National Survey of Mortgage Originations Survey Data on Your Home Loan Toolkit

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Abstract

The Real Estate Settlement Procedures Act (RESPA) requires that consumers who apply for a mortgage to purchase a home receive certain information on real estate settlement services and related costs. Before 2015, the U.S. Department of Housing and Urban Development (HUD) published a booklet titled Shopping for Your Home Loan: Settlement Cost Booklet (Booklet), which lenders provided to mortgage applicants. Starting in October 2015, coincident with the implementation of new mortgage loan estimate and closing disclosure forms, lenders began providing the Consumer Financial Protection Bureau's substantially revised publication, the "Your Home Loan Toolkit" (Toolkit) (CFPB, n.d.1).

This article details the extent to which mortgage applicants recalled getting the Toolkit. Because the Toolkit is required only for purchase mortgages, the analysis considers purchase-mortgage borrowers' recollection of receiving the Booklet or the Toolkit. We find that the percentage of homebuyers who remember receiving the information increased with the introduction of the new Toolkit. The estimated marginal effects are statistically significant and large compared with other factors

Introduction

Getting a mortgage is a complex financial decision and, for many consumers, it is the biggest and most complex financial decision they will make. One of the primary federal regulations that relates to the acquisition of residential mortgage is the Real Estate Settlement Procedures Act (RESPA). RESPA requires that consumers who apply for a mortgage to purchase a home or to refinance an existing loan receive certain information on real estate settlement services and related costs. RESPA requires that purchase-mortgage borrowers get a "special information booklet" that informs them about real estate settlement services (12 U.S.C. 2601 et seq. and its implementing Regulation X, 12 CFR 1024.6).

From 1976 to 2015, HUD implemented this RESPA provision by requiring lenders to provide purchase-mortgage applicants with an information booklet titled "Shopping for Your Home Loan: HUD's Settlement Cost Booklet" (Booklet). The Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) transferred the responsibility for the information booklet to the Consumer Financial Protection Bureau (CFPB, n.d.1). On October 3, 2015, new RESPA rules were implemented, including for the CFPB special information booklet. The CFPB booklet is titled "Your Home Loan Toolkit: A Step-by-Step Guide" (Toolkit). RESPA requires that lenders and brokers provide homebuyers a copy of the booklet within 3 days of submitting an application. RESPA does not require the booklet to be given to consumers who are refinancing a residential mortgage.2

A comparison of both booklets shows clear differences in the content and format. The Booklet walks the applicant through the Good Faith Estimate (GFE) and HUD-1 Settlement Statement line by line. The Toolkit does not walk the applicant through the Loan Estimate line by line³ and, although it provides detailed information on the Closing Disclosure, it does so in less detail than does the Booklet. Also, the Dodd-Frank Act listed specific topics to be described and explained in the CFPB informational document.⁴ Some of those topics, such as an explanation of variable rate mortgages and home equity lines of credit, had been included in the Booklet. Further, the Dodd-Frank Act required that the information booklet include questions that a consumer should ask regarding the loan, including, among other things, whether the consumer would have the ability to pay back the loan. To fulfill that requirement, the Toolkit includes "The Talk" boxes throughout, which include questions and factors that consumers should consider.

In this article, we detail the shares of mortgage applicants who recalled getting the CFPB Toolkit. We compare those results with the shares of mortgage applicants who remembered getting the earlier Booklet to understand how the recollection of receiving this information changed after implementation of the new Toolkit. We look further at how changes in borrowers' recall of those documents varied by borrower and loan characteristics (for example, loan amount, borrower age, and credit score). The analysis uses consumer responses from the National Survey of

¹ Dodd-Frank Act §1450. The Booklet is available at https://www.hud.gov/sites/documents/HUD_SETTLE_COST.PDF, and the Toolkit is available at https://files.consumerfinance.gov/f/201503_cfpb_your-home-loan-toolkit-web.pdf.

² Lenders and mortgage brokers do not have to provide the booklet during refinancing transactions; closed-end loans, such as when the lender takes a subordinate lien; reverse mortgages; and any other federally related mortgage loan whose purpose is not the purchase of a one- to four-family residential property (12 CFR §1024.6(3)).

