"Ineffective In Any Form: Confirmation Biases And Other Psychological Phenomena Undermine Improved Home Loan Disclosures"

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Mark A. LeBoeuf³

Introduction

The Consumer Financial Protection Bureau (“CFPB”) recently proposed consolidated home loan disclosure forms to better enable consumers to understand the terms of the loan being offered.⁴ However, the results from three eye-tracking experiments funded by the National Science Foundation demonstrate that even improved forms provide an ineffective strategy for adequately protecting consumers and that these disclosures need to be augmented with robust mortgage counseling.

For several decades, Congress has attempted to help consumers make prudent home loan decisions primarily through mandating the use of home loan disclosure forms⁵ and has continued to rely on this method even as home loan options became increasingly complex, risky, and divergent in pricing, over time.⁶ In reaction to the home loan mortgage crisis, where many consumers took out overpriced⁷ and unaffordable home loans, HUD in 2008 created a revised Good Faith Estimate (“GFE”) and revised HUD-1

¹ Debra Pogrund Stark is a professor of law at The John Marshall Law School. The experiments reported in this article were funded by a grant awarded to Dr. Choplin and Professor Stark from the National Science Foundation: Law and Social Science Program (SES 1024435).
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⁴ Integrated Mortgage Disclosures under the Real Estate Settlement Procedures Act (Regulation X) and the Truth In Lending Act (Regulation Z) 12 C.F.R. §§ 1024 and 1026 (July 9, 2012). (“Proposed Integrated Disclosures Rule”)
⁵ Truth in Lending Act, 15 U.S.C. § 1601 et seq. (1968); Real Estate Settlement Procedures Act, 12 U.S.C. § 2601 et seq. (1974) as contrasted with putting a cap on interest rates and fees or prohibiting certain loan terms. While the Home Ownership Equity Preservation Act, 15 U.S.C. § 1639 (2006), provides some prohibited terms, the triggers for this to apply were so high that only a very small percentage of loans are covered under HOEPA and are still much higher than typically charged.
⁷ By “overpriced” we are referring to the widespread phenomena of taking out a home loan at an interest rate, fees, and closing costs that creates an “APR” in excess of the “par rate” (the amount the lender would normally be willing to charge for the borrower in light of the borrower’s credit score and income). See ELIZABETH WARREN & AMELIA WARREN TYAGI, THE TWO INCOME TRAP: WHY MIDDLE CLASS MOTHERS AND FATHERS ARE GOING BROKE 135 (Basic Books 2003) (estimating that as many as 40% of high cost subprime loans were made to borrowers who would have qualified for a prime loan).
disclosure form (“2008 HUD-1”) to better disclose to consumers the terms of the loans they were entering into.8

One key problem that HUD attempted to correct was that many consumers mistakenly thought that they had received fixed-rate loans when in fact they had received much riskier floating-rate loans. The initial interest rate and monthly payment were low, but then increased to levels that many borrowers could not afford.9 That the interest rate and monthly payment could increase was not covered at all in the pre-2008 HUD-1, and the rules on this type of disclosure under the Truth in Lending Act (the “TILA Disclosure”) created, in our view, misleading disclosures.10 The 2008 HUD-1 was designed to better disclose this information. We tested whether it was better in the experiments reported in Section I. These experiments tracked participants’ eye fixations as they reviewed disclosure forms, measured their recall of key loan terms, and their evaluations of the presented loan when loan terms were disclosed on the pre-2008 HUD-1 and TILA Disclosure and when disclosed on the 2008 HUD-1.

In particular, we tested for “confirmation biases,” cognitive biases wherein individuals skim through documents seeking to confirm the truth of what they are told (“Your loan is at 4%”), and fail to skim the document to determine if this statement is false (i.e. that the loan may start at 4% but that it can increase to as high as 8%).11 We found that consumers engaged in confirmation bias and failed to see that the interest rate could rise much more often with the pre-2008 HUD-1 and TILA Disclosure then with the 2008 HUD-1 form, reflecting that the change in forms was helpful to consumers.12 We also investigated how dual tasking, such as when a mortgage broker engages borrowers in conversation while they are attempting to read a disclosure form, could increase confirmation biases and cause consumers to miss the disclosure of adjustable rates. We tested this question in our third experiment. We found that dual tasking decreased the effectiveness of the improved disclosure form considerably.13

In light of the problem with confirmation biases and the impact of dual tasking, and the likelihood that most mortgage lenders and brokers emphasize the favorable terms

10 The TILA form used in experiment 1 is based on an actual deal in compliance with TILA requirements at the time, so although it notes the loan is an adjustable rate loan it provides as examples for future monthly payments amounts equal to or less than the initial monthly payment rather than showing how those amounts can increase over time. The Mortgage Disclosure Improvement Act of 2008, which better discloses how the rates can rise, did not become effective until Jan. 30, 2011.
11 See, e.g., P.C. Wason, On the Failure to Eliminate Hypotheses in a Conceptual Task, 12 QUARTERLY JOURNAL OF EXPERIMENTAL PSYCHOLOGY 129 (1960)(found that participants tested a rule by producing answers consistent with the rule they had in mind and failed to produce answers that were inconsistent with it).
12 See results of experiments one and two in Section I.
13 See results of experiment three in Section I.
of a loan and do not explain to the borrower the problematic terms, we argue in Section II that relying primarily upon disclosure forms, even improved ones, is inadequate. We also briefly note several other important cognitive and social psychological phenomena that make it difficult for consumers to effectively use the disclosure forms as Congress intended. To better address the demonstrated limited effectiveness of even improved disclosure forms, we recommend in Section II that Congress amend the Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank")\textsuperscript{14} so that the counseling requirement is applied to all consumers considering conventional home loans who are likely to need and benefit from this,\textsuperscript{15} rather than just those under a "high cost home loan" or a loan with negative amortization (where the principal amount of the loan increases over time) as Dodd-Frank currently provides.\textsuperscript{16} Section II also recommends a number of changes to improve the proposed rules that the CFPB issued in July 2012 relating to the nature, scope, and procedures for the counseling that is to be performed\textsuperscript{17} to ensure that the counseling is adequate to overcome not only confirmation biases but also many other important psychological phenomena that impede rational home loan decision making. Section II also recommends changes to a new form that the CFPB has proposed that would alert borrowers under virtually all home loans of the possibility of obtaining counseling on the loan and list of mortgage counselors in their area they can contact. The changes we propose are designed to prevent lenders and mortgage brokers from using the list as a means of steering consumers to certain counselors which could compromise the integrity of the counseling provided. The recommendations are also designed to make it more likely that consumers will choose to obtain counseling on their home loans based on information we propose be added to this form on the counseling to be provided and the benefits of the counseling.

