



THE OHIO STATE UNIVERSITY

Reverse Mortgage Research Highlights

The Market for Reverse Mortgages

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How Recent Policy Changes Affected Originations and Performance

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*These views do not necessarily reflect those of the Philadelphia Fed or the Federal Reserve System



"The Market for Reverse Mortgages among Older Americans"

Christopher Mayer and Stephanie Moulton

Wharton Pension Research Council Working Papers (2020); 693.

https://repository.upenn.edu/prc_papers/693

How do older adults borrow from home equity in retirement? What types of mortgage products do they use?

What proportion of older adults using forward mortgage products could have borrowed from a reverse mortgage?

What proportion of older adults who applied for but were denied forward mortgages could have borrowed from a reverse mortgage?



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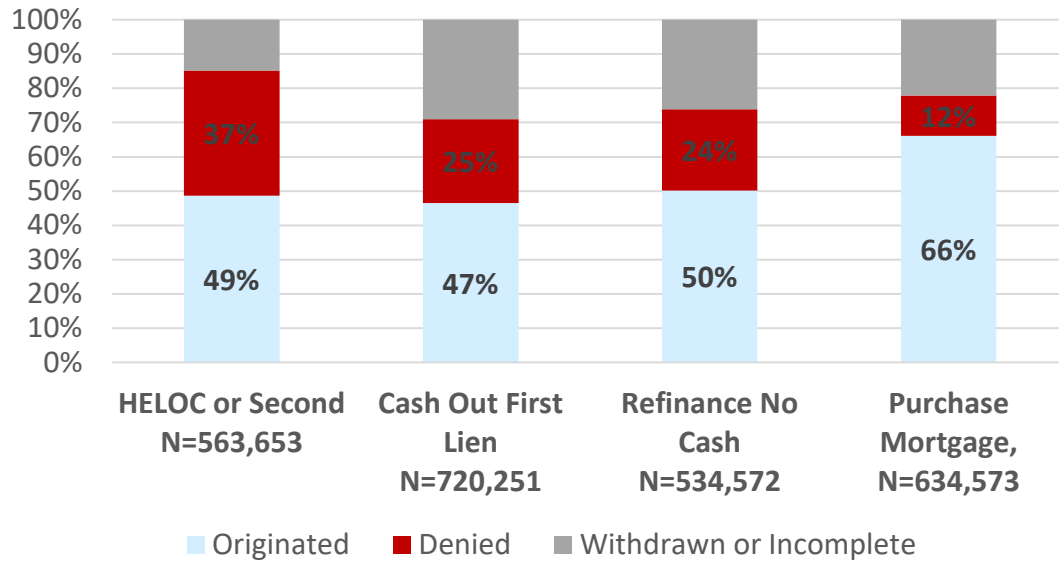
What proportion of older adults using forward mortgage products could have borrowed from a reverse mortgage?

What proportion of older adults who applied for but were denied forward mortgages could have borrowed from a reverse mortgage?

- We inform these questions using details on mortgage applicants age 62 and older in the 2018 Home Mortgage Disclosure Act (HMDA) data
- Includes expanded data such as the type of mortgage, age of borrowers, interest rate and costs for each loan, and reverse mortgages



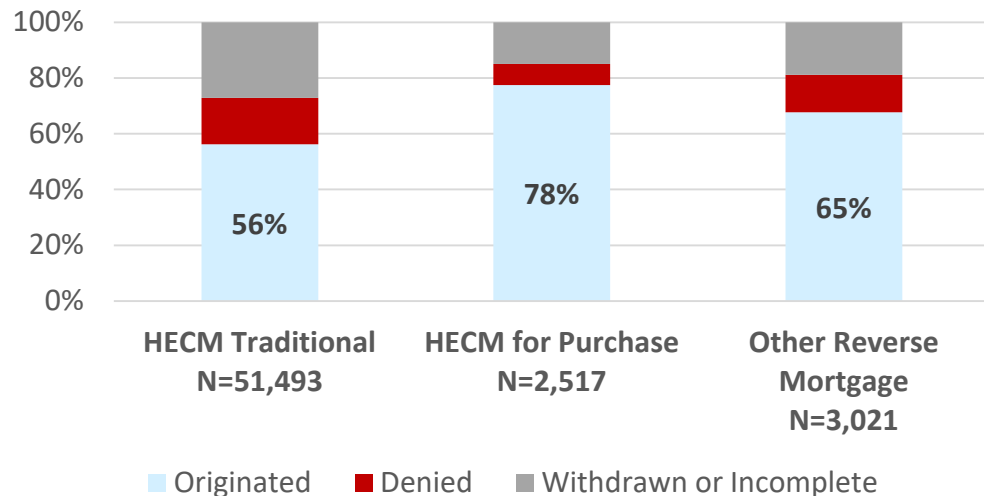
Forward Mortgage Application Status, Age 62+



2018 Mortgage Applications

Age 62+
N = 2,510,080

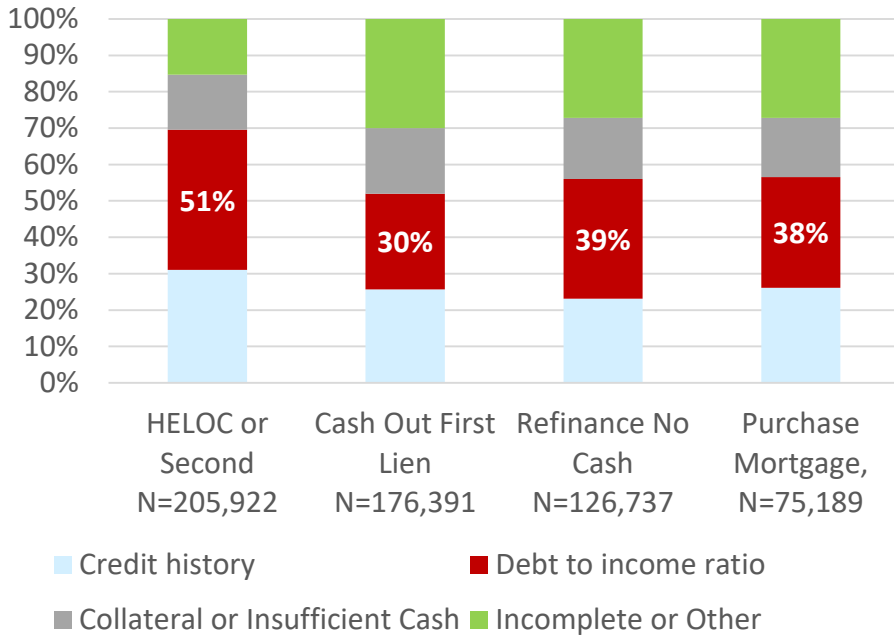
Reverse Mortgage Application Status, Age 62+



Source: Author's calculations from 2018 HMDA data, excluding purchased loans. Sample is restricted to loans for single family, owner-occupied properties where the applicant or co-applicant is age 62 or older, excluding investment properties and second homes.



