Online Appendix for "The Sensitivity of Housing Demand to Financing Conditions: Evidence from a Survey"

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A User cost model: dependence of elasticities on parameter values

In the tables below, we show how the two semi-elasticities we focus on in the user cost model depend on various parameters. We vary one parameter at a time from our baseline calibration, which is described in Section 1 of the main paper: r=5.5%, $\theta=0.2$, $\varphi=0.34$, $\tau=0.0335$, $\delta=0.06$, and g=0.02.

$-\frac{\partial \log(P)}{\partial \theta}$	$\rho = 0.0363$	$\rho = 0.1$	$\rho = 0.2$
Baseline	0	0.82	1.65
r = 4.5% r = 6.5%	0.12 -0.1	0.97 0.69	1.81 1.50
$\varphi = 0$	0	0.49	1.27
$\varphi = 0.5$	0	1.03	1.87
$\tau = 0.02$ $\tau = 0.05$	0 0	1.02 0.66	1.93 1.40
q = 0	0	0.77	1.60
g = 0.04	0	0.89	1.72
$\delta = 0$ $\delta = 0.2$	0 0	0.70 0.92	1.54 1.79

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$-\frac{\partial \log(P)}{\partial r}$	$\rho = 0.0363$	$\rho = 0.1$	$\rho = 0.2$
Baseline	8.53	6.80	5.32
$\theta = 0.05$	10.13	9.21	8.40
$\varphi = 0$	9.77	8.64	7.01
$\varphi = 0.5$	7.66	5.67	4.34
$\tau = 0.02$	11.70	8.47	6.24
$\tau = 0.05$	6.41	5.48	4.51
g = 0	7.56	6.40	5.15
g = 0.04	10.80	7.40	5.54
$\delta = 0$	4.76	5.80	4.97
$\delta = 0.2$	9.89	7.66	5.78

B Screenshots from survey (Q1-Q4)

The questions in the screenshots shown here are for current owners; instructions given to current renters (available upon request) did not mention that respondents would sell their current residence and pay off their mortgage (since they did not own their residence).

Suppose that you were to sell your current primary residence today and pay off your outstanding mortgage. Further, suppose you were to move to a town/city similar to your current one. You want to buy a home, as you intend to stay for the indefinite future.

You have found a home that you like, and are planning to put in an offer on the house. Homes similar to the one that you are interested in have been selling for \$230,000 lately.

You need to think about the maximum amount you would be willing to pay for the home, taking into account how much of a down payment you would be able to make.

Assume that you are required to make a <u>down payment of 20%</u> of the purchase price, and finance the rest with a 30-year fixed-rate mortgage with an interest rate of 6.5%.

The table below shows two examples of what different purchase prices would mean for your effective total monthly payment (including maintenance costs, property taxes and insurance, and taking into account the tax deductibility of interest payments).

Purchase Price	Down Payment (20%)	Mortgage	Effective Monthly Payment
\$290,000	\$58,000	\$232,000	\$1,703
\$170,000	\$34,000	\$136,000	\$1,264

For instance, if you were to pay \$290,000 for the house, with a required down payment of \$58,000, your monthly payment would be \$1,703. On the other hand, if you paid \$170,000, with the required down payment of \$34,000, your monthly payment would be \$1,264.

CALCULATOR

Below is a tool you can use to determine what your down payment and monthly payment would be based on different purchase prices. You can put in any purchase price, and see what it means for your required down payment and your effective monthly payment. You can use this calculator as many times as you would like to help you arrive at the maximum amount you would pay for this home. You will enter your final answers at the bottom of the page.

Purchase Price: \$ 250000

Purchase Price	Down Payment	Mortgage	Effective Monthly Payment
\$250,000	\$50,000	\$200,000	\$1,556

FINAL ANSWER

What would be the maximum amount you would be willing and able to pay for this home today?

Note that you need to be able to make a down payment of 20% of the purchase price that you enter, so pick a purchase price taking into account your financial situation if you were to sell your current home (and pay off your outstanding mortgage) today.



You stated that you would be willing to pay \$240,000 for this home. This would mean you would be **required** to make a down payment of \$48,000, and that your monthly payment would be \$1,520 per month. If you are not satisfied with this, please change your answer, otherwise click next.



Consider the same situation as before, where you are planning to put an offer on a home that you like. As before, homes similar to the one that you are interested in have been selling for \$230,000 lately.

You need to think about the maximum amount you would be willing to pay for the home, taking into account how much of a down payment you would be able to make.

Now, the minimum down payment is only 5% instead of a required 20% of the purchase price. However, you also have a choice of putting down more than 5% of the purchase price, if you wish (and have the financial resources to do so - after selling your current home). As before, the mortgage interest rate is 6.5%

So now you have to choose both the maximum price that you are willing to pay for the home, as well as the down payment (which cannot be less than 5% of the purchase price). The table below shows some examples of what different purchase prices would mean for your effective total monthly payment (including maintenance costs, property taxes and insurance, and taking into account the tax deductibility of interest payments) if you made only the minimum down payment of 5%.

Purchase Price	Down Payment (5%)	Mortgage	Effective Monthly Payment
\$240,000	\$12,000	\$228,000	\$1,684
\$300,000	\$15,000	\$285,000	\$1,945
\$180,000	\$9,000	\$171,000	\$1,424

Instead if you were to make a down payment greater than the minimum, say 20% of the purchase price, the different purchase prices listed in the table above would now imply the following for your total monthly payment.