\textbf{I. Experiments Testing the Impact of Disclosure Form and the Impact of Dual Tasking on Confirmation Biases, Recall and Evaluation of Loans}\textsuperscript{18}

We ran three experiments that tracked consumers’ eyes as they reviewed home-loan disclosure forms. To test whether simpler forms reduce confirmation biases and improve recall and loan evaluation, Experiment 1 investigated confirmation biases on the pre-2008 HUD-1 and TILA forms while Experiment 2 investigated them on the 2008 HUD-1 form. Experiment 3 investigated the impact of conversation on confirmation biases, recall of loan terms, and loan evaluation under the 2008 HUD-1.

\textsuperscript{16} Id. at §§ 1433(e) and 1414(a).
\textsuperscript{17} High-Cost Mortgage and Homeownership Counseling Amendments to the Truth in Lending Act (Regulation Z) and Homeownership Counseling Amendments to the Real Estate Settlement Procedures Act (Regulation X) 12 C.F.R. §§ 1024 and 1026 (Hereinafter “Proposed Counseling Rule”).
\textsuperscript{18} Further details on these experiments, including how the experiments comply with standard methods for eye tracking, will be presented in LeBoeuf, Choplin, and Stark (in preparation).
Methods

Participants. Data from 5 participants were excluded due to data recording failures, leaving the following totals. In Experiment 1, 50 undergraduate students (25 in the monthly payment condition and 25 in the interest rate condition) reviewed the pre-2008 HUD-1 and TILA disclosure forms. In Experiment 2, 48 undergraduate students (23 in the monthly payment condition and 25 in the interest rate condition) reviewed the post-2008 disclosure form. In Experiment 3, 42 undergraduate students (22 in the monthly payment condition and 20 in the interest rate condition) reviewed the post-2008 disclosure form while the experimenter attempted to engage them in conversation. In exchange for their participation students received credit in an introductory psychology course and $1 for every correctly recalled term.¹⁹

Procedure, Materials, and Equipment. All participants were run individually in approximately 20-minute sessions. An Eyelink 1000 (SR Research, LTD) eye tracker recorded participants’ eye movements. Eye movements were measured from the left eye but participants were able to view the form with both. The eye tracker recorded eye positions at 1000 samples per second, or 1 sample every millisecond. Participants were seated 76.2 centimeters from the computer screen (a 20 inch Sony Trinitron monitor).

Upon arrival, the experimenter informed participants that the purpose of the study was to assess how mortgage consumers read through disclosure forms. Participants sat down and placed their heads in the chin rest. To allow participants to acclimate to the eye-tracking apparatus, participants read through a short article unrelated to the study. After completing that article, the experimenter described the disclosure forms and their purpose. Participants were told that their task was to read through the forms as if they were the consumer taking out the loan, that once they finish reading they would answer questions about the contents of the form. They were told that they would be paid $1 for every term that they correctly recalled and that they could not reference the form while answering the questions.

Once participants confirmed that they fully understood the task, participants were given information that we suspected would create confirmation biases. In particular, participants were randomly told either that “the interest rate for your loan is 3.875%” (the interest rate condition) or that “the monthly payment for your loan is $1960.00” (the monthly payment condition). In neither condition did the experimenter disclose that the quoted rate applied only for a limited period of time.

To use eye-tracking technology, an experimenter must confirm that participants’ eye gaze direction corresponds to particular locations on the computer screen. A 9-point calibration procedure confirmed this, followed by a validation step measuring the accuracy of the initial calibration. After this calibration, the form was displayed on the screen and participants were able to read through its contents. The disclosure forms were presented on the computer screen. To improve textual resolution, each page was divided in half so that participants first viewed the top-half of a page followed by the bottom half. The pre-2008 HUD-1 spanned two pages and the TILA was a single page. Dividing these pages in half created six screens in Experiment 1. Because the eye-tracking

¹⁹ In the fall of 2012, with support from an NSF grant, we will run similar experiments on older participants and minorities who will be compared to these students.
measurements were only accurate within 0.5° of visual angle, the five- and thirty-year monthly payment terms on the TILA were each moved approximately two centimeters downward from their original position on the actual form. The post-2008 HUD-1 form spanned three pages, with a fourth page intended for signature collection. Dividing these pages in half created seven screens in Experiments 2 and 3. Any time a forward or backward transition between pages occurred while reading, a drift-correction was performed in order to account for head-position shifts. Participants completed this task by focusing on a single point in the center of the screen and pressing the key used to advance the page.

Unlike Experiments 1 and 2, the experimenter in Experiment 3 attempted to engage the participants in conversation. A large filing cabinet was placed between the experimenter and the participants to prevent participants from diverting their gaze. The topic was randomly selected from a set of six predetermined topics, including 1. sports which asked questions such as whether there was a Chicago Bears game that weekend, 2. neighborhoods to live in Chicago, 3. cellphones which asked questions such as what kind of cellphone they had,” 4. places to visit in Chicago wherein the experimenter pretended to be having out-of-town guests that weekend and asked where to take them, 5. moving to Chicago for work wherein the experimenter pretended that a friend was considering moving to the Chicago area and asked about commute times from a variety of suburbs, and 6. personal questions about the participant’s job and interests asking the participant questions such as what kind of work they did. If the initial topic was exhausted, the experimenter chose a new one. Likewise, if the conversation deviated from the topics initially outlined, the experimenter would continue discussing a topic that was of interest to the participant. After reviewing the disclosure forms, participants in all three experiments recalled loan terms and answered questions about the loan. Their responses are discussed below. After completing these questions, participants were paid according to the number of loan attributes they correctly recalled and thanked for their time.