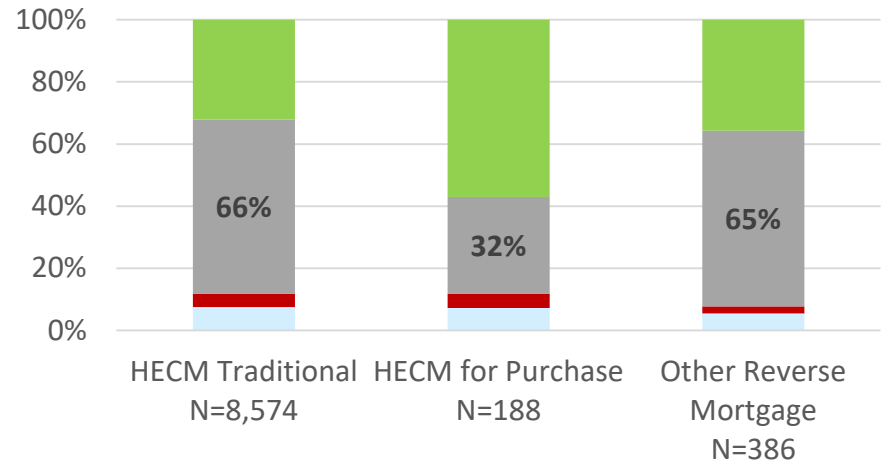
Forward Mortgage Reason for Denial, Age 62+



2018 Denied Applications

Age 62+
N = 593,387

Reverse Mortgage Reason for Denial, Age 62+

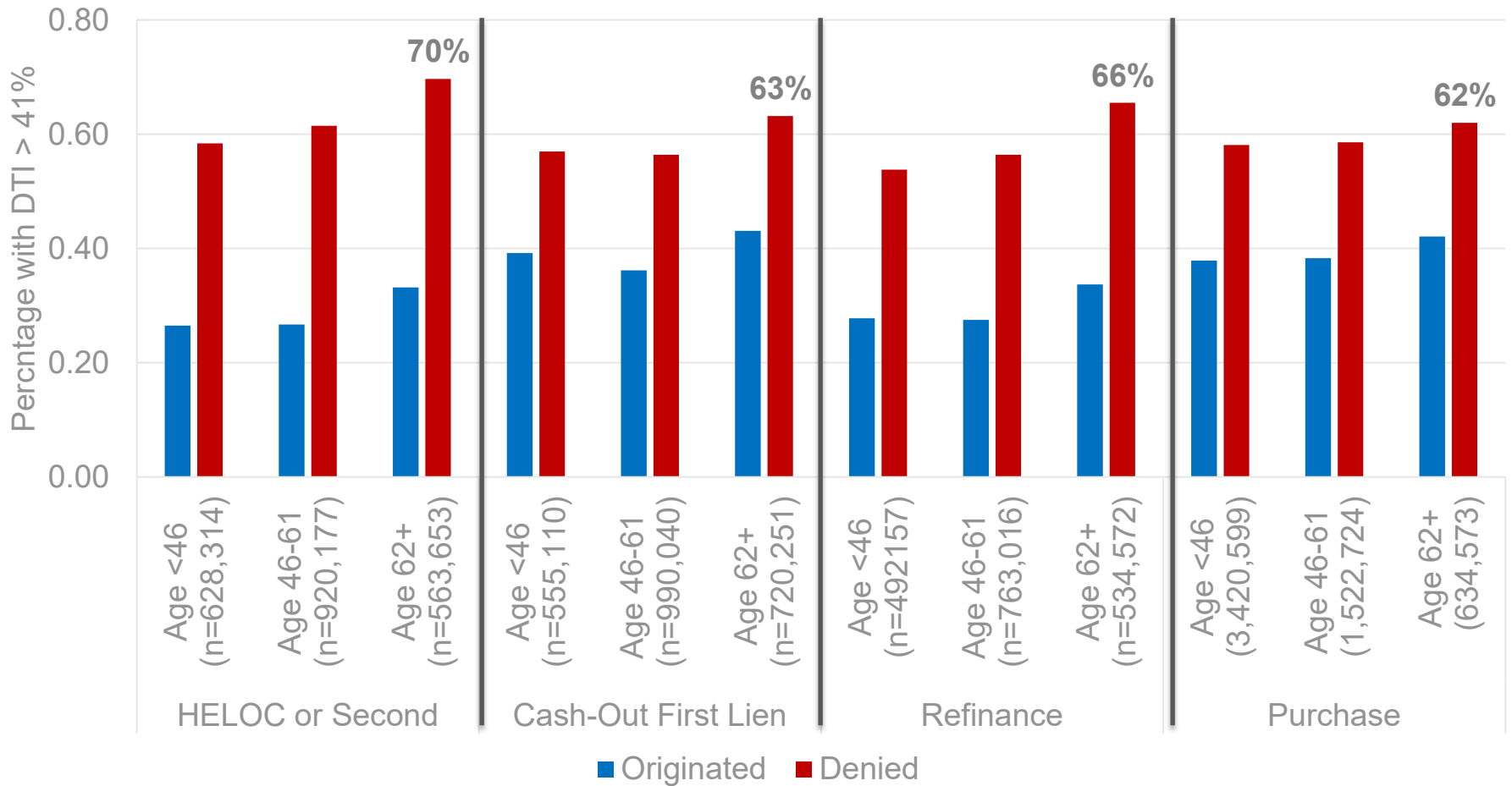


Source: Author's calculations from 2018 HMDA data, excluding purchased loans. Sample is restricted to loans for single family, owner-occupied properties where the applicant or co-applicant is age 62 or older, excluding investment properties and second homes.

