

Updated Assumptions Used to Estimate Single-Family Mortgages Originated and Outstanding, 1990 – 2008

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 2008.

Table 1
Jumbo Share of Conventional Single Family Mortgage Originations, 1990 – 2008
(Percent)

Year	IMF Estimate	MIRS Estimate	HMDA Estimate	FHFA Estimate
1990	23.64	19.01	28.80	23.82
1991	22.50	17.44	26.34	22.09
1992	21.83	17.24	21.28	20.12
1993	22.69	16.96	22.63	20.76
1994	25.69	20.29	25.62	23.87
1995	25.81	19.77	23.37	22.98
1996	26.48	22.39	22.93	23.93
1997	26.07	22.30	26.40	24.92
1998	27.84	21.33	23.40	24.19
1999	27.74	22.80	24.62	25.05
2000	26.97	24.21	26.64	25.94
2001	20.09	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

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 2008

Table 2 (Extended)
Adjustable Rate Mortgage (ARM) Share of
Conventional Single-Family Loans, 2005 – 2008
(Percent)

Year	ARM Share of Non-Jumbo Loans	ARM Share of Jumbo Loans
2005	26.60	63.10
2006	25.13	53.32
2007	11.26	41.78
2008	7.95	27.28

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 2008 have been added.

Table 6 (Revised)
ARMs as a Share of Conventional
Single-Family Mortgages Serviced
(Percent)

Year	MBA Mortgage 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

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 2008 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%	\$233,226	\$288,034
1999	48.5%	48.5%	\$290,570	\$342,596
2000	51.8%	51.8%	\$319,301	\$351,382
2001	54.2%	54.2%	\$369,373	\$369,243
2002	55.4%	55.4%	\$441,832	\$410,542
2003	52.4%	52.4%	\$646,376	\$745,284
2004	49.9%	49.9%	\$881,614	\$1,080,876
2005	47.6%	47.6%	\$1,093,957	\$1,203,218
2006	43.6%	43.6%	\$1,119,702	\$1,451,001
2007	42.8%	42.8%	\$1,053,809	\$1,408,361
2008	41.3%	41.3%	\$895,969	\$1,273,447

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