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SECURITIZATION AND MORTGAGE DEFAULT:
REPUTATION VS. ADVERSE SELECTION

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Securitization and Mortgage Default: Reputation vs. Adverse Selection[1]

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Preliminary

Abstract

　　The academic literature, the popular press, and policymakers have all debated the securitization's contribution to the poor performance of mortgages originated in the run-up to the current crisis. Theoretical arguments have been advanced on both sides, but the lack of suitable data has made it difficult to assess them empirically. We examine this issue by using a loan-level data set from LPS Analytics, covering approximately three-quarters of the mortgage market from 2003-2007 and including both securitized and non-securitized loans. We find evidence that privately securitized loans do indeed perform worse than similar, non-securitized loans. Moreover, this effect is concentrated in prime mortgage markets; for example, a typical prime ARM loan originated in 2006 becomes delinquent at a 20 percent higher rate if it is privately securitized, ceteris paribus. By contrast, subprime loan performance does not seem to be worse for most classes of securitized loans.

Introduction

　　The recent dramatic increase in mortgage default rates, particularly for subprime loans, has led many to blame securitization. Simply put, the argument is that since the majority of subprime loans were securitized, issuers had less incentive to screen those loans, and this

encouraged a decline in lending standards. This argument has featured prominently in the popular press and has also been echoed by policymakers.[3] For example, the recently released U.S Treasury report on regulatory reform notes that "[t]he lack of transparency and standards in markets for securitized loans helped to weaken underwriting standards." and the report goes on to propose that issuers be required to maintain a 5 percent stake in any securitization. The argument has also found support in recent academic work, for example, Dell'Ariccia, Igan, and Laeven (2008), Mian and Sufi (2009), and Keys, et al. (2009).[4]

On the other hand, others (most prominently, Gorton, 2008) have pointed out that issuers retained substantial exposure even after mortgages were securitized. Some of this was explicit, since issuers often continued to service mortgages they had sold, or they retained senior tranches of CDOs containing these mortgages. But it was also implicit; for example, Higgins and Mason (2004) document instances in which issuers of credit card ABS have taken back non-performing loans (Higgins and Mason, 2004). More generally, Gorton and Souleles (2007) show that prices paid by investors in credit card ABS take into account issuers' ability to bail out their ABS. Thus, issuers' incentives need not necessarily be misaligned with those of investors. This view is also supported by earlier work on the securitization of prime mortgages. (See Ambrose, et al. , 2005, who found that securitized loans tended to perform *better* than similar non-securitized loans.)

One difficulty with most of the recent academic work is that the data used do not allow researchers to determine whether individual loans are in fact securitized. Dell'Ariccia, Igan, Laeven (2008) and Mian and Sufi (2009) instead use local-level aggregate securitization rates, an approach that makes interpreting their results difficult, since it is difficult to distinguish the effect of securitization from that of other local conditions.

Keys, et al. (2009) use loan-level data, but only for securitized loans (from the Loan Performance ABS database). So they must use an instrumental variables approach to characterize loans that are "harder" to securitize (those with credit scores just below 620) and find that these loans are indeed less likely to default, ceteris paribus. While this is indeed an ingenious approach, several issues arise. First, this instrument is rather weak, since many subprime MBS

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[3] http://www.financialstability.gov/docs/regs/FinalReport_web.pdf
[4] See also Nadauld and Sherlund (2009), who argue that house price appreciation facilitates securitization, and that underwriters tended to purchase lower credit-quality subprime mortgages in those ZIP codes that experienced the highest house price appreciation.

did indeed contain substantial numbers of loans below this cutoff. For example, in the New Century securitization studied by Ashcraft and Schuermann (2008), 57 percent of all loans have FICO scores below 620. Furthermore, work by Krainer and Laderman (2009), and others, suggests that this "620-discontinuity" appears to affect the performance of *non-securitized* loans in equal measure.[5] Relative to this paper, however, a key limitation of their approach is that they can only examine the effect of securitization for a very narrow subset of loans — those in the neighborhood of their cutoff. And, indeed, they find a significant effect only for a small subsample of loans — those with low or no documentation of income. By contrast, our approach allows us to examine a much broader segment of the mortgage market.[6]

In this paper we take a more direct approach, one that avoids many of these problems. We use the LPS data set, which includes both securitized loans and those held in portfolio by the original lender. We find evidence that for prime mortgages, private securitized loans indeed perform worse than portfolio loans; for instance, for loans originated in 2006, the two-year default rate is at least 15 percent higher, on average. Given the large number of prime loans that were originated over this period, this difference in default rates is economically significant. By contrast, securitized subprime loans do not appear to have defaulted at higher rates than similar non-securitized loans. As we discuss below, this relative difference in performance between prime and subprime loans may be driven by two factors. First, subprime loans are likelier to have been subject to greater scrutiny by investors, whereas prime loans would have been presumed to be of higher quality, thereby reducing the scope for adverse selection. In addition, as we discuss below, very few subprime loans were actually held in portfolio, further reducing the benefit to the lenders from cream-skimming and also increasing lenders' risk from doing so.

Our analysis also breaks down the effect of securitization by origination year. We find some evidence that this effect grows over time. In particular, for the largest segment of the market, prime FRMs, securitized loans originated in earlier years perform no worse, and sometimes better, than similar non-securitized loans. However, this effect decreases over time, and beginning with the 2006 vintage, such loans actually become delinquent at higher rates than

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[5] Some of these criticisms are addressed, at least in part, by additional analyses that they undertake in the paper. In particular, they also examining the introduction, and repeal, of anti-predatory lending laws in Georgia and New Jersey. The results of this latter analysis are consistent with those of their primary approach; during the period that these laws were in force, loans with credit scores slightly above 620 default a higher rates than those with scores slightly below.

[6] A final issue with their approach is that credit scores themselves are not completely exogenous and are subject to manipulation.

non-securitized loans. Our interpretation is that while in earlier years reputational effects were sufficient to sustain underwriting standards, as loan volumes increased, and the future of the housing market became more and more tenuous, the current benefit from originating questionable loans outweighed the future costs, and this led to a deterioration in issuers' incentives to properly underwrite loans. We should stress, however, that our results do not rule out the possibility that investors understood that such a deterioration in standards had taken place and that the prices or structures of the MBS reflected this.

We should point out that a recent paper by Jiang et al. (2009) also uses loan-level data on securitized and non-securitized loans to study the effect of loan sales on default. They study approximately 700,000 mortgages originated by a single lender specializing in Alt-A and, in particular, low-documentation loans. They find that broker-originated loans are more likely to default. However, they also find that low-doc loans that are securitized are *less* likely to default, after controlling for observable characteristics. Both of these findings are consistent with our results, as reported below. Since their data come from only a single lender, it is unclear how general their findings are. By contrast, because we work with a larger data set, we are able to establish a much broader set of results. In particular, our results highlight the different impact that securitization had in the prime and subprime markets.

Data

Introduction

We use loan-level data from the LPS Applied Analytics Inc, data set.[7] Other researchers have used this data set to study foreclosure outcomes; see Piskorski, Seru, and Vig (2009) and Foote et al. (2009); a more detailed description of the data may also be found in the latter paper. These data are provided by the servicers of the loans and include nine of the top 10 servicers.

As Table 1 demonstrates, coverage in LPS is approximately 75 percent of that in HMDA. However, subprime loans appear to be somewhat underrepresented, at least when compared to the Loan Performance data (Table 2).[8]

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[7] This data set is also commonly known as the "McDash" data.
[8] The HMDA data do not break out loans by prime vs. subprime, so the HMDA shares in Table 2 are not directly comparable to LP and LPS.

Table 1: First Mortgage Originations: LPS vs. HMDA

	LPS	HMDA
2004	7.2m	10.2m
2005	7.4m	10.5m
2006	6.4m	8.6m
2007	5.1m	6.9m

Table 2: Subprime Share of Originations[9]

	LP	McDash	HMDA
2003	7%	2.7%	
2004	16%	8.5%	14%
2005	18%	9.2%	25%
2006	16%	17.3%	28%
2007		13.4%	18%

In order to make the analysis cleaner, we focus primarily on 30-year, owner-occupied first-lien mortgage loans.[10] We drop observations with missing data and obvious outliers. To reduce survival bias, we also restrict attention to loans that entered the LPS data set within 12 months of their origination date. Taken together, these restrictions eliminate 10-20 percent of the data we begin with. We also consider only loans originated from 2003-2007, since LPS coverage was more limited before 2003, and we want to have a sufficiently long time horizon following origination.[11] We then follow the loans through March 2009.

We consider the following products: fixed-rate mortgages (FRM), 5-year ARMs, 3-year ARMS, and 2/28 ARMs. These three classes of ARMs were chosen because, taken together, they make up over 60 percent of all the adjustable-rate mortgages originated in the LPS data set during this time period. For each class we break down the sample into prime and subprime loans (as reported by the servicers). Note that there is no separate category for Alt-A loans; depending on the issuer, they may be classed as either prime or subprime. We also consider prime low-doc

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[9] Loan Performance statistics are from Mayer and Pence (2008). The HMDA share is the fraction of "higher-priced" loans in first-lien originations; pricing was first reported in HMDA in 2004.

[10] For the estimations reported here, we also dropped FHA and VA loans.

[11] We also repeated our analysis while restricting it to loans originated in 2005-2007; the results did not change significantly and are not reported here.

FRM and Jumbo FRM's separately. Except for prime FRM, where we draw a 25 percent random sample, we used all of the loans available in the LPS data set that met our criteria. Summary statistics for these different samples can be found in Table 6 of the Appendix.

The LPS data set is divided into a "static" file, whose values generally do not change over time, and a "dynamic" file. The static data set contains information obtained at the time of underwriting, such as the loan amount, house price, (origination) FICO score, documentation status, source of the loan (e.g., whether it was broker-originated), property location (zip code), type of loan (fixed-rate, ARM, prime, subprime, etc.), the prepayment penalty period (if any), and the termination date and termination status if the loan has indeed terminated. The termination types include "paid off," foreclosure (and other negative termination events such as REO sale), and the transfer of the loan to another servicer.

The dynamic file is updated monthly, and among other variables, it contains the status of the loan (current, 30 days delinquent, 60 days, etc.), the current interest rate (since this changes over time for ARMs), current balance, and investor type (private securitized, GNMA, FNMA, FHLMC, portfolio). The investor type variable is discussed in greater detail below.

We also generate several additional variables. First, we define a loan as being "in default" if it is 60+ days delinquent or if it experienced a negative termination event.[12] This is a relatively early definition of default, as opposed to a foreclosure, for example, which can occur many months later. We use this early definition for several reasons. First, state laws governing foreclosure differ widely, and this can have an effect on the length of time it takes to conclude a foreclosure.[13] Also, whether a delinquent loan is securitized or not may also affect the ease of modifying it and hence of avoiding foreclosure (Piskorski, Seru, and Vig, 2009 and Foote et al., 2009); thus, we choose to focus on the initial stages of distress.

In addition, we estimate the current house price by applying the FHFA house price index to the house price reported at origination[14] and use this to compute an estimate of the current loan-to-value ratio at quarterly frequency. We also calculate the house price appreciation in the

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[12] We use the Mortgage Bankers Association (MBA) definition of delinquency: a loan increases its delinquency status if a monthly payment is not received by the end of the day immediately preceding the loan's next payment due date.