³ The switch from the Booklet to the Toolkit was done as part of the larger Truth in Lending Act (TILA)-RESPA Integrated Disclosures Rule, which, among other things, combined the GFE and the initial TILA disclosure and replaced them with a single Loan Estimate.

a single Loan Estimate

⁴ For a comprehensive list of topics, see Dodd-Frank Act §1450(2)(b).

Mortgage Originations (NSMO), a nationally representative survey that provides rich information on the expectations, knowledge, experiences, and loan terms for consumers with a recent mortgage origination.5

We find that the percentage of homebuyers who remember receiving information from their lender increased with the introduction of the Toolkit. Specifically, the percentage of homebuyers who remembered receiving the documents increased from 22 percent for the Booklet to 42 percent for the Toolkit. In general, the increase in the share of homebuyers who remember the information document tended to be larger for borrowers with lower credit scores, household income, education, or experiences with mortgages. Using a multinomial logit model to better isolate the role of the Toolkit in the increase in borrower recognition, we find that controlling for borrower and loan characteristics in NSMO does not meaningfully change the estimated effect of the Toolkit on borrower recall. The estimated marginal effects of the Toolkit indicator are statistically significant and large compared with the other covariates in the model.

Literature Review

Choosing and closing on a mortgage is a complex process and one that most consumers do only infrequently. That infrequency, in turn, may contribute to many consumers not understanding the terms and conditions of their mortgage. Bucks and Pence (2008) explore whether borrowers understand the terms and conditions of their adjustable rate mortgages and find that consumers underestimate or do not understand the extent of possible rate increases from year to year or over the life of the loan. Lacko and Pappalardo (2010) found that many borrowers do not understand the terms of their loans, including the total loan amount and whether their loan had restrictions, such as prepayment penalties. Borrowers' lack of understanding of their mortgage rates and terms could, in part, reflect asymmetric information and search costs. Mortgage professionals engage in transactions on a frequent and regular basis but may find information costly to produce, and once produced, it becomes a common good. Further, consumers may engage in only a limited search across mortgage lenders because their perceived expected benefits from such a search are less than their expected costs.6

Various ways exist to increase knowledge, reduce asymmetric information, and encourage consumers to search for the rates, terms, and conditions that meet their needs. Those ways include mandatory standardized disclosure and homeownership education and counseling (HEC). Numerous studies have been conducted on prepurchase HEC programs.⁷ Those studies usually evaluate specific programs that generally target consumers with low income or low credit scores and focus on whether HEC programs reduce mortgage default rates (see, for example, Agarwal et al. [2010]). Elsewhere in this volume, Argento and his colleagues (2018) evaluated NSMO survey respondents' use of housing counseling and found that those who reported receiving some form of HEC had better mortgage knowledge and higher satisfaction with their mortgage terms and the process.

Standardized disclosures of loan terms and features may also increase consumer knowledge and understanding of mortgage terms and conditions. Lacko and Pappalardo (2010) conducted a

⁵ NSMO and the National Mortgage Database® (NMDB) are described in the guest editors' introduction of this Cityscape issue.

See Alexandrov and Koulayev (2017); Woodward and Hall (2010).
 Collins and O'Rourke (2010), Moulton (2012), and Myhre and Watson (2017) provide a review of many of these studies.

randomized control experiment to test borrower understanding using either the mandatory TILA and RESPA mortgage disclosures or prototype disclosures developed for the study. They found that borrowers presented with the prototype disclosures had a higher level of understanding of the mortgage terms, but the borrowers could not fully describe important loan terms.⁸

Consumers have other ways to gain knowledge and be encouraged to search, including talking with family and friends, engaging with websites on the homebuying process, and reading homebuying handbooks provided by government agencies, such as the HUD and CFPB booklets.9

Virtually no studies focus on the effects of the various types of knowledge acquisition by consumers. One exception, the CFPB's Know Before You Owe Brief No. 3, found evidence of "learning by doing" in the mortgage context. The study looked at changes in mortgage knowledge throughout the homebuying process and found evidence that consumers became more knowledgeable through the process, but it does not attribute this gain to any source in particular. 10

Changes in Responses to Whether Borrower Remembers Booklet or Toolkit

This article contributes to the literature by exploring whether purchase-mortgage borrowers were more likely to recall the Booklet or the Toolkit and whether those documents led borrowers to ask questions about their loans. These comparisons are intended as a simple test of whether the new Toolkit is more salient and thus may be more effective in informing consumers. Further, we consider how the changes in borrowers' ability to recall the booklet varied across groups based on borrower or loan characteristics.

