	Population	Behavior	Finding on Behavior
Bernheim, Garrett and Maki (2001)	Natural experiment	Legislation	Middle-aged	Savings Wealth accumulation	+
Mandell and Klein (2009)	Descriptive	Legislation	Young	Savings Credit payments	N/A
Grimes, Roger and Smith (2010)	Descriptive	Self-Reports	All	Banking status	+
Gutter, Copur and Garrison (2011)	Descriptive	Legislation	Young	Savings Credit payments	+
Brown et al. (2014)	Natural experiment	Legislation	Young	Credit delinquency Credit scores	+
Cole, Paulson and Shastry (2015)	Natural experiment	Legislation	Middle-aged	Savings Wealth accumulation	N/A
Brown et al. (2016)	Natural experiment	Legislation	Young	Credit delinquency Credit scores	+

Focus of This Study:

(Motivation)

Overarching question: Does state-mandated financial education impact relevant behaviors?

Impacts on an previously unstudied behavior:

- **1. Alternative financial services (AFS)**

...Do marginal effects vary for different subgroups?

Data Sources

Mandates: Urban and Schmeiser (2015)

AFS use: National Financial Capability Study (2012)

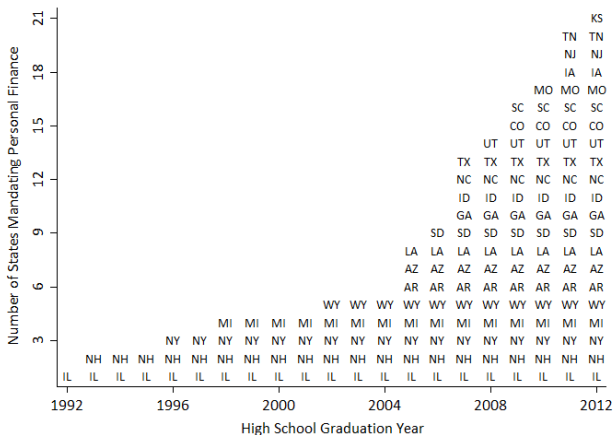
- Question: "In the past five years, how many times have you used [PRODUCT]?"
- n, analytic sample = 7,324

Sensitivity analyses: RAND American Life Panel (ALP)

- MS 284 (NFCS 2012) & MS 432 (Pilot Survey 2015)
- n, analytic sample = 503

Used Difference-in-Differences to Exploit the Rollout of the Mandate

(Empirical Strategy)



Data Source: Urban and Schmeiser (2015)

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Specified a Standard Model to Estimate Causal Effect of Mandates on High-Cost Borrowing

(Empirical Strategy)

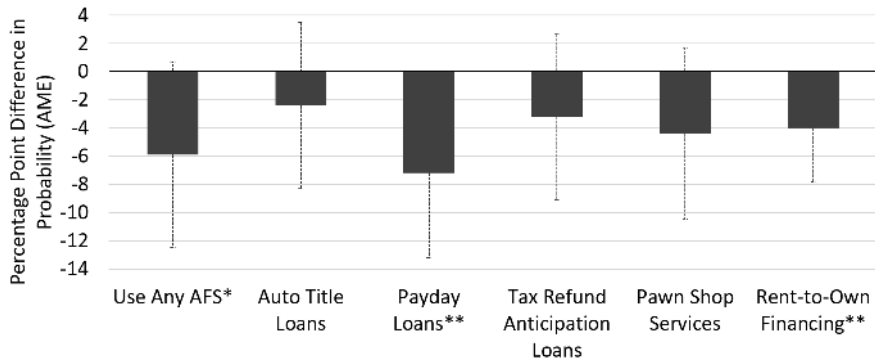
The generic estimated causal model is:

$$f(Y_{ics}) = \beta_0 + \theta M_{cs} + X_i' \beta + \gamma_c + \lambda_s + \epsilon_{ics}$$

- Y_{ics} is the outcome of individual i aged c from current state of residence s
- $M_{cs} = 1$ if individual was required to take personal finance in high school to graduate
- X_i is a vector of individual i 's characteristics
- γ_c captures unobserved age/cohort factors
- λ_s captures unobserved state characteristics & policies

Individuals Exposed to the Mandate Were Less Likely to Use Payday Loans and Rent-to-Own Financing