Results

Eye fixations. The first analysis we conducted investigated whether presenting misleading information such as presenting the initial interest rate or monthly payment without qualifying it as temporary would create confirmation biases. If a confirmation bias were created, presenting this information would encourage participants to locate information that confirms that interest rate or monthly payment and cause them to fail to search for information that could disconfirm it. In this case, they would fail to look for the possibility that the loan adjusts. To investigate this question and track where the participants looked, non-overlapping, rectangular Areas of Interest (AOIs) were defined around the initial interest rate, initial monthly payment, and areas of the form that would make it clear that these terms were not permanent. As shown in Figure A, the TILA form used in Experiment 1, the short rectangle labeled A corresponded to the initial interest rate, the short rectangle labeled B corresponded to the initial monthly payment, and the long rectangle that stretched the entire page which identified the loan as an adjustable rate loan labeled C was an area of the form that made it clear that these terms were not permanent. As shown in Figure B, the Post-2008 HUD-1 form used in Experiments 2 and 3, the rectangle labeled A corresponded to the initial interest rate and the rectangle labeled B corresponded to the initial monthly payment. The rectangles labeled C and D,
the maximum interest rate, made it clear that the initial interest rate was not permanent. The rectangles labeled E and F, the maximum monthly payment, made it clear that the initial monthly payment was not permanent. The number of fixations that landed on or within these AOIs were analyzed where a fixation was defined as an event in which the eyes stayed relatively still (consecutive gaze coordinates were located within 1° of visual angle of these AOIs) for a duration of 200ms or greater.

Figure A. The TILA form used in Experiment 1. The rectangles labeled A and B represented confirmatory information and the rectangle labeled C represented disconfirmatory information. These rectangles and labels were not visible.
Figure B. The post-2008 HUD-1 disclosure form used in Experiments 2 and 3. The rectangles labeled A and B represented confirmatory information and the rectangles labeled C through F represented disconfirmatory information. These rectangles and labels were not visible.

Examples of confirmatory and disconfirmatory fixation patterns from participants in these experiments are presented in the eye-tracking “heatmaps” showing distributions of eye movements in Figures C and D. Figure C demonstrates confirmatory and disconfirmatory patterns for the TILA used in Experiment 1. Figure D demonstrates confirmatory and disconfirmatory patterns for the Post-2008 HUD-1 used in Experiments 2 and 3. A confirmatory pattern of fixation was defined as at least one fixation in the AOI containing confirmatory information without a subsequent fixation in the AOIs.
containing disconfirmatory information. For instance on the post-2008 HUD-1 used in Experiments 2 and 3, if a participant in the monthly payment disclosure condition made a fixation on the initial monthly payment term but failed to fixate on at least one of the maximum monthly payment terms, this pattern of fixations was defined as a confirmatory search strategy. A disconfirmatory search strategy was defined as at least one fixation in the AOIs containing disconfirmatory information.

Figure C. Confirmatory (left panel) and disconfirmatory (right panel) patterns of eye movements on the TILA used in Experiment 1. Darker areas were looked at more.
In Experiment 1, two participants (1 in the interest rate condition and 1 in the monthly payment condition) were excluded from the fixation analysis because they did not fixate on either confirmatory or disconfirmatory information. Of the remaining 48 participants, 29% of those in the interest rate condition (7 participants out of 24) and 33% of those in the monthly payment condition (8 participants out of 24) displayed a confirmatory fixation pattern. In Experiment 2, 4% of those in the interest rate condition (1 participant out of 25) and 35% of those in the monthly payment condition (8 participants out of 23) displayed a confirmatory fixation pattern. In Experiment 3, two participants (1 in the interest rate condition and 1 in the monthly payment condition) were excluded from the fixation analysis because they did not fixate on either confirmatory or disconfirmatory information. Of the remaining 40 participants, 42% of those in the interest rate condition (8 participants out of 19) and 48% of those in the monthly payment condition (10 participants out of 21) displayed a confirmatory fixation pattern.

Comparing the results of Experiments 1 and 2 suggests that better designed forms might help some consumers avoid confirmation biases, but the results are not unequivocal. A statistical analysis combining the interest rate and monthly payment conditions failed to find a statistically significant advantage of the Post-2008 HUD-1 form over that Pre-2008 HUD-1 form. While 19% of the participants in Experiment 2 with the better-designed Post-2008 HUD-1 form and 31% of the participants in Experiment 1 with the TILA and Pre-2008 HUD-1 form displayed confirmatory fixation
patterns, this difference fell short of statistical significance, $\chi^2(1, N=95)=1.84, p>.05$. Analyzing the results by condition, however, found no difference for the monthly payment condition (33% in Experiment 1 versus 35% in Experiment 2), but did find a statistically significant difference in the interest rate condition (29% in Experiment 1 versus 4% in Experiment 2; Fisher's Exact test p-value = .048). So the better disclosure form helped participants avoid confirmation biases only if the interest rate was the loan attribute they were primed to confirm.

There are several possible reasons why the interest rate condition was different from the monthly payment condition in Experiment 2. The greater distance on the post-2008 HUD-1 form between the confirmatory and disconfirmatory information on monthly payments (B and E on Figure B) compared to the distance between confirmatory and disconfirmatory information on interest rates (A and C on Figure B) might have been responsible for this difference. Alternatively, it is possible that the media attention on adjustable interest rates during the recent mortgage crisis sensitized participants to this issue, but only the better-designed form allowed them to find the information they sought. The combined disclosure form proposed by the CFPB is an improvement in that it contains both the adjusted rate and monthly payment figures right next to the initial figures and one would expect lower confirmation biases with the new combined form.

However, comparing the results of Experiments 2 and 3 demonstrates that distracted participants were more likely to use a confirmatory test strategy, $\chi^2(1)= 6.75, p = .009$, compared to non-distracted participants. That is, 45% of the participants in Experiment 3 displayed a confirmatory fixation pattern, while only 19% of participants in Experiment 2 displayed a confirmatory fixation pattern. These results suggest that better-designed disclosure forms are unlikely to sufficiently protect consumers, as distractions commonly occur as consumers review home loan disclosure forms.