Purchase Price	Down Payment (20%)	Mortgage	Effective Monthly Payment
\$240,000	\$48,000	\$192,000	\$1,520
\$300,000	\$60,000	\$240,000	\$1,739
\$180,000	\$36,000	\$144,000	\$1,300

In the previous scenario, you chose a purchase price of \$240,000 with a required down payment of \$48,000, resulting in a monthly mortgage payment of \$1,520.

CALCULATOR

Below is a tool you can use to determine what your monthly payment would be based on different purchase prices and down payments. You can put in any purchase price and any down payment (which has to be at least 5% of the purchase price but can be any amount above that), and see what it means for your effective monthly payment. You can use this calculator as many times as you would like to help you arrive at the maximum amount you would pay for this home. You will enter your final answers at the bottom of the page.

Purchase Price: \$ 275000 Down Payment: \$ 25000

Purchase Price	Down Payment	Mortgage	Effective Monthly Payment
\$275,000	\$25,000	\$250,000	\$1,785

FINAL ANSWER

What would be the maximum purchase price you would be willing and able to pay for this home today?

Note that you need to be able to make a down payment of at least 5% of the purchase price that you enter, so pick a purchase price taking into account your financial situation if you were to sell your current home (and pay off your outstanding mortgage) today.

\$ 250000

And how high would your down payment be? Your down payment must be \$12,500 or more.

\$ 25000

You stated that you would be willing to pay \$250,000 for this home, and put a down payment of \$25,000. This would mean that your monthly payment would be \$1,671 per month. If you are not satisfied with this, please change your answer, otherwise click next.

Consider the same situation as before, where you are planning to put an offer on a home that you like. As before, homes similar to the one that you are interested in have been selling for \$230,000 lately.

Assume now that mortgage interest rate is 4.5% instead of 6.5%. For the purchase price and down payment as on the previous page, that would mean a monthly payment of \$1,510 instead of \$1,671.

You need to think about how this change affects the maximum amount you would be willing to pay for the home. You still need to make a down payment of at least 5% (and can put down more than that if you wish, and have the financial resources to do so - after selling your current home).

The table below shows some examples of what different purchase prices would mean for your effective total monthly payment if you made only the minimum down payment of

Purchase Price	Down Payment (5%)	Mortgage	Effective Monthly Payment
\$250,000	\$12,500	\$237,500	\$1,558
\$310,000	\$15,500	\$294,500	\$1,778
\$190,000	\$9,500	\$180,500	\$1,338

Instead if you were to make a down payment greater than the minimum, say 20% of the purchase price, the different purchase prices listed in the table above would now imply the following for your total monthly payment.

Purchase Price	Down Payment (20%)	Mortgage	Effective Monthly Payment
\$250,000	\$50,000	\$200,000	\$1,413
\$310,000	\$62,000	\$248,000	\$1,598
\$190,000	\$38,000	\$152,000	\$1,228

How would the decrease in the interest rate affect both the maximum amount and down payment you are willing to pay? In the previous scenario, you chose a purchase price of \$250,000 and a down payment of \$25,000.

CALCULATOR

Below is a tool you can use to determine what your monthly payment would be based on different purchase prices and down payments. You can put in any purchase price and any down payment (which has to be at least 5% of the purchase price but can be any amount above that), and see what it means for your effective monthly payment. You can use this calculator as many times as you would like to help you arrive at the maximum amount you would pay for this home. You will enter your final answers at the bottom of the page.

Purchase Price: \$	260000
Down Payment: \$	15000

Purchase Price	Down Payment	Mortgage	Effective Monthly Payment
\$260,000	\$15,000	\$245,000	\$1,587

FINAL ANSWER

What would be the maximum purchase price you would be willing and able to pay for this home today?

Note that you need to be able to make a down payment of at least 5% of the purchase price that you enter, so pick a purchase price taking into account your financial situation if you were to sell your current home (and pay off your outstanding mortgage) today.



And how high would your down payment be? Your down payment can be \$13,250 or more.



You stated that you would be willing to pay \$265,000 for this home, and put a down payment of \$20,000. This would mean that your monthly payment would be \$1,587 per month. If you are not satisfied with this, please change your answer, otherwise click next.

We return to scenario that you just answered, with a minimum down payment of 5% and a mortgage interest rate of 4.5%. You said that you would be willing to pay \$265,000 for the home, and put a down payment of \$20,000, leading to an effective monthly payment of \$1,587.

Suppose now that you just inherited \$100,000 in cash. You could use all or part of this towards the down payment if you want but you don't have to. How would this affect your maximum price and down payment for the same home that you considered in the previous three scenarios?

CALCULATOR

Below is a tool you can use to determine what your monthly payment would be based on different purchase prices and down payments. You can put in any purchase price and any down payment (which has to be at least 5% of the purchase price but can be any amount above that), and see what it means for your effective monthly payment. You can use this calculator as many times as you would like to help you arrive at the maximum amount you would pay for this home. You will enter your final answers at the bottom of the page.

Purchase Price: \$ 275000 Down Payment: \$ 40000

Purchase Price	Down Payment	Mortgage	Effective Monthly Payment
\$275,000	\$40,000	\$235,000	\$1,548

FINAL ANSWER

What would be the maximum purchase price you would be willing and able to pay for this home today?