[13] Many papers have studied the effect of these state laws on foreclosure outcomes; for example, Ghent and Kudlyak (2009) use the LPS data to address laws that restrict deficiency judgments.

[14] For properties located within an MSA we use the MSA-level index, while for those not in an MSA we use the "rural" index (or the state-level index when the rural index is not available).

region over the four years *prior* to the origination date of the loan to capture the effect of a housing "boom" on lending standards (as in Dell'Ariccia, Igan, and Laeven, 2008).

The Investor Type

Since the investor type is a key variable in our analysis, we discuss it in more detail. First note that the investor type is dynamic: nearly half of all loans are initially recorded as "portfolio" loans and are only then subsequently securitized, typically within several months. So we must define the investor type carefully so as to capture the "intended" investor type at the time of origination. Roughly speaking, we adopted the most common investor type during the first year of the loan's life; we restricted attention to the first year in order to more closely capture the intended investor type when the loan was originated.[15] Table 3 compares this "final" investor type to the one reported at loan origination.

Another issue is that a loan may also end up in a lender's portfolio not by design but because the loan defaults before it can be securitized. In particular, investors are generally able to force lenders to take back any loans that experience "early default," that is, loans that default in the first three months.[16] This is a particular concern for subprime loans, especially in the 2006 vintage. As we discuss below, to address this possibility we repeat our analysis while dropping any loans that have defaulted within three months of origination.

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[15] More precisely, for a given loan the investor type used was constructed as follows. We considered all investor types that occur during the first year of a loan's life. We then denoted an investor type to be "admissible" if it matches the modal investor type over the 12 months following the date on which it first appears. We then selected the admissible investor type that occurred first. Note that for almost all loans, there was only a single admissible investor type. On average, the investor type was determined within three months of the origination date.

[16] We are grateful to Amit Seru for highlighting the importance of this.

Table 3: Initial and "Final" Investor Type

	PRIME					SUBPRIME			
Year	**FHA**	**GSE**	**Private Securitized**	**Portfolio**		**FHA**	**GSE**	**Private Securitized**	**Portfolio**
Investor Type at Origination	2.81%	24.81%	22.84%	49.54%		0.05%	5.67%	52.84%	41.44%
"Final" Investor Type	9.02%	59.27%	22.43%	9.28%		0.09%	7.40%	84.12%	8.38%

Some Stylized Facts

Before we begin our formal analysis, it is useful to establish a few facts about the data. First, Table 4 reports the distribution of loans by investor type, for each product. We can see that prime ARMs represent an ideal laboratory for studying the effect of securitization, since issuers distributed their loans across all three investor types. Conversely, observe that the vast majority of subprime loans were privately securitized.

It is also useful to simply compare default rates across the different investor types (Table 5). Notice that private securitized loans do indeed seem to default at higher rates than other loans. However, this does not take account of the observable risk factors for these loans: for example, as we have already seen, private securitization was concentrated in the subprime market. Thus, a formal analysis is needed.

Table 4: Investor Type by Product

		GSE	Private Securitized	Portfolio	# Loans
FRM	Prime	78.6%	15.6%	5.7%	17.9 m
	Jumbo FRM	-	89.7%	10.3%	0.8 m
	Subprime	19.1%	74.1%	6.7%	0.8 m
	Lowdoc	80.7%	16.7%	2.5%	1.6 m
5 Yr ARMs	Prime	40.4%	35.2%	24.3%	2.2 m
	Subprime	17.9%	77.8%	4.2%	0.03 m
3 Yr ARMs	Prime	38.5%	35.5%	26.0%	0.6 m
	Subprime	0.0%	95.3%	4.7%	0.3m
2/28 ARMs	Prime	0.1%	95.4%	4.5%	0.4m
	Subprime	0.1%	91.0%	8.9%	0.8m

Table 5: Termination Status: by Investor Type (%)

	Entire Sample	FHA	GSE	Private Securitized	Portfolio
Paid Off or Did Not Terminate in Sample	93.47	92.4	97.31	85.38	89.62
Defaulted	1.7	2.59	0.59	3.78	1.62
Transferred to Other Servicer	4.83	5.37	2.1	10.84	9.13

Results

We estimate a Cox proportional hazard model, with default as the dependent variable, for each of our subsamples. The coefficients are reported in Tables 7-11, with standard errors in parentheses. Figure 1 plots the coefficients on securitized loans, by origination year, for the products we consider.

Turning first to the most standard product, prime FRM (Table 7), the coefficients in Panel A generally conform to our intuition. As others have found, broker-originated and low-doc loans are riskier. A borrower with a higher FICO score is less likely to default, while higher interest rates are riskier. We control for both current and origination LTV. A higher current LTV is has a

strong positive association with delinquency, as expected. By contrast, loans with higher origination LTVs default at lower rates (this may reflect screening on unobservables).[17] Also note that origination LTV enters as a spline, with its effect permitted to differ based on whether the origination LTV is below, equal to, or above 80 percent. And indeed, loans originated at 80 percent LTV default at slightly higher rates.[18]

As others have found, high house price appreciation in the four years prior to the mortgage origination date is associated with a higher likelihood of default (for example, Dell'Ariccia, Igan, and Laeven, 2008; Nadauld and Sherlund, 2009), although when we include MSA dummies, this coefficient changes sign.

The interactions between the dummy variables for origination year and investor type are in Panel B. The baseline origination year is 2003, and the baseline investor type is a portfolio loan (we dropped FHA and VA loans). The coefficients for loans originated in subsequent years are positive; that is, loans originated in later vintages are riskier, after controlling for risk and house prices changes. This is consistent with other papers' findings: see for example, Demyanyk and Van Hemert (2009).

As for the marginal contribution of private securitization, observe that in 2003-2005, securitized loans are less risky. However, this coefficient attenuates over time, and, starting in 2006, the contribution of private securitization to default is positive. We also re-ran the estimation for the subset of loans originated in the top 25 MSAs, both with and without MSA fixed effects, and obtained similar results.

Finally, we also break up our sample into the broker-originated loans and those that were not originated through a broker. These results are reported in Table 13. This allows us to conclude that it is in fact the brokered-subsample that accounts for our earlier finding that prime securitized FRM are riskier. In addition, we also see that lowdoc loans are particularly risky when they are originated by brokers; this is also consistent with Jiang et al (2009).

Results for jumbo FRM are similar and are reported in Tables 8 and 13.

As discussed above, prime ARMs represent an ideal laboratory for studying the effect of securitization. In particular, 5-year and 3-year ARMs are split roughly evenly between all three

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[17] Similar results have been observed in other contexts; for example, Berger and Udell (1990) find that riskier business loans tend to have more collateral.

[18] This may reflect the existence of unobserved "piggyback" (second) mortgages, which are more common for those loans originated at 80 percent LTV.

investor types, unlike prime FRM, where the GSEs dominated, and subprime ARMs, for which the vast majority of loans were in private securitized pools. For both of these, the coefficients on securitization are positive for every year (Tables 9 and 10). The results for 2/28 ARMs are similar, although they are negative for 2003 and 2004 (Table 10).

To help assess the economic significance of securitization on prime mortgage default rates, Table 12 reports the average two-year cumulative delinquency rate for loans originated in 2006, as well as the securitization coefficient for that year from the Cox regression. For example, for a typical prime 5-year ARM, private securitization would raise the delinquency rate by 23 percent,[19] from 14.6 percent to 18.4 percent.

By contrast, securitization seems to have a much smaller impact on subprime loans. For subprime ARMs, indeed, our baseline results have a negative coefficient in all years, which implies that securitized loans actually perform *better* (Table 11). However, it is important to note that a large part of this effect, particularly for the worst-performing vintages (such as 2006), is driven by early defaults.[20] This occurs because, as discussed above, early defaults can bias our definition of investor type; for example, loans that have defaulted can no longer be securitized. To control for this we re-run our estimations, but now excluding those loans that became delinquent within three months of origination.[21] This attenuates the coefficients, particularly for loans originated in 2005-2007; these coefficients are no longer statistically significant (and many become positive), once we make this restriction. By contrast, excluding these loans has little effect on the results for the prime sample (Tables 8-10), since it contains few early defaults.

The results for low-documentation FRM are similar (Table 8). Our baseline regression yields negative coefficients, but once we exclude those loans that become delinquent within three months of origination, they become positive or insignificant. This is also consistent with the findings of Jiang et al (2009) using their data set (from a single lender).

As discussed earlier, we conjecture that there are two reasons why riskier loans appear to have been securitized in prime markets, but less so in subprime. First, investors were aware of risks in the subprime and low-doc markets and may have scrutinized loans without the "prime" imprimatur more carefully. Along the same lines, "cherry picking" would have been riskier for

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[19] That is, $0.26 = e^{0.23} - 1$.

[20] For example, 30 percent of all 2/28 subprime ARMs held in portfolio become delinquent within the first three months; for securitized loans the corresponding figure is only 10 percent.

[21] We also drop loans with small balances (<$50,000), since these are also less likely to be securitized. We thank Paul Calem for this suggestion.

subprime lenders who were dependent on securitized pools to hold their loans. There are two reasons to be cautious in interpreting these results on the subprime market, however. First, as we have shown, coverage of the LPS data of this segment of the market was less broad. Also, the fact that securitization was ubiquitous in the subprime market might imply that the few non-securitized loans may be special in some way.

Conclusion

Using a data set that covers approximately 75 percent of loan originations from the years 2003-2007, and that includes both private securitized, GSE, and mortgages held in portfolio, we have shown that prime (private) securitized loans originated at the peak of the bubble performed significantly worse than similar non-securitized loans, ceteris paribus. This is particularly striking for markets such as prime ARMs, in which issuers held non-negligible amounts of loans in portfolio, and for lenders who were less reliant on securitization. We argue that this is evidence that adverse selection was present in the prime mortgage market, and that this may have contributed to a deterioration in underwriting standards.

However, in contrast to some previous studies, we do not find that the small fraction of subprime loans that were held in portfolio performed better than securitized loans. We suggest that this may be the result of two factors: subprime lenders' reliance on securitization made cherry picking more risky for them, and investors were more careful in scrutinizing loans that did not have the "prime" imprimatur.