Recall of critical loan attributes. Participants’ difficulties recalling the information presented in the forms even though they were paid $1 for every correct answer further demonstrates how problematic it is to rely on disclosure forms to protect consumers from predatory lending. The analysis of this factor focused on four attributes: the initial interest rate, the initial monthly payment, the maximum interest rate, and the maximum monthly payment. Answers were deemed correct if the first two digits of the recalled value matched those of the term’s actual value. For instance, the initial interest rate was 3.875 percent, and the maximum interest rate was 8.875 percent; thus any value between 3.800 and 3.899 or 8.800 and 8.899 was counted as correct for the initial and maximum interest rates, respectively. Table 1 displays the number and percentage of participants within each experiment and condition who correctly recalled these terms. Notice that the maximum interest rate was not even presented on the TILA or Pre-2008 HUD-1 and the adjusted monthly payment on these forms was potentially misleading (see the TILA form presented in Figure C) making gleaning this information impossible or problematic in Experiment 1. These terms are, therefore, marked not applicable (N/A) in Table 1. To gage whether or not the participants in Experiment 1 knew that interest rates and monthly payments could adjust upwards, the participants in Experiment 1 were asked

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20 This interaction also demonstrates that these results reflect true confirmation biases, rather than preferences for particular locations or terms.
to estimate the interest rate and monthly payment in 3 years and 5 years time. The analyses of these results are presented in the next section.

The results in Table 1 reflect that consumer recall was better using the 2008 forms (Experiment 2) rather than the pre-2008 forms (Experiment 1), but once conversation is added (Experiment 3) accurate recall is dramatically reduced even with the 2008 forms.

### Table 1: Number of Participants Who Correctly Recall Information in Each Condition

#### Experiment 1

<table>
<thead>
<tr>
<th>Disclosure Condition</th>
<th>Interest Rate N (%)</th>
<th>Monthly Payment N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loan Term</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial interest rate</td>
<td>20(80.0%)</td>
<td>8(32.0%)</td>
</tr>
<tr>
<td>Initial monthly payment</td>
<td>10(40.0%)</td>
<td>4(16.0%)</td>
</tr>
<tr>
<td>Maximum interest rate</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Maximum monthly payment</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

#### Experiment 2

<table>
<thead>
<tr>
<th>Disclosure Condition</th>
<th>Interest Rate N (%)</th>
<th>Monthly Payment N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loan Term</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial interest rate</td>
<td>23(95.8%)</td>
<td>13(54.2%)</td>
</tr>
<tr>
<td>Initial monthly payment</td>
<td>3(12.5%)</td>
<td>6(25.0%)</td>
</tr>
<tr>
<td>Maximum interest rate</td>
<td>9(37.5%)</td>
<td>9(37.5%)</td>
</tr>
<tr>
<td>Maximum monthly payment</td>
<td>6(25.0%)</td>
<td>3(12.5%)</td>
</tr>
</tbody>
</table>

#### Experiment 3

<table>
<thead>
<tr>
<th>Disclosure Condition</th>
<th>Interest Rate N (%)</th>
<th>Monthly Payment N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loan Term</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial interest rate</td>
<td>9(45.0%)</td>
<td>5(22.7%)</td>
</tr>
<tr>
<td>Initial monthly payment</td>
<td>1(5.0%)</td>
<td>6(27.3%)</td>
</tr>
<tr>
<td>Maximum interest rate</td>
<td>4(20.0%)</td>
<td>1(4.5%)</td>
</tr>
<tr>
<td>Maximum monthly payment</td>
<td>1(5.0%)</td>
<td>1(4.5%)</td>
</tr>
</tbody>
</table>

Combining the results of the interest rate and monthly payment conditions to compare participants’ recall in Experiment 3 where they are engaged in conversation to participants’ recall in Experiment 2 where they are not found that conversation inhibited recall for almost every term. Participants were less likely to recall the initial interest rate.
(33.3% versus 75.0% correct)\textsuperscript{21}, maximum interest rate (11.9% versus 37.5% correct)\textsuperscript{22}, and maximum monthly payment (4.8% versus 18.8% correct)\textsuperscript{23} while distracted. The only term for which the differences in recall failed to reach significance was the initial monthly payment (16.7% versus 18.8% correct)\textsuperscript{24}. These findings demonstrate that conversation makes it very difficult for participants to encode and recall loan-related information.

\textit{Estimation of future interest rates and monthly payments in Experiment 1.} The TILA statement used in Experiment 1 (an actual deal, filled out in compliance with the Truth in Lending Act) included the statement “VARIABLE RATE FEATURE: This loan contains a variable rate feature. A variable rate disclosure has been provided earlier.” but neither the TILA Statement nor the Pre-2008 HUD-1 used in Experiment 1 presented the maximum interest rate or maximum monthly payments possible under the loan, and the future monthly payment information on the TILA, reflected an amount less than the initial interest rate and monthly payment amount (in our opinion a misleading disclosure even though it complied with TILA requirements). Although the TILA statement noted in a single sentence that the loan was a floating rate loan (presumably, to alert consumers that the interest rate and monthly payment might in fact increase), the eye fixation results presented above suggest that this statement was insufficient to alert them to this feature and risk of the loan. To investigate this question, participants in Experiment 1 were asked to estimate the interest rate and the monthly payment in three years and again in five years.

Estimated values of the future interest rates and monthly payments are shown in Table 2. Estimates that fell below a 3\% interest rate or a $1900.00 monthly payment were classified as projected decreases; estimates of interest rates that fell between 3\% and 4\% and monthly payments that fell between $1,900 and $2,000 were classified as constant projections; and estimates that fell above a 4\% interest rate or a $2,000 were classified as projected increases. The majority of participants projected that interest rates and monthly payments would remain constant or decrease. Only 32\% thought the interest rate would increase in 3 years; 36\% thought the interest rate would increase in 5 years; 24\% thought the monthly payment amount would increase in 3 years; and 30\% thought the monthly payment amount would increase in 5 years.\textsuperscript{25} Consistent with the misleading nature of the TILA statement (see Figure A, projected future monthly payments by label B), participants were particularly likely to project that the monthly payments would decrease. These results demonstrate that the variable rate statement included in the TILA statement was inadequate to inform consumers that the loan they were considering was adjustable and that the monthly payments could increase, suggesting instead that they would decrease.