- Incomplete or Other
- Collateral or Insufficient Cash
- Debt to income ratio
- Credit history



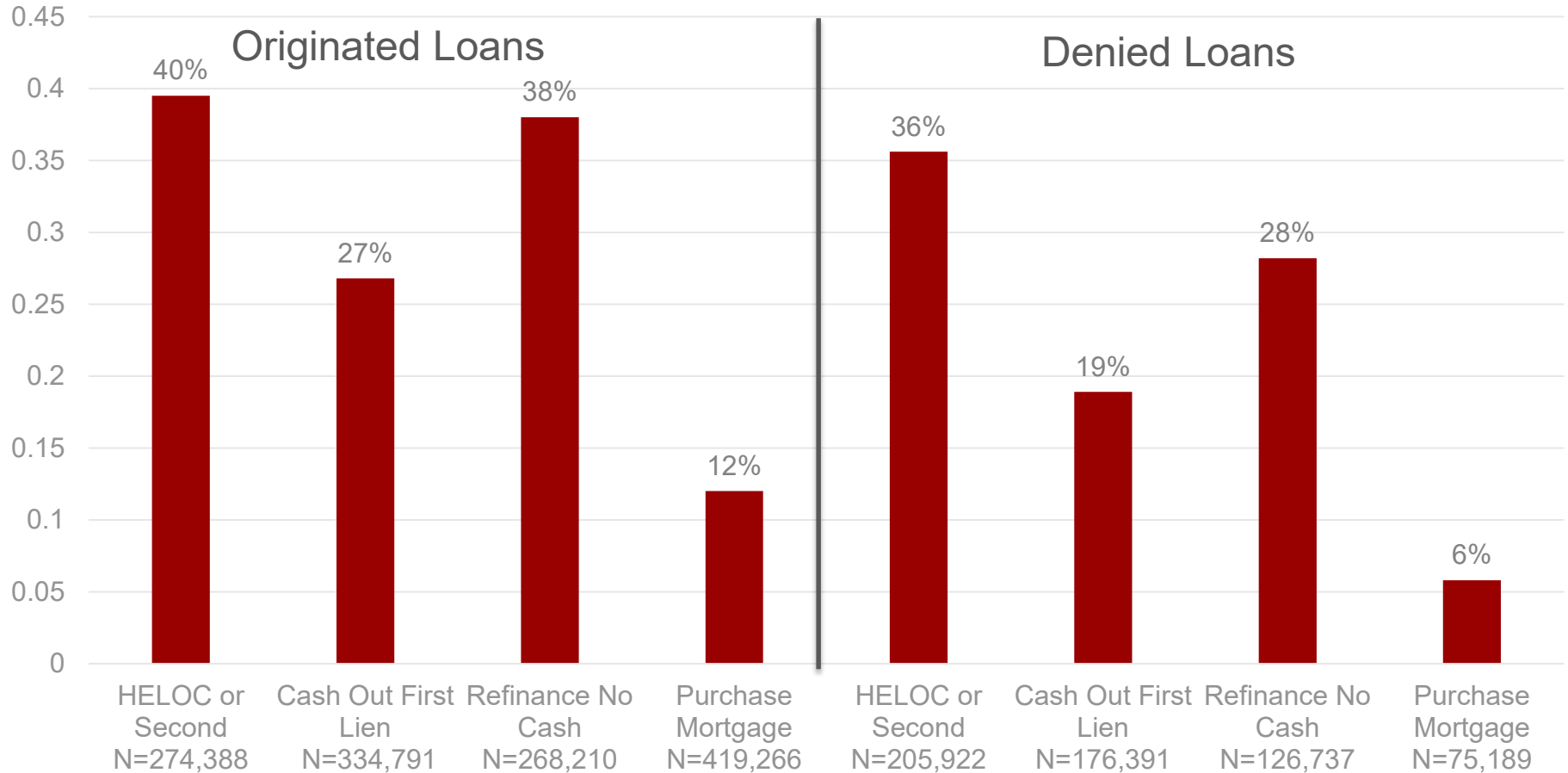
2018 HMDA Applications, Debt to Income Ratio is Greater Than 41%



Source: Author's calculations from 2018 HMDA data, excluding purchased loans. Sample is restricted to loans for single family, owner-occupied properties, excluding investment properties and second homes.



Simulated % with Sufficient Home Equity to Obtain HECM 3% Interest Rate, No Origination Fee



Source: Author's calculations from 2018 HMDA data, excluding purchased loans. Sample is restricted to loans for single family, owner-occupied properties, excluding investment properties and second homes.



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Key Takeaways:

- High debt burdens are a substantial barrier to borrowing from home equity for older adults— more so than credit quality
 - 70% of denied HELOC applicants age 62+ were denied in part due to their debt to income ratio
- While reverse mortgages can “solve” for the monthly debt burden, homeowners must have sufficient home equity to qualify
 - More than two-thirds of those denied forward mortgages have LTVs that are too high to allow them to obtain a HECM and fully payoff their forward mortgage debt



"Reverse Mortgage Retrospective: How Recent Policy Changes Affected Government-Insured Reverse Mortgage Originations and Performance"

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What is the relationship between the policy reforms enacted between 2013 and 2015 and HECM loan outcomes?

Policy Reforms:

- (1) Initial Draw Restrictions
- (2) Financial Assessment

Outcomes:

- (1) Timing and Amount of Draws
- (2) Payment of Property Taxes and Insurance
 - Unscheduled draws from the line of credit
 - Corporate advances (default)
- (3) Available Home Equity