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Appendix – Figures and Tables

Figure 1: Results: Coefficients on Private Securitization, by Origination Year
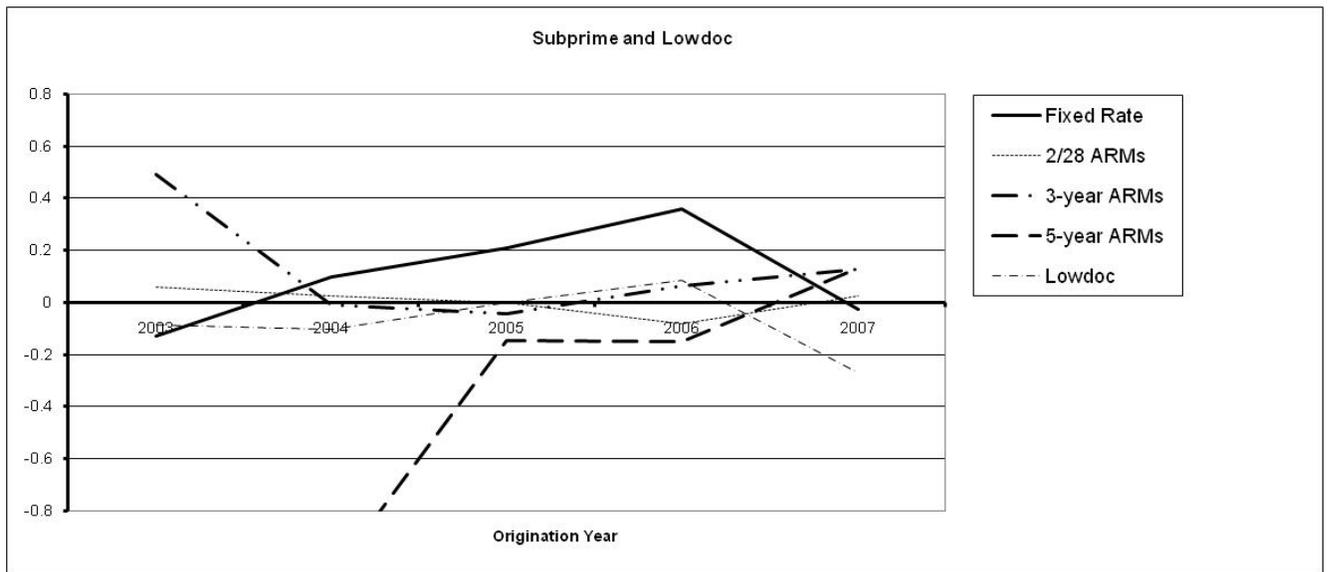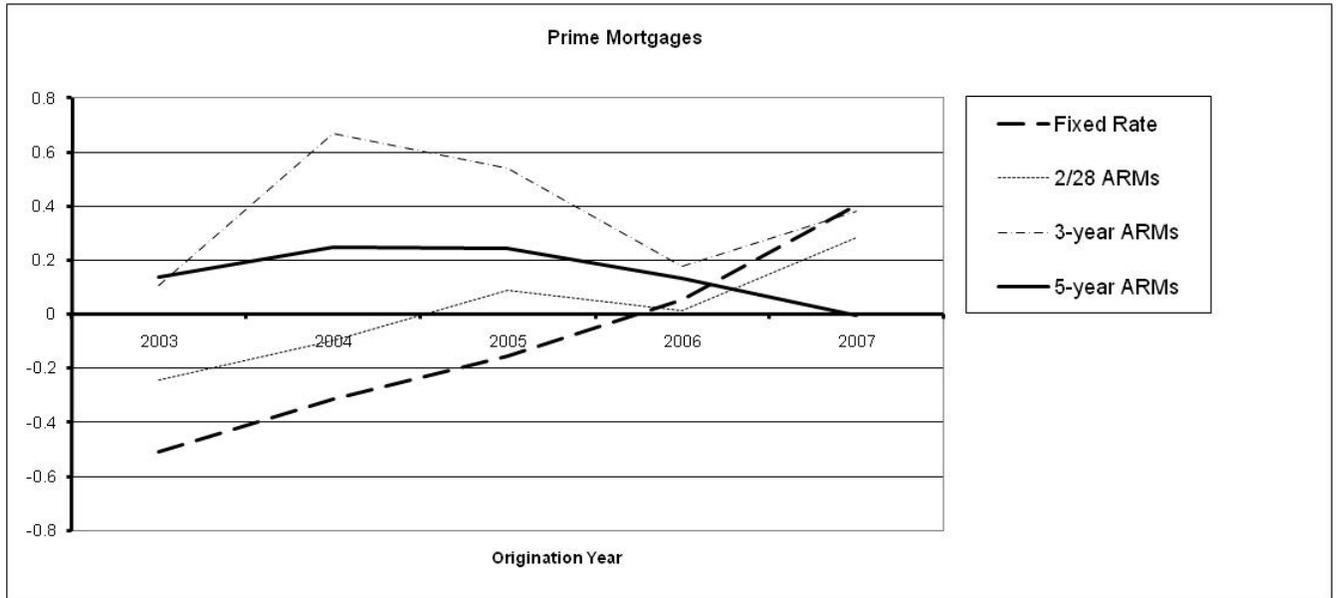
Table 6: Means of Selected Variables

Variable	FRM			5-Yr ARMs		3-Yr ARMs		2-Yr ARMs	
	Prime	Lowdoc	Subprime	Prime	Subprime	Prime	Subprime	Prime	Subprime
FICO (origination)	711	700	617	727	656	714	607	637	609
Current Interest Rate (%)	6.16	6.33	7.72	5.55	7.15	5.21	7.46	7.50	7.89
Margin (%; ARMs ONLY)				2.38	4.64	2.53	5.10	5.27	5.39
Jumbo Loan	0.05	0.04	0.06	0.26	0.16	0.19	0.08	0.14	0.09
Lowdoc Loan	0.10	1.00	0.06	0.22	0.15	0.23	0.03	0.14	0.09
Broker-originated	0.16	0.19	0.19	0.20	0.37	0.23	0.30	0.19	0.20
Correspondent-originated	0.29	0.42	0.17	0.20	0.05	0.25	0.17	0.02	0.12
Option-ARM Loan	0.00	0.01	0.00	0.14	0.41	0.09	0.05	0.20	0.16
Interest-Only Loan	0.02	0.03	0.03	0.50	0.39	0.35	0.23	0.27	0.16
Transferred from other Servicer	0.11	0.02	0.33	0.09	0.55	0.16	0.21	0.75	0.41
Prepayment Penalty Active	0.01	0.01	0.92	0.02	0.20	0.04	0.54	0.17	0.35
PMI	0.15	0.16	0.04	0.08	0.02	0.12	0.01	0.03	0.07
Refinancing	0.43	0.48	0.70	0.38	0.55	0.48	0.55	0.32	0.50
Cash-out Refinancing	0.11	0.17	0.47	0.10	0.37	0.10	0.47	0.06	0.32
LTV at Origination (%)	76	74	78	73	77	74	81	93	81
Current LTV Estimate (%)	66	67	72	65	66	64	74	76	75
County Unemployment Rate (%)	5.3	5.4	5.4	4.8	4.9	5.1	5.1	5.1	5.0
HPI Appreciation: 4 years before Orig.	0.39	0.42	0.44	0.54	0.52	0.49	0.48	0.58	0.51
Defaulted in-sample	0.09	0.10	0.34	0.09	0.27	0.12	0.35	0.43	0.39
Paid Off-in Sample	0.28	0.26	0.31	0.38	0.33	0.64	0.55	0.43	0.50

Table 7 (Panel A): Prime Fixed Rate Estimates

	Base Case	No Early Default	Top 25 MSA	
				Dummies
FICO at origination	-0.0124***	-0.0123***	-0.0121***	-0.0121***
	(5.74E-05)	(6.02E-05)	(9.09E-05)	(0.000094)
Interest Rate	0.511***	0.548***	0.600***	0.580***
	(0.00606)	(0.00671)	(0.00879)	(0.00881)
Loan Amount	0.000000464***	0.000000537***	0.000000551***	0.000000546***
	(3.19E-08)	(3.39E-08)	(3.63E-08)	(3.85E-08)
Jumbo loan	-0.334***	-0.360***	-0.392***	-0.361***
	(0.0195)	(0.0206)	(0.0247)	(0.0249)
Low-doc Loan	0.0381***	0.0347***	0.0143	0.0112
	(0.00713)	(0.00759)	(0.01110)	(0.01110)
Broker-originated	0.268***	0.240***	0.225***	0.226***
	(0.00734)	(0.00790)	(0.01120)	(0.01130)
Correspondent	0.0603***	0.0314***	0.0233*	0.0401***
	(0.00643)	(0.00698)	(0.00956)	(0.00956)
Prepayment Penalty Active	0.375***	0.381***	0.417***	0.318***
	(0.0316)	(0.0332)	(0.0467)	(0.0451)
PMI	0.521***	0.535***	0.599***	0.571***
	(0.0313)	(0.0348)	(0.0387)	(0.0374)
Refinancing	-0.0269***	0.00727	0.000655	0.016
	(0.00793)	(0.00860)	(0.01260)	(0.01250)
Cashout-refi	0.109***	0.103***	0.108***	0.105***
	(0.00852)	(0.00902)	(0.01260)	(0.01270)
LTV at Orig. (<80%)	-0.0188***	-0.0172***	-0.0229***	-0.0332***
	(0.00159)	(0.00170)	(0.00133)	(0.00136)
LTV at Orig. (=80%)	-0.01653***	-0.01478***	-0.02034***	-0.03058***
	(0.00154)	(0.00165)	(0.00121)	(0.00125)
LTV at Orig. (>80%)	-0.0194***	-0.0180***	-0.0243***	-0.0343***
	(0.00160)	(0.00170)	(0.00143)	(0.00144)
Current LTV	3.109***	3.006***	3.771***	4.863***
	(0.1310)	(0.1430)	(0.0504)	(0.0696)
County Unemp. Rate	0.0366***	0.0351***	0.0340***	0.0411***
	(0.00319)	(0.00346)	(0.00249)	(0.00287)
HPI appreciation	0.133***	0.178***	0.0848***	-0.425***
(4-years prior to orig)	(0.0246)	(0.0277)	(0.0211)	(0.0404)

Table 7 (Panel B): Prime Fixed Rate Estimates

	Base Case	No Early Default	Top 25 MSA	
				Dummies
Orig. 2004	0.280***	0.354***	0.398***	0.391***
	(0.0543)	(0.0600)	(0.0793)	(0.0791)
Orig. 2005	0.310***	0.387***	0.486***	0.457***
	(0.0515)	(0.0570)	(0.0756)	(0.0758)
Orig. 2006	0.351***	0.454***	0.382***	0.308***
	(0.0501)	(0.0562)	(0.0740)	(0.0742)
Orig. 2007	0.459***	0.661***	0.724***	0.608***
	(0.0506)	(0.0568)	(0.0731)	(0.0730)
GSE 2003	-0.428***	-0.354***	-0.373***	-0.362***
	(0.0429)	(0.0480)	(0.0645)	(0.0643)
GSE 2004	-0.517***	-0.467***	-0.536***	-0.509***
	(0.0363)	(0.0391)	(0.0511)	(0.0507)
GSE 2005	-0.388***	-0.350***	-0.447***	-0.429***
	(0.0299)	(0.0320)	(0.0434)	(0.0433)
GSE 2006	-0.360***	-0.328***	-0.247***	-0.236***
	(0.0260)	(0.0283)	(0.0401)	(0.0397)
GSE 2007	0.101***	0.103***	0.123***	0.111**
	(0.0252)	(0.0274)	(0.0356)	(0.0347)
Securitized-2003	-0.566***	-0.510***	-0.507***	-0.476***
	(0.0494)	(0.0549)	(0.0714)	(0.0711)
Securitized-2004	-0.398***	-0.314***	-0.359***	-0.315***
	(0.0402)	(0.0425)	(0.0561)	(0.0558)
Securitized-2005	-0.190***	-0.154***	-0.238***	-0.199***
	(0.0323)	(0.0346)	(0.0463)	(0.0462)
Securitized-2006	0.0663*	0.0555	0.117**	0.125**
	(0.0282)	(0.0305)	(0.0433)	(0.0429)
Securitized-2007	0.437***	0.405***	0.353***	0.327***
	(0.0309)	(0.0331)	(0.0438)	(0.0429)
No Early Default & Loan>$50,000	N	Y	Y	Y
MSA Subset	-	-	Y	Y
MSA Dummy	-	-	Y	Y
N	29128421	28257070	13701430	13701430