\textsuperscript{21} \chi^2(1, \textit{N}=90)=15.750, \textit{p}<.01
\textsuperscript{22} \chi^2(1, \textit{N}=90)=7.713, \textit{p}<.01
\textsuperscript{23} \chi^2(1, \textit{N}=90)=4.085, \textit{p}<.05
\textsuperscript{24} \chi^2(1, \textit{N}=90)=.067, \textit{p}=.80
\textsuperscript{25} Some participants who estimated increases provided unreasonably high estimates. We interpreted these estimates as saying that rates would increase by an unknown amount.
Experiment 1: Estimates of future interest rates and monthly payments.

<table>
<thead>
<tr>
<th>Told Initial Interest Rate</th>
<th>Told Initial Monthly Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimates of Future Monthly Payments</td>
<td>Estimates of Future Interest Rates</td>
</tr>
<tr>
<td>Estimates of Future Monthly Payments</td>
<td>Estimates of Future Interest Rates</td>
</tr>
<tr>
<td>3 years</td>
<td>5 years</td>
</tr>
<tr>
<td>Decrease</td>
<td>36%</td>
</tr>
<tr>
<td>Constant</td>
<td>36%</td>
</tr>
<tr>
<td>Increase</td>
<td>28%</td>
</tr>
</tbody>
</table>

*Loan quality judgments.* Participants rated the quality of the loan on a scale from 1 to 7 with 1 being a very bad loan and 7 being a very good loan and also provided comments on the quality of the loan. Participants should have provided low ratings and negative comments for this loan because it is an adjustable rate loan and therefore more risky than a fixed rate loan, especially when fixed interest rates are at historic lows. The differences on the loan rating reported by participants among the three experiments fell short of significance, but profound differences became apparent in participants’ comments among the three experiments. Specifically, although the differences between the mean rating of 3.63 in Experiment 2 and the mean ratings of 4.06 in Experiment 1 and 4.14 in Experiment 3 failed to reach statistical significance, participants’ comments were profoundly different between experiments. Table 3 presents these comments. The comments were correctly negative overall in Experiment 2 in which participants reviewed the better-designed 2008 HUD-1 without distractions and positive overall in the other two experiments. In Experiment 2, 62.0% of the comments were negative (31/50), while only 22.0% were positive (11/50). By contrast, in Experiment 1 in which participants reviewed the Pre-2008 HUD-1 and TILA form, the comments were favorable overall with 58.3% of comments positive (28/48) and 27% negative (16/48). In Experiment 3 in which participants reviewed the better-designed form but were distracted, the comments were favorable overall with 52.3% of comments positive (23/44) and 29.5% negative (13/44).

Table 3

<table>
<thead>
<tr>
<th>Number of participants citing each explanation for their loan ratings.</th>
</tr>
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</table>

26 F(2,134)=1.93, MSE=1.76, p>.05, although there was a statistically significant interaction between the experiment and the information provided such that ratings were lower in Experiment 2 when participants were originally provided with monthly payment information but not when participants were originally provided with interest rate information, F(2,134)=3.37, MSE=1.76, p<.05.
II. Proposed Legal Reforms

The results reported in Section I along with the fact that mortgage lenders and brokers typically emphasize favorable, rather than problematic loan terms,\textsuperscript{27} support the argument that the new combined disclosure forms are unlikely to adequately protect consumers. Even if improved forms were to successfully alert all home-loan mortgage consumers to which loans have adjustable rates, problematic loans could have other negative features such as a “balloon payment.” Schema deficits (i.e. not understanding what that means), confirmation biases and dual tasking would then make noticing and evaluating these features difficult. As the CFPB noted, home loans have become complicated products with terms that are often difficult for consumers to understand,\textsuperscript{28} but to avoid information overload, the CFPB decided not to include any educational information in the proposed disclosure forms.\textsuperscript{29} But if consumers lack schemas to

\begin{itemize}
\item \textbf{Positive}
\begin{itemize}
\item Low interest rate: 17, 5, 14
\item Low monthly payment: 2, 0, 0
\item Fair loan/Low cost: 4, 4, 4
\item Loan duration: 1, 1, 0
\item Steady payment terms: 1, 1, 2
\item No balloon payment: 0, 0, 2
\item Absence of prepayment penalty: 2, 0, 0
\item No hidden fees: 1, 0, 1
\end{itemize}
\item \textbf{Neutral}
\begin{itemize}
\item Lack of knowledge: 14, 8, 8
\end{itemize}
\item \textbf{Negative}
\begin{itemize}
\item Adjustable interest rate: 2, 22, 7
\item High interest rate: 9, 0, 0
\item Adjustable monthly payment: 0, 3, 0
\item Magnitude of adjustable interest rate: 0, 4, 0
\item Excessive fees: 2, 2, 1
\item Cost of monthly payment: 0, 0, 2
\item Overall cost of loan: 3, 0, 3
\end{itemize}
\end{itemize}

\textsuperscript{27} See Analysis of Home Loan Disclosures, supra note 6, at notes 28 and 29.

\textsuperscript{28} Proposed Integrated Disclosures Rule, supra note 4, at 12.

\textsuperscript{29} Id. at 42.
understand loan features like “balloon payment” or “prepayment charge” and their associated problems, then simply disclosing the presence of these features is inadequate.

It should also be noted that even when consumers are familiar with these features from learning about them in information booklets or other sources, important cognitive and social psychological barriers still impede consumers’ judgments. For example, they may have looked around and found that the lowest advertised fixed-rates under a thirty year term home loan were at 4%. They then work with a mortgage broker perhaps for weeks to obtain all the documentation and information necessary for a loan application and eventually get a loan commitment, but at 4.5%. If asked to explain the higher rate, the broker might provide an explanation by pointing (sometimes correctly but sometimes not) to problems with their credit history as the basis for the higher interest rate. Due to sunk cost effects, the consumer will likely fail to shop further and proceed with the loan because of the invested time and effort to obtain this loan commitment. The consumer may also have inappropriate trust in the broker due to a false belief that the broker is supposed to find them the best deal, and brokers are able to reassure borrowers with less education or income when they show these borrowers superficial forms of respect.

Consumers may also proceed even after spotting a problematic term, as long as they receive the syntax of an explanation. One experiment by the first two authors found that when participants detected the presence of a term in a contract inconsistent with what they had been told, and asked for an explanation, many of the participants expressed they would proceed with the transaction when provided the senseless explanation “because the form was drafted that way.”

