Updated Assumptions Used to Estimate Single-Family Mortgages Originated and Outstanding, 1990 – 2009 Q1

Except where noted below, all assumptions used to generate estimates of single-family mortgages originated and outstanding are as described in the paper, *Single-Family Mortgages Originated and Outstanding: 1990 – 2004.*

Originations

Table 1 in that paper was revised and is reprinted below. The primary change is to the estimates from the Federal Housing Finance Agency's Mortgage Interest Rate Survey (MIRS). Previously, that data was based on percent of transactions; the revised estimates are based on transactions weighted by gross dollars. Data has been added through 2009 Q1.

 Table 1

 Jumbo Share of Conventional Single Family Mortgage Originations, 1990 – 2009 Q1

 (Percent)

YearIMF EstimateMIRS EstimateHMDA EstimateFHFA Estimate199023.6419.0128.8023.82199122.5017.4426.3422.09199221.8317.2421.2820.12199322.6916.9622.6320.76199425.6920.2925.6223.87199525.8119.7723.3722.98199626.4822.3922.9323.93199726.0722.3026.4024.92199827.8421.3323.4024.19199927.7422.8024.6225.05200026.9724.2126.6425.94200120.0920.1922.5220.93200219.7920.8026.3022.30200316.4817.7720.4918.25200417.4724.1227.8323.14200518.2727.4132.2725.98200616.1122.5332.3523.66200714.3219.3524.5519.4120086.5311.1921.36*13.032009 Q15.1713.3923.35*13.97	(Percent)						
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Year	IMF Estimate	MIRS Estimate	HMDA Estimate	FHFA Estimate		
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	1990	23.64	19.01	28.80	23.82		
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	1991	22.50	17.44	26.34	22.09		
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	1992	21.83	17.24	21.28	20.12		
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	1993	22.69	16.96	22.63	20.76		
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	1994	25.69	20.29	25.62	23.87		
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	1995	25.81	19.77	23.37	22.98		
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	1996	26.48	22.39	22.93	23.93		
199927.7422.8024.6225.05200026.9724.2126.6425.94200120.0920.1922.5220.93200219.7920.8026.3022.30200316.4817.7720.4918.25200417.4724.1227.8323.14200518.2727.4132.2725.98200616.1122.5332.3523.66200714.3219.3524.5519.4120086.5311.1921.36*13.03	1997	26.07	22.30	26.40	24.92		
200026.9724.2126.6425.94200120.0920.1922.5220.93200219.7920.8026.3022.30200316.4817.7720.4918.25200417.4724.1227.8323.14200518.2727.4132.2725.98200616.1122.5332.3523.66200714.3219.3524.5519.4120086.5311.1921.36*13.03	1998	27.84	21.33	23.40	24.19		
2001 2009 20.19 22.52 20.93 2002 19.79 20.80 26.30 22.30 2003 16.48 17.77 20.49 18.25 2004 17.47 24.12 27.83 23.14 2005 18.27 27.41 32.27 25.98 2006 16.11 22.53 32.35 23.66 2007 14.32 19.35 24.55 19.41 2008 6.53 11.19 21.36* 13.03	1999	27.74	22.80	24.62	25.05		
200219.7920.8026.3022.30200316.4817.7720.4918.25200417.4724.1227.8323.14200518.2727.4132.2725.98200616.1122.5332.3523.66200714.3219.3524.5519.4120086.5311.1921.36*13.03	2000	26.97	24.21	26.64	25.94		
2003 16.48 17.77 20.49 18.25 2004 17.47 24.12 27.83 23.14 2005 18.27 27.41 32.27 25.98 2006 16.11 22.53 32.35 23.66 2007 14.32 19.35 24.55 19.41 2008 6.53 11.19 21.36* 13.03	2001	20.09	20.19	22.52	20.93		
200417.4724.1227.8323.14200518.2727.4132.2725.98200616.1122.5332.3523.66200714.3219.3524.5519.4120086.5311.1921.36*13.03	2002	19.79	20.80	26.30	22.30		
2005 18.27 27.41 32.27 25.98 2006 16.11 22.53 32.35 23.66 2007 14.32 19.35 24.55 19.41 2008 6.53 11.19 21.36* 13.03	2003	16.48	17.77	20.49	18.25		
2006 16.11 22.53 32.35 23.66 2007 14.32 19.35 24.55 19.41 2008 6.53 11.19 21.36* 13.03	2004	17.47	24.12	27.83	23.14		
2007 14.32 19.35 24.55 19.41 2008 6.53 11.19 21.36* 13.03	2005	18.27	27.41	32.27	25.98		
2008 6.53 11.19 21.36* 13.03	2006	16.11	22.53	32.35	23.66		
	2007	14.32	19.35	24.55	19.41		
2009 Q1 5.17 13.39 23.35* 13.97	2008	6.53	11.19	21.36*	13.03		
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Source: FHFA based on data from Inside Mortgage Finance Publications, FHFA's MIRS, and FFIEC.