Table 8 (Panel A): Other Fixed-Rate Mortgages

	Jumbo FRM			Subprime FRM			Lowdoc Prime FRM		
	Base Case	No Early Default	Top 25 MSA	Base Case	No Early Default	Top 25 MSA	Base Case	No Early Default	Top 25 MSA
FICO at origination	-0.0108***	-0.0108***	-0.0109***	-0.00619***	-0.00583***	-0.00555***	-0.0113***	-0.0110***	-0.0108***
	(0.0000999)	(0.000105)	(0.000130)	(0.0000497)	(0.0000543)	(0.0000774)	(0.0000584)	(0.0000618)	(0.0000895)
Loan Amount	6.79e-08***	4.58e-08*	3.22e-09	0.00000117***	0.00000110***	0.000000957***	0.000000456***	0.000000509***	0.000000633***
	(1.76e-08)	(1.93e-08)	(2.41e-08)	(5.34e-08)	(5.25e-08)	(6.29e-08)	(3.36e-08)	(3.59e-08)	(4.80e-08)
Jumbo				-0.207***	-0.220***	-0.177***	-0.281***	-0.313***	-0.358***
				(0.0183)	(0.0185)	(0.0206)	(0.0212)	(0.0224)	(0.0286)
Low-doc	-0.0130	-0.0193	-0.00997	0.0568***	0.0578***	0.0475**			
	(0.0139)	(0.0146)	(0.0174)	(0.0101)	(0.0113)	(0.0173)			
Broker	0.284***	0.245***	0.231***	0.123***	0.109***	0.113***	0.245***	0.235***	0.228***
	(0.0113)	(0.0119)	(0.0144)	(0.00681)	(0.00743)	(0.0108)	(0.00850)	(0.00896)	(0.0132)
Correspondent	-0.0537***	-0.0740***	-0.0398**	0.114***	0.121***	0.0940***	0.0532***	0.0274***	0.0703***
	(0.0118)	(0.0123)	(0.0150)	(0.00689)	(0.00755)	(0.0115)	(0.00739)	(0.00786)	(0.0119)
Prepayment Penalty	0.240***	0.257***	0.224***	-0.126***	-0.143***	-0.0990***	0.141***	0.149***	0.0573
	(0.0147)	(0.0157)	(0.0186)	(0.0102)	(0.0105)	(0.0143)	(0.0324)	(0.0353)	(0.0479)
LTV at Orig. (<80%)	0.0247***	0.0275***	0.0286***	-0.00784***	-0.00590***	-0.00692***	-0.00998***	-0.00749***	-0.0139***
	(0.00131)	(0.00126)	(0.00160)	(0.000427)	(0.000468)	(0.000714)	(0.000527)	(0.000556)	(0.000923)
LTV at Orig. (=80%)	0.0258***	0.0283***	0.0295***	-0.00698***	-0.00514***	-0.00566***	-0.00946***	-0.00698***	-0.0133***
	(0.00128)	(0.00123)	(0.00158)	(0.000403)	(0.00044)	(0.00068)	(0.000504)	(0.000528)	(0.000891)
LTV at Orig. (>80%)	0.0191***	0.0219***	0.0233***	-0.00892***	-0.00718***	-0.00831***	-0.00736***	-0.00528***	-0.0120***
	(0.00130)	(0.00125)	(0.00159)	(0.000374)	(0.000408)	(0.000643)	(0.000471)	(0.000492)	(0.000855)
Current LTV	1.165***	1.179***	1.196***	2.484***	2.428***	2.639***	3.253***	3.200***	3.956***
	(0.101)	(0.0927)	(0.124)	(0.0263)	(0.0274)	(0.0477)	(0.0323)	(0.0331)	(0.0682)
Interest Rate	0.682***	0.695***	0.681***	0.231***	0.226***	0.242***	0.573***	0.606***	0.647***
	(0.00845)	(0.00879)	(0.0107)	(0.00247)	(0.00274)	(0.00393)	(0.00965)	(0.00852)	(0.0103)
HPI Appreciation	0.362***	0.386***	-0.166**	0.0716***	0.110***	0.153***	0.0966***	0.134***	-0.329***
(4-yrs prior)	(0.0232)	(0.0240)	(0.0554)	(0.0107)	(0.0114)	(0.0418)	(0.0133)	(0.0141)	(0.0503)
Refinance	0.0818***	0.151***	0.147***	-0.320***	-0.303***	-0.353***	0.00193	0.0326***	0.0798***
	(0.0106)	(0.0111)	(0.0135)	(0.00777)	(0.00858)	(0.0129)	(0.00854)	(0.00877)	(0.0130)
Cashout Refi	-0.127***	-0.122***	-0.117***	0.101***	0.124***	0.138***	0.160***	0.174***	0.203***
	(0.0122)	(0.0128)	(0.0155)	(0.00747)	(0.00820)	(0.0121)	(0.00946)	(0.00988)	(0.0141)
Unemployment Rate	0.0921***	0.0847***	0.104***	0.00811***	0.0116***	0.0291***	0.0158***	0.0146***	0.0164***
	(0.00366)	(0.00352)	(0.00479)	(0.00125)	(0.00134)	(0.00302)	(0.00157)	(0.00163)	(0.00348)
PMI	0.676***	0.609***	0.523***	-0.0582**	-0.0473*	-0.0509	0.0277*	0.0284*	0.0875***
	(0.0359)	(0.0385)	(0.0456)	(0.0184)	(0.0203)	(0.0335)	(0.0110)	(0.0121)	(0.0189)
Transfer	0.284***	0.214***	0.267***	0.179***	0.134***	0.120***	0.0701*	0.0253	0.0961**
	(0.0141)	(0.0151)	(0.0180)	(0.00636)	(0.00699)	(0.0101)	(0.0274)	(0.0308)	(0.0367)
Option-ARM	0.527***	0.604***	0.599***	0.726***	0.880***	0.834***			
	(0.0213)	(0.0222)	(0.0262)	(0.0380)	(0.0408)	(0.0606)			
Interest-Only	0.884***	0.908***	0.879***	0.414***	0.430***	0.445***			
	(0.0109)	(0.0115)	(0.0138)	(0.00938)	(0.0102)	(0.0131)			

Table 8 (Panel B): Other Fixed-Rate Mortgages

	Jumbo FRM			Subprime FRM			Lowdoc Prime FRM		
	Base Case	No Early Default	Top 25 MSA	Base Case	No Early Default	Top 25 MSA	Base Case	No Early Default	Top 25 MSA
Orig. 2004	0.330***	0.552***	0.566***	0.274***	0.234***	0.284**	0.714***	0.534***	0.462***
	(0.0738)	(0.0850)	(0.101)	(0.0472)	(0.0573)	(0.0870)	(0.0786)	(0.0892)	(0.105)
Orig. 2005	1.132***	1.102***	1.114***	0.522***	0.293***	0.355***	0.882***	0.586***	0.433***
	(0.0662)	(0.0708)	(0.0867)	(0.0323)	(0.0370)	(0.0523)	(0.0776)	(0.0899)	(0.113)
Orig. 2006	1.536***	1.566***	1.512***	0.768***	0.466***	0.482***	0.924***	0.651***	0.607***
	(0.0621)	(0.0664)	(0.0850)	(0.0305)	(0.0359)	(0.0533)	(0.0784)	(0.0881)	(0.112)
Orig. 2007	2.357***	2.557***	2.419***	1.162***	1.075***	1.118***	1.693***	1.555***	1.457***
	(0.0607)	(0.0633)	(0.0785)	(0.0261)	(0.0294)	(0.0431)	(0.0658)	(0.0728)	(0.0843)
Securitized-2003	-0.340***	-0.408***	-0.402***	-0.0395	-0.131***	-0.236***	-0.246**	-0.0866	-0.00332
	(0.0485)	(0.0508)	(0.0598)	(0.0360)	(0.0390)	(0.0579)	(0.0813)	(0.0825)	(0.0825)
Securitized-2004	-0.0461	-0.189*	-0.215*	0.0303	0.100	0.109	-0.398***	-0.104	-0.0158
	(0.0613)	(0.0737)	(0.0876)	(0.0453)	(0.0554)	(0.0844)	(0.0572)	(0.0656)	(0.0839)
Securitized-2005	-0.131**	-0.0296	-0.0381	0.0323	0.208***	0.225***	-0.350***	-0.00165	0.119
	(0.0466)	(0.0507)	(0.0622)	(0.0287)	(0.0333)	(0.0463)	(0.0536)	(0.0654)	(0.0922)
Securitized-2006	0.134**	0.221***	0.267***	0.107***	0.359***	0.397***	-0.217***	0.0836	0.0777
	(0.0429)	(0.0469)	(0.0540)	(0.0258)	(0.0313)	(0.0461)	(0.0542)	(0.0624)	(0.0886)
Securitized-2007	-0.163***	-0.166***	-0.116***	-0.0907***	-0.0249	-0.0158	-0.493***	-0.270***	-0.275***
	(0.0198)	(0.0213)	(0.0259)	(0.0198)	(0.0228)	(0.0331)	(0.0344)	(0.0386)	(0.0497)
GSE-2003				-0.554***	-0.602***	-0.451***	-0.278***	-0.218***	-0.249***
				(0.0846)	(0.0918)	(0.114)	(0.0599)	(0.0655)	(0.0722)
GSE-2004				0.335***	0.409***	0.399***	-0.508***	-0.253***	-0.253**
				(0.0478)	(0.0578)	(0.0885)	(0.0539)	(0.0634)	(0.0804)
GSE-2005				0.169***	0.328***	0.269***	-0.555***	-0.215***	-0.116
				(0.0313)	(0.0360)	(0.0514)	(0.0518)	(0.0637)	(0.0897)
GSE-2006				0.134***	0.365***	0.357***	-0.618***	-0.294***	-0.337***
				(0.0280)	(0.0335)	(0.0499)	(0.0519)	(0.0600)	(0.0864)
GSE-2007				0.0755***	0.144***	0.154***	-0.884***	-0.644***	-0.629***
				(0.0211)	(0.0243)	(0.0352)	(0.0279)	(0.0321)	(0.0423)
No Early Default	N	Y	Y	N	Y	Y	N	Y	Y
N	7850509	7682202	5387952	4724547	4405820	2093203	14438228	14001753	6995468