Note that you need to be able to make a down payment of at least 5% of the purchase price that you enter. So pick a purchase price taking into account your financial situation if you were to sell your current home today, and the fact that you now have an additional \$100,000.

And how high would your down payment be? Your down payment can be \$14,000 or more.

60000

You stated that you would be willing to pay \$280,000 for this home, and put a down payment of \$60,000. This would mean that your monthly payment would be \$1,490 per month. If you are not satisfied with this, please change your answer, otherwise click next.

BACK NEXT 75% 100%

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C Additional tables

Table A-1: WTP in Q1 — robustness. Table shows alternative specifications of the regression in column 3 of Table 2 in the main text. Robust standard errors reported in parentheses.

Dep. var.: Log(WTP) in Q1						
Interest Rate Low	0.063	0.046	0.049	0.045	0.043	0.045
	(0.047)	(0.041)	(0.041)	(0.041)	(0.041)	(0.041)
Log(Appr.)	(0.0)	0.787	0.786	0.843	0.833	0.805
8(FF)		(0.055)	(0.046)	(0.046)	(0.045)	(0.048)
Owner	0.355	0.337	0.508	0.540	0.502	0.511
o mier	(0.166)	(0.132)	(0.081)	(0.084)	(0.084)	(0.085)
Equity in (0, 50K]	-0.007	0.120	(0.001)	(0.00.)	(0.00.)	(0.000)
	(0.154)	(0.115)				
Equity in (50, 125K]	0.354	0.351				
2quity in (60, 12011)	(0.148)	(0.108)				
Equity in (125K, 200K)	0.445	0.339				
Equity in (1231t, 2001t)	(0.158)	(0.112)				
Equity of more than 200K	0.802	0.360				
Equity of more than 2001C	(0.157)	(0.120)				
Liquid Savings of [5K, 30K)	0.145	(0.120)	0.054			
Elquid Savings of [SIR, SOIL)	(0.084)		(0.068)			
Liquid Savings of [30K, 100K)	0.337		0.249			
Elquid Savings of [Soft, 1001t)	(0.087)		(0.065)			
Liquid Savings of [100K, 500K)	0.302		0.287			
Eiquid Savings of [1001x, 5001x)	(0.090)		(0.060)			
Liquid Savings of 500K or more	0.384		0.391			
Elquid Savings of 300K of more	(0.103)		(0.069)			
Non-Housing Debt of [1000, 5000)	0.062		(0.00)	0.060		
Non-Housing Debt of [1000, 3000)	(0.077)			(0.067)		
Non-Housing Debt of [5K, 30K)	0.101			-0.027		
Non-Housing Debt of [5K, 50K)	(0.074)			(0.059)		
Non-Housing Debt of 30K or more	-0.058			-0.068		
Non-Housing Debt of 30K of filore	(0.082)			(0.067)		
Credit Score 680-719	0.216			(0.007)	0.027	
Credit Score 080-719	(0.107)				(0.027)	
Credit Score 720-760	0.213				0.212	
Credit Score 720-700	(0.095)				(0.083)	
Credit Score Above 760	0.114				0.189	
Cledit Score Above 700					(0.084)	
Income in (40K, 75K)	(0.096) 0.185				(0.064)	0.087
income in (40K, 75K)						
Income in (75V 150V)	(0.087)					(0.072)
Income in (75K, 150K]	0.385					0.157
•	0.385 (0.090)					0.157 (0.072)
Income in (75K, 150K] Income greater than 150K	0.385 (0.090) 0.633					0.157 (0.072) 0.321
•	0.385 (0.090)					0.157 (0.072)
•	0.385 (0.090) 0.633 (0.116)	√	√	√	√	0.157 (0.072) 0.321
Income greater than 150K Demographic controls Expectation controls	0.385 (0.090) 0.633 (0.116)	✓ ✓	✓ ✓	✓ ✓	✓ ✓	0.157 (0.072) 0.321 (0.094)
Income greater than 150K Demographic controls	0.385 (0.090) 0.633 (0.116)					0.157 (0.072) 0.321 (0.094)
Income greater than 150K Demographic controls Expectation controls	0.385 (0.090) 0.633 (0.116)	\checkmark	\checkmark	✓	\checkmark	0.157 (0.072) 0.321 (0.094)

Table A-2: Robustness to different samples and weighting. Table shows the main average effects reported in Figures 2, 3 and 4 of the main text under different weighting or sample selection schemes. Part (a) reproduces the results from the main text, for reference. In part (b), sample weights are used. In part (c), we do not drop respondents based on self-appraised home value, age, or response time. In part (d), we restrict the sample to respondents who state a probability of moving over the next 3 years of 20% or higher and a probability of buying conditional on moving of 50% or higher. Sample sizes (before trimming) – parts (a) and (b): 962 (698 owners, 264 renters); part (c): 1139 (820 owners, 319 renters); part (d): 385 (259 owners, 126 renters).