Beginning in the third quarter of 2015, in anticipation of the replacement of the Booklet with the Toolkit, the NSMO questionnaire asked whether the respondent had received a copy of Shopping for Your Home Loan: HUD's Settlement Cost Booklet (HUD, n.d.). A year later, when the survey sample was comprised mostly of mortgages taken out in early 2016 and some from late 2015, the question was changed to ask whether the respondent remembered receiving a copy of Your Home Loan Toolkit: A Step-by-Step Guide (CFPB, n.d.).11 The analysis contrasts pooled responses to the four quarterly NSMO surveys before the change to pooled responses for the subsequent five quarters, through the third quarter of 2017.

The analysis is limited to mortgages for home purchase because lenders were only required to provide the Booklet or Toolkit for purchase transactions. The sample excludes refinance loans,

⁸ In integrating the TILA and RESPA mortgage disclosures, the CFPB used a User Center Design process with a qualitative and a quantitative phase (Kleimann, 2012; 2013).

⁹ The CFPB provides a webpage on mortgages that includes tools and resources for homebuyers (https://www.consumerfinance.gov/consumer-tools/mortgages/). State and city governments also provide homebuyer guides, for example, Minnesota (https://www.ag.state.mn.us/consumer/handbooks/HmBuyers/default.asp), New York City (https://cnycn.org/homebuyers-guide/), and Ohio (https://www.com.ohio.gov/documents/real_HomeBuyersGuide.pdf). ¹⁰ For the study analyzed in the CFPB's Know Before You Owe Brief No. 3 (CFPB n.d.2), prospective homebuyers took an initial baseline survey and then were surveyed biweekly for up to 3 months or until they bought a home, whichever

¹¹ The questions differed slightly over time, as the earlier question asked whether the respondent had received the booklet ("Your lender may have given you a Shopping for Your Home Loan: HUD's Settlement Cost Booklet, did you receive a copy?"), and the later question whether the borrower remembered receiving it ("Your lender may have given you a booklet, Your Home Loan Toolkit: A Step-by-Step Guide, do you remember receiving a copy?").

loan modifications, and special-purpose mortgages (loans to add or remove a co-borrower, loans to finance a construction loan, and new mortgages on mortgage-free properties).

Exhibit 1 shows that an average of 22 percent of NSMO respondents reportedly recalled receiving the Booklet. 12 After the new Toolkit took effect, the share who recalled getting it jumped to 42 percent on average. The share of respondents who reported that they did not know whether they received the document dropped from 38 percent to 27 percent.

Exhibit 1

Borrower Recall of Mortgage Booklet and Toolkit (Percent)

	Don't Know	Yes	No
Booklet	38	22	39
Toolkit	27	42	30

Notes: The difference in the distribution of responses is statistically significant at a 0.1-percent level. The sample includes 3,083 purchase-mortgage borrowers in the 2015Q3-2016Q2 NSMO surveys and 2,722 purchase-mortgage borrowers in the 2016Q3-2017Q3 surveys.

The NSMO asked a followup question about whether the document led to the homebuyer asking questions about his or her mortgage in hopes of determining how effective the documents were at getting respondents to think about their mortgage. Exhibit 2 tabulates responses to this followup question for respondents who recalled getting the document (top panel) and for all survey respondents (bottom panel).