Counseling can mitigate these and many other cognitive and social psychological factors that prevent home-loan disclosures from being effective, especially when the counseling is tailored to address these phenomena. For example, due to temporal and uncertainty discounting, under which consumers fail to give a problem sufficient weight due to the costs of the problem being delayed or uncertain, consumers are likely to underestimate how problematic a prepayment charge can be. Counselors could reduce this problem by informing the consumer of the large percentage of loans that are paid off early triggering the prepayment charge, how high this added cost can be, and how it can make it difficult to refinance the loan. The CFPB also recognized the benefits of counseling when it stated in its Proposed Counseling Rule (where it proposed creating a

30 See Analysis of Home Loan Disclosures, supra note 6, at 97-105 (which identified fourteen such factors).
31 In an analogous context, one-third of surveyed buyers did not know that the real estate agent owed primary loyalty to the seller rather than the buyer. See Michael Braunstein and Hazel Genn, Odd Man Out: Preliminary Findings Concerning the Diminishing Role of Lawyers in the Home-Buying Process, 32 OHIO STATE LAW JOURNAL 469 (1991).
32 See Analysis of Home Loan Disclosures, supra note 6, at 104 and note 30.
new form that would alert all borrowers under conventional loans secured by their home loan to the possibility of obtaining counseling) that “a trained mortgage counselor can be useful to any consumer considering any type of loan.” But, as will be discussed below, the scope of counseling they outline in the Proposed Counseling Rule fails to maximize the benefits to the consumer from the counseling and may fail to adequately protect consumers contemplating a home loan.

We believe that the best way to ensure that consumers are made aware of a loan’s risks and drawbacks and are encouraged to shop for the best home loan possible is to provide a “mortgage counseling intervention” which includes not only explaining the information in the disclosure forms, but also providing advice and assistance. The scope and form of the counseling we propose exceeds the counseling CFPB contemplates in its proposed rule. Congress in Dodd-Frank required consumers to obtain counseling on the “advisability” of the high cost home loan applied for, which one would think would include providing “advice” based on determinations and judgments relating to the terms of the loan and the borrower’s circumstances. But the CFPB stated in the Proposed Counseling Rule that the counseling on the “advisability” of the loan “does not require the counselor to have made a judgment or determination as to the appropriateness of the loan for the consumer.” Instead, the CFPB states the counselor is only supposed to “address” the affordability of the loan and the key terms of the loan (i.e. it appears, merely review these matters with the borrower, providing information on them presumably, but not providing any recommendations to the borrower on what to do).

The CFPB does not provide an explanation for its narrow interpretation of what “advisability” means except to note that the position they have taken not to have the counselor provide a judgment or determination is consistent with the kind of counseling that is required for federally insured home equity conversion mortgages (i.e. reverse mortgages for seniors) under the HECM mortgage counseling protocol.

To understand why the HECM mortgage counseling prohibits counselors from making a recommendation relating to the offered reverse mortgage loan, it is important to note that it was not until 2008 that Congress amended the law to require that counseling be performed by independent counselors. When lenders, mortgage brokers, their affiliates or anyone else associated with or compensated by the lender or loan servicer counseled borrowers on the reverse mortgage loan they sometimes improperly counseled them to take out unsuitable reverse mortgages and/or steered them into other unsuitable add on products such as annuities. To prevent this type of improper steering, counselors were (and still are) prohibited from providing any advice to a borrower on whether to

35 Proposed Counseling Rule, supra note 17, at 31.
36 Analysis of Home Loan Disclosures, supra note 6, at 113-125.
37 Proposed Counseling Rule, supra note 17, at 126.
38 Id.
35 Id. at 286.
40 Id. at 127.
take out the offered reverse mortgage loan \(^{42}\) However, once steps are taken to ensure the independence of the mortgage counselors and that they are otherwise properly trained to provide the counseling, the problem of improper steering through the advice provided is addressed and the advice provided should be truly beneficial to consumers.

It is our contention that any mandatory counseling \(^{43}\) would be far more effective if the independent, HUD trained mortgage counselors not only explain the disclosed loan terms and provide information on the borrower’s ability to afford making payments on the loan, but also advise the borrower on whether to enter into the offered home loan in light of various relevant factors (these factors could be articulated in a counseling protocol for conventional home loans that mortgage counselors would be required to comply with). We advocate this approach, because the amount of relevant information that the counselor should review with the borrower in making a wise decision likely exceeds the amount of information that the consumer can process. In situations like this, consumers typically look for a single reason or justification for making their choice, rather than perform a normative in-depth analysis.\(^{44}\) We therefore recommend that the CFPB modify their proposed rules to require the counselor to provide advice to the borrower on whether to accept the offered home loan or continue shopping for a better one by determining whether the loan appears to be overpriced, unaffordable, or otherwise unsuitable (for example, if a refinance, if it is not likely to provide a net economic benefit to the borrower, or if the loan contains risky or otherwise problematic terms like a balloon payment or adjustable interest rates when there are alternative loans readily available without these problematic features) and to assist the borrower in shopping for a more suitable home loan when appropriate. To better ensure that the mortgage counselor’s judgments and advice are sound, we recommend that the CFPB revise their proposed regulations to provide better guidance to the mortgage counselors on the information they should review with the borrower and the standards that mortgage counselors should apply when making the judgments described above. For example, on the issue of whether the loan appears to be overpriced, the mortgage counselor should be instructed to find out the borrower’s credit score and look up the current APR that would apply to that credit score.\(^{45}\) If the APR is higher, the counselor can work with the borrower to contact the lender to determine why (perhaps the source of the borrower’s income is problematic or the borrower has not been employed long enough) and shop around for a loan with a lower APR if it appears that there is no legitimate reason for the higher APR.

One concern that mortgage counselors may have is their exposure to liability when they make these types of judgments. The Proposed Counseling Rule could be


\(^{43}\) Our proposals here would apply not only to high cost and negative amortization home loans but any other type of conventional home loan that Congress may require counseling for in the future (such as those required due to the results of the financial literacy test we propose as a trigger to mandatory counseling).


