

**Exhibit 2 with corrections through 4.21.10**

**Memorandum**

**Sizing Total Federal Government and Federal Agency Contributions to Subprime and Alt-A Loans in U.S. First Mortgage Market as of 6.30.08**

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This memorandum outlines in detail how I calculated the Federal government and Federal agency contributions to subprime and Alt-A loans outstanding in the U.S. financial system on June 30, 2008 (unless otherwise noted).

**Background:**

In the first half of the 1990s, the federal government adopted three policy initiatives that were intended to supplement the operations of the Federal Housing Administration (FHA), which had until that time been the federal government's main vehicle for higher risk home lending:

1. In 1992, Congress imposed affordable housing goals on Fannie and Freddie<sup>1</sup> and they became both competitors of FHA and a source of demand for CRA loans;
2. in 1994, HUD began to enter into "Fair Lending Best Practices Agreements" with lenders across the nation;<sup>2</sup> and
3. in 1995, the Community Reinvestment Act (CRA), which had been passed in 1977 but had had little impact on bank lending until then, was given new life with more stringent regulations applicable to all insured banks

These additional initiatives covered most lenders and most of the secondary market. Each either explicitly (FHA, CRA, and HUD) or implicitly (Fannie and Freddie) required the use of flexible lending standards, a policy that was in place for about a dozen years. At the end of this period, the U.S. suffered a catastrophic and nationwide decline in home prices, which can largely be attributed to the poor quality of the mortgages that the foregoing initiatives produced. This memorandum shows how many high risk loans resulted from these initiatives.

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<sup>1</sup> Federal Housing Enterprises Financial Safety and Soundness Act of 1992

<sup>2</sup> See Appendix 1

**Section A: Definitions – these definitions are the same as in my “Sizing Total Exposure to Subprime and Alt-A Loans in U.S. First Mortgage Market as of 6.30.08.”**

One of the reasons for confusion about the number of subprime and Alt-A mortgages outstanding at any time in the U.S. is that many of the participants and reporting agencies used different definitions of the same terms. In many cases these definitions did not classify subprime and Alt-A loans based on objective risk characteristics but on the basis of how the lender or securities issuer classified a loan. For example, Fannie Mae classified a loan as subprime if the mortgage loan was originated by a lender specializing in the subprime business or by subprime divisions of large lenders.<sup>3</sup> This had the effect of reducing its subprime loan count to a very small number. On the other hand, when the Federal Reserve studied the performance of CRA loans, they defined them as subprime if they were reported as high interest loans under the Home Owners Protection Act (HOPA), which excluded the very large number of CRA loans that did not carry interest rates that fell into the HOPA category. The result was again a very small number of subprime loans defined as made under CRA. In this memorandum, I use the objective risk characteristics of the loan to determine whether it should be considered subprime or Alt-A. The definitions follow:

**Subprime Loans:** In general, these are loans to borrowers with “weakened credit histories that include payment delinquencies and possibly more severe problems such as charge-offs, judgments, and bankruptcies.”<sup>4</sup> There are two varieties of subprime loans:

**Self-denominated Subprime or SD Subprime:** These are loans denominated or classified as subprime by the originator or the securities issuer and had one or more of the following characteristics:

1. Originated by a lender specializing in subprime business or by subprime divisions of large lenders;
2. Placed in a subprime private MBS (Subprime Private MBS); or
3. Had a rate of interest considered “high” under HOPA.

**Not Initially Classified as Subprime or Subprime by Characteristic:** Loans with a FICO score of less than 660. The origin of the use of a FICO score below 660 as the demarcation between prime and subprime loans goes back to 1995. As noted in January 1997 by Standard & Poor’s, “...a FICO score of 660 [is] the investment-grade score as defined in Freddie Mac’s industry letter of August 1995.”<sup>5</sup> In 2001 federal regulators issued “Expanded Guidance for Subprime Lending Programs” which set forth a number of credit characteristics for subprime borrowers including:

“Relatively high default probability as evidenced by, for example, a credit bureau risk score (FICO) of 660 or below (depending on the product/collateral).”<sup>6</sup>

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<sup>3</sup> In November 2008, Fannie acknowledged that it had “other loans with some features that are similar to Alt-A and subprime loans that [it had] not classified as Alt-A or subprime because they do not meet [its] classification criteria. See P. 182 of Fannie’s Q.3:2008 10-Q

<sup>4</sup> See Appendix 2

<sup>5</sup> S&P Structured Finance Ratings, January 1997, p. 14

<sup>6</sup> See Appendix 2.