Exhibit 2

Share of Borrowers Who Asked Questions Based on Booklet or Toolkit (Percent)

	Yes	No		
Borrowers Who Recalled Booklet or Toolkit				
Booklet	29	71		
Toolkit	30	70		
All Borrowers				
Booklet	6	16		
Toolkit	13	30		

Notes: The sample includes 700 purchase-mortgage borrowers in the 2015Q3-2016Q2 NSMO surveys and 1148 purchase-mortgage borrowers in the 2016Q3-2017Q3 surveys. "Not applicable" responses for borrowers who said "No" or "Don't Know" when asked whether they recalled the Booklet or Toolkit are not shown

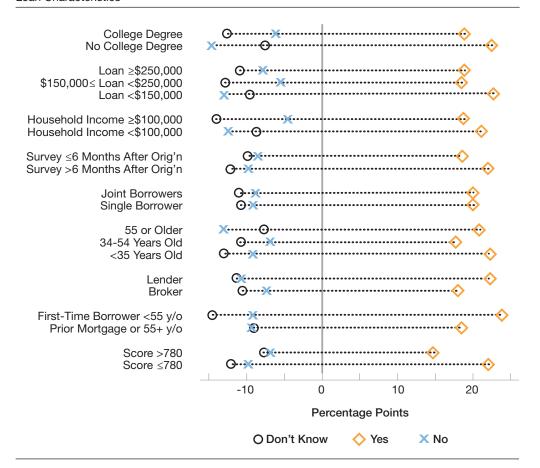
¹² All statistics are weighted using nonresponse-adjusted analysis weights.

Overall, there was a statistically insignificant change in the likelihood borrowers asked questions, conditional on remembering the documents. The share who reportedly asked questions rose from an average of 29 percent before the change to 30 percent after the Toolkit was introduced; roughly 70 percent of respondents did not ask additional questions in either time period. Because the share of borrowers who recalled the Booklet or Toolkit increased, the percentage of all borrowers who asked questions based on these documents roughly doubled, from 6 percent for the Booklet to 13 percent for the Toolkit.

Exhibit 3 breaks down the changes in the estimates shown in Exhibit 1 after the Toolkit was introduced for subgroups defined by borrower or loan characteristics. It shows, specifically, the differences in the shares of respondents within subgroups defined by borrower or loan characteristics who said, "Don't Know," "Yes," or "No." In each row of the exhibit, the likelihood that respondents said they remember the new Toolkit increased by 15 percentage points or more.

Exhibit 3

Changes in Borrower Recall of Receiving Mortgage Disclosure, by Borrower and Loan Characteristics



In general, the increases in the shares of "Yes" tended to be larger for groups of borrowers with lower credit scores, household income, loan amount, education, or experience with mortgages. The increase in "Yes" responses was also greater for respondents who worked directly with a lender rather than a broker. There was little difference in the increases for joint and single borrowers and those who got the survey more than 6 months after they took out the mortgage. For all groups, the percentages of "No" and "Don't Know" responses both declined noticeably after the new Toolkit was introduced, and in most cases the share of "Don't Know" answers dropped by more than that of "No" answers did. 14

Multivariate Analysis

To better isolate the role of the Toolkit in the increase in borrower recollection shown in exhibits 1 and 3, we estimate a multinomial logit model of whether the respondent recalled the Booklet or the Toolkit ("Don't Know," "Yes," or "No"). The models include the covariates shown in exhibit 3, a time trend, and controls for other factors that might be correlated with borrowers' recall of the Toolkit or Booklet. These factors include debt-to-income ratio, loan-to-value, interest rate spread, loan type, the respondent's labor force status, the respondent's race and ethnicity, and household composition. ¹⁵ In addition, the models incorporate information on borrowers' knowledge and views as they began the mortgage process, concern about qualifying, certainty about the type of mortgage they wanted, and knowledge about mortgage terms and the mortgage process. ¹⁶ Together, these controls serve to make sure that any measured change in borrower recall is not the result of shifts in risk or in borrower characteristics and attitudes.

Exhibit 4 shows the estimated marginal effects on the probability of each response for selected covariates. ¹⁷ Controlling for these additional factors does not meaningfully change the estimated effect of the Toolkit on borrower recall. The Toolkit indicator leads to a significant estimated decline in the likelihood of "Don't Know" (8 percentage points) and "No" (13 percentage points) and a corresponding 22-percentage-point increase for "Yes." These changes are similar to the unadjusted differences of 11, 9, and 20 percentage points (see exhibit 1), respectively.