\(^{45}\) FICO provides this kind of information on its website. See www.myfico.com.
modified to clarify that when the counseling takes place in good faith compliance with the standards established for making the judgment, then the counselor will have no liability to the borrower for the judgments made. Another concern that the mortgage counselors may have is the amount of time it will take to perform this type of counseling and whether the fee they can charge will cover the necessary time. One would not want a race to the bottom in terms of counseling quality because counselors fear that if they charge more than another counselor to spend the time necessary to adequately counsel the borrower they will lose the business. We therefore recommend that the fee for the counseling be regulated based on the amount of work that the loan presented would require. A menu of counseling topics could be created and counseling fees that would be charged for each item could be created.

As previously noted, Congress in Dodd-Frank has already required counseling for certain defined “high cost home loans” and for first time home buyers who apply for a home loan with negative amortization (i.e., where the principal amount increases rather than decreases). Even though Dodd-Frank has lowered the triggers as to what is a “high cost home loan,” typical home loans are still not covered even though many consumers could greatly benefit from the counseling intervention we recommend. We therefore propose that Congress require that at the time that borrowers begin the process of applying for a home loan that they be required to answer a series of questions designed to gauge their level of understanding of real estate finance terms and that test their ability to use the disclosure forms to evaluate an offered loan. If the borrower demonstrates a lack of understanding of important real estate finance terms or demonstrates a lack of understanding of the disclosure forms and how to use them to evaluate a proposed loan, then the borrower will be required to obtain mortgage counseling. The test can be created by HUD and be taken on a website controlled by HUD. In this way, those most in need of counseling will be mandated to receive it and the benefits to them from the counseling should outweigh the costs of providing it.

Lenders have objected to counseling due to the delays and added costs it would create. But as described in detail in another article by the first two authors, the mortgage counseling we envision should create less of a delay and create less added cost than the mandated appraisals of the value of the home do and should provide just as great a benefit to the consumers counseled. For example, a key cost of the counseling is the fee that the counselor will charge. It is worth noting that once the grants for the counseling for reverse mortgages were used up, most counseling agencies charged only $125 for the

46 Dodd-Frank, supra note 14, at §§ 1433(e) and 1414(a).
47 Id. at § 1431(a)(the triggers are an APR for first mortgage loans 6.5% greater than prime and points and fees greater than 5% of total transaction costs).
48 See, Analysis of Home Loan Disclosures, supra note 6, at 125-130 for a discussion in general of the costs and benefits of the counseling we propose. We have modified our proposal here from what we proposed there to make as the pre-condition to requiring counseling a financial literacy test rather than a pre-condition based on the interest rate for the loan because interest rates, while important, are not the only potentially problematic feature for a home loan.
49 Id. at 128 and note 140.
50 Id. at 122-124.
51 Id. at 125-130.
counseling they provide in conformance with the HECM Counseling Protocol. Surprisingly, some consumer advocates have objected to counseling as the primary means of protection since they fear it places too heavy a burden on consumers to protect themselves. We believe that the counseling we propose, which includes providing assistance in shopping for the lowest priced loan with the least risky terms, and advice on whether to accept the home loan offered would not place a difficult burden on consumers to protect themselves, as would counseling if it merely provided a large amount of relevant information to the consumer. The counseling we envision would be analogous to what a good attorney would do for a consumer client seeking advice on the loan and we encourage attorneys to become trained to perform this type of counseling as a form of public service.

There are several other important reforms to the CFPB’s Proposed Counseling Rule that we recommend to improve consumer protection. The first relates to the timing of when the counseling will take place. Currently, the proposed regulations state that the lender can process the loan application and order the appraisal and title policy before the counseling certificate is received. This decision on timing is consistent with CFPB’s articulated goal of implementing the counseling requirement “in a manner that minimizes operational challenges” since it should then minimize any delays to the process. However, it may conflict with the CFPB’s goal of also implementing the counseling requirement “in a way that ensures that borrowers will receive meaningful counseling.” This is because if the borrower is liable for large expenses, such as the cost of an appraisal, before she has been counseled on the loan, these sunk costs may influence the borrower to proceed with the loan when she otherwise might not have after receiving the counseling. We recommend that the counseling be required to be completed before any substantial charges are incurred. We recognize this may delay the process a bit, but if the counseling system required has an adequate number of trained counselors it should only cause about a week delay to the process.

The CFPB in the Proposed Counseling Rule already contemplates a second phase to the counseling, after the disclosure forms should have been delivered, to confirm receipt of the disclosures. We agree with the idea of a two phased counseling, but believe the first stage should be at the time the borrower receives the initial set of disclosure forms.

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53 Analysis of Home Loan Disclosures, supra note 6, at note 141.

54 In addition to addressing the affordability issue, consumers can be advised by an independent expert on whether the loan appears to be properly priced, whether, if a refinance, there is a net economic benefit, and whether there are any problematic features of the loan. If there are problematic features, the consumer can be counseled and guided in the steps to take to shop around for a loan with better terms.

55 Proposed Counseling Rule, supra note 17 at 117.

56 Id.

57 Analysis of Disclosure Laws, supra note 6, at 123 and note 123.

58 Proposed Counseling Rule, supra note 17m at 124.
disclosure documents and the second phase should take place just before closing and when the closing disclosure documents are furnished to the borrower. We recommend that at this second phase the counselor is tasked with verifying that the costs the borrower received in the initial set of disclosure documents do not at closing exceed the permitted variances and to otherwise confirm the borrower is receiving a loan with terms that are consistent with what was initially disclosed to them (such as the interest rate to be charged). While lenders are required to correct any impermissible variance to avoid bait and switch type situations, and closing agents might notice the problem and alert the borrower and seek a correction from the originating lender, if this does not occur, the borrower might never notice this variance. By having a counselor review the closing disclosures on this issue and other issues of consistency, the consumer is better protected.