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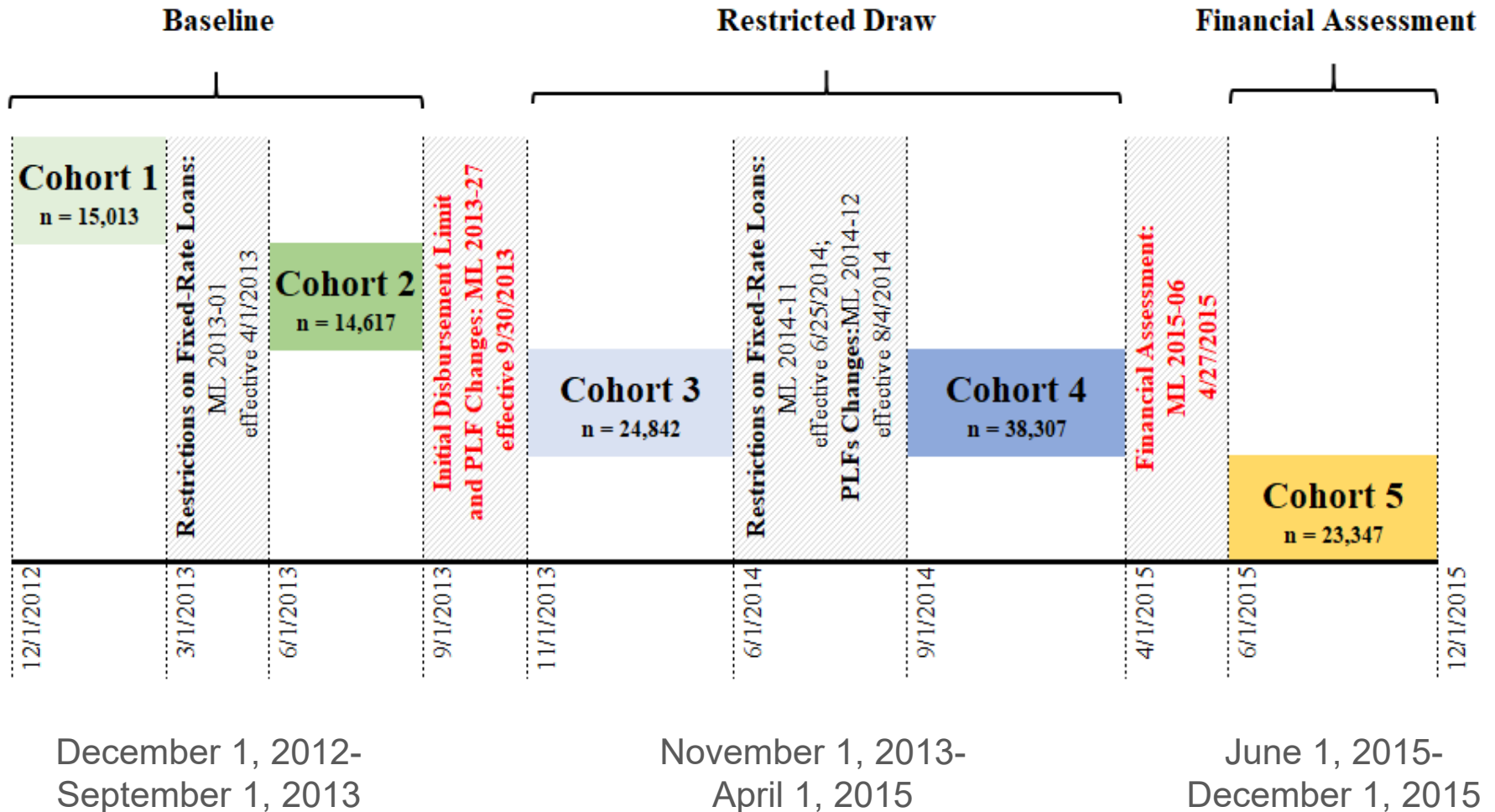
What is the relationship between the policy reforms enacted between 2013 and 2015 and HECM loan outcomes?

Data:

- Our primary data are from HUD, including all HECM originations endorsed by HUD through December 2018.
- Data include static loan and borrower characteristics at the time of origination, as well as dynamic transaction data on all withdrawals, charges, and payments through May 2019.
- Restrict analysis to originated HECM loans with case numbers assigned between December 1, 2012, and November 30, 2015. We follow each loan's performance for 36 months after origination, collapsing transaction-level data into monthly account summaries.



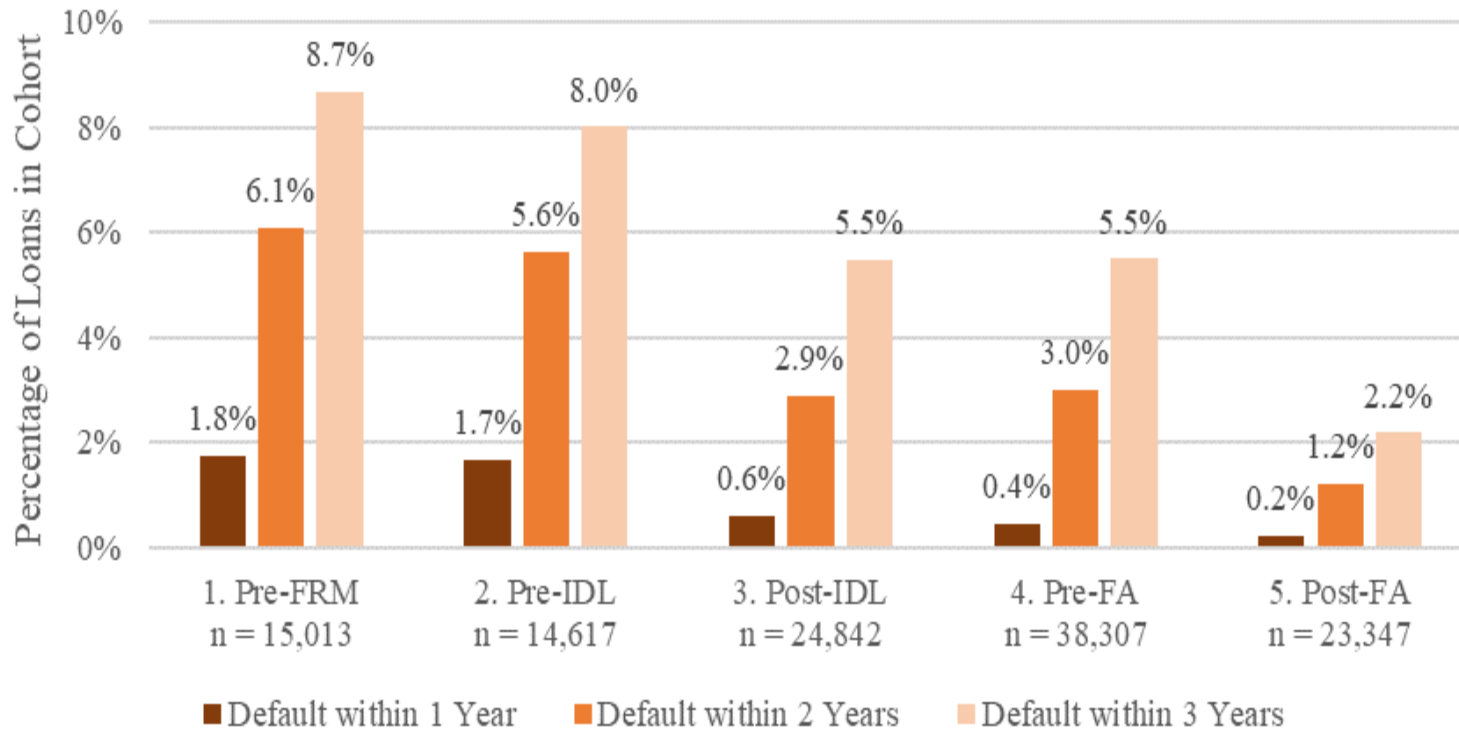
HECM Policy Cohorts by Case Number Assignment Date





