Tax Credits for Student Loan Repayment in Maine

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This presentation represents the views of the author only and not necessarily the views of Maine Revenue Services or the state of Maine.
Current Law: Credit for Educational Opportunity

- 100% credit for loan repayments
  - Accelerated payments are ineligible for credit, other restrictions

- Annual credit caps by degree: In 2016, $840 if loan for Associates Degree, $4,476 for Bachelor’s degree, and $3,900 for graduate degree
  - Limits stack: Total possible credit with BA and graduate debt is $8,376

- Credit prorated by fraction of coursework completed after 2007

- Credit refundable for STEM degrees starting TY 2013 and all Associates degrees starting TY 2016.

- Extended carry-forward period for unused credits

- Eligibility
  - 2008-15 graduates: Undergraduate degree from Maine college
  - 2016 major expansion: Extended to all undergraduate degrees and Maine graduate degrees earned 2016 and later
  - Restrictions on out-of-state credit transfers were eased for students transferring after 2012 and eliminated in tax year 2016
Credit for Educational Opportunity History

Opportunity Maine Credits Claimed
(Thousands of Dollars)

Credit Claimed = Amount the credit reduces tax liability in the current tax year

Note: 1) The tax year 2016 extension deadline has not yet arrived; 2) Amended returns and processing delays are common, so the tax year 2016 final credits will rise relative to earlier years.
Credit for Educational Opportunity History

Number of Opportunity Maine Credits

- 2009: 0
- 2010: 1,000
- 2011: 2,000
- 2012: 3,000
- 2013: 4,000
- 2014: 5,000
- 2015: 6,000
- 2016: 7,000

The number of Opportunity Maine Credits has been increasing steadily from 2009 to 2016.
2017 Proposal

• Nonrefundable credit of 100% of loan repayments up to a cap that depends on highest degree (dropout/AA/BA/Graduate)

• Eligibility
  – Degree earned or separation occurs after 2007, but credit is not prorated for post-2007 coursework like current credit
  – Loan for taxpayer’s own education; parent loans excluded

• Requests for a wide range of credit caps, including high limits ($7,000+)

• Compared to current program
  – Expands eligibility to non-Maine undergraduate degrees and Maine graduate degrees earned 2008-15 and non-Maine graduate degrees earned 2008 to present
  – Reduces credit for many currently eligible, largely due to making all credits nonrefundable and ending carryforwards, also through lower annual credit cap for most
Important Considerations for Fiscal Note

- Credit not refundable
  - In tax year 2016, the refundable STEM credit cost would have been 34% lower if nonrefundable.

- Credit caps—When do these caps bind?
  - Upper tail of repayment distribution is important

- Degree-date eligibility restriction: In 2017, what fraction of borrowers in repayment earned their degree after 2007?

- Parent Loans
Relevant Stylized Facts About Loan Repayment

Stylized Fact #1: Income and loan balance positively correlated

Stylized Fact #2: Repayment and balance distribution high variance and skewed

Stylized Fact #3: Delays entering repayment and repayment pauses are common; repayment rates have slowed over time

Must account for these facts in fiscal note.
Stylized Fact #1: Income and loan balance positively correlated

Figure 11: The Relationship between Student Debt and Student Earnings

The right panel shows mean earnings two years after entering repayment by repayment balance. From: Adam Looney and Constantine Yannelis, “A Crisis in Student Loans?” (Fall 2015), Brookings Institution, Washington, D.C.
Stylized Fact #2: Repayment Distribution

• In 2015 Q2, borrowers 20-30 years old in repayment:
  – Average payment = $351
  – Median payment = $203
  – 75th percentile payment = $400

Statistics from:
Stylized Fact #2: Significant variation in loan balances

The CFPB Office of Research, "CFPB Data Point: Student Loan Repayment," August 2017
Stylized Fact #2: Significant variation in loan balances

- Cumulative debt accumulated at the University of Maine at separation, July 2013 – June 2015 separations
  - 25th Percentile: $6,800
  - Median: $17,236
  - 75th Percentile: $27,000
  - Median for graduate: $26,150
  - Median for non-completer: $9,500

Source: College Scorecard
Stylized Fact #3: Repayment Delays and Pauses Common

- Baccalaureate and Beyond Longitudinal Study
  - 2008 Baccalaureate Recipients with Debt
    - 60% in repayment in 2009
    - 69% with no subsequent enrollment in repayment in 2012
    - 64% overall in repayment in 2012

Source:
2012: NCES PowerStats, Baccalaureate and Beyond Longitudinal Study
Stylized Fact #3: Repayment Rate Has Slowed

From: Adam Looney and Constantine Yannelis, “A Crisis in Student Loans?” (Fall 2015), Brookings Institution, Washington, D.C.
These figures show the fraction of the initial federal loan balance remaining (y-axis) by number of years since entered repayment (x-axis) by repayment cohort that is defined by year entering repayment.
2017 Reform Fiscal Note Estimate

• For each Maine income tax return, would like to know:
  – Is the taxpayer making student loan repayments?
  – How much is the annual loan repayment?
  – Is the loan repayment for the taxpayer’s own education?
  – What is the taxpayer’s highest degree?
  – When did the taxpayer earn their highest degree?