Table 9 (Panel A): 5-year Prime ARMs

	Base Case	No Early Default	No Option-ARM or IO	No Early Default	Top 25 MSA	Dummies
FICO at origination	-0.00974***	-0.00964***	-0.0122***	-0.0122***	-0.00967***	-0.00969***
	(0.0000605)	(0.0000627)	(0.000138)	(0.000143)	(0.0000836)	(0.0000823)
Loan Amount	0.000000239***	0.000000229***	-7.92e-09	-5.73e-08	0.000000168***	0.000000198***
	(1.18e-08)	(1.25e-08)	(5.10e-08)	(5.65e-08)	(1.57e-08)	(1.53e-08)
Jumbo	-0.0125	-0.0297***	-0.153***	-0.154***	-0.0486***	-0.0104
	(0.00865)	(0.00891)	(0.0269)	(0.0288)	(0.0110)	(0.0113)
Low-doc	-0.0422***	-0.0520***	-0.0591***	-0.0615***	-0.0539***	-0.0532***
	(0.00696)	(0.00725)	(0.0154)	(0.0162)	(0.00931)	(0.00934)
Broker	0.194***	0.186***	0.195***	0.202***	0.156***	0.170***
	(0.00724)	(0.00756)	(0.0169)	(0.0177)	(0.00974)	(0.00978)
Correspondent	-0.0183*	-0.0260**	-0.0385**	-0.0349*	-0.0147	-0.00982
	(0.00764)	(0.00790)	(0.0149)	(0.0155)	(0.0103)	(0.0104)
Prepayment Penalty	0.216***	0.190***	0.151***	0.116**	0.140***	0.0981***
	(0.0115)	(0.0121)	(0.0335)	(0.0356)	(0.0160)	(0.0164)
LTV at Orig. (<80%)	0.0222***	0.0212***	-0.00235*	0.00163	0.0224***	0.0228***
	(0.00136)	(0.00122)	(0.000998)	(0.00105)	(0.00139)	(0.00139)
LTV at Orig. (=80%)	0.02294***	0.02181***	-0.00134	0.002538*	0.0230***	0.0236***
	(0.00134)	(0.00120)	(0.000948)	(0.000995)	(0.00136)	(0.00138)
LTV at Orig. (>80%)	0.0171***	0.0164***	0.00610***	-0.00274**	0.0177***	0.0183***
	(0.00133)	(0.00118)	(0.000929)	(0.000976)	(0.00139)	(0.00139)
Current LTV	1.404***	1.688***	3.218***	3.117***	1.625***	1.543***
	(0.119)	(0.103)	(0.0580)	(0.0594)	(0.117)	(0.119)
Initial Interest Rate	0.651***	0.662***	0.412***	0.417***	0.701***	0.688***
	(0.00539)	(0.00584)	(0.0112)	(0.0120)	(0.00804)	(0.00774)
Margin	-0.178***	-0.167***	-0.195***	-0.197***	-0.164***	-0.159***
	(0.00570)	(0.00569)	(0.00982)	(0.0104)	(0.00711)	(0.00684)
HPI appreciation	0.633***	0.615***	0.462***	0.489***	0.604***	0.315***
(4-years prior to orig)	(0.0194)	(0.0181)	(0.0230)	(0.0243)	(0.0186)	(0.0434)
Refinancing	-0.0134	0.00242	0.0353*	0.0594***	-0.0123	-0.000275
	(0.00712)	(0.00738)	(0.0148)	(0.0155)	(0.00974)	(0.00950)
Cashout Refi	-0.0281**	-0.0241*	0.141***	0.151***	-0.0234	-0.0250
	(0.00980)	(0.0102)	(0.0214)	(0.0223)	(0.0133)	(0.0131)
Unemployment Rate	0.0810***	0.0703***	0.0568***	0.0570***	0.0896***	0.129***
	(0.00392)	(0.00374)	(0.00379)	(0.00397)	(0.00528)	(0.00587)
PMI	0.341***	0.281***	0.566***	0.580***	0.247***	0.206***
	(0.0187)	(0.0205)	(0.0377)	(0.0405)	(0.0389)	(0.0347)
Transfer	0.446***	0.465***	0.741***	0.819***	0.472***	0.461***
	(0.00825)	(0.00860)	(0.0233)	(0.0241)	(0.0112)	(0.0112)
Option-ARM	-0.128***	-0.143***			-0.122***	-0.109***
	(0.00931)	(0.00974)			(0.0120)	(0.0120)
IO	0.108***	0.121***			0.121***	0.109***
	(0.00768)	(0.00790)			(0.0103)	(0.0101)

Table 9 (Panel B): 5-year Prime ARMs

	Base Case	No Early Default	No Option-ARM or IO		Top 25 MSA	
			No Early Default			**Dummies**
Orig. 2004	0.291***	0.309***	0.206***	0.268***	0.283***	0.286***
	(0.0259)	(0.0270)	(0.0375)	(0.0397)	(0.0338)	(0.0338)
Orig. 2005	0.851***	0.842***	0.886***	0.945***	0.770***	0.791***
	(0.0291)	(0.0294)	(0.0467)	(0.0495)	(0.0371)	(0.0367)
Orig. 2006	1.309***	1.308***	1.082***	1.160***	1.284***	1.315***
	(0.0341)	(0.0336)	(0.0525)	(0.0557)	(0.0419)	(0.0417)
Orig. 2007	2.149***	2.116***	1.634***	1.743***	2.094***	2.036***
	(0.0436)	(0.0420)	(0.0625)	(0.0679)	(0.0493)	(0.0501)
Securitized-2003	0.210***	0.188***	0.543***	0.565***	0.133*	0.128*
	(0.0474)	(0.0498)	(0.0572)	(0.0609)	(0.0640)	(0.0640)
Securitized-2004	0.337***	0.344***	0.443***	0.450***	0.350***	0.352***
	(0.0181)	(0.0186)	(0.0369)	(0.0384)	(0.0236)	(0.0236)
Securitized-2005	0.264***	0.269***	0.199***	0.225***	0.306***	0.309***
	(0.0135)	(0.0140)	(0.0399)	(0.0419)	(0.0187)	(0.0187)
Securitized-2006	0.248***	0.235***	0.288***	0.317***	0.234***	0.231***
	(0.0140)	(0.0142)	(0.0426)	(0.0448)	(0.0177)	(0.0175)
Securitized-2007	0.0730***	0.108***	0.327***	0.351***	0.0932***	0.126***
	(0.0185)	(0.0199)	(0.0660)	(0.0724)	(0.0245)	(0.0246)
GSE 2003	0.363***	0.349***	0.327***	0.374***	0.294***	0.294***
	(0.0273)	(0.0285)	(0.0347)	(0.0370)	(0.0368)	(0.0368)
GSE 2004	0.409***	0.406***	0.421***	0.443***	0.392***	0.401***
	(0.0169)	(0.0174)	(0.0268)	(0.0279)	(0.0226)	(0.0226)
GSE 2005	0.147***	0.141***	-0.100**	-0.0827*	0.189***	0.191***
	(0.0144)	(0.0150)	(0.0373)	(0.0392)	(0.0203)	(0.0203)
GSE 2006	0.0883***	0.0746***	-0.105*	-0.0756	0.0553**	0.0468*
	(0.0151)	(0.0153)	(0.0415)	(0.0436)	(0.0194)	(0.0192)
GSE 2007	0.00832	0.0396*	-0.130*	-0.0911	0.0145	0.0422
	(0.0185)	(0.0199)	(0.0647)	(0.0705)	(0.0252)	(0.0251)
N	19628285	19238238	8275802	8135845	11514164	11514164
No Early Default	N	Y	N	Y	Y	Y
Top MSA Subsample	-	-	-	-	Y	Y
MSA Dummies	-	-	-	-	N	Y

Table 10 (Panel A): 3-year and 2/28 Prime ARMs

	3-yr ARMs			2/28 ARMs		
	Base Case	No Early Default	Top 25 MSA Dummies	Base Case	No Early Default	Top 25 MSA Dummies
FICO at origination	-0.00823***	-0.00830***	-0.00839***	-0.00276***	-0.00274***	-0.00234***
	(0.0000959)	(0.0000995)	(0.000128)	(0.0000599)	(0.0000621)	(0.0000819)
Loan Amount	0.000000251***	0.000000244***	0.000000240***	0.00000146***	0.00000144***	0.00000147***
	(2.99e-08)	(2.98e-08)	(2.97e-08)	(3.58e-08)	(3.62e-08)	(4.93e-08)
Jumbo	0.0507**	0.0451**	0.0808***	-0.102***	-0.102***	-0.0870***
	(0.0165)	(0.0168)	(0.0197)	(0.0129)	(0.0132)	(0.0161)
Low-doc	0.00626	-0.0159	-0.0308	0.185***	0.151***	0.167***
	(0.0118)	(0.0123)	(0.0162)	(0.0102)	(0.0107)	(0.0138)
Broker	0.194***	0.203***	0.185***	0.179***	0.246***	0.364***
	(0.0137)	(0.0142)	(0.0190)	(0.0400)	(0.0427)	(0.0581)
Correspondent	0.0202	0.0220	0.0398*	0.168***	0.277***	0.324***
	(0.0139)	(0.0144)	(0.0193)	(0.0366)	(0.0389)	(0.0525)
Prepayment Penalty	0.134***	0.105***	0.104***	-0.243***	-0.327***	-0.309***
	(0.0171)	(0.0179)	(0.0239)	(0.0106)	(0.0112)	(0.0144)
LTV at Orig. (<80%)	-0.0179***	-0.0178***	-0.0164***	-0.0186***	-0.0184***	-0.0227***
	(0.00115)	(0.00104)	(0.00200)	(0.00121)	(0.00117)	(0.000921)
LTV at Orig. (=80%)	-0.0145***	-0.0143***	-0.0125***	-0.0153***	-0.0152***	-0.0192***
	(0.00117)	(0.00107)	(0.00201)	(0.00117)	(0.00113)	(0.000879)
LTV at Orig. (>80%)	-0.0184***	-0.0182***	-0.0169***	-0.0173***	-0.0171***	-0.0212***
	(0.00113)	(0.00103)	(0.00200)	(0.00112)	(0.00108)	(0.000812)
Current LTV	1.934***	1.911***	1.774***	1.515***	1.496***	1.837***
	(0.152)	(0.145)	(0.220)	(0.0854)	(0.0834)	(0.0546)
Initial Interest Rate	0.243***	0.237***	0.223***	0.243***	0.247***	0.249***
	(0.00577)	(0.00600)	(0.00782)	(0.00334)	(0.00353)	(0.00488)
Margin	-0.00717	-0.00128	0.0105	0.00773**	0.00509	0.0121***
	(0.00476)	(0.00497)	(0.00639)	(0.00257)	(0.00266)	(0.00356)
HPI appreciation	0.357***	0.389***	0.601***	0.124***	0.154***	0.621***
(4-years prior to orig)	(0.0210)	(0.0213)	(0.0949)	(0.0121)	(0.0125)	(0.0536)
Refinancing	-0.160***	-0.163***	-0.195***	-0.190***	-0.184***	-0.199***
	(0.0112)	(0.0117)	(0.0150)	(0.00749)	(0.00779)	(0.0101)
Cashout Refi	0.00502	0.0112	0.0385	0.00171	0.0141	-0.00181
	(0.0161)	(0.0166)	(0.0216)	(0.0151)	(0.0157)	(0.0201)
Unemployment Rate	-0.0108*	-0.0114*	-0.0272***	0.0250***	0.0241***	0.0212***
	(0.00503)	(0.00494)	(0.00711)	(0.00233)	(0.00235)	(0.00387)
PMI	0.493***	0.484***	0.489***	0.0253	0.0347	0.0708*
	(0.0212)	(0.0225)	(0.0290)	(0.0249)	(0.0261)	(0.0291)
Transfer	0.267***	0.291***	0.287***	0.293***	0.426***	0.493***
	(0.0155)	(0.0160)	(0.0213)	(0.0254)	(0.0273)	(0.0361)