Cumulative Incidence of Tax and Insurance Default in Initial 3 Years of Loan

a. Cumulative T&I Default Rates



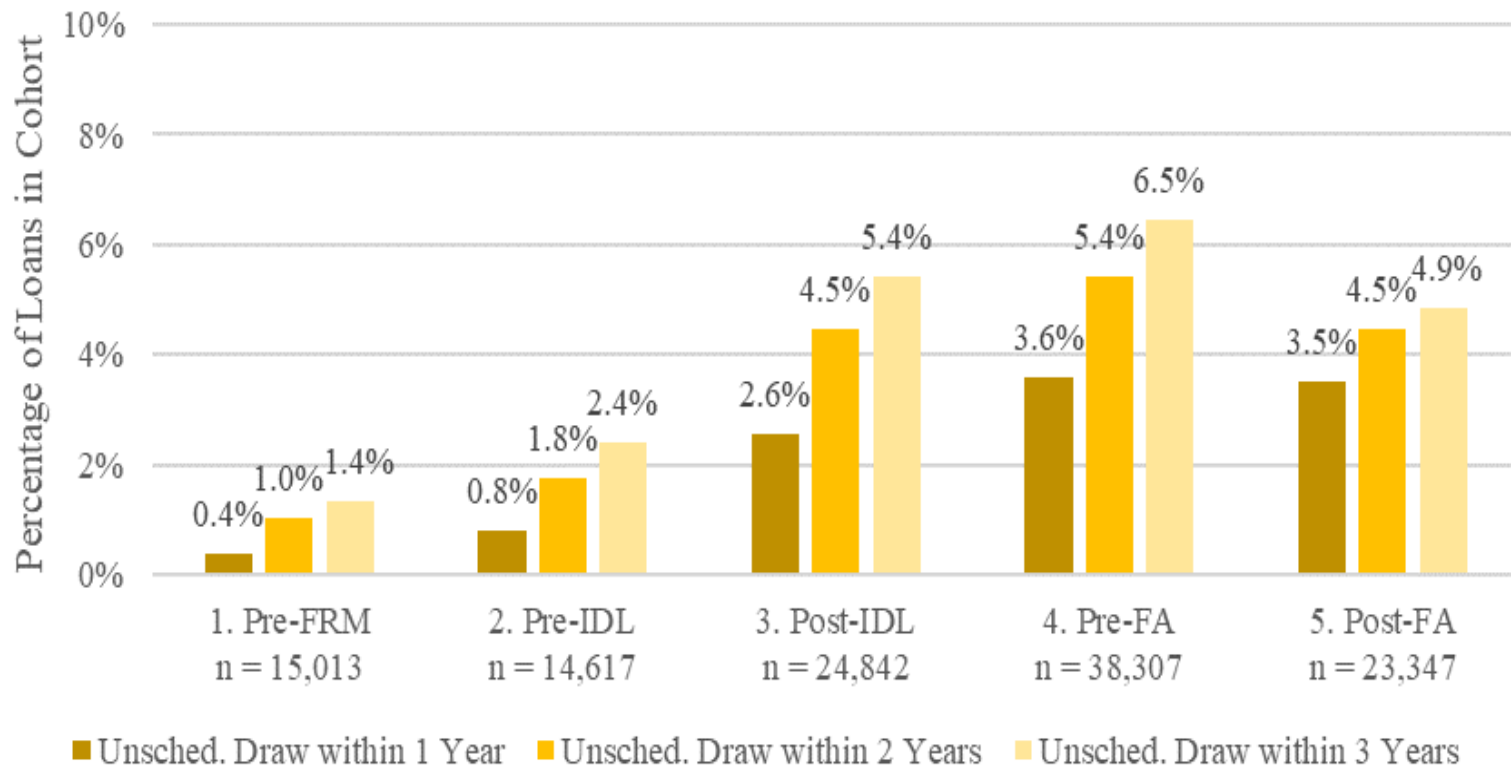
Note: *T&I Default* is defined as being \$1,000 or more past due on property taxes or homeowner's insurance payments.

Source: Authors' tabulations of data from the U.S. Department of Housing and Urban Development



