Web Data Appendix for

Learning to Cope: Voluntary Financial Education and Loan Performance during a Housing Crisis

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We use two main sources of data for our study: loan-level data furnished by LPS Applied Analytics (LPS) and INHP internal tracking data on program participants. LPS aggregates data from loan servicing companies that participate in the HOPE NOW alliance[1]. The most recent LPS data cover about 30 million loans that include prime and subprime mortgages, as well as loans that are privately securitized, sold to the GSEs, or held on bank balance sheets. In addition to monthly data on loan performance status, LPS contains information on key borrower and loan characteristics at origination. This includes the borrower's FICO credit score, the loan amount and interest rate, whether the loan is a fixed or a variable-rate mortgage, the ratio of loan amount to home value (LTV), whether the loan was intended for home purchase or refinancing, etc.

INHP provided data on 726 first-lien mortgage loans originated for program graduates during the calendar years 2005-2007. About 30 percent of these loans (211) were funded internally, while the rest were referred to external lenders partnering with INHP. For the internally funded loans, all information on borrower and loan characteristics and ex post loan performance was available directly from INHP. For loans referred to external lenders, we had to use available data on loan terms at origination to find corresponding loan records in the LPS data. This process identified 266 of 515 lender referred loans, which likely reflects loans originated by lenders that do not use LPS-reporting servicers. Unfortunately, a sizable fraction of identified loans had their servicing rights transferred to a non-LPS servicer shortly after origination, which precluded us from tracking their performance. At the end, we have information on 211 internally funded (IN) loans and 148 lender referral (LR) loans.

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[1] The HOPE NOW alliance includes most of the country's largest mortgage servicers included, A full list of participants is available at http://www.hopenow.com/members.html#mortgage

The rest of LPS loans serve as our source for selecting a control sample. We limit the set of LPS observations to first-lien loans originated in Marion County in 2005-2007. Because INHP loans are used for home purchase, we further filter out loans used for refinancing from the LPS dataset. The key characteristics of INHP and LPS (or treated- and non-treated) loans are summarized in Table A below.

TABLE A – SUMMARY STATISTICS OF MORTGAGE LOANS AND BORROWERS (2005-2007)

	INHP clients		
Variable	Internal loans	External loans	Rest of Marion Co.
Number of first-lien mortgage loans	211	148	16,677
FICO score at origination (mean)	614	638	691
[interquartile range]	[569 - 646]	[594 - 676]	[637 - 752]
Income (median)	27,600	35,000	54,000
[interquartile range]	[22,800 - 35,047]	[26,000 - 44,700]	[37,000 - 82,000]
Loan amount (median)	69,900	93,344	108,000
LTV at origination (mean)	93%	93%	90%
Share of fixed-rate mortgages (FRM)	100%	99%	81%
Interest rates on FRM (mean)			
loans originated in 2005	7.2%	5.7%	6.1%
loans originated in 2006	7.7%	6.5%	6.8%
loans originated in 2007	7.8%	6.7%	6.7%
Loan spread (mean)	2.7%	1.5%	2.3%
Share of FHA-insured loans	0%	47%	22%
12-month default rate	3.8%	4.1%	6.3%
18-month default rate	10.0%	6.3%	10.1%

Notes: Unless otherwise noted all statistics are computed for first-lien home purchase mortgage loans that did not get refinanced or transferred within 12 months of origination. Directly-financed loans are funded and underwritten by INHP and are typically sold off in pools after seasoning. Lender-referred (LR) loans are funded and underwritten by INHP lending partners. Loan spread for fixed-rate mortgages is defined as a difference between the contract rate and the contemporaneous rate on Treasury bonds of the same maturity. For adjustable-rate mortgages, loan spread is set equal to the loan margin applied at the first interest rate reset. A loan is considered in "default" if it is 90 days or more past due, in foreclosure, or REO. The 18-month default rate is computed for loans that did not get refinanced or transferred within 18 months of origination.