Both GSEs implicitly acknowledge this demarcation point in their respective delineations of their mortgage credit portfolios by key risk characteristics, each of which has a high likelihood of default.<sup>7</sup> Fannie, for example, lists risk characteristics and related serious delinquency (SD) rates for FICOs of <620 (16.08% SD) and FICOs of 620-659 (11.32% SD). Other high volume high risk categories listed include interest only loans (17.94% SD), Original LTV >90% (11.56% SD), and Alt-A (13.97% SD).<sup>8</sup> Fannie's SD rate on its traditionally underwritten loans (those loans without any of these high risk characteristics) is 1.78%.<sup>9</sup> Loans with a FICO of <620 and 620-659 have a default probability 9 times and 6.4 times, respectively, the default probability of traditionally underwritten loans.

**Alt-A Loan:** These loans either had low or no documentation requirements or had some feature that was “alternative to agency” (hence, “Alt-A”)—i.e., did not meet the traditional underwriting guidelines of the GSEs in such characteristics as Original LTV, Combined LTV, debt ratio, rules for loans on investment properties, rules on cash-out refinances, condominium guidelines, special income definitions, low start rates, or negative amortization ARMs.

There are two varieties of **Alt-A Loans**:

**Self-denominated Alt-A or SD Alt-A:** Loans initially classified as Alt-A generally had one or more of the following characteristics:

1. Lender delivering loan initially classified it as Alt-A based on documentation or other features, or
2. Placed in an Alt-A private MBS (Alt-A Private MBS).

**Not Initially Classified as Alt-A or Alt-A by Characteristic:** Loans not initially classified as Alt-A which had:

1. Non-traditional ARM terms such as low start (“teaser”) rates or no or negative amortization. These could be in either private MBS or whole loan form;
2. High Original LTV including 97% Original LTV and 100% Original LTV loans, along with 95% Original LTV loans with non-traditional underwriting guidelines and debt ratios. For the period in question, virtually all Original LTV >90% lending had one or more of these characteristics. This lending may also be referred to as Original LTV >90%; or
3. High Combined LTV where a combined 1<sup>st</sup> and 2<sup>nd</sup> lien was used to reduce the down payment required. This lending commonly involved an 80% 1<sup>st</sup> and a 20% second. This lending may also be referred to as Combined LTV >90%

**FHA, VA, and Rural Housing Loans:** For the 2002-2007 loan books, approximately 83% of FHA loans consisted of High Original LTV lending (Original LTV>90%) and approximately 70% had a FICO of <660<sup>10</sup>. FHA is projecting a 21% and 24% claims rate<sup>11</sup> for its 2006 and

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<sup>7</sup> Fannie Mae 2009 Third Quarter Credit Supplement, p. 5, found at:

[http://www.fanniemae.com/ir/pdf/sec/2009/q3credit\\_summary.pdf](http://www.fanniemae.com/ir/pdf/sec/2009/q3credit_summary.pdf) and Freddie Mac Third Quarter Results Supplement p. 18 found at [http://www.freddie.com/investors/er/pdf/supplement\\_3q09.pdf](http://www.freddie.com/investors/er/pdf/supplement_3q09.pdf)

<sup>8</sup> Fannie Mae 2009 Third Quarter Credit Supplement, p. 5

<sup>9</sup> Id. Derived from data found on p.5

<sup>10</sup> Data in or derived from 2009 Actuarial Review of the Federal Housing Administration Mutual Mortgage Insurance Fund, pp. 42 and 44

2007 book years respectively. While similar data is not available for the smaller volume VA and rural housing loan programs, Original LTV distributions are believed to be similar.