The second area of recommended change relates to the proposed implementation of the Dodd-Frank requirement that lenders or mortgage brokers provide a list of counselors to all borrowers within three days of their applying for a home loan. We recommend that CFPB, in implementing this requirement include with this list of counselors a description of the services that the counselor would provide and fees typically charged for such services to make it more likely that the borrower will recognize the value of counseling. Considering that counselors currently charge approximately $150 for HECM counseling, we assume that a current cap of around $350 for the full menu of counseling options could be provided at a fee of approximately $350. To demonstrate the benefit of the counseling, the form can provide as an example that if the borrower is taking out a loan for $300,000 at 4.5%, but the counselor helps the borrower shop around and find a loan at an interest rate of 4%, this can lead to a savings of almost triple the counseling cost in the first year, $7,376 over seven years and $31,611 over thirty years, if the loan is held that long. We also recommend that the CFPB reconsider having the mortgage broker or lender create the list of HUD approved counselors for the borrowers. We are concerned that they will select and order this list by placing on top those counselors who are most “lender friendly,” which could cause some counselors to lose their independence in judgment on behalf of the borrower to gain favor with the lender to be placed on the list and at the top of the list. The CFPB can address this issue by requiring the five HUD certified counseling agencies that are listed and provided to the borrower be based on a list created by HUD through its use of the same

59 Previously the good faith estimate and Truth in Lending Act disclosure—under the Proposed Integrated Disclosures Rule, the “Loan Estimate”.
60 As reflected recently in the revised HUD-1, but to be reflected in the Proposed Integrated Disclosures Rule as the “Closing Disclosure”.
61 12 C.F.R. § 1024.7(i)(if the deal closes with fees that exceed the permitted variances, the lender has 30 days from the settlement date to correct the mistake with a refund.) Failure to do so is a violation of section 5 of RESPA (12 U.S.C. § 2604).
62 Even if she did notice this after closing, she might have to bring a lawsuit under a consumer fraud type claim to induce the lender to refund the amount she has overpaid if the lender fails to do so upon request or if CFPB fails to enforce the refund obligation.
63 Proposed Counseling Rule, supra note 17, at 6.
64 The order in which options are listed has a major effect on which options are chosen. See Jamie Murphy, Charles Hofacker & Richard Mizerski, Primacy and Recency Effects on Clicking Behavior, 11(2) J. COMPUTER-MEDIATED COMM. 522 (Jan. 2006).
criteria set forth in its proposed rule, but with the top five results created via computer randomization. The CFPB noted in the Proposed Counseling Rule that it planned to develop a website portal to assist lenders in creating the list based on the zip codes they type in, instead we recommend that the CFPB require lenders to provide the borrower’s zip code to the CFPB which can then develop the ability to create the list themselves as described above.

Finally, the CFPB’s proposed Counseling Rule permits lenders to directly pay or to finance the cost of the counseling (or to have the borrower directly pay the counseling costs) to make the counseling more available to consumers. But it may be problematic for the lender to be able to finance the cost of the counseling as currently permitted by the CFPB’s Proposed Counseling Rule. Having the lender pay could create reciprocity effects under which the consumer might feel obligated to take out the loan to reciprocate the lender’s kindness in paying for the counseling even if the counseling demonstrates that the consumer should be able to obtain a loan on better terms. At the same time, having the borrower pay could create sunk cost effects under which a borrower may feel that they need to proceed or else the money that they have already spent would become a loss. In addition, due to the psychological phenomenon of temporal discounting where more distant expenses receive less weight in the decision making process, the cost of counseling will loom disproportionately large relative to the much higher costs if problems with the loan arise or the consumer could have obtaining a loan with better terms. We therefore recommend that Congress impose a charge on all lenders who make conventional home loans to cover the estimated costs of the counseling. Although this added cost to make home loans will ultimately be passed along to all home borrowers it will take place in an indirect fashion that should not cause those counseled to consider those costs to be a basis to take out a loan that they have learned is not suitable.

65 Proposed Counseling Rule, supra note 17, at 32.
66 Id. at 129-130 (setting forth three options for paying the fee: (i) the borrower pays the counseling agency directly; (ii) the lender pays the fee (regardless of whether the borrower closes on the loan—to prevent potential conflicts of interest); and (iii) the lender finances the counseling fee in order to preserve the availability of counseling for high-cost mortgages.).
67 Proposed Counseling Rule, supra note 17, at 129-130 (setting forth three options for paying the fee: (i) the borrower pays the counseling agency directly; (ii) the lender pays the fee (regardless of whether the borrower closes on the loan—to prevent potential conflicts of interest); and (iii) the lender finances the counseling fee in order to preserve the availability of counseling for high-cost mortgages.).
[Where add following statements from CFPB? “homeownership counseling may improve borrower’s understanding of their mortgages, it may complement the information provided in disclosures, and it could counteract any tendency among borrowers to consider only loan features that are most easily understood, most immediately relevant, or most certain…..The proposed rule would not mandate counseling for potential borrowers of mortgages covered by RESPA, but requiring lenders to provide the list of homeownership counselors or counseling organizations may prompt some borrowers who were unaware of these resources (or of their geographic proximity) to seek homeownership counseling. This may especially be the case for borrowers who feel confused or overwhelmed by the information and disclosures provided by the lender.”]

Conclusion

Results from three eye-tracking experiments demonstrate that better disclosure forms can reduce confirmation biases, improve recall of loan attributes, and improve loan evaluations. But the results also demonstrate that dual tasking in the form of distracting conversation as a consumer reviews the disclosure forms can eliminate the advantages of better forms. In light of these findings and other cognitive and social psychological barriers to wise home loan decision making, we propose expanding the counseling requirements in Dodd-Frank to all conventional home loans where the borrowers in their response to a financial literacy test demonstrate a lack of understanding of real estate finance terms or a lack of understanding on how to use the disclosure forms to evaluate the loan. We also recommend that the CFPB modify their current proposed rules to better describe the counseling that should take place and provide better guidance to the mortgage counselors on the scope of their responsibilities. Of great importance, the CFPB’s proposed rules need to be modified to empower mortgage counselors to best help consumers by providing a judgment as to whether the loan appears to overpriced or unaffordable, the suitability of the loan, including whether if a refinance it is likely to provide a net economic benefit to the borrower, and—when necessary—help consumers shop for lower cost loans or loans with less risky terms. [add here on timing, listing and payment of counseling fees?] The improved disclosure forms alone are unlikely to adequately protect most borrowers, but they could be highly effective in preventing consumers from entering into overpriced or otherwise unsuitable loans if supplemented with robust counseling from specially trained independent counselors.