

# The Take Up and Outcomes of Foreclosure Counseling for Troubled Mortgage Borrowers

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# Mortgage Default, Modifications and Consumer Decision Making

- At least 5 million households at risk of losing home to foreclosure
- Borrowers and lenders face significant costs from foreclosure
- But, workouts are also costly for lenders/servicers to pursue
  - Policy Response: Making Home Affordable Program (MHA)
- Some portion (perhaps a majority) of borrowers fail to make reciprocal contact with lender/servicer
  - Policy Response: National Foreclosure Mitigation Counseling (NFMC) Program

# What is the Role of Counseling in Decisions?

- Renegotiating mortgage contract is complex
- Information: Borrowers fail to understand terms of mortgage contract or options
  - Lack of information about alternatives including public and private programs
- Trust: Borrowers do not trust lender/servicer
- Cognition: Borrowers limited in ability to develop financial plan for debt service
  - Emotional distress as a possible barrier to information processing
  - Consumer needs advice or decision-making support to take next step

# What Does Foreclosure Counseling Entail?

Counseling programs generally focus on a few key tasks:

- 1 Diagnosing why the borrower is struggling to make mortgage payments,
- 2 Reviewing all income and expenditures in order to reduce budgeted spending items and identify income available for debt repayment,
- 3 Prioritizing the order of payment of non-mortgage debts,
- 4 Maximizing potential income through public programs and benefits, and
- 5 Developing a strategy for mortgage loan repayment, which may include seeking a loan modification or selling the home.

# Research Questions

- 1 Who seeks counseling? Are there neighborhood/social effects?
- 2 Are borrowers with lower financial capacity more likely to seek counseling?
- 3 Is there a relationship between receiving a loan modification and counseling?
- 4 Does counseling result in more generous loan modifications?
- 5 Does counseling result in fewer foreclosure filings, more prepayments or fewer homes lost to foreclosure?

# Past Literature

- Collins and O Rourke(2011) review found about a dozen studies - 1970s to present
  - No conclusive results; no RCTs
- Mayer, Tatian, Tempkin, and Calhoun (2011) analyze the federally funded NFMC program
  - Counseled clients 1.6 times more likely to cure a foreclosure than a non-counseled pool of borrowers
  - Counseled clients who received a loan modification negotiated lower monthly mortgage payments

# Identification Strategy

- Decision to seek counseling is voluntary
- Unobservable characteristics such as motivation level that explain repayment and seeking counseling
- Borrowers may face time-varying shocks triggering seeking counseling as well as mortgage outcomes
- Panel data on monthly loan repayment allows fixed effects - unobservables in panel context
- Selection into counseling - ideally use an IV

# Exploring an IV for Counseling

- Approximately 60 foreclosure prevention workshops around the country on various dates in 2008 and 2009
- Each event received considerable local publicity and had variation in number of participating servicers
- Month before during and after the event and number of participating servicers at each event predicts seeking counseling
  - IV Counsel and then estimate REO, Default, Foreclosure Filing - all for modified loans only
    - LATE conditional on modification
  - First Stage f-statistics adequate, but REO and Filings models are overidentified

# Data

- Wells Fargo Bank, N.A. Corporate Trust Services (CTS) database
  - CTS data contain the loan number, the loan servicer, and zip code of mortgaged property, and monthly observations on loan status.
  - Matched to administrative data from foreclosure hotline
  - 5,005 counseled borrowers matched by loan #
  - Random sample of 5,332 unmatched
- Jan 2007 through December 2010 monthly loan performance
  - Counseling occurred in 2008 or 2009
- Also matched to Home Mortgage Disclosure Act application information
  - Allow us to include race, income, gender and verify loan type

# Model

$$Y_{ist} = \alpha + \beta X_{ist} + \delta C_{ist} + \gamma G_{ist} + \tau T_t + \varepsilon_{ist}$$

- $Y$  = Receipt of Mod, REO, Default, Foreclosure Start
- $X$  = Vector of borrower/loan characteristics: FICO, CLTV, current loan balance, ARM indicator, lagged delinquency status, original loan amount, PTI, interest rate
- $G$  = MSA unemployment and house prices; Zip code level
- $C$  = Indicator for period after receipt of counseling or counseling indicator interacted with delinquency status at time of counseling
  - Variations: Adding fixed effects, servicer effects, neighborhood
  - Primarily LPM; Also explore Multinomial Logit (foreclosure and prepayment)

# Descriptive Means Final Period

	No Counsel	Counsel
Payment is past due	0.164	0.470
Foreclosure Filing Started	0.0549	0.159
Modified Loan	0.104	0.323
Original Balance	262,809	321,007
Interest Rate	6.918	5.168
Adjustable Rate Mortgage (ARM) Indicator	0.661	0.665
Counseled Current	0	0.421
Counseled 90 plus Days Del	0	0.368
Observations	5334	5003