		Trimmed $X = 2.5$	means wit	hout top/b		
	Full	Owner	Renter	Full	Owner	Renter
(a) As in main text (for reference)						
$log(WTP \text{ with } DP \ge 5\%) - log(WTP \text{ with } DP = 20\%)$	0.185	0.106	0.400	0.152	0.084	0.346
	(0.014)	(0.012)	(0.038)	(0.011)	(0.008)	(0.032)
log(WTP with r=6.5%) - log(WTP with r=4.5%)	-0.050	-0.043	-0.069	-0.044	-0.044	-0.047
	(0.004)	(0.003)	(0.012)	(0.003)	(0.003)	(0.006)
$\log(\text{WTP with } 100\text{k windfall}) - \log(\text{WTP}_{Q3})$	0.135	0.090	0.264	0.109	0.085	0.184
	(0.009)	(0.008)	(0.027)	(0.007)	(0.006)	(0.019)
(b) Weighted						
$\log(\text{WTP with DP} \ge 5\%) - \log(\text{WTP with DP} = 20\%)$	0.206	0.126	0.399	0.161	0.099	0.323
	(0.015)	(0.013)	(0.039)	(0.011)	(0.009)	(0.031)
log(WTP with r=6.5%) - log(WTP with r=4.5%)	-0.055	-0.043	-0.085	-0.044	-0.044	-0.046
	(0.005)	(0.003)	(0.014)	(0.003)	(0.003)	(0.006)
$log(WTP \text{ with } 100\text{k windfall}) - log(WTP_{Q3})$	0.144	0.102	0.256	0.117	0.092	0.187
	(0.010)	(0.009)	(0.027)	(0.007)	(0.006)	(0.020)
(c) No drops based on appraisal, age, response time						
$log(WTP \text{ with } DP \ge 5\%) - log(WTP \text{ with } DP = 20\%)$	0.175	0.102	0.368	0.140	0.078	0.313
	(0.013)	(0.011)	(0.033)	(0.009)	(0.007)	(0.027)
log(WTP with r=6.5%) - log(WTP with r=4.5%)	-0.044	-0.041	-0.052	-0.041	-0.040	-0.043
	(0.003)	(0.003)	(0.010)	(0.002)	(0.003)	(0.005)
$\log(\text{WTP with } 100\text{k windfall}) - \log(\text{WTP}_{Q3})$	0.124	0.086	0.231	0.101	0.078	0.170
	(0.008)	(0.007)	(0.023)	(0.006)	(0.005)	(0.016)
(d) Only respondents with Pr(move over next 3 years)	≥ 20% ar	ıd Pr(buy m	ove)≥ 50%	6		
$log(WTP \text{ with } DP \ge 5\%) - log(WTP \text{ with } DP = 20\%)$	0.209	0.095	0.443	0.167	0.078	0.362
	(0.023)	(0.017)	(0.056)	(0.017)	(0.011)	(0.046)
log(WTP with r=6.5%) - log(WTP with r=4.5%)	-0.058	-0.047	-0.080	-0.051	-0.051	-0.050
	(0.007)	(0.006)	(0.016)	(0.004)	(0.005)	(0.008)
$\log(\text{WTP with } 100\text{k windfall}) - \log(\text{WTP}_{Q3})$	0.130	0.096	0.204	0.108	0.090	0.151
	(0.014)	(0.013)	(0.033)	(0.010)	(0.011)	(0.022)

Standard errors shown in parentheses.

Table A-3: Heterogeneity of WTP elasticities and down payment choices to down payment requirement, interest rate, or wealth. - Current owners only. This repeats the analysis from Table 3 in the main text, for current homeowners only. Instead of the owner/renter cut, it adds a cut where current owners are separated by how much equity they have in their current home.

