The Benefits of Pre-Purchase Homeownership Counseling

Gabriela Avila
Hoa Nguyen
Peter Zorn

February 20, 2013
Introduction

Motivation:

- First-time home buyer programs are a valuable public policy vehicle for expanding homeownership opportunities
- Requiring that participants receive pre-purchase homeownership counseling may improve the performance of these programs
- Counseling may also reduce the credit risk of alternative outreach programs
- There is no definitive proof of counseling’s efficacy, reducing its use and funding opportunity/success
- Our hope is to definitively demonstrate the value of pre-purchase counseling

Research question:

- Does pre-purchase homeownership counseling reduce delinquency rates?
- We also consider whether counseling is more effective for first-time home buyers, and whether counseling’s effectiveness depends on how it is delivered or the macroeconomic environment in which it is delivered?
We analyze nearly 38,000 purchase money, fixed-rate loans made under Freddie Mac’s affordable lending programs between 2000 and 2008.

- Nearly 60% of the sample are first-time home buyers, 10% of those were non-counseled.

Data include a variety of borrower, property and loan variables:

- FICO score, LTV, DTI, first-time home buyer flag, etc.
- Local house price appreciation and lender/servicer information
- Delinquency history—we analyze 90-day delinquency within the first 3 years
Evidence from the raw data

Comparison of delinquency rates for first-time home buyer and second-time home buyer with different types of counseling and non-counseling

- First-time home buyers seem to especially benefit from classroom counseling.
  - The first-time buyer delinquency rate of 8% is smaller than the 15% rate of repeat buyers

- First-time home buyers generally have higher delinquency rates than repeat borrowers.
  - The delinquency rate of first-time home buyers not receiving counseling was 23%, while the delinquency rate of repeat home buyers not receiving counseling was 20%.
Evidence from the raw data

Counseling seems to be especially effective at reducing delinquency rates during the boom/crisis era (2005-2008).

- The delinquency rate of borrowers not receiving counseling during the boom/crisis era was 23%, while the delinquency rate for borrowers receiving counseling was only 19%.
Difficulties with the data

- Data are not from a true experiment
  - Borrowers receiving counseling have different observable risk characteristics and experience different macroeconomic environments
  - Observable and unobservable differences across borrowers may determine whether or not they receive counseling
  - Lenders may differentially underwrite and service loans

- We account for borrower and macroeconomic heterogeneity
  - Include observable borrower and macroeconomic characteristics in our delinquency model

- We account for selection into counseling
  - Explicitly model the effects of selection into counseling on delinquency
  - Account for unobservable factors affecting selection into counseling

- We account for differences in lender/servicer behaviors
  - Include lender/servicer fixed effects captured from additional data
Our conceptual approach

- Replicate design of true experiment
  - Estimate model to determine effects of observable and unobservable characteristics on delinquency rates
  - Use estimated model to predict delinquency rates for a fixed set of borrowers as a “control” group
  - Compute predicted delinquency rates for the same fixed set of borrowers under a “treatment” regime

- Experiments (treatments regimes)
  - Receiving counseling
  - Counseling for first-time versus repeat home buyers
  - Delivery of counseling through classroom, individual, home study and “other” (primarily telephone)
Results from our analysis

- Pre-purchase counseling provides a significant reduction in delinquency rates
  - Delinquency rates of borrowers receiving counseling are 15% lower than those not receiving counseling

- The effect is mostly due to the significant impact of pre-purchase counseling on first-time home buyers
  - First-time buyers’ delinquency rates are reduced 29% from receiving counseling.
  - Repeat buyers receive no economically or statistically significant impact from receiving pre-purchase counseling

- A 29% reduction in delinquency rates reduces default costs to lenders by about $1,000.
  - Counseling may also increase prepayment rates, which could reduce some of these cost savings to lenders
First-time home buyers benefit from classroom, home study and telephone counseling, however we do not find any statistically significant impact from receiving individual counseling.

First-time home buyers receive a statistically significant benefit from counseling during the boom/crisis period (2005-2008).
Summary and policy implications

- **Summary of empirical results**
  - Counseling reduces first-time home buyers delinquency rates by 29%
  - This results in about a $1,000 savings in expected default costs
  - Classroom, home study and telephone counseling are all effective
  - Counseling provides significant benefit in periods of macroeconomic stress

- **Policy implications**
  - Pre-purchase counseling provides an effective vehicle for reducing the credit risk of first-time buyer homeownership programs
  - The cost savings from counseling appear large enough to pay for its delivery