• Only have data on first question: Is the taxpayer making student loan repayments?
Determining Whether the Taxpayer is Repaying a Student Loan

- Match Maine 1040 to Federal Form 1098-E and Federal Form 1040s with student loan interest deduction
- About 90,000 full-year resident returns with 1098-E and/or above-the-line interest deduction
  - NY Fed Consumer Credit Panel: 191,000 with student loan balance on credit report and Maine mailing address in 2012 Q4
- A few complications/puzzles
  - 1098-E interest but no student loan deduction when income<phaseout threshold for deduction
    - About 27,000 returns with a 1098-E only, no student loan interest deduction
      - Over 60% appear eligible for deduction
      - Most common at low incomes
      - Assume low credit take-up rate for these returns
  - Student loan interest deduction on 1040 but no 1098-E
    - About 20% of returns with a student loan interest deduction are not matched to 1098-E
    - Interest could be below reporting requirement threshold but there’s more going on
    - Raises concern about missing taxpayers in repayment with AGI above cutoff for claiming student loan interest deduction
Impute Remaining Data Based on 2013 Survey of Consumer Finances

• 6,026 families interviewed in 2013 SCF
• Microdata includes
  – Age of respondent and spouse
  – Highest education of respondent and spouse
  – Presence of respondent’s children both at home and away from home
  – Information on up to 6 student loans, including:
    » Whether in repayment and amount of repayment
    » Origination date
• Does not include
  – Whose education the loan is for
  – Date of highest degree
    » If loans consolidated or refinanced, loan origination date could be an especially misleading indicator of degree year
Imputations

• Based on SCF data, estimate:
  1) Probability eligible | repayment, income category
  2) Probability Highest Degree=X | eligible, income category
  3) 25, 50, 75, 90, and 95th percentiles of annual repayment for each highest degree and income category
    1) Use to construct discrete repayment distribution \((P_1, P_2, \ldots, P_N)\) with associated probabilities \((\Pi_1, \Pi_2, \ldots, \Pi_N)\)

• Imputations on tax data based on above probabilities and repayment distribution
  – Also compute an expected credit for each taxpayer based on above

• Given data limitations, some questionable assumptions required to assign eligibility in the SCF data
Issues with this approach

• National data used for state imputations
• Small sample size divided into smaller subpopulations
  – When possible look for external validation, at least for whether the parameters are in a reasonable ballpark:
    » Are median and mean repayment amounts reasonable compared to other published data?
    » Is the fraction in repayment with degree earned within 9 years reasonable given other information on time to reentering repayment and fraction in repayment by time since entering repayment?
    » Is the share of taxpayers in repayment who are parents reasonable given PLUS borrower share?
  – Smoothed/adjusted some amounts in the repayment distribution by degree*income
• Forecasting
  – Analysis based on 2014 tax data; policy changes begin TY 2017 (bill carried over, effective date will change)
Issues with this approach: Participation

• Incomplete take-up of current Opportunity Maine credit is likely important
  – About 10,000 in in the median debt completers cohort for degrees awarded July 2013 – June 2015 from Maine colleges, excluding highly selective liberal arts colleges (College Scorecard)
  – Compare to about 7,200 credits in tax year 2016, the 9th year of the program
  – Even if you disregard the first few graduate cohorts (complicated story) and 2016 graduates and allow for high shares who are not in repayment or moved out-of-state, it’s hard to arrive at a credit number this low
  – Do not have a reliable take-up rate estimate

• Proposed credit is simpler, could have higher take-up rate?
Results

• Start with about 90,000 full-year resident tax returns with student loan repayments

• Original Bill: Must have degree, limits $1,000/$2,000/$3,000 for highest degree AA/BA/Graduate
  – Full participation: About $47 million and 30,000 credits
  – Reduced to $40 million and 25,000 credits for take up

• Alternative #1: No degree requirement, limits $2,500/$5,000/$7,500 for AA or less/BA/Graduate
  – Full participation: About $71 million; 41,000 credits
  – Reduced to $60 million and 34,000 credits for take up
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<tr>
<th>Source</th>
<th>Description</th>
<th>Availability</th>
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<tr>
<td><em>Trends in Student Aid</em>, College Board</td>
<td>Statistics on borrowing and debt, including for graduate programs, largely based on NPSAS.</td>
<td><a href="https://trends.collegeboard.org/student-aid">https://trends.collegeboard.org/student-aid</a></td>
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<td>FRBNY Consumer Credit Panel</td>
<td>A few state-level tables with per capita student debt and number with debt (the latter table ends in 2012).</td>
<td><a href="https://www.newyorkfed.org/microeconomics.databank.html">https://www.newyorkfed.org/microeconomics.databank.html</a></td>
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<td>Department of Education:</td>
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<td>Baccalaureate and Beyond Longitudinal Study (B&amp;B:08/12)</td>
<td>Longitudinal survey following baccalaureate recipients one year, four years, and ten years after degree. Has information about undergraduate borrowing, subsequent borrowing, and repayment status.</td>
<td>NCES Datalab for custom tables. The microdata is confidential. Also several brief papers that can be found from the survey homepage: <a href="https://nces.ed.gov/surveys/b&amp;b/">https://nces.ed.gov/surveys/b&amp;b/</a></td>
</tr>
<tr>
<td>National Postsecondary Students Aid Study (NPSAS)</td>
<td>Survey with detailed financial aid information and student characteristics; covers both graduate students and undergraduate students.</td>
<td><a href="https://nces.ed.gov/surveys/npsas/">https://nces.ed.gov/surveys/npsas/</a></td>
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<td>NCES Datalab</td>
<td>Tool for creating custom tables from NCES survey data, including NPSAS and B&amp;B. The microdata is confidential. Products include QuickStats, PowerStats, and TrendStats.</td>
<td><a href="https://nces.ed.gov/datalab/">https://nces.ed.gov/datalab/</a></td>
</tr>
<tr>
<td>College Scorecard</td>
<td>Institutional data on distribution of cumulative debt at separation, median debt for completers and noncompleters, repayment rates, number who separate with debt (total and completer only).</td>
<td><a href="https://collegescorecard.ed.gov/data/">https://collegescorecard.ed.gov/data/</a></td>
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