**Original loan-to-value or Original LTV: The loan-to-value relationship at the time of loan origination of the first mortgage and the value of the home being financed.**

**Combined loan-to-value or Combined LTV: The loan-to-value relationship at the time of loan origination of the combined amounts of first mortgage and second mortgage and the value of the home being financed.**

## **Section B: Summary of Federal government and Federal agency contributions to total subprime and Alt-A loan exposure**

Based on the definitions above, I estimate the Federal government and Federal agency contributions to subprime and Alt-A loan exposures as follows:

**Table 1: Federal government and Federal agency contributions to subprime and Alt-A loan exposures as of 6.30.08:**

<b>Table or Section with detail*</b>	<b>Subprime and Alt-A Loans</b>	<b>\$ in billions</b>	<b>Number of loans in millions</b>
Table 2	Fannie	\$1,077	7.026
Table 3	Freddie	\$758	4.913
Section E	FHA/VA/Rural Housing	\$537	4.760
Section F	FHLB	\$50	0.313
Section G	CRA and HUD Program Loans	\$312	2.240
	Total Federal contribution to Subprime and Alt-A	\$2,734	19.252 <sup>12</sup>
	<b>Total Subprime and Alt-A</b>	<b>\$4,622</b>	<b>26.7</b>

\*Within each section, the text setting out the various concluded dollar amounts and number of loans for each source is bolded.

In the balance of this memorandum, I will show how these totals were developed.

<sup>11</sup> Id. Found at Appendix F-3. FHA insures loans against loss from default. When there is an insured loss, FHA pays a claim. Losses generally result from a foreclosure. FHA keeps track of the claims it pays or expects to pay by projecting a claims rate for each book year of insured loans. A projected claims rate of 24% means that FHA expects to pay 24 claims for every 100 loans insured.

<sup>12</sup> This total is larger than the total I have used previously. This is due to the two reasons. First, Fannie released details regarding overlaps among its high risk loans for the first time in August 2009. My prior estimates for both Fannie and Freddie had conservatively assumed a lower total balance based on more overlapping loans and a larger average loan balance than was the case. Second, my analysis of CRA and HUD Program Loans is more detailed than my previous analysis and resulted in a larger estimate.

## Section C. Detail of Fannie contributions to total subprime and Alt-A loan exposure

**Table 2: Fannie contributions to total subprime and Alt-A loan exposure:**

Type	\$ in billions	Number of loans in millions
Subprime Private MBS	\$36	0.235
Alt-A Private MBS	\$30	0.175
Subprime by Characteristic loans, Self-denominated Alt-A and Alt-A by Characteristic loans held in mortgage credit book	\$1,011	6.616
Total	\$1,077	7.026

**1. Fannie’s holdings of Subprime Private MBS as of 6.30.08:**

**Fannie held \$36 billion in Self-Denominated Subprime Private MBS at 6.30.08<sup>13</sup> with an average principal balance per loan of \$153,400<sup>14</sup> for a total of 0.235 million loans.**

**2. Fannie’s holdings of Alt-A Private MBS as of 6.30.08:**

**Fannie held \$30 billion in Self-Denominated Alt-A Private MBS at 6.30.08<sup>15</sup> with an average principal balance per loan of \$171,269<sup>16</sup> for a total of 0.175 million loans.**

**3. Fannie’s single-family mortgage credit book of business holdings of Subprime by Characteristic loans, Self-denominated Alt-A and Alt-A by Characteristic loans as of 6.30.08:**

Fannie acquired seven types of high risk whole loans: FICO <620, FICO of 620-659, negatively amortizing loans, interest-only loans, loans with an Original LTV >90%, loans with Combined LTV >90%, and Self-denominated Alt-A.