¹³ The score categories are based on the VantageScore® 3.0 for the survey respondent or his or her spouse or partner and the average of these scores when both are available. Income is self-reported household income. Age and education are those for the respondent and are self-reported values from the survey. First-time borrowers are people younger than 55 years of age who did not have any record of having a mortgage in the Experian data in the 7 years before the mortgage in consideration and who were buying a house in which they will primarily live. The category "Survey >6 months after orig'n" comprises loans with an origination date 180 days or more before the initial survey mailing for the respective survey wave.

¹⁴ Exhibit A.2 presents percentage point estimates for the differences shown in exhibit 3; the distributions of responses are significantly different before and after the introduction of the Toolkit, at a 0.1-percent level for all 20 groups shown.

¹⁵ See Exhibit A.1 for additional detail on the model covariates.

¹⁶ The NSMO also asks several questions about borrowers' knowledge after they took out the mortgage; those responses are excluded from the models because that knowledge might have been affected by receipt of the Booklet or Toolkit.

¹⁷ Exhibit A.3 presents marginal effects and corresponding standard errors for all covariates.

Selected Covariates (Percentage Points)

Exhibit 4 Marginal Effects on Probability of Responses to Recall of Booklet or Toolkit,

	Don't Know	Yes	No
Toolkit	- 8.1**	21.6***	- 13.4***
Credit Score	0.03	- 0.02	- 0.007
Age	- 0.3***	0.3***	0.07
Days Since Origination	0.008	- 0.002	- 0.006
Loan Amount <\$50K	- 13.7**	5.8	7.9
Loan Amount \$50K-\$99.9K	- 4.1	0.9	3.2
Loan Amount \$100K-\$149.9K	- 2.8	2.2	0.6
Loan Amount \$200K-\$249.9K	2.3	- 1.0	- 1.3
Loan Amount \$250K-\$299.9K	1.4	- 3.9	2.5
Loan Amount \$300K-\$349.9K	- 1.6	- 2.3	3.9
Loan Amount \$350K-\$399.9K	4.2	- 1.0	- 3.1
Loan Amount \$400K or More	0.5	2.8	- 3.3
Rate Spread	1.3	- 4.3***	3.0*
Loan-to-Value	- 0.08	0.2**	- 0.07
First-Time Borrower <55 Years Old	-2.4	4.8*	-2.4
Not Owner-Occupied	- 1.9	- 1.3	3.2
Broker	- 1.9	0.9	1.0
Joint Borrowers	- 0.5	0.9	- 0.4
Non-Hispanic White	2.8	- 6.9***	4.1*
Somewhat Concerned Qualified	6.9***	- 3.2	- 3.6
Not at All Concerned Qualified	4.5*	- 4.6*	0.07
Some Idea of Desired Mortgage	- 1.0	- 1.2	2.2
No Idea of Desired Mortgage	5.3	_ 7.9**	2.6

^{*} p<0.05, ** p<0.01, *** p<0.001

The Toolkit indicator is the only variable with a statistically significant effect on all three response outcomes, and those effects are generally larger than the estimated effects for other covariates. The effects, for example, on the indicator for whether the respondent was a non-Hispanic White are about one-third the magnitude of the effects for the Toolkit, and the marginal effects for the indicator for the respondent having no firm idea about the type of mortgage he or she wanted are two-thirds to one-fifth. The estimated nearly 14-percentage-point reduction in the likelihood of a "Don't Know" response for borrowers with a loan amount of less than \$50,000 compared with a loan amount of \$150,000-\$199,999 (the omitted category) is the exception in having a larger effect than the Toolkit. Qualitatively, the sign of the marginal effects for the Toolkit is comparable to the effects for age. In contrast, non-Hispanic White borrowers, those who were less concerned about qualifying or had "no idea" about the desired mortgage, or those who had mortgage loans with a larger rate spread were more likely to say they did not recall or didn't know if they remembered getting the Booklet or Toolkit.

Conclusion

This article uses the rich information and quarterly data from the NSMO to examine whether purchase-mortgage borrowers were more likely to recall the Toolkit than the Booklet, which the Toolkit replaced in October 2015. The comparison of borrowers' reported ability to recall and ask questions based on this disclosure is intended as a simple test of whether the new Toolkit is more salient and thus may be more effective in informing consumers.