			Price Elasticity	y	DC	Down Payment Choice	hoice
	Z	-d logWTP / d θ	-d logWTP / dr	d logWTP / d wealth	DP (Q2)	d DP / dr	d DP / d wealth
All	869	0.71 (0.08)	2.16 (0.17)	9.0 (0.8)	26.0 (1.0)	1.8 (0.2)	18.2 (0.9)
Equity > 50k Equity \leq 50k p-val [t / MWW]	450 245	0.46 (0.09) 1.18 (0.16) [0.00 / 0.00]	2.13 (0.20) 2.23 (0.31) [0.79 / 0.46]	7.3 (0.8) 12.1 (1.6) [0.01 / 0.02]	33.7 (1.4) 11.8 (0.7) [0.00 / 0.00]	2.1 (0.2) 1.2 (0.2) [0.01 / 0.03]	14.5 (0.9) 25.3 (1.7) [0.00 / 0.00]
Income $\geq 75k$ Income $< 75k$ p-val [t / MWW]	349 339	0.57 (0.10) 0.85 (0.13) [0.08 / 0.31]	2.28 (0.22) 2.06 (0.27) [0.53 / 0.73]	5.6 (0.6) 12.6 (1.4) [0.00 / 0.00]	26.6 (1.4) 24.9 (1.5) [0.40 / 0.01]	1.6 (0.2) 1.9 (0.3) [0.48 / 0.58]	13.8 (0.9) 23.3 (1.5) [0.00 / 0.00]
Liquid assets $\geq 40k$ Liquid assets $< 40k$ p-val [$t \mid MWW$]	356 322	0.45 (0.10) 1.02 (0.14) [0.00 / 0.00]	2.09 (0.21) 2.21 (0.28) [0.73 / 0.35]	6.5 (0.9) 11.8 (1.3) [0.00 / 0.00]	33.1 (1.5) 18.0 (1.2) [0.00 / 0.00]	2.1 (0.3) 1.3 (0.2) [0.03 / 0.27]	13.5 (0.9) 23.7 (1.5) [0.00 / 0.00]
E(Inc. growth) $\geq 5\%$ E(Inc. growth) $< 5\%$ p-val [t / MWW]	208	0.65 (0.13) 0.71 (0.10) [0.72 / 0.77]	1.94 (0.34) 2.22 (0.20) [0.47 / 0.96]	9.1 (1.4) 8.6 (0.9) [0.77 / 0.55]	23.7 (1.7) 27.0 (1.3) [0.12 / 0.53]	1.9 (0.3) 1.7 (0.2) [0.68 / 0.73]	17.0 (1.5) 18.4 (1.1) [0.43 / 0.64]
r in Q1 and Q2 = 4.5% r in Q1 and Q2 = 6.5% p-val [t / MWW]	344 354	0.70 (0.11) 0.72 (0.12) [0.94 / 0.94]	2.86 (0.26) 1.49 (0.21) [0.00 / 0.00]	8.6 (1.0) 9.4 (1.1) [0.62 / 0.20]	24.1 (1.4) 27.8 (1.5) [0.06 / 0.17]	2.7 (0.3) 0.9 (0.2) [0.00 / 0.00]	18.2 (1.2) 18.2 (1.2) [0.97 / 1.00]
Marg. tax rate $> p50$ Marg. tax rate $\le p50$ p-val [t / MWW]	344 344	0.62 (0.11) 0.80 (0.12) [0.27 / 0.83]	2.24 (0.23) 2.12 (0.26) [0.73 / 0.61]	7.5 (0.9) 10.5 (1.2) [0.05 / 0.15]	25.0 (1.4) 26.6 (1.4) [0.44 / 0.31]	1.7 (0.2) 1.8 (0.3) [0.83 / 0.48]	19.2 (1.3) 17.4 (1.1) [0.30 / 0.67]
Prop. tax rate $> p50$ Prop. tax rate $\leq p50$ p-val [t/MWW]	343 355	0.81 (0.13) 0.62 (0.10) [0.25 / 0.38]	2.26 (0.24) 2.06 (0.24) [0.56 / 0.08]	9.2 (1.1) 8.7 (1.0) [0.74 / 0.98]	24.1 (1.3) 27.8 (1.5) [0.07 / 0.49]	1.9 (0.3) 1.7 (0.2) [0.65 / 0.45]	18.9 (1.2) 17.5 (1.2) [0.45 / 0.16]
E(HP growth) $\geq 3\%$ E(HP growth) $< 3\%$ p-val [t / MWW]	336 342	0.57 (0.12) 0.79 (0.11) [0.18 / 0.05]	2.43 (0.26) 2.05 (0.23) [0.28 / 0.69]	9.6 (1.2) 8.0 (1.0) [0.29 / 0.12]	27.0 (1.5) 25.3 (1.4) [0.42 / 0.19]	2.1 (0.3) 1.5 (0.3) [0.11 / 0.05]	
Moving prob. $> 1/3$ Moving prob. $< 1/3$ p-val [t / MWW]	200	0.64 (0.13) 0.74 (0.10) [0.56 / 0.45]	2.09 (0.36) 2.19 (0.19) [0.80 / 0.77]	9.2 (1.4) 8.9 (0.9) [0.88 / 0.62]	25.5 (1.9) 26.2 (1.2) [0.77 / 0.45]	1.3 (0.3) 2.0 (0.2) [0.09 / 0.04]	18.9 (1.5) 17.9 (1.0) [0.62 / 0.51]

Table A-4: Heterogeneity in the effect of the lower down payment requirement on WTP. Coefficient estimates from OLS regressions; dependent variable: $(\log(\text{WTP}_{Q2}) - \log(\text{WTP}_{Q1}))/0.15$ (the empirical measure of $-\partial \log(P)/\partial \theta$). Robust standard errors reported in parentheses.

(1) (2) (3)	
Interest Rate Low -0.398 (0.187) -0.387 (0.188) -0.408 (0.196	0)
Owner -1.014 (0.578) -1.891 (0.425) -1.074 (0.596)	6)
Age -0.015 (0.008) -0.013 (0.007) -0.012 (0.008)	8)
Number correct on numeracy test -0.149 (0.104) -0.112 (0.106) -0.125 (0.104)	4)
Education: College Degree or higher -0.276 (0.206) -0.183 (0.207) -0.129 (0.226)	(0
Married 0.576 (0.205) 0.583 (0.209) 0.747 (0.249)	(0
Male 0.115 (0.199) 0.140 (0.196) 0.206 (0.206)	(0
Marginal income tax rate 0.003 (0.011) 0.005 (0.012) 0.020 (0.014)	6)
Property tax rate 0.290 (0.171) 0.275 (0.170) 0.294 (0.171)	3)
Risk Averse 0.168 (0.212) 0.070 (0.207) 0.125 (0.21)	7)
Risk Loving 0.053 (0.239) -0.024 (0.239) 0.001 (0.244)	8)
E(Inc. growth, 1 yr) -0.003 (0.011) -0.004 (0.010) -0.005 (0.01	1)
E(HP growth, 1 yr) -0.003 (0.022) -0.006 (0.023) -0.009 (0.022)	2)
Pr(move over next 3 yrs) 0.002 (0.004) 0.003 (0.003) 0.002 (0.004)	4)
Pr(buy move) 0.005 (0.004) 0.005 (0.004) 0.007 (0.004)	4)
Equity in (0, 50K] -0.755 (0.477) -0.625 (0.499)	9)
Equity in (50, 125K] -1.565 (0.453) -1.281 (0.46	7)
Equity in (125K, 200K] -1.243 (0.493) -0.841 (0.52)	2)
Equity of more than 200K -1.262 (0.504) -0.981 (0.544)	(0
Liquid Savings of [5K, 30K) 0.134 (0.309) 0.369 (0.334)	4)
Liquid Savings of [30K, 100K) -0.625 (0.282) -0.295 (0.31)	3)
Liquid Savings of [100K, 500K) -0.635 (0.274) -0.182 (0.30c)	6)
Liquid Savings of 500K or more -0.542 (0.300) -0.093 (0.38	1)
Non-Housing Debt of [1000, 5000) -0.092 (0.26)	3)
Non-Housing Debt of [5K, 30K) 0.020 (0.24)	7)
Non-Housing Debt of 30K or more 0.139 (0.27.	5)
Credit Score 680-719 -0.546 (0.46)	9)
Credit Score 720-760 -0.751 (0.43)	3)
Credit Score Above 760 -0.507 (0.43)	7)
Income in (40K, 75K] -0.119 (0.33c)	(0
Income in (75K, 150K] -0.335 (0.36c)	8)
Income greater than 150K -0.756 (0.47)	5)
Constant 2.915 (0.791) 2.667 (0.752) 2.547 (0.83)	9)
Region & home type controls \checkmark \checkmark	
Adj. R2 0.11 0.11 0.11	
Obs. 790 790 790	
Mean(dep. var.) 1.070 1.070 1.070	