* 2008 HMDA data will not be released until September 2009. FHFA estimate is based on historical relationship between MIRS, IMF and HMDA from 1990 through 2007.

Table 2 (page 9) was extended for 2005 through 2009 Q1

Table 2 (Extended) Adjustable Rate Mortgage (ARM) Share of					
v	nal Single-Family Loar				
(Percent)					
	ARM Share of	ARM Share of			
Year	Non-Jumbo Loans	Jumbo Loans			
2005	26.60	63.10			
2006	25.13	53.32			
2007	11.26	41.78			
2008	7.95	27.28			
2009 Q1	0.28	8.69			

Source: FHFA based on data from FHFA's MIRS.

Outstandings

Data in Table 6 (page 13) was re-estimated for 1998 to 2004. The revised estimates include subprime loans. Estimates for 2005 through 2009 Q1 have been added.

Table 6 (Revised)							
ARMs as a Share of Conventional							
Single-Family Mortgages Serviced							
(Percent)							
MBA Mortgage							
Year	Delinquency Survey	FHFA Estimate					
1998	14.05	14.05					
1999	14.93	14.93					
2000	14.06	14.06					
2001	13.83	13.83					
2002	13.99	13.99					
2003	18.79	18.79					
2004	23.13	23.13					
2005	26.07	26.07					
2006	26.04	26.04					
2007	23.38	23.38					
2008	21.19	21.19					
2009 Q 1	1 20.38	20.38					

Source: FHFA based on data from MBA

There has been a change in the assumption used to decompose jumbo and non-jumbo conventional mortgages outstanding into ARMs and FRMs. Data for 1990 through 2009 Q1 have been re-estimated assuming that, for each year, the jumbo share of outstanding ARMs is equal to the dollar-weighted average of the jumbo share of ARMs originated in the previous five years. For 1990-1994, only data starting in 1990 is used in the

calculation, resulting in a period of less than five years. Table 7 (below) shows the weighted average jumbo share of ARMs originated in the previous five years and the resulting estimates for jumbo and non-jumbo ARMs outstanding.

Table 7 (Revised)

5-Yr Moving Average Jumbo Share of Conventional ARM Originations and Jumbo Share of Outstanding Conventional ARMs

Year	5-Yr Moving Average Jumbo Share of ARM Originations	FHFA Estimate: Jumbo Share of Outstanding ARMs	FHFA Estimate: Jumbo ARMs Outstanding	FHFA Estimate: Non-Jumbo ARMs Outstanding
1990	34.5%	34.5%	\$75,250	\$142,866
1991	34.0%	34.0%	\$79,147	\$153,347
1992	33.7%	33.7%	\$84,337	\$165,807
1993	35.8%	35.8%	\$141,962	\$254,585
1994	37.3%	37.3%	\$156,460	\$262,693
1995	38.7%	38.7%	\$179,438	\$283,794
1996	40.6%	40.6%	\$199,733	\$291,851
1997	42.5%	42.5%	\$182,894	\$247,498
1998	45.6%	45.6%	\$233,229	\$278,410
1999	48.5%	48.5%	\$290,530	\$308,105
2000	51.8%	51.8%	\$319,242	\$297,278
2001	54.2%	54.2%	\$369,362	\$311,811
2002	55.4%	55.4%	\$441,832	\$355,274
2003	52.4%	52.4%	\$646,444	\$586,417
2004	49.9%	49.9%	\$881,652	\$886,143
2005	47.6%	47.6%	\$1,093,563	\$1,202,784
2006	43.6%	43.6%	\$1,120,918	\$1,452,577
2007	42.8%	42.8%	\$1,055,310	\$1,410,368
2008	41.3%	41.3%	\$896,531	\$1,274,246
2009 Q1*	41.3 %	41.3 %	\$857,277	\$1,218,454

Source: FHFA based on data from Inside Mortgage Finance Publications, FHFA's MIRS, and FFIEC.

2009 Q1 estimate assumed to be 5-yr moving average through year-end 2008.

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