Borrowers were about 20 percentage points more likely to recall the Toolkit than they were the Booklet. There was no meaningful difference in the likelihood that borrowers who remembered the disclosures asked followup questions of their lender, but the increased share of borrowers who recall the Toolkit implies a significant increase in the overall share of borrowers prompted to ask questions as a result. The differences in recall hold within subsets of borrowers classified based on demographic, socioeconomic, and loan characteristics. Similarly, controlling for a variety of borrower and loan characteristics does not meaningfully change the estimated effect of the Toolkit on borrower recall, and the marginal effect of the Toolkit flag is statistically significant and large compared with the estimated marginal effects for other covariates.

On the whole, these findings suggest that the design or content of the Toolkit made the information more salient to borrowers. The large effect—both in absolute terms and compared with other covariates—of the switch to the Toolkit on borrower recall suggests that testing of informational and educational materials for consumer financial products may improve borrower engagement with the content. Although the NSMO questions cannot shed light on which specific aspects of information in the Toolkit were especially effective, more in-depth surveys or focus groups may be able to distinguish these key features.

Appendix

Exhibit A.1

Sample Statistics (1 of 2)

Variable	Description	Mean	Min	Max	
1.toolkit	Loan sampled in 2016Q3 or later	0.506	0	1	
survey_wave	NSMO survey wave	10.5	7	15	
mnscore	Avg. credit score for respondent & spouse/ partner (if applic.)	731.1	502.5	839	
x74r	Respondent age	42.3	19	93	
daystomail	Days from loan orig'n to 1st survey mailing	174.1	55	495	
1.loan_amount_cat	Loan amt at orig'n <\$50K	0.021	0	1	
2.loan_amount_cat	Loan amt at orig'n \$50K-\$99.9K	0.129	0	1	
3.loan_amount_cat	Loan amt at orig'n \$100K-\$149.9K	0.195	0	1	
5.loan_amount_cat	Loan amt at orig'n \$200K-\$249.9K	0.142	0	1	
6.loan_amount_cat	Loan amt at orig'n \$250K-\$299.9K	0.106	0	1	
7.loan_amount_cat	Loan amt at orig'n \$300K-\$349.9K	0.069	0	1	
8.loan_amount_cat	Loan amt at orig'n \$350K-\$399.9K	0.048	0	1	
9.loan_amount_cat	Loan amt at orig'n \$400K or more	0.120	0	1	
rate_spread	Interest rate spread at origination	0.263	-1.5	1.5	
ltv	Loan-to-value at origination	83.8	11	125	
dtirecode	Debt-to-income at orig'n (missing set to 0)	35.5	0	100	
1.missdti	Missing debt-to-income (DTI)	0.007	0	1	
1.firsttime	Owner-occ,1st-time borrow <55yr	0.373	0	1	
4.firsttime	Not owner-occupied	0.093	0	1	
1.broker	Loan through broker (vs. lender or builder)	0.430	0	1	
1.joint	Two or more borrowers	0.453	0	1	
1.x83	Total household income less than \$35K	0.059	0	1	
2.x83	Total household income \$35K-\$49.9K	0.111	0	1	
3.x83	Total household income \$50K-\$74.9K	0.202	0	1	
5.x83	Total household income \$100K-\$174.9K	0.277	0	1	
6.x83	Total household income \$175K or more	0.160	0	1	
2.x76rrecode	Respondent high school grad or less	0.104	0	1	
3.x76rrecode	Respondent technical school	0.054	0	1	
4.x76rrecode	Respondent some college	0.179	0	1	
6.x76rrecode	Respondent postgraduate studies	0.280	0	1	
1.rwhitenh	Respondent non-Hispanic White	0.765	0	1	
2.loan_type	FHA insured	0.221	0	1	
3.loan_type	VA guaranteed	0.081	0	1	
4.loan_type	FSA/RHS insured	0.035	0	1	
2.x05a	Somewhat familiar: interest rates available	0.390	0	1	

Exhibit A.1

Sample Statistics (2 of 2)