Table 10 (Panel B): 3-year and 2/28 Prime ARMs

	3-yr ARMs			2/28 ARMs		
	Base Case	No Early Default	Top 25 MSA Dummies	Base Case	No Early Default	Top 25 MSA Dummies
Option-ARM	0.0841***	0.0866***	0.145***	0.125***	0.0910*	0.0692
	(0.0202)	(0.0211)	(0.0266)	(0.0362)	(0.0382)	(0.0521)
IO	0.347***	0.365***	0.354***	0.143***	0.145***	0.0886***
	(0.0158)	(0.0162)	(0.0180)	(0.00734)	(0.00756)	(0.00968)
Orig. 2004	0.420***	0.405***	0.408***	0.668***	0.289***	0.411***
	(0.0333)	(0.0344)	(0.0429)	(0.0485)	(0.0538)	(0.0788)
Orig. 2005	0.872***	0.867***	0.857***	0.697***	0.533***	0.629***
	(0.0389)	(0.0401)	(0.0514)	(0.0529)	(0.0546)	(0.0786)
Orig. 2006	1.775***	1.783***	1.911***	0.811***	0.671***	0.825***
	(0.0468)	(0.0481)	(0.0645)	(0.0431)	(0.0445)	(0.0647)
Orig. 2007	2.120***	2.070***	2.308***	0.745***	0.547***	0.710***
	(0.0496)	(0.0515)	(0.0730)	(0.0479)	(0.0502)	(0.0736)
Securitized-2003	0.180**	0.106	0.150	-0.240***	-0.244***	-0.109
	(0.0651)	(0.0692)	(0.0894)	(0.0425)	(0.0444)	(0.0687)
Securitized-2004	0.633***	0.669***	0.691***	-0.407***	-0.0986*	-0.0723
	(0.0237)	(0.0245)	(0.0309)	(0.0365)	(0.0424)	(0.0578)
Securitized-2005	0.527***	0.543***	0.601***	0.0439	0.0898*	0.102
	(0.0248)	(0.0256)	(0.0339)	(0.0390)	(0.0402)	(0.0539)
Securitized-2006	0.165***	0.177***	0.183***	0.0254	0.0160	-0.00532
	(0.0232)	(0.0245)	(0.0329)	(0.0202)	(0.0210)	(0.0282)
Securitized-2007	0.303***	0.383***	0.350***	0.199***	0.285***	0.355***
	(0.0475)	(0.0505)	(0.0613)	(0.0462)	(0.0484)	(0.0651)
GSE 2003	0.288***	0.281***	0.320***			
	(0.0425)	(0.0439)	(0.0562)			
GSE 2004	0.427***	0.462***	0.475***			
	(0.0225)	(0.0232)	(0.0298)			
GSE 2005	0.211***	0.211***	0.242***			
	(0.0268)	(0.0277)	(0.0374)			
GSE 2006	-0.222***	-0.202***	-0.205***			
	(0.0309)	(0.0323)	(0.0442)			
GSE 2007	-0.386***	-0.268***	-0.378***			
	(0.0543)	(0.0575)	(0.0791)			
N	4668454	4560519	2579919	5052194	4833211	2652468
No Early Default	N	Y	Y	N	Y	Y

Table 11: Subprime ARMs (Panel A)

	5-yr ARMs		3-yr ARMs		2/28 ARMs	
	Base Case	MSA Subset - No Early Default	Base Case	MSA Subset - No Early Default	Base Case	MSA Subset - No Early Default
FICO (origination)	-0.00569***	-0.00551***	-0.00426***	-0.00360***	-0.00412***	-0.00369***
	(0.000296)	(0.000419)	(0.0000715)	(0.000102)	(0.0000421)	(0.0000678)
Loan Amount	0.00000107***	0.000000912***	0.00000126***	0.00000132***	0.00000123***	0.00000106***
	(1.28e-07)	(1.44e-07)	(4.97e-08)	(6.39e-08)	(4.14e-08)	(3.64e-08)
Jumbo	-0.105	-0.101	-0.163***	-0.174***	-0.104***	-0.0964***
	(0.0580)	(0.0682)	(0.0177)	(0.0221)	(0.0133)	(0.0133)
Low-doc	0.363***	0.330***	0.149***	0.0921***	0.183***	0.115***
	(0.0371)	(0.0514)	(0.0184)	(0.0252)	(0.00666)	(0.00975)
Broker	0.365***	0.295	0.141***	0.109***	0.429***	0.376***
	(0.105)	(0.158)	(0.00913)	(0.0135)	(0.00750)	(0.0116)
Correspondent	0.446***	0.454**	0.0424***	0.0162	0.293***	0.259***
	(0.110)	(0.162)	(0.0103)	(0.0153)	(0.00736)	(0.0117)
Prepayment Penalty	0.0388	-0.00935	0.0425***	0.0157	-0.115***	-0.113***
	(0.0536)	(0.0731)	(0.00781)	(0.0115)	(0.00538)	(0.00802)
LTV at Orig. (<80%)	-0.000607	-0.00324	-0.0332***	-0.0348***	-0.00263***	-0.0226***
	(0.00289)	(0.00410)	(0.000520)	(0.000808)	(0.000154)	(0.000895)
LTV at Origination (=80%)	0.0345	-0.120	-2.444***	-2.544***	-0.000958	-1.607***
	(0.218)	(0.311)	(0.0404)	(0.0627)	(0.0114)	(0.0669)
LTV at Orig. (>80%)	-0.00350	-0.00502	-0.0316***	-0.0332***	-0.00158***	-0.0225***
	(0.00252)	(0.00362)	(0.000479)	(0.000749)	(0.000117)	(0.000766)
Current LTV	2.781***	2.914***	2.422***	2.547***	0.115***	2.829***
	(0.148)	(0.222)	(0.0367)	(0.0574)	(0.0128)	(0.0377)
Initial Interest Rate	0.253***	0.273***	0.243***	0.271***	0.188***	0.201***
	(0.0145)	(0.0216)	(0.00356)	(0.00547)	(0.00209)	(0.00322)
Margin	-0.0386*	-0.0861***	0.0498***	0.0656***	0.0321***	0.0294***
	(0.0181)	(0.0249)	(0.00471)	(0.00714)	(0.00269)	(0.00434)
HPI Appreciation	-0.000969	-0.0169	-0.00207	0.0565**	0.185***	0.137***
(4-years prior to orig.)	(0.0538)	(0.0718)	(0.0133)	(0.0184)	(0.00804)	(0.0109)
Refinancing	-0.193***	-0.191**	-0.231***	-0.233***	-0.250***	-0.235***
	(0.0525)	(0.0711)	(0.0138)	(0.0207)	(0.00620)	(0.0100)
Cashout Refi	-0.0515	-0.0119	-0.0323*	-0.0268	0.0236***	0.0129
	(0.0532)	(0.0724)	(0.0138)	(0.0206)	(0.00680)	(0.0105)
Unemployment Rate	0.0161	0.0164	-0.00693***	-0.0145***	0.0600***	0.0102***
	(0.00946)	(0.0158)	(0.00203)	(0.00343)	(0.00103)	(0.00223)
PMI	0.259	0.326	-0.204***	-0.281***	-0.0607***	-0.0376*
	(0.151)	(0.205)	(0.0376)	(0.0624)	(0.0102)	(0.0182)
Transfer	0.226*	0.374**	0.135***	0.151***	0.370***	0.408***
	(0.0901)	(0.135)	(0.0106)	(0.0156)	(0.00684)	(0.0107)
Option-ARM	-0.239**	-0.0707	-0.0418*	0.0118	-0.175***	-0.0834***
	(0.0751)	(0.107)	(0.0191)	(0.0265)	(0.00758)	(0.0112)
IO	-0.173***	-0.121*	0.0408***	0.0436***	0.125***	0.0555***
	(0.0369)	(0.0483)	(0.00849)	(0.0117)	(0.00547)	(0.00789)

Table 11: Subprime ARMs (Panel B)

	5-yr ARMs		3-yr ARMs		2/28 ARMs	
	Base Case	MSA Subset - No Early Default	Base Case	MSA Subset - No Early Default	Base Case	MSA Subset - No Early Default
Orig. 2004	-0.355	0.0930	0.836***	0.883***	0.423***	0.264***
	(0.417)	(0.484)	(0.109)	(0.169)	(0.0213)	(0.0347)
Orig. 2005	-0.875***	-0.418	1.160***	0.989***	0.760***	0.376***
	(0.161)	(0.231)	(0.0662)	(0.110)	(0.0184)	(0.0292)
Orig. 2006			1.102***	0.983***	1.418***	0.562***
			(0.0598)	(0.104)	(0.0234)	(0.0362)
Orig. 2007	-0.589***	0.00523	1.063***	1.064***	1.280***	0.581***
	(0.156)	(0.219)	(0.0711)	(0.118)	(0.0305)	(0.0516)
GSE 2003	-3.170***	-2.649***	1.915*	2.237**		
	(0.182)	(0.253)	(0.790)	(0.808)		
GSE 2004	0.809	0.954	0.597	1.695***		
	(1.163)	(1.207)	(0.544)	(0.372)		
GSE 2005	-40.31***	-44.58	-0.254	0.270		
	(0.479)	(0)	(0.470)	(0.207)		
GSE 2006			4.711***			
			(0.0446)			
GSE 2007	-0.714**	-0.546	-0.413	-0.175		
	(0.259)	(0.381)	(0.225)	(0.294)		
Securitized-2003	-2.974***	-2.489***	0.347**	0.492**	0.301***	0.0582
	(0.176)	(0.237)	(0.116)	(0.183)	(0.0385)	(0.0735)
Securitized-2004	-1.140**	-1.055*	-0.0888	-0.0103	-0.0449**	0.0232
	(0.406)	(0.460)	(0.0992)	(0.146)	(0.0172)	(0.0283)
Securitized-2005	-0.226	-0.148	-0.239***	-0.0441	-0.0989***	0.000492
	(0.122)	(0.173)	(0.0455)	(0.0636)	(0.0122)	(0.0198)
Securitized-2006	-0.703***	-0.151	-0.0814*	0.0636	-0.500***	-0.0838**
	(0.111)	(0.162)	(0.0341)	(0.0505)	(0.0195)	(0.0293)
Securitized-2007	0.190	0.133	0.0262	0.126	-0.299***	0.0258
	(0.125)	(0.173)	(0.0601)	(0.0858)	(0.0295)	(0.0499)
N	187651	112985	2001750	1011367	12529196	5759399

Table 12: Two-year Delinquency Rates and Securitization Coefficients

	Two-Year Delinquency Rate (2006 Vintage)	Coefficient on Private Securitization (2006 Vintage)
Prime		
FRM	7.28%	0.055
Jumbo FRM	8.9%	0.221
Lowdoc FRM	9.75%	0.084
5-Year ARM	14.6%	0.235
3-Year ARM	28.6%	0.177
2/28 ARM	29.9%	0.016
Subprime		
FRM	41.4%	0.359
5-Year ARM	41.2%	-0.151
3-Year ARM	38.8%	0.064
2/28 ARMS	43.7%	-0.084