Fannie and Freddie’s disclosures regarding these seven loan types have evolved over time, which has generally resulted in additional information being provided. While Fannie and Freddie’s disclosures are similar, Fannie provides some useful additional information, particularly with respect to loans with multiple product features. By Q.2:2009 not only were six of the seven product features listed on Fannie’s “Credit Profile by Key Product Features”, but key information helpful in addressing loans with more than one feature was provided.<sup>17</sup> The product feature of Combined LTV >90% is

<sup>13</sup> Fannie Mae 2008 Q. 2 10-Q Investor Summary p. 20

<sup>14</sup> Fannie Mae 2008 Q. 2 10-Q Investor Summary p. 30. As no average principal balance per loans is provided, Fannie’s average loan size for its portfolio of subprime loans was used.

<sup>15</sup> Fannie Mae 2008 Q. 2 10-Q Investor Summary p. 20,

<sup>16</sup> Fannie Mae 2008 Q. 2 10-Q Investor Summary p. 30. As no average principal balance per loans is provided, Fannie’s average loan size for its portfolio of Alt-A loans was used.

<sup>17</sup> Fannie Mae 2009 Second Quarter Credit Supplement, p. 5.

the exception; however it was disclosed separately in Fannie's 2007 10-K<sup>18</sup> and Freddie's 2008 Quarter 2 10-Q.<sup>19</sup>

In its 2009 Second Quarter Credit supplement, Fannie provided both individual dollar amounts for each of the six features (all but Combined LTV >90%) and a subtotal which factors out any duplication among the six. An average loan size of \$152,814 for the loans in the non-duplicative subtotal is also provided.<sup>20</sup> As of 6.30.09, the subtotal for these six key product features equaled \$878 billion with an average loan size of \$152,814. The total before removing duplicates was \$1.104 trillion.<sup>21</sup> The total without duplicates is 80% of the total with duplicates (\$878 billion divided by \$1.104 trillion). This percentage would have changed little over one year's time and may therefore be used to calculate Fannie's net loan amounts for the second quarter of 2008, our subject period. It is also helpful in eliminating Freddie's duplicates for the same six features for the second quarter of 2008, as Fannie and Freddie's loans are similar. Freddie does not provide this added level of detail.

As of 6.30.08, Fannie's six key product features totaled \$1.214 trillion gross dollars and 7.944 million gross loans.<sup>22</sup> Multiplying by 80% to adjust for duplicates yields \$971 billion and 6.354 million net loans (\$971 billion divided by \$152,814).

Fannie's seventh and final key category (Combined LTV >90%) may now be addressed. Fannie noted in its 2007 10-K:<sup>23</sup>

"In recent years there has been an increased percentage of borrowers obtaining second lien financing to purchase a home as a means of avoiding paying primary mortgage insurance. Although only 10% of our conventional single-family mortgage credit book of business had an original average LTV ratio greater than 90% as of December 31, 2007, we estimate that 15% of our conventional single-family mortgage credit book of business had an original combined average LTV ratio greater than 90%. The combined LTV ratio takes into account the combined amount of both the primary and second lien financing on the property. Second lien financing on a property increases the level of credit risk [on the first lien] because it reduced [sic] the borrower's equity in the property and may make it more difficult to refinance. Our original combined average LTV ratio data is limited to second lien financing reported to us at the time of origination of the first mortgage loan."

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<sup>18</sup> Fannie Mae 2007 10-K, p. 128.

<sup>19</sup> Freddie Mac Quarter 2 10-Q, p. 60.

<sup>20</sup> While eight key product features are listed, two may be ignored. Both Fannie and Freddie have a category for loans with both a FICO <620 and an Original LTV > 90%, which loans are already included in the two named product features. Fannie has a category for self-denominated subprime loans, which is the smallest category (\$7.9 billion) and is almost completely contained in either loans with FICO <620 or loans with FICO 620-559.

<sup>21</sup> Fannie Mae 2009 Q. 2 10-Q Investor Summary p. 5.

<sup>22</sup> Fannie Mae 2008 Q. 2 10-Q Investor Summary p. 30 lists five features totaling \$947 billion, to which sum a sixth feature (FICO of 620-659 in the amount of \$267 billion) must be added. This brings the total to \$1.214 trillion. While the key feature, FICO of 620-659, was included in the 2009 Quarter 2 listing of key features, it was not listed in 2008. See Appendix 2 for detail regarding the calculation of Fannie's loans with a FICO of 620-659.