Variable	Description	Mean	Min	Max
3.x05a	Not at all familiar: interest rates available	0.094	0	
2.x05b	Somewhat familiar: types of mortgages avail.	0.423	0	1
3.x05b	Not at all familiar: types of mortgages avail.	0.152	0	1
2.x05c	Somewhat familiar: mortgage process	0.407	0	1
3.x05c	Not at all familiar: mortgage process	0.188	0	1
2.x05d	Somewhat familiar: downpayment to qualify	0.357	0	1
3.x05d	Not at all familiar: downpayment to qualify	0.085	0	1
2.x05e	Somewhat familiar: income needed to qualify	0.382	0	1
3.x05e	Not at all familiar: income needed to qualify	0.100	0	1
2.x05f	Somewhat familiar: own credit history, score	0.215	0	1
3.x05f	Not at all familiar: own credit history, score	0.030	0	1
2.x05g	Somewhat familiar: money needed at closing	0.388	0	1
3.x05g	Not at all familiar: money needed at closing	0.159	0	1
2.x06	Somewhat concerned about qualifying	0.339	0	1
3.x06	Not at all concerned about qualifying	0.470	0	1
2.x07	Some idea of mortgage wanted	0.393	0	1
3.x07	Little idea of mortgage wanted	0.096	0	1
1.rworkstatus	Respondent self-employed	0.096	0	1
3.rworkstatus	Respondent retired	0.084	0	1
4.rworkstatus	Respondent not working	0.045	0	1
1.x81a	(Grand)Children <18 in household	0.452	0	1
1.x81b	(Grand)Children 18-22 in household	0.067	0	1
1.x81c	(Grand)Children 23+ in household	0.047	0	1
1.x81def	Other relatives or non-relatives in household		0	1

Exhibit A.2

Changes in Borrower Recall of Receiving Mortgage Disclosure by Borrower and Loan Characteristics (Percentage Points)

	Don't Know	Yes	No
Score ≤780	-12	22	-10
Score >780	- 8	15	- 7
Not First-Time or 55+	- 9	18	- 9
First-Time <55	– 15	24	- 9
Lender	- 11	18	- 7
Broker	– 11	22	– 11
<35 Years Old	– 13	22	- 9
35-54 Years Old	- 11	18	- 7
55 or Older	- 8	21	- 13
Single	- 11	20	- 9
Joint	- 11	20	- 9
Orig'n >6 Mos.	- 12	22	– 10
Orig'n ≤6 Mos.	- 10	19	- 9
Income <100K	- 9	21	– 13
Income ≥100K	- 14	19	- 5
Loan <\$150K	– 10	23	- 13
<35 Years Old	– 13	22	- 9
35-54 Years Old	- 11	18	- 7
55 or Older	-8	21	– 13
Less Than College	-8	22	– 15
College or More	- 13	19	- 6

Exhibit A.3 Marginal Effects (ME) and Standard Errors (SE) from Multinomial Logit Model of Responses to Recall of Booklet or Toolkit (Percentage Points)