Table 13 (Panel A): Broker Originated Fixed-Rate Mortgages

	Prime FRM		Jumbo FRM		Low-doc FRM	
	Broker=1	Broker=0	Broker=1	Broker=0	Broker=1	Broker=0
FICO at origination	-0.0104***	-0.0127***	-0.00880***	-0.0116***	-0.00964***	-0.0115***
	(0.000125)	(0.0000719)	(0.000201)	(0.000124)	(0.000131)	(0.0000692)
Loan Amount	0.000000418	0.000000462***	-5.60E-08	0.000000146***	0.000000645***	0.000000394***
	(0.000000284)	(3.25E-08)	(3.66E-08)	(2.24E-08)	(6.44E-08)	(4.46E-08)
Jumbo	-0.220*	-0.374***			-0.229***	-0.380***
	(0.109)	(0.0223)			(0.04)	(0.0274)
Low-doc	0.0580***	0.0263**	-0.0279	-0.119***		
	(0.0161)	(0.0086)	(0.0251)	(0.0174)		
Correspondent		0.0386***		-0.0511***		0.0230**
		(0.00675)		(0.0116)		(0.00787)
Prepayment Penalty	0.215***	0.422***	0.334***	0.566***	0.0617	0.163***
	(0.0629)	(0.0392)	(0.0277)	(0.0183)	(0.101)	(0.0334)
LTV at Orig. (<80%)	0.00279	-0.0191***	0.0297***	0.0309***	-0.00648***	-0.00801***
	(0.00218)	(0.000846)	(0.00165)	(0.00151)	(0.00118)	(0.000629)
LTV at Orig. (=80%)	0.00307	-0.0166***	0.0309***	0.0318***	-0.00643***	-0.00728***
	(0.00204)	(0.000763)	(0.00156)	(0.00146)	(0.00113)	(0.000595)
LTV at Orig. (>80%)	-0.000688	-0.0195***	0.0210***	0.0235***	-0.00519***	-0.00548***
	(0.002)	(0.000906)	(0.00171)	(0.00148)	(0.00104)	(0.000557)
Current LTV	3.056***	3.117***	1.417***	1.214***	3.515***	3.151***
	(0.0868)	(0.0439)	(0.052)	(0.11)	(0.0701)	(0.0375)
Initial Interest Rate	0.574***	0.549***	0.750***	0.705***	0.637***	0.610***
	(0.0156)	(0.00647)	(0.0177)	(0.0102)	(0.0189)	(0.0085)
HPI Appreciation	0.185**	0.184***	0.274***	0.545***	0.0693*	0.158***
(4-yrs prior)	(0.0574)	(0.0152)	(0.0377)	(0.0286)	(0.0297)	(0.0161)
Refinancing	0.102***	0.00288	0.0364	0.188***	0.110***	0.0157
	(0.0174)	(0.00912)	(0.0211)	(0.0133)	(0.0172)	(0.0102)
Cashout refi	0.0583**	0.125***	-0.198***	-0.0531***	0.157***	0.175***
	(0.0184)	(0.0101)	(0.0241)	(0.0152)	(0.0194)	(0.0114)
Unemployment Rate	0.0357***	0.0315***	0.0702***	0.0944***	0.0191***	0.0128***
	(0.0031)	(0.00161)	(0.00446)	(0.0044)	(0.00346)	(0.00186)
PMI	0.372***	0.512***	0.613***	0.575***	0.0237	0.0176
	(0.0419)	(0.0353)	(0.0981)	(0.0438)	(0.0236)	(0.0143)

Table 13 (Panel B): Broker Originated Fixed-Rate Mortgages

	Prime FRM		Jumbo FRM		Low-doc FRM	
	Broker=1	Broker=0	Broker=1	Broker=0	Broker=1	Broker=0
Orig. 2004	0.217	0.363***	0.513*	0.489***	0.558***	0.408***
	(0.154)	(0.0646)	(0.213)	(0.0929)	(0.162)	(0.112)
Orig. 2005	0.0994	0.563***	0.497*	1.085***	0.667***	0.418***
	(0.134)	(0.0632)	(0.196)	(0.0768)	(0.132)	(0.122)
Orig. 2006	0.355**	0.473***	1.569***	1.462***	0.623***	0.533***
	(0.129)	(0.0604)	(0.145)	(0.076)	(0.121)	(0.129)
Orig. 2007	0.659***	0.608***	2.793***	2.590***	1.486***	1.449***
	(0.129)	(0.0597)	(0.126)	(0.0726)	(0.107)	(0.101)
Securitized 2003	-0.665***	-0.456***	-0.704***	-0.418***	-0.259*	0.0636
	(0.148)	(0.0564)	(0.115)	(0.0566)	(0.12)	(0.0976)
Securitized 2004	-0.214*	-0.278***	-0.25	-0.0878	-0.362*	-0.000313
	(0.105)	(0.0463)	(0.191)	(0.0795)	(0.141)	(0.0723)
Securitized 2005	0.248***	-0.383***	0.568***	-0.00844	-0.185	0.063
	(0.0682)	(0.042)	(0.164)	(0.0532)	(0.103)	(0.0862)
Securitized 2006	0.384***	-0.0567	0.577***	0.380***	0.157	0.0428
	(0.0563)	(0.037)	(0.0883)	(0.0547)	(0.0801)	(0.0981)
Securitized 2007	0.646***	0.356***	0.160***	-0.0685**	-0.0619	-0.410***
	(0.0558)	(0.0401)	(0.0369)	(0.0262)	(0.0531)	(0.0565)
GSE 2003	-0.133	-0.406***			-0.249*	-0.319***
	(0.122)	(0.0517)			(0.0966)	(0.0893)
GSE 2004	-0.0943	-0.544***			-0.236	-0.266***
	(0.0985)	(0.0429)			(0.136)	(0.0703)
GSE 2005	0.151*	-0.597***			-0.291**	-0.176*
	(0.0604)	(0.0395)			(0.0959)	(0.0847)
GSE 2006	-0.0507	-0.422***			-0.194*	-0.332***
	(0.0467)	(0.0353)			(0.0758)	(0.0951)
GSE 2007	0.300***	0.0764*			-0.437***	-0.717***
	(0.0438)	(0.0324)			(0.0466)	(0.0476)
N	3872913	24384157	1263913	6418289	2878852	11122901

Table 14 (Panel A): Broker Originated Prime ARMs

	5yr Prime		3yr Prime		2/28 Prime	
	Broker=1	Broker=0	Broker=1	Broker=0	Broker=1	Broker=0
FICO at origination	-0.00969***	-0.0100***	-0.00869***	-0.00810***	-0.00337***	-0.00268***
	(0.000144)	(0.0000897)	(0.000233)	(0.00011)	(0.000225)	(0.0000649)
Loan Amount	0.000000240***	0.000000179***	0.000000121	0.000000307***	0.00000111***	0.00000146***
	(2.50E-08)	(1.96E-08)	(6.25E-08)	(3.68E-08)	(0.000000134)	(3.79E-08)
Jumbo	-0.0886***	-0.0846***	0.0641	0.0353	-0.165**	-0.0902***
	(0.0199)	(0.0137)	(0.0352)	(0.0196)	(0.0535)	(0.0136)
Low-doc	0.0970***	-0.205***	-0.00755	-0.00174	0.0432	0.229***
	(0.0134)	(0.0103)	(0.025)	(0.0145)	(0.0255)	(0.0121)
Correspondent		-0.150***		0.0294*		0.338***
		(0.00984)		(0.0146)		(0.0407)
Prepayment Penalty	0.265***	0.159***	0.204***	0.0905***	0.861	-0.353***
	(0.0275)	(0.0163)	(0.0569)	(0.019)	(1.073)	(0.0114)
LTV at Orig. (<80%)	0.0171***	0.0111***	-0.00574**	-0.0173***	-0.0222***	-0.0175***
	(0.00121)	(0.000746)	(0.00188)	(0.00111)	(0.00259)	(0.00117)
LTV at Orig. (=80%)	0.0181***	0.0118***	-0.00399*	-0.0140***	-0.0210***	-0.0142***
	(0.00115)	(0.000711)	(0.00179)	(0.00113)	(0.00247)	(0.00113)
LTV at Orig. (>80%)	0.0124***	0.00676***	-0.00640***	-0.0173***	-0.0241***	-0.0162***
	(0.00125)	(0.000675)	(0.00176)	(0.00111)	(0.00232)	(0.00108)
Current LTV	2.332***	2.345***	3.417***	1.822***	4.172***	1.427***
	(0.0532)	(0.0329)	(0.0998)	(0.147)	(0.177)	(0.0803)
Initial Interest Rate	0.664***	0.609***	0.242***	0.243***	0.243***	0.239***
	(0.0133)	(0.00922)	(0.0126)	(0.00673)	(0.0126)	(0.00371)
Margin	-0.171***	-0.0589***	-0.218***	0.00703	0.0930***	0.00315
	(0.0124)	(0.00886)	(0.0209)	(0.00515)	(0.0265)	(0.0027)
HPI Appreciation	0.376***	0.576***	0.379***	0.394***	-0.09	0.185***
(4-yrs prior)	(0.024)	(0.0161)	(0.0424)	(0.0233)	(0.054)	(0.013)
Refinancing	0.150***	0.0182	0.0149	-0.192***	-0.232***	-0.174***
	(0.0151)	(0.011)	(0.0255)	(0.0131)	(0.0228)	(0.00822)
Cashout refi	-0.147***	-0.0853***	-0.0806*	0.0576**	1.223*	-0.0176
	(0.0183)	(0.0143)	(0.0366)	(0.0189)	(0.497)	(0.016)
Unemployment Rate	0.0623***	0.0460***	-0.0522***	-0.0118*	0.0267***	0.0230***
	(0.00393)	(0.00242)	(0.00609)	(0.00502)	(0.00625)	(0.00233)
PMI	0.287***	0.233***	0.135	0.436***	-37.46	0.0329
	(0.0655)	(0.0247)	(0.072)	(0.0233)	(0)	(0.0251)
Transfer		0.181***		0.286***		0.443***
		(0.0162)		(0.0167)		(0.027)
Option ARM	-0.0948***	-0.426***	0.250***	0.107***	21.02***	-0.0443
	(0.0165)	(0.0156)	(0.0355)	(0.0293)	(0.668)	(0.0519)
IO	0.0923***	0.157***	0.327***	0.348***	0.212	0.128***
	(0.0162)	(0.0109)	(0.0279)	(0.0169)	(0.176)	(0.00755)