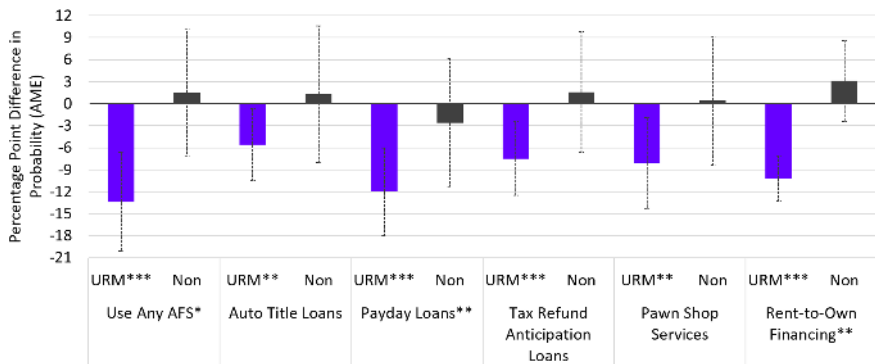
(Main Results)



Data Sources: NFCS 2012 and Urban and Schmeiser (2015)

Particularly, Underrepresented Minorities Exposed to the Mandate Were Less Likely to Use Any AFS Products

(Main Results)



Data Sources: NFCS 2012 and Urban and Schmeiser (2015)

Results Are Robust to Multiple Checks

(Main Results)

	Overall	Heterogeneous
State of residency during high school (ALP)	X	N/A
Simultaneously-estimated zero-inflated Poisson regressions	X	X
Excluding teenagers	X	X
Excluding states banning payday loans by 2007	X	X
Excluding states banning payday loans by 2012	X	X

Mandate Exposure Reduced Probabilities of Borrowing High-Cost Loans

(Summary)

Used difference-in-differences approach to exploit cross-state and consumer-age variation in mandates

Exposure to high school personal finance requirements:

- Reduced probability of borrowing any AFS by 6 pp
- Reduced probability of payday borrowing by 7 pp
- Associated w/reduced probability of rent-to-own financing by 4 pp

Mandates differentially impacted subgroups more likely to use AFS (e.g. underrepresented minorities)

Understanding Policy Effects Requires Examining All Relevant Outcomes

(Policy Implications)

- **Research**: evaluate effects on non-traditional sources of credit
- **Mandating states**: emphasize efforts in underserved districts
- **Non-mandating states**: discuss AFS in tandem with other credit options, especially in underserved areas

Thank you
Email: **mharvey@prgs.edu**

Appendices

- Examples of Financial Literacy Questions [▶ Jump to](#)
- Summary Statistics [▶ Jump to](#)
- Heterogeneous Effects by Gender [▶ Jump to](#)
- Robustness Checks: Alternative Financial Services [▶ Jump to](#)
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Examples of Financial Literacy Questions (Lusardi's Scale)

Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, how much would you be able to buy with the money in this account? (% correct: 59)

- More than today
- Exactly the same
- **Less than today**
- Don't know/prefer not to say

Buying a single company's stock usually provides a safer return than a stock mutual fund. (% correct: 46)

- True
- **False**
- Don't know/prefer not to say

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Proportions of Americans Under Age 40 Using AFS, Overall, and by Race and Gender

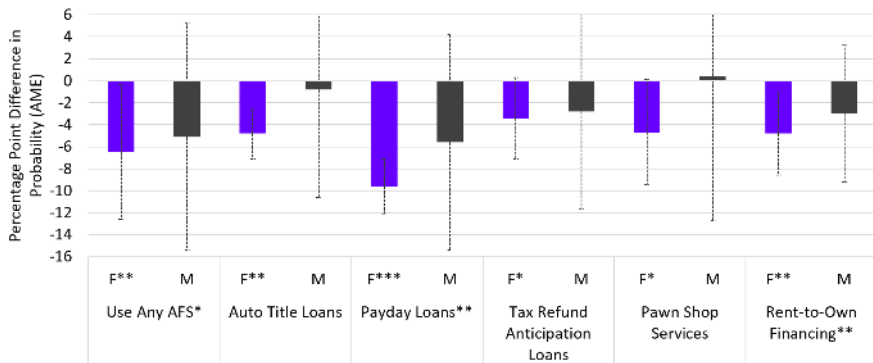
	Overall	Race/Ethnicity		Gender	
		URM	Non-URM	Female	Male
Any AFS Loan	39%	47%	33%	37%	40%
Auto Title Loans	13%	15%	12%	11%	16%
Payday Loans	18%	23%	14%	16%	19%
RALs	14%	16%	12%	11%	16%
Pawn Shop Services	25%	31%	21%	23%	27%
RTOs	16%	18%	14%	14%	17%
Underrepresented Minority	41%				
Female	49%				

Data Sources: NFCS 2012 and Urban and Schmeiser (2015). Statistics are weighted.