Cumulative Incidence of Unscheduled Draws for T&I in Initial 3 Years of Loan

b. Cumulative Unscheduled T&I Draws

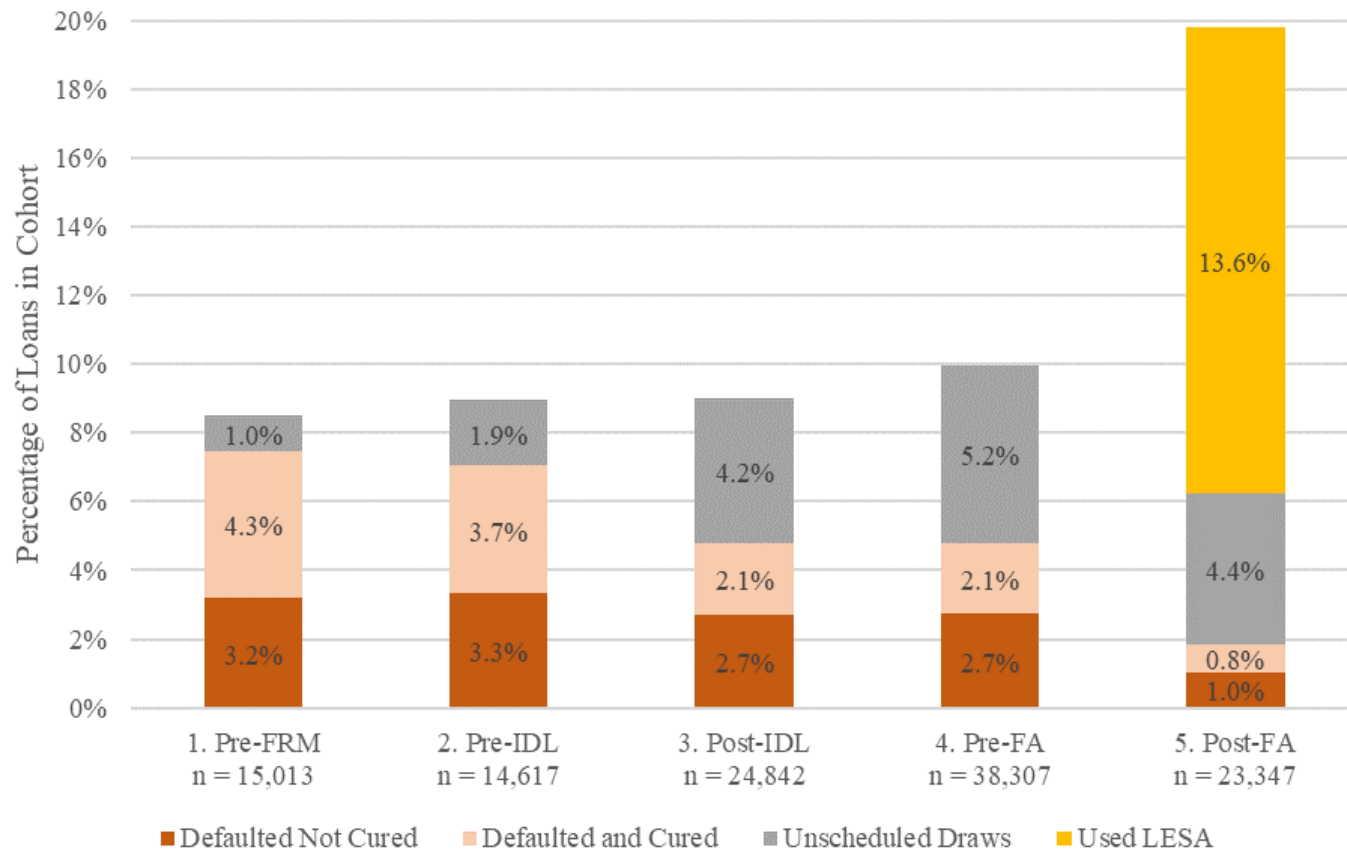


Note: *Unscheduled T&I Draw* is defined as the mortgage servicer making a draw of \$1,000 or more from the borrower's lien of credit to pay property taxes or homeowner's insurance.

Source: Authors' tabulations of data from the U.S. Department of Housing and Urban Development



How Borrowers Paid Their Taxes and Insurance in Loan's Initial Three Years



Note: Loans are classified in a waterfall. If a loan defaulted in the initial 36 months of the loan, it is classified in one of the default groups, regardless of whether the borrower previously used a LESA or had an unscheduled draw. Defaulted loans are classified as having cured if the cure occurred within the initial 36 months. If a loan went into default for taxes and insurance two or more years after being marked as due and payable by the lender for some other reason, it is classified in the residual (“other”) status (not displayed in figure).

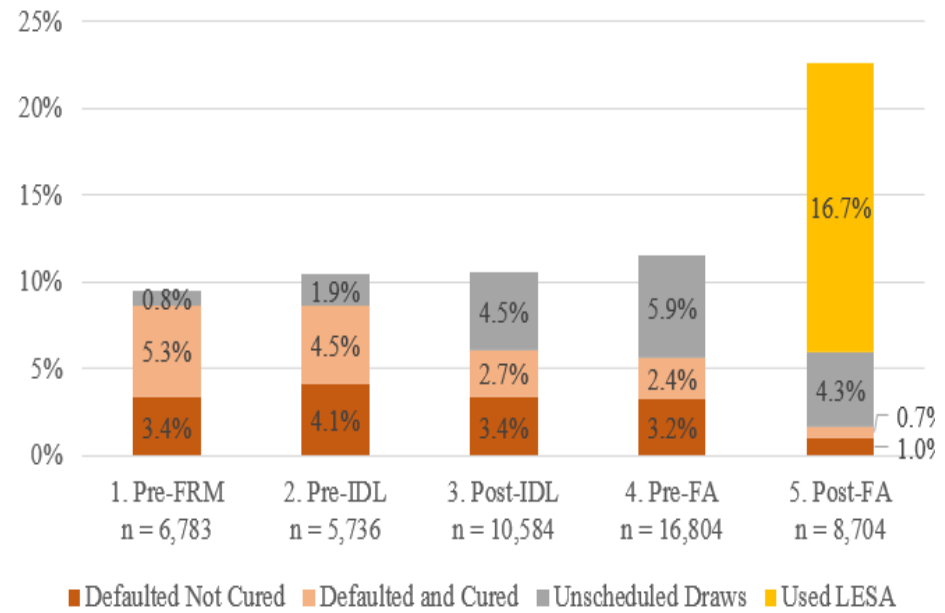
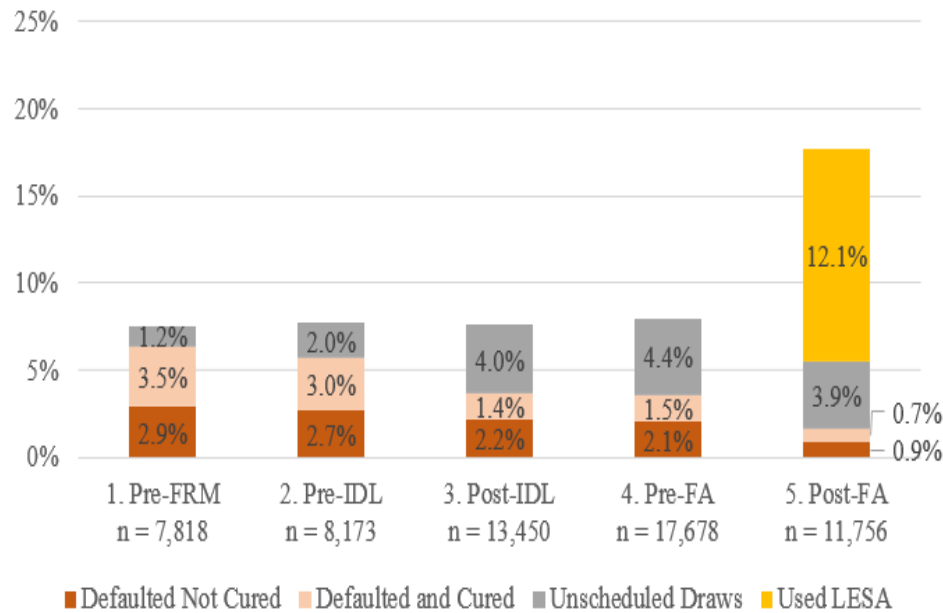
Source: Authors’ tabulations of data from the U.S. Department of Housing and Urban Development