Source: Corporate Trust Services (CTS) December, 2010

# Take Up of Counseling - Cross section and panel

	(1) Counsel b/se	(2) Couns Current b/se	(3) Couns 90 Del b/se	(4) Counsel FE panel b/se
Log Income	0.9495*** (0.010)	0.9379*** (0.016)	1.0709*** (0.019)	
Black	1.0919*** (0.017)	0.9478* (0.023)	1.0269 (0.025)	
Hispanic	1.0669*** (0.014)	0.9299*** (0.018)	1.0826*** (0.020)	
Incomplete Rate Zip	0.9864* (0.007)	1.0351** (0.011)	0.9703** (0.010)	
Months Delinquent				1.0493*** (0.001)
Counseled in Zip (t-1)				0.9993*** (0.000)
Servicer Mod Rate (t-1)				0.7527 (0.159)
Observations	9526	4661	4661	227414

- \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$
- OLS with exponentiated coefficients; Models 1-3 Dec 2010 only. Model 4 (FE) 2008 to 2009
- Controls: FICO, LTV, PTI, MSA unemployment, MSA house prices, gender, loan terms, loan amount, year of loan, zip denial rate

## Counseling and Loan Modifications - Panel Data

	(1)	(2)	(3)
	Post Mod	Post Mod	Post Mod FE
Counsel	1.1150*** (0.001)	1.1009*** (0.002)	
Minority		1.0255*** (0.004)	
Minority x Counsel		1.0230*** (0.002)	
Counseled Current			1.1145*** (0.001)
Counseled 30 Del			1.1670*** (0.003)
Counseled 60 Del			1.1727*** (0.003)
Counseled 90 Del			1.0842*** (0.002)
Observations	457248	457248	496176

- Exponentiated coefficients; Monthly data 2007 to 2010

- Controls: FICO, LTV, PTI, MSA unemployment, MSA house prices, gender, loan terms, loan amount, year

of loan modification



# Counseling and Post Modification Loan Terms

	(1)	(2)	(3)
	Payment	Balance	Rate (BPS)
	b/se	b/se	b/se
Counseled Indicator	52.2890*** (3.476)	-559.9167*** (94.838)	-0.2467*** (0.014)
Post Modified Indicator	-184.1995*** (3.673)	-206.9750* (100.199)	-1.5908*** (0.015)
Counsel x Modified	-107.9107*** (4.314)	2162.0277*** (117.709)	-0.0596*** (0.018)
Observations	110013	110013	110013

- Monthly data conditional on modification 2007-2010
- Controls: FICO, Delinquency, ARM, MSA Unemployment, House prices

# Counseling and Loan Outcomes for Modified Loans

	(1)	(2)	(3)	(4)	(5)	(6)
	REO	REO IV	Default	Default IV	Fcl	Fcl IV
	b/se	b/se	b/se	b/se	b/se	b/se
Counsel	-0.0075*** (0.001)	-0.5445 (0.581)	0.0043* (0.002)	1.1716 (1.210)	-0.0075** (0.002)	-1.0086 (1.153)

- Monthly data conditional on modification
- IV for counseling using HOPE Now Events
- Controls: FICO, ARM, Delinquency, Loan amount, MSA unemployment and house prices,

# Prepayment as an Alternative Outcome

	(1)		(2)	
	REO b/se	Prepay b/se	REO b/se	Prepay b/se
Counsel	0.0797*** (0.013)	0.1193*** (0.014)	0.0761*** (0.012)	0.1118*** (0.013)
Counsel x Mod			1.1564 (0.268)	2.9772* (1.264)
Post Mod			0.0723*** (0.016)	0.0064*** (0.002)
Constant	0.0015*** (0.001)	0.9277 (0.780)	0.0013*** (0.001)	0.7460 (0.635)

- Multinomial logit; Relative risk ratios. 457248 Observations

# Preliminary Conclusions

- 1 Who seeks counseling? Are there neighborhood/social effects?
  - When the call for counseling is made seems to matter; But, no strong neighborhood effects
- 2 Are borrowers with lower financial capacity more likely to seek counseling?
  - Some evidence suggestive of minority and lower income seeking counseling; no strong effects of loan application patterns in zip

# Preliminary Conclusions

- 1 Is there a relationship between receiving a loan modification and counseling?
  - Appears to be strong correlation
- 2 Does counseling result in more generous loan modifications?
  - Lower payments but more capitalization of arrears - informed tradeoffs?
- 3 Does counseling result in fewer foreclosure filings, more prepayments or fewer homes lost to foreclosure?
  - Maybe, but preliminary

# Issues to Explore

- Results are preliminary but suggestive.
  - Statistical, data and conceptual issues to manage
- Selection into counseling important to understand
- Concentration of counseling among more distressed and traditionally less financial capable demographic groups
- Counseling highly correlated with formal changes to the mortgage contract; slightly stronger for minority borrowers
- Counseling may aid the borrower in negotiating lower interest rates and monthly payments, but not lower loan balances.
  - Encourage longer term debt for present day decreases in monthly obligations - informed expectations about future ability to pay?

# Further Study

- Consumer and servicer behavior are dynamic month to month
- Unique data: income, race and counseling
- Prepayment, sale or pay off of the loan maybe an important outcome
  - Outcomes are contingent - prepayment vs. reo vs. continued loan (which maybe in default)
    - Tested Multinomial Logit and Proportional Hazards - Prepayment of Mods?
    - Model selection matters: exploring GMM and other alternatives for IV
- Better understand the mechanics of how people seek advice
- Institutional factors of lender or servicer