<sup>23</sup> Fannie Mae 2007 10-K, p. 128.

As a result, an estimated \$133 billion of its portfolio at 6.30.08 consists of loans with a Combined LTV >90%.<sup>24</sup> The overlap between this product characteristic and the six that have already been addressed needs to be estimated. Fannie does not provide overlap information for this characteristic. I have conservatively estimated the overlap at 70%, yielding \$40 billion. Assuming these loans have an average balance equal to Fannie's average loan amount of \$152,814 for key product features yields a net 0.262 million loans.<sup>25</sup>

**For the 7 product features that comprise Fannie's mortgage credit book of business of Subprime by Characteristic, Self-denominated Alt-A and Alt-A by Characteristic loans, the net dollars are \$1.011 trillion (\$971 billion plus \$40 billion) respectively and the net number of loans is 6.616 million (6.354 million plus 0.262 million).**

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<sup>24</sup> Fannie Mae 2008 Q. 2 10-Q Investor Summary p. 30. This is the result of multiplying the 5% difference noted times Fannie's \$2.667 trillion total single-family portfolio at 6.30.08. This yields \$133 billion before addressing overlap.

<sup>25</sup> Fannie Mae 2009 Second Quarter Credit Supplement, p. 5.

## Section D: Detail of Freddie's contributions to total subprime and Alt-A loan exposure

**Table 2: Freddie's contributions to total subprime and Alt-A loan exposure:**

Type	\$ in billions	Number of loans in millions
Subprime Private MBS	\$82	0.535
Alt-A Private MBS	\$41	0.233
Subprime by Characteristic loans, Self-denominated Alt-A and Alt-A by Characteristic loans held in mortgage credit book	\$635	4.155
Total	\$758	4.913

**1. Freddie's holdings of Subprime Private MBS as of 6.30.08:**

**Freddie held \$82 billion in Self-Denominated Subprime Private MBS at 6.30.08<sup>26</sup> with an average principal balance per loan of \$153,400<sup>27</sup> for a total of 0.535 million loans.**

**2. Freddie's holdings of Alt-A Private MBS as of 6.30.08:**

**Freddie held \$41 billion in Self-Denominated Alt-A Private MBS at 6.30.08<sup>28</sup> with an average principal balance per loan of \$175,961<sup>29</sup> for a total of 0.233 million loans.**

**3. Freddie's single-family credit guarantee portfolio of business holdings of Subprime by Characteristic loans, Self-denominated Alt-A and Alt-A by Characteristic loans as of 6.30.08:**

Freddie acquired seven types of high risk whole loans: FICO <620, FICO of 620-659, negatively amortizing loans, interest-only loans, loans with an Original LTV >90%, loans with Combined LTV >90%, and Self-denominated Alt-A.

As noted earlier, Fannie provides details regarding overlaps among high risk loans that can also be applied to Freddie's credit guarantee portfolio

As of 6.30.08, Freddie's six key product features totaled \$752 billion.<sup>30</sup> Multiplying by 80% to adjust for duplicates yields \$602 billion and 3.939 million net loans (\$602 billion divided by \$152,814)

<sup>26</sup> Freddie Mac's Second Quarter 2008 Financial Results (slides from conference call) p. 36

<sup>27</sup> Fannie Mae 2008 Q. 2 10-Q Investor Summary p. 30. As no average principal balance per loans is provided, Fannie's average loan size for its portfolio of subprime loans was used.

<sup>28</sup> Freddie Mac's Second Quarter 2008 Financial Results (slides from conference call) p. 36

<sup>29</sup> Freddie Mac's Second Quarter 2008 Financial Results (slides from conference call) p. 26. As no average principal balance per loans is provided, Freddie's average loan size for its portfolio of Alt-A loans was used.

<sup>30</sup> Freddie Mac 2008 Second Quarter Financial Results p. 26 lists five features totaling \$588 billion, to which sum a sixth feature (FICO of 620-659 in the amount of \$164 billion) must be added, This brings the total to