How Borrowers Paid Their Taxes and Insurance in Loan's Initial Three Years, by Paid off Forward Mortgage Debt with HECM

a. New HECM, No Mortgage Debt

b. New HECM, Paid off Mortgage Debt

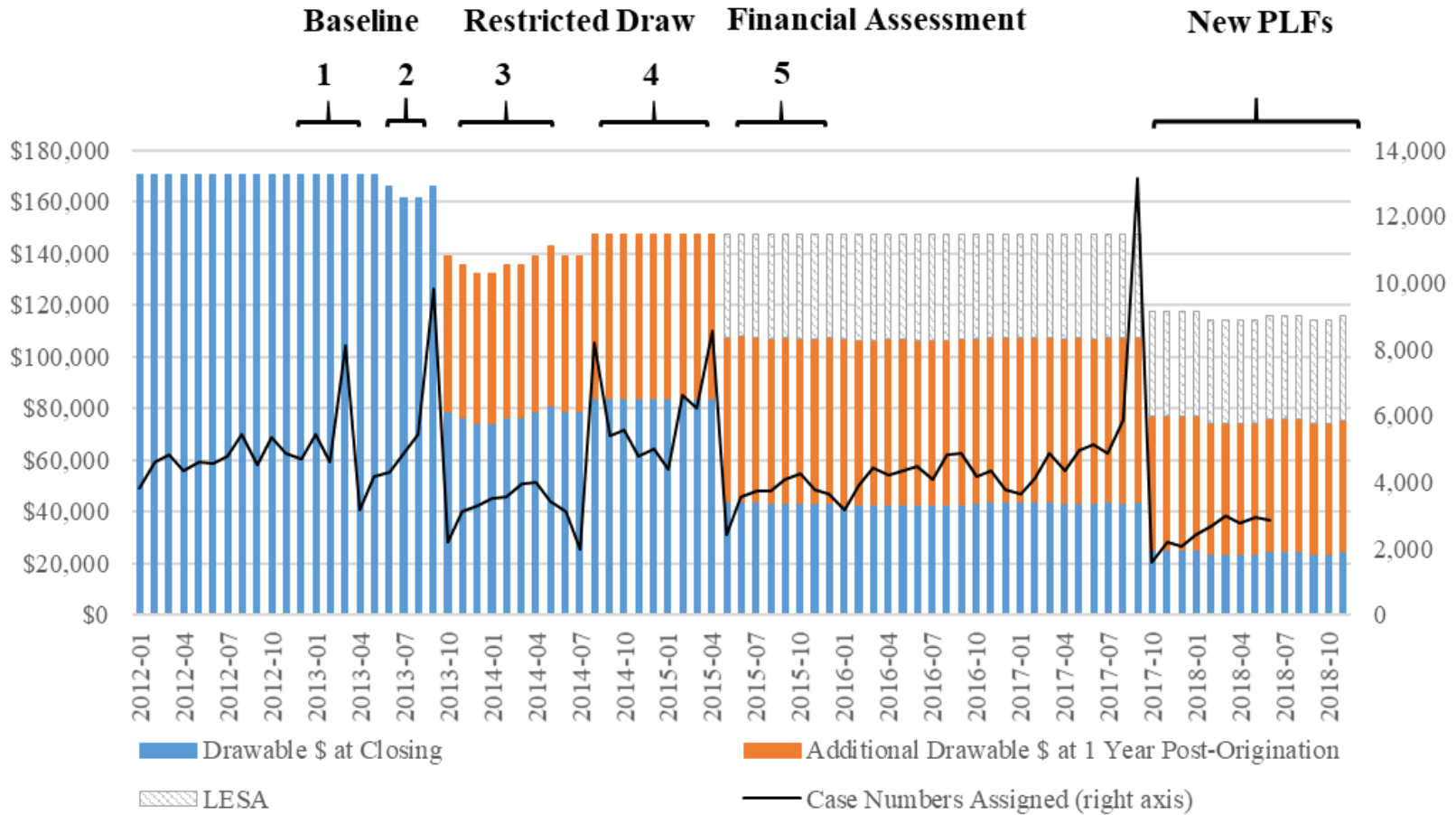


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Stylized Example of Available Home Equity and Estimated LESA Under Different Program Rules (\$270,000 Appraised Value, Age=72)



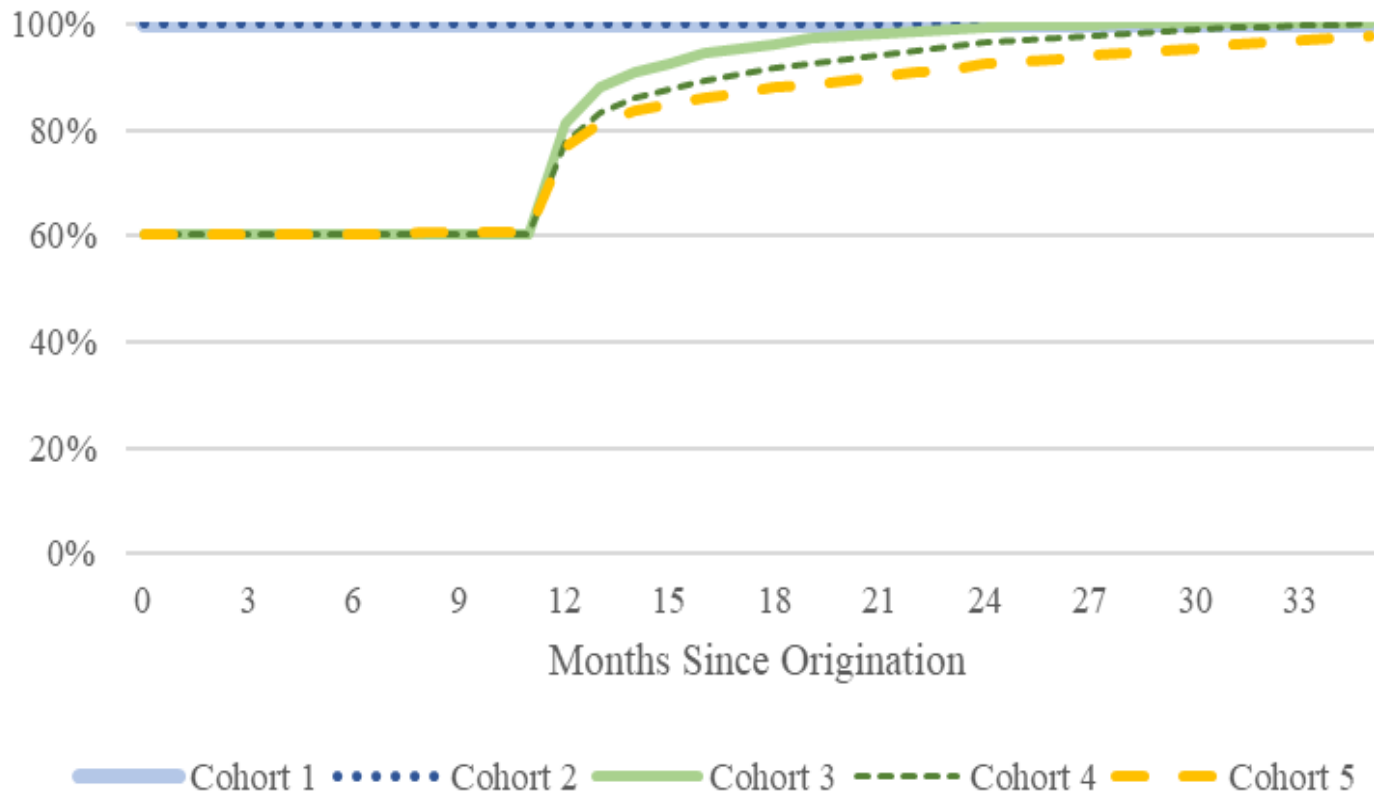
Note: The example assumes appraised value = \$270,000, age = 72, closing costs = \$6,700, up-front mortgage and insurance premium = 2% of appraised value. Interest rate set to median effective rate for fixed-rate mortgages until March 2013 and then to median expected rate for adjustable-rate mortgages thereafter. PLF = principal limit factor.