Table A-5: Heterogeneity in the effect of the change in rates on WTP. Coefficient estimates from OLS regressions; dependent variable: $-(\log(\text{WTP}|6.5\%) - \log(\text{WTP}|4.5\%))/0.02$ (the empirical measure of $-\partial \log (P)/\partial r$). Robust standard errors reported in parentheses.

	(1)		(2)		(3)		(4)	
Starting Interest Rate Low	0.357	(0.374)	0.423	(0.365)	0.395	(0.367)	0.396	(0.373)
Down payment fraction chosen, Q2	-1.896	(0.509)	-0.843	(0.634)	-1.346	(0.592)	-0.915	(0.649)
Owner		,	-1.249	(1.044)	-1.623	(0.780)	-1.295	(1.071)
Age			-0.008	(0.017)	-0.011	(0.017)	-0.007	(0.018)
Number correct on numeracy test			0.222	(0.200)	0.193	(0.207)	0.185	(0.216)
Education: College Degree or higher			0.720	(0.402)	0.628	(0.407)	0.585	(0.410)
Married			-0.087	(0.488)	-0.067	(0.491)	-0.395	(0.535)
Male			-0.891	(0.398)	-0.893	(0.398)	-0.940	(0.398)
Marginal income tax rate			-0.008	(0.020)	-0.007	(0.022)	-0.025	(0.030)
Property tax rate			0.114	(0.349)	0.132	(0.351)	0.015	(0.351)
Risk Averse			0.319	(0.429)	0.246	(0.431)	0.308	(0.427)
Risk Loving			-0.428	(0.535)	-0.454	(0.532)	-0.398	(0.550)
E(Inc. growth, 1 yr)			-0.020	(0.021)	-0.020	(0.021)	-0.019	(0.022)
E(HP growth, 1 yr)			0.082	(0.053)	0.086	(0.054)	0.092	(0.053)
Pr(move over next 3 yrs)			-0.002	(0.008)	-0.003	(0.008)	-0.003	(0.008)
Pr(buy move)			0.011	(0.011)	0.011	(0.011)	0.011	(0.010)
Equity in (0, 50K]			-0.494	(0.870)			-0.506	(0.941)
Equity in (50, 125K]			0.311	(0.870)			0.292	(0.956)
Equity in (125K, 200K]			-0.884	(0.957)			-1.134	(1.059)
Equity of more than 200K			-1.044	(0.910)			-0.942	(1.023)
Liquid Savings of [5K, 30K)					-0.036	(0.618)	-0.189	(0.619)
Liquid Savings of [30K, 100K)					0.071	(0.599)	-0.159	(0.614)
Liquid Savings of [100K, 500K)					0.294	(0.567)	0.064	(0.599)
Liquid Savings of 500K or more					-0.561	(0.712)	-0.547	(0.802)
Non-Housing Debt of [1000, 5000)							-0.905	(0.590)
Non-Housing Debt of [5K, 30K)							0.029	(0.543)
Non-Housing Debt of 30K or more							-0.639	(0.553)
Credit Score 680-719							0.714	(0.955)
Credit Score 720-760							0.230	(0.714)
Credit Score Above 760							0.748	(0.832)
Income in (40K, 75K]							0.511	(0.570)
Income in (75K, 150K]							0.817	(0.694)
Income greater than 150K							0.684	(0.883)
Constant	2.793	(0.357)	3.247	(1.565)	3.699	(1.569)	3.959	(1.769)
Region & home type controls			✓		✓		✓	
Adj. R2	0.01		0.02		0.02		0.03	
Obs.	790		790		790		790	
Mean(dep. var.)	2.531		2.531		2.531		2.531	

Table A-6: Heterogeneity in the effect of \$100,000 wealth shock on WTP. Coefficient estimates from OLS regressions; dependent variable: $100 \cdot (\log(\text{WTP}_{Q4}) - \log(\text{WTP}_{Q3}))$. Robust standard errors reported in parentheses.