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Among Women, Those Exposed to the Mandate Were Less Likely to Use Any AFS Products

(Main Results)

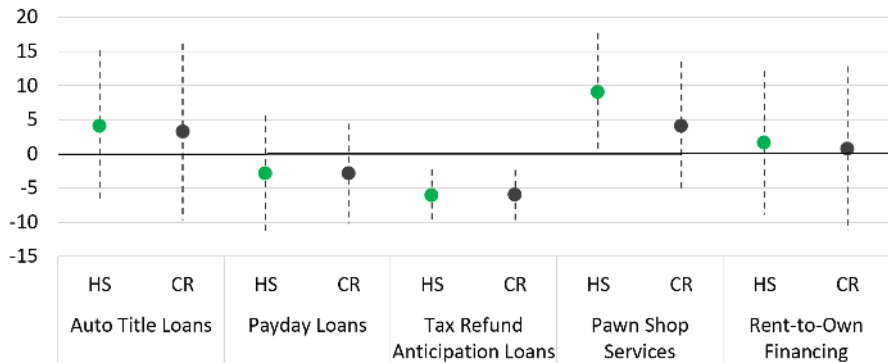


*F = women, M = men.

Data Sources: NFCS 2012 and Urban and Schmeiser (2015).

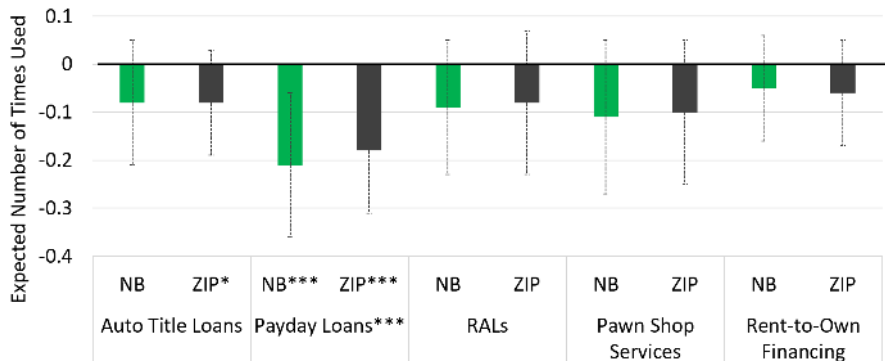
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State of Current Residence Is A Good Proxy for State of Residence During High School



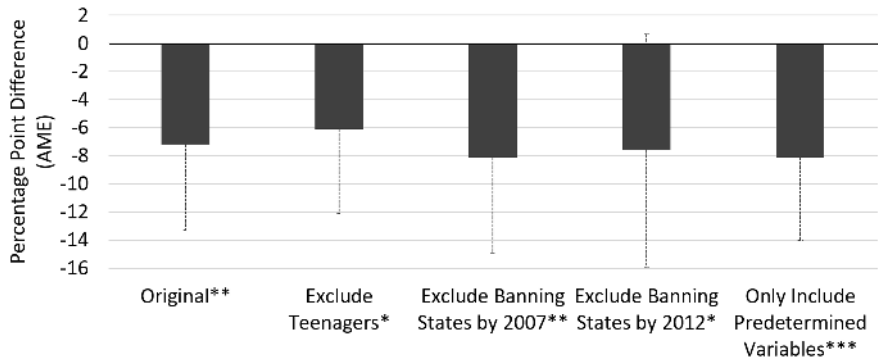
Data Sources: RAND American Life Panel (MS 284 & MS 432) and Urban and Schmeiser (2015)

Results Are Robust to ZIP Regressions



Data Sources: NFCS 2012 and Urban and Schmeiser (2015)

Results Are Robust to Age and Payday Lending Policy Restrictions



Data Sources: NFCS 2012 and Urban and Schmeiser (2015). Results for payday borrowing are shown.

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