Source: Authors' tabulations of data from the U.S. Department of Housing and Urban Development



Actual Utilization and LTVs of HECM Borrowers over Time

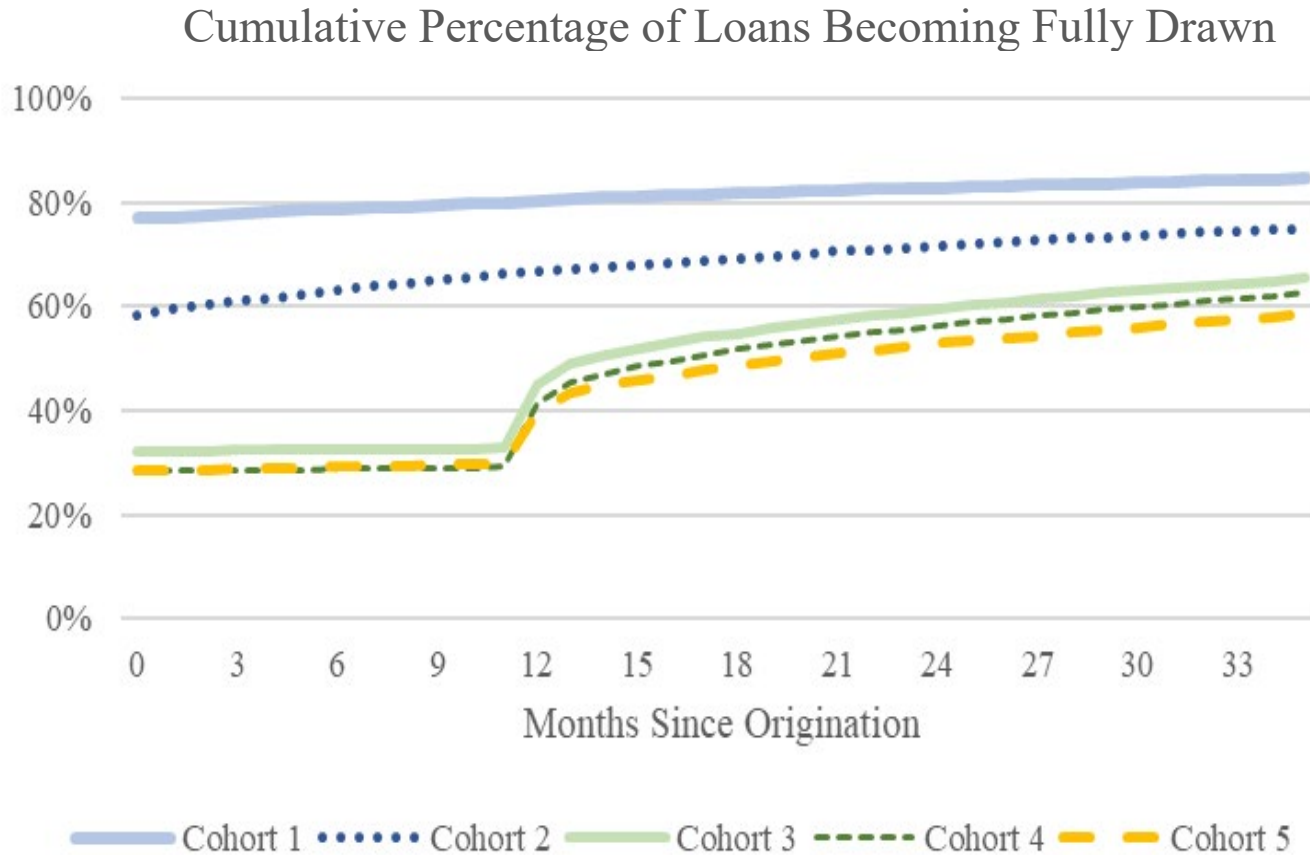
Median Utilization of Available Line of Credit by Cohort



Source: Authors' tabulations of data from the U.S. Department of Housing and Urban Development



Actual Utilization and LTVs of HECM Borrowers over Time



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Key Takeaways:

- Lower rates of T&I default
 - Borrowers paying off forward mortgage debt at higher risk of T&I default (structurally, have less money remaining on LOC for unscheduled draws)
- Higher rates of unscheduled draws for T&I
 - Need to make sure that these unscheduled draws do not flip to default when LOC runs out of money; financial assessment appears to moderate this risk somewhat
- Marked increase in HECM draws after the one-year time limit
 - Are draw limits having intended effect? Reduced draws after one year “sticky” for a subset of borrowers– are these borrowers who are more or less likely to default? LESA helps solve for this