Voviable	Don't	Know		Yes		No		
Variable	ME	SE	ME	SE	ME	SE		
1.toolkit	- 8.1	2.8**	21.6	2.7***	- 13.4	2.8***		
survey_wave	- 0.8	0.6	- 0.5	0.6	1.2	0.6		
mnscore	0.03	0.01	- 0.02	0.01	- 0.007	0.01		
x74r	- 0.3	0.08***	0.3	0.07***	0.07	0.08		
daystomail	0.008	0.01	- 0.002	0.01	- 0.006	0.01		
1.loan_amount	- 13.7	4.5**	5.8	6	7.9	5.8		
2.loan_amount	- 4.1	2.7	0.9	2.7	3.2	2.8		
3.loan_amount	- 2.8	2.3	2.2	2.3	0.6	2.4		
5.loan_amount	2.3	2.5	- 1	2.4	- 1.3	2.5		
6.loan_amount	1.4	2.7	- 3.9	2.5	2.5	2.8		
7.loan_amount	- 1.6	3.2	- 2.3	3	3.9	3.3		
8.loan_amount	4.2	3.7	- 1	3.4	- 3.1	3.6		
9.loan_amount	0.5	3	2.8	3	- 3.3	3		
rate_spread	1.3	1.2	- 4.3	1.2***	3	1.2*		
Itv	- 0.08	0.05	0.2	0.05**	- 0.07	0.05		
dtirecode	- 0.09	0.07	0.05	0.06	0.04	0.07		
1.missdti	- 16.4	6.1**	3.9	8.7	12.4	9.1		
1.firsttime	- 2.4	2	4.8	2*	-2.4	2.1		
4.firsttime	- 1.9	2.7	- 1.3	2.6	3.2	2.8		
1.broker	- 1.9	1.4	0.9	1.4	1	1.5		
1.joint	- 0.5	1.5	0.9	1.4	- 0.4	1.5		
1.x83	3.9	3.7	- 0.2	3.4	- 3.7	3.4		
2.x83	0.3	2.9	- 0.4	2.7	0.2	2.8		
3.x83	- 2.5	2.2	0.1	2.2	2.3	2.3		
5.x83	- 0.9	2.1	0.9	2.1	- 0.03	2.1		
6.x83	- 1.3	2.7	- 1.8	2.8	3.1	2.9		
2.x76rrecode	2.1	2.6	- 2.7	2.4	0.6	2.5		
3.x76rrecode	2.4	3.3	- 0.6	3.1	- 1.9	3.2		
4.x76rrecode	2	2	- 1.1	2	- 1	2		
6.x76rrecode	0.4	1.7	0.2	1.7	- 0.6	1.7		
1.rwhitenh	2.8	1.7	- 6.9	1.7***	4.1	1.7*		
2.loan_type	1.4	2.2	0.2	2.2	- 1.6	2.2		
3.loan_type	- 3.9	2.7	- 3.9	2.6	7.8	3**		
4.loan_type	0.9	4.4	0.1	4.2	- 1	4.3		
2.x05a	0.7	1.9	1.4	1.9	- 2.1	1.9		
3.x05a	1.4	3.6	- 0.8	3.5	- 0.6	3.5		

to Recall of Booklet or Toolkit (Percentage Points)

Exhibit A.3 Marginal Effects (ME) and Standard Errors (SE) from Multinomial Logit Model of Responses

Variable	Don't	Know	Yes		Yes No	
variable	ME	SE	ME	SE	ME	SE
2.x05b	2.9	2	- 6.6	1.9***	3.7	1.9
3.x05b	0.4	3	- 7.9	3**	7.5	3.2*
2.x05c	- 1.7	2	- 1.7	1.9	3.4	2
3.x05c	-2.3	3.1	- 1.5	3.1	3.8	3.2
2.x05d	1.7	2.2	- 1.2	2.1	- 0.5	2.2
3.x05d	- 7.6	3.4*	5.5	4	2.1	3.9
2.x05e	3.3	2.1	- 1	2.1	- 2.3	2.2
3.x05e	6.3	3.8	- 6.7	3.6	0.4	3.8
2.x05f	- 0.9	2	0.5	2	0.4	2
3.x05f	3.9	4.8	1.9	4.7	- 5.8	4
2.x05g	- 2.7	2	0.5	1.9	2.2	1.9
3.x05g	– 1	3	- 0.6	3	1.6	3
2.x06	6.9	2.1***	- 3.2	2.1	- 3.6	2.1
3.x06	4.5	2.2*	- 4.6	2.2*	0.07	2.3
2.x07	- 1	1.6	- 1.2	1.6	2.2	1.6
3.x07	5.3	3.1	- 7.9	2.8**	2.6	3
1.rworksta~s	0.7	2.4	- 1.8	2.4	1.1	2.5
3.rworksta~s	- 2.6	2.7	- 1.1	2.5	3.6	2.8
4.rworksta~s	1.6	3.2	- 2.3	3.1	0.7	3.3
1.x81a	0.05	1.5	- 3.3	1.5*	3.3	1.6*
1.x81b	- 2.5	2.6	2	2.6	0.5	2.7
1.x81c	- 3.8	3	1.5	3	2.3	3.1
1.x81def	-2	2.4	- 3.3	2.4	5.3	2.6*

^{*} p<0.05, ** p<0.01, *** p<0.001

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