	(1)		(2)		(3)	
Interest Rate Low	1.213	(1.699)	1.467	(1.696)	1.440	(1.723)
Owner	-10.885	(5.676)	-11.094	(4.055)	-11.830	(5.900)
Age	-0.092	(0.083)	-0.083	(0.085)	-0.047	(0.086)
Number correct on numeracy test	0.223	(0.980)	0.316	(0.971)	0.740	(0.998)
Education: College Degree or higher	1.251	(1.961)	1.851	(1.994)	2.373	(2.080)
Married	-7.806	(2.557)	-7.586	(2.594)	-6.637	(2.828)
Male	1.847	(1.872)	2.046	(1.860)	2.306	(1.898)
Marginal income tax rate	-0.146	(0.109)	-0.143	(0.115)	-0.107	(0.154)
Property tax rate	3.160	(1.831)	3.137	(1.800)	2.956	(1.853)
Risk Averse	-1.735	(1.935)	-2.435	(1.955)	-1.879	(1.977)
Risk Loving	-1.752	(2.296)	-2.103	(2.273)	-1.983	(2.348)
E(Inc. growth, 1 yr)	-0.127	(0.107)	-0.127	(0.106)	-0.144	(0.110)
E(HP growth, 1 yr)	0.453	(0.202)	0.398	(0.204)	0.379	(0.209)
Pr(move over next 3 yrs)	-0.021	(0.041)	-0.021	(0.040)	-0.017	(0.040)
Pr(buy move)	-0.061	(0.043)	-0.057	(0.042)	-0.044	(0.043)
Equity in (0, 50K]	1.224	(4.878)			2.403	(5.258)
Equity in (50, 125K]	-1.824	(4.667)			1.021	(5.064)
Equity in (125K, 200K]	-4.476	(4.810)			-0.689	(5.312)
Equity of more than 200K	-5.189	(4.796)			-0.950	(5.236)
Liquid Savings of [5K, 30K)			0.785	(2.945)	1.273	(2.969)
Liquid Savings of [30K, 100K)			-4.797	(2.613)	-3.437	(2.708)
Liquid Savings of [100K, 500K)			-6.472	(2.561)	-4.157	(2.596)
Liquid Savings of 500K or more			-6.127	(2.826)	-4.095	(2.998)
Non-Housing Debt of [1000, 5000)					1.513	(2.672)
Non-Housing Debt of [5K, 30K)					-1.263	(2.197)
Non-Housing Debt of 30K or more					3.035	(2.610)
Credit Score 680-719					-4.334	(4.568)
Credit Score 720-760					-3.991	(3.819)
Credit Score Above 760					-3.935	(3.779)
Income in (40K, 75K]					-1.052	(3.595)
Income in (75K, 150K]					-2.085	(4.027)
Income greater than 150K					-3.602	(4.656)
Constant	30.546	(8.019)	30.705	(7.779)	27.985	(8.906)
Region & home type controls	\checkmark		\checkmark		\checkmark	
Adj. R2	0.10		0.10		0.10	
Obs.	790		790		790	
Mean(dep. var.)	12.015		12.015		12.015	

Table A-7: Heterogeneity in down payment fractions in Q2. Coefficient estimates from OLS regressions; dependent variable: down payment as fraction of WTP in Q2. Robust standard errors reported in parentheses.

	(1)		(2)		(3)		(4)	
Interest Rate Low	-2.64	(1.74)	-3.29	(1.42)	-2.64	(1.53)	-3.41	(1.41)
Owner			-4.64	(2.00)	5.28	(1.96)	-3.25	(2.08)
Age			0.34	(0.06)	0.45	(0.07)	0.26	(0.06)
Number correct on numeracy test			2.52	(0.72)	3.12	(0.75)	2.34	(0.75)
Education: College Degree or higher			-0.99	(1.51)	-0.59	(1.65)	-1.99	(1.58)
Married			0.62	(1.47)	1.36	(1.57)	1.43	(1.61)
Male			-0.30	(1.45)	-0.50	(1.54)	-0.83	(1.45)
Marginal income tax rate			-0.24	(0.08)	-0.26	(0.09)	-0.23	(0.10)
Property tax rate			-4.04	(1.36)	-4.57	(1.38)	-3.47	(1.31)
Risk Averse			-0.86	(1.57)	1.95	(1.62)	-0.17	(1.57)
Risk Loving			2.19	(2.31)	4.00	(2.49)	2.86	(2.33)
E(Inc. growth, 1 yr)			-0.06	(0.07)	-0.10	(0.08)	-0.06	(0.07)
E(HP growth, 1 yr)			-0.03	(0.13)	0.04	(0.14)	0.01	(0.13)
Pr(move over next 3 yrs)			0.03	(0.03)	0.03	(0.03)	0.04	(0.03)
Pr(buy move)			0.08	(0.03)	0.09	(0.03)	0.07	(0.03)
Equity in (0, 50K]			3.31	(1.55)			2.72	(1.74)
Equity in (50, 125K]			11.93	(1.87)			9.95	(2.12)
Equity in (125K, 200K]			26.67	(3.18)			23.17	(3.34)
Equity of more than 200K			33.94	(3.06)			29.91	(3.45)
Liquid Savings of [5K, 30K)					-0.73	(1.79)	-3.45	(1.76)
Liquid Savings of [30K, 100K)					2.66	(2.15)	-2.24	(2.23)
Liquid Savings of [100K, 500K)					14.59	(2.87)	4.95	(2.97)
Liquid Savings of 500K or more					18.93	(4.30)	4.98	(4.48)
Non-Housing Debt of [1000, 5000)							-2.79	(2.74)
Non-Housing Debt of [5K, 30K)							-5.36	(2.26)
Non-Housing Debt of 30K or more							-3.91	(2.38)
Credit Score 680-719							-1.00	(2.18)
Credit Score 720-760							2.85	(1.99)
Credit Score Above 760							4.76	(2.14)
Income in (40K, 75K]							-1.83	(2.17)
Income in (75K, 150K]							-3.43	(2.51)
Income greater than 150K							-5.34	(3.90)
Constant	24.24	(1.25)	-2.94	(5.79)	-14.68	(6.38)	4.67	(6.23)
Region & home type controls			\checkmark		\checkmark		\checkmark	
Adj. R2	0.00		0.35		0.26		0.37	
Obs.	790		790		790		790	
Mean(dep. var.)	22.96		22.96		22.96		22.96	