Table 14 (Panel B): Broker Originated Prime ARMs

	5yr Prime		3yr Prime		2/28 Prime	
	Broker=1	Broker=0	Broker=1	Broker=0	Broker=1	Broker=0
Debt-to-Income Ratio		0.00966***				
		(0.000308)				
Orig. 2004	0.240***	0.367***	0.422***	0.384***	0.546***	0.315**
	(0.0504)	(0.0412)	(0.0591)	(0.0431)	(0.0718)	(0.101)
Orig. 2005	0.774***	0.831***	0.742***	0.841***	20.15	0.807***
	(0.056)	(0.0416)	(0.068)	(0.0492)	.	(0.0909)
Orig. 2006	1.181***	1.266***	1.549***	1.761***	20.75***	0.993***
	(0.0615)	(0.0443)	(0.0793)	(0.0554)	(0.679)	(0.0857)
Orig. 2007	2.194***	1.900***	2.180***	1.919***	21.08***	0.822***
	(0.0625)	(0.0503)	(0.0823)	(0.0589)	(0.672)	(0.0904)
Securitized 2003	-0.0253	-0.0474	0.355*	0.068	-0.243***	0.0274
	(0.126)	(0.075)	(0.143)	(0.079)	(0.0487)	(0.155)
Securitized 2004	0.414***	0.377***	0.707***	0.657***	-0.353***	0.169**
	(0.0382)	(0.0265)	(0.0447)	(0.0305)	(0.0602)	(0.0618)
Securitized 2005	0.197***	0.227***	0.280***	0.546***	-43.03	0.0981*
	(0.0365)	(0.0198)	(0.054)	(0.0314)	(0)	(0.0403)
Securitized 2006	0.133***	0.108***	-0.0864	0.161***	-0.436	-0.0138
	(0.0359)	(0.0195)	(0.0741)	(0.0272)	(1.196)	(0.0213)
Securitized 2007	-0.168***	0.221***	0.0654	0.447***	-42.69	0.309***
	(0.039)	(0.0492)	(0.121)	(0.056)	(0)	(0.0508)
GSE 2003	0.161*	-0.0529	0.249**	0.264***		
	(0.0731)	(0.0492)	(0.0954)	(0.0507)		
GSE 2004	0.426***	0.262***	0.430***	0.455***		
	(0.0325)	(0.0237)	(0.0424)	(0.0286)		
GSE 2005	0.128***	0.0516**	0.216***	0.203***		
	(0.0351)	(0.0191)	(0.0491)	(0.0346)		
GSE 2006	-0.0178	-0.0279	-0.177**	-0.210***		
	(0.0361)	(0.019)	(0.0679)	(0.0375)		
GSE 2007	-0.229***	0.0944*	-0.562***	-0.138		
	(0.033)	(0.0377)	(0.0916)	(0.0752)		
N	3613032	9296723	1053784	3506735	828741	4004470

Table 15 (Panel A): Broker Originated Subprime Mortgages

	5yr Subprime		3yr Subprime		2/28 Subprime		Subprime FRM	
	Broker=1	Broker=0	Broker=1	Broker=0	Broker=1	Broker=0	Broker=1	Broker=0
FICO at origination	-0.00254***	-0.00324***	-0.00380***	-0.00441***	-0.00228***	-0.00430***	-0.00515***	-0.00566***
	(0.000462)	*(0.000903)*	*(0.000134)*	*(0.0000927)*	*(0.000127)*	*(0.0000799)*	*(0.000125)*	*(0.00006)*
Loan Amount	0.00000165***	0.00000223***	0.00000119***	0.00000116***	0.00000114***	0.00000105***	0.00000143***	0.00000123***
	(0.000000211)	*(0.000000441)*	*(8.82E-08)*	*(6.48E-08)*	*(6.80E-08)*	*(4.32E-08)*	*(6.79E-08)*	*(6.03E-08)*
Jumbo	-0.298**	-0.38	-0.177***	-0.127***	-0.0997***	-0.0964***	-0.280***	-0.225***
	(0.0948)	*(0.198)*	*(0.031)*	*(0.0231)*	*(0.026)*	*(0.0155)*	*(0.0305)*	*(0.0212)*
Low-doc	0.280***	0.173	0.214***	0.0821***	0.147***	0.0683***	0.167***	0.0278*
	(0.0513)	*(0.117)*	*(0.0357)*	*(0.0243)*	*(0.0165)*	*(0.0129)*	*(0.0243)*	*(0.013)*
Correspondent		0.389*		0.0607***		0.252***		0.0730***
		(0.185)		*(0.0109)*		*(0.0121)*		*(0.00712)*
Prepayment Penalty	-0.177	-0.0685	-0.000312	0.0490***	-0.224***	-0.0903***	-0.197***	-0.195***
	(0.226)	*(0.125)*	*(0.0158)*	*(0.00982)*	*(0.0202)*	*(0.00881)*	*(0.0251)*	*(0.0113)*
LTV at Orig. (<80%)	0.00187	-0.00207	-0.0171***	-0.0326***	-0.0148***	-0.0221***	-0.00203	-0.00797***
	(0.00451)	*(0.00873)*	*(0.0014)*	*(0.000653)*	*(0.00139)*	*(0.000932)*	*(0.00115)*	*(0.000518)*
LTV at Orig. (=80%)	0.00267	-0.000847	-0.0156***	-0.0302***	-0.0124***	-0.0198***	-0.000553	-0.00717***
	(0.00427)	*(0.00817)*	*(0.00133)*	*(0.000634)*	*(0.00133)*	*(0.000869)*	*(0.00108)*	*(0.000487)*
LTV at Orig. (>80%)	-0.000435	-0.00535	-0.0198***	-0.0308***	-0.0157***	-0.0220***	-0.00432***	-0.00914***
	(0.00396)	*(0.00751)*	*(0.00121)*	*(0.0006)*	*(0.00123)*	*(0.0008)*	*(0.001)*	*(0.000453)*
Current LTV	2.408***	2.546***	3.030***	2.359***	2.996***	2.764***	2.560***	2.554***
	(0.213)	*(0.451)*	*(0.0717)*	*(0.046)*	*(0.0754)*	*(0.0436)*	*(0.0598)*	*(0.0315)*
Initial Interest Rate	0.261***	0.400***	0.255***	0.233***	0.193***	0.197***	0.248***	0.220***
	(0.0218)	*(0.0477)*	*(0.00756)*	*(0.00445)*	*(0.00666)*	*(0.00371)*	*(0.00575)*	*(0.00313)*
Margin	0.116*	0.0284	0.0913*	0.0632***	0.127***	0.0310***		
	(0.0586)	*(0.0627)*	*(0.0442)*	*(0.00525)*	*(0.022)*	*(0.00457)*		
HPI Appreciation (4-yrs prior)	-0.0883	0.135	0.0875***	0.0439*	0.0880***	0.144***	0.137***	0.131***
	(0.0791)	*(0.164)*	*(0.025)*	*(0.0173)*	*(0.0199)*	*(0.0129)*	*(0.0246)*	*(0.0128)*
Refinancing	-0.294***	-0.00298	-0.172***	-0.208***	-0.250***	-0.240***	-0.425***	-0.317***
	(0.0839)	*(0.18)*	*(0.0389)*	*(0.0159)*	*(0.0331)*	*(0.0106)*	*(0.0265)*	*(0.00915)*
Cashout refi	0.055	-0.201	-0.0426	-0.0175	-0.00804	0.0315**	0.132***	0.140***
	(0.0823)	*(0.173)*	*(0.0394)*	*(0.0158)*	*(0.0338)*	*(0.0113)*	*(0.0262)*	*(0.00866)*
Unemployment Rate	0.0273*	0.0329	-0.00632	-0.00895***	0.0275***	0.00346	0.00830**	0.0113***
	(0.0136)	*(0.0278)*	*(0.00407)*	*(0.00253)*	*(0.00439)*	*(0.00259)*	*(0.00301)*	*(0.0015)*
PMI	-0.12	-0.345	1.084	-0.204***		-0.0356	-0.373	-0.0836***
	(0)	*(0)*	*(0.727)*	*(0.0404)*		*(0.0186)*	*(0.21)*	*(0.0204)*
Transfer		-0.0853		0.181***		0.399***		
		(0.164)		*(0.0115)*		*(0.0112)*		
Option ARM	-0.0934	-0.408*	-0.0414	-0.0821	-0.0966***	-0.0708***		
	(0.151)	*(0.193)*	*(0.0314)*	*(0.0457)*	*(0.0189)*	*(0.0173)*		
IO	-0.0913	-0.126	0.0181	0.0576***	0.121***	0.0330***		
	(0.0558)	*(0.102)*	*(0.0152)*	*(0.0111)*	*(0.0166)*	*(0.00906)*		

Table 15 (Panel B): Broker Originated Subprime Mortgages

	5yr Subprime		3yr Subprime		2/28 Subprime		Subprime FRM	
	Broker=1	Broker=0	Broker=1	Broker=0	Broker=1	Broker=0	Broker=1	Broker=0
Debt-to-Income Ratio		0.00531						
		(0.00394)						
Orig. 2004			-0.568*	0.919***	0.404*	0.248***	0.0274	0.216***
			(0.27)	(0.134)	(0.162)	(0.0398)	(0.176)	(0.0605)
Orig. 2005	-0.558	18.29***	-0.378*	1.124***	0.454**	0.444***	0.161*	0.209***
	(0.511)	(0.987)	(0.192)	(0.11)	(0.156)	(0.0429)	(0.0735)	(0.0516)
Orig. 2006	0.00526	18.99***		1.085***	0.781***	0.580***	0.472***	0.532***
	(0.522)	(0.965)		(0.0764)	(0.187)	(0.0391)	(0.126)	(0.0371)
Orig. 2007	-0.0189	19.61	-0.306	0.971***	0.551**	0.692***	0.820***	1.103***
	(0.519)	.	(0.213)	(0.088)	(0.168)	(0.0714)	(0.0716)	(0.0341)
Securitized 2003			-41.26	0.422***		0.0631	-2.188*	-0.0714
			(0)	(0.125)		(0.0744)	(1.024)	(0.039)
Securitized 2004	-1.023	18.70***	0.111	-0.131	-0.117*	0.0459	-0.0389	0.153**
	(0.6)	(0.819)	(0.198)	(0.125)	(0.0547)	(0.0344)	(0.168)	(0.0586)
Securitized 2005	0.0924	0.713	0.00299	-0.285**	-0.0118	-0.051	0.0276	0.294***
	(0.154)	(0.61)	(0.0606)	(0.097)	(0.023)	(0.0376)	(0.0477)	(0.0491)
Securitized 2006	-0.0684	0.171	-0.224	-0.134*	-0.213*	-0.0870**	0.112	0.340***
	(0.162)	(0.573)	(0.185)	(0.0541)	(0.105)	(0.0324)	(0.112)	(0.0323)
Securitized 2007	0.0628	-0.0587	-0.00773	0.206*	0.0355	-0.041	0.0927*	-0.0211
	(0.166)	(0.79)	(0.121)	(0.0803)	(0.0712)	(0.0713)	(0.0393)	(0.0283)
GSE 2003		-20.94					-0.747*	-0.577***
		(0)					(0.323)	(0.0982)
GSE 2004	-40.76	-21.26					0.538**	0.412***
	(0)	(0)					(0.175)	(0.0612)
GSE 2005	-43.76	-43.66					0.415***	0.390***
	(0)	(0)					(0.0817)	(0.0509)
GSE 2006							0.284*	0.257***
							(0.12)	(0.0345)
GSE 2007	-43.05						0.184***	0.0672*
	(0)						(0.0463)	(0.0294)
N	49643	13434	588075	1341367	1297523	4461876	721616	3684204