Table A-8: Qualitative response of WTP to change in interest rate: multivariate regressions. Robust standard errors reported in parentheses.

Dep. var.: Binary indicator (0/100) for:		(1) (TP 6.5%) :		(2) .5%)	,	3) P 6.5%) >	,	4)
Starting Interest Rate Low	-3.004	(3.261)	-3.770	(3.289)	-1.376	(1.931)	-1.646	(1.971)
Down payment fraction chosen, Q2	19.106	(6.773)	13.957	(7.513)	-0.615	(4.590)	-0.961	(5.373)
Owner	3.087	(5.297)	4.493	(8.846)	-5.522	(3.880)	-3.027	(5.839)
Age	0.314	(0.141)	0.233	(0.154)	-0.049	(0.089)	-0.053	(0.097)
Number correct on numeracy test	1.636	(1.658)	1.243	(1.694)	-2.948	(1.158)	-2.620	(1.208)
Education: College Degree or higher	2.466	(3.628)	-1.295	(3.888)	-3.334	(2.247)	-1.463	(2.404)
Married	1.621	(3.697)	-0.407	(4.133)	-1.395	(2.230)	0.729	(2.594)
Male	5.767	(3.443)	5.184	(3.496)	0.473	(2.031)	0.590	(2.065)
Marginal income tax rate	0.054	(0.173)	-0.023	(0.224)	0.090	(0.107)	0.209	(0.154)
Property tax rate	0.628	(3.310)	1.705	(3.360)	-2.896	(1.807)	-2.864	(1.885)
Risk Averse	-3.746	(3.643)	-3.508	(3.741)	2.681	(2.077)	1.742	(2.077)
Risk Loving	-4.557	(4.656)	-5.124	(4.649)	5.433	(3.014)	5.453	(3.090)
E(Inc. growth, 1 yr)	0.144	(0.155)	0.189	(0.157)	-0.069	(0.100)	-0.075	(0.105)
E(HP growth, 1 yr)	-0.643	(0.320)	-0.622	(0.328)	-0.008	(0.196)	-0.055	(0.195)
Pr(move over next 3 yrs)	0.072	(0.066)	0.062	(0.067)	-0.032	(0.043)	-0.029	(0.045)
Pr(buy move)	-0.046	(0.067)	-0.059	(0.069)	-0.057	(0.044)	-0.043	(0.044)
Equity in (0, 50K]		` ′	-1.083	(8.577)		` '	-2.039	(5.497)
Equity in (50, 125K]			-11.589	(8.775)			-0.564	(5.674)
Equity in (125K, 200K]			-3.657	(9.546)			1.432	(6.073)
Equity of more than 200K			6.045	(9.567)			1.264	(6.329)
Liquid Savings of [5K, 30K)			-4.766	(4.873)			2.483	(3.388)
Liquid Savings of [30K, 100K)			-0.258	(5.628)			-2.322	(3.305)
Liquid Savings of [100K, 500K)			-0.566	(6.297)			-3.463	(3.466)
Liquid Savings of 500K or more			6.067	(7.843)			0.104	(4.738)
Non-Housing Debt of [1000, 5000)			-3.642	(5.410)			0.395	(3.446)
Non-Housing Debt of [5K, 30K)			-1.724	(4.656)			-1.010	(3.003)
Non-Housing Debt of 30K or more			3.587	(5.094)			-4.020	(2.946)
Credit Score 680-719			1.248	(6.326)			1.189	(4.617)
Credit Score 720-760			6.066	(5.813)			-4.058	(4.122)
Credit Score Above 760			1.914	(6.035)			-3.513	(3.992)
Income in (40K, 75K]			-1.078	(5.093)			0.043	(3.400)
Income in (75K, 150K]			3.343	(6.020)			-5.626	(3.914)
Income greater than 150K			6.256	(8.723)			-7.547	(5.157)
Constant	8.800	(13.020)	18.798	(14.963)	36.044	(8.462)	34.374	(9.854)
Region & home type controls	✓		✓		✓		√	
Adj. R2	0.02		0.02		0.04		0.04	
Obs.	962		962		962		962	
Mean(dep. var.)	47.401		47.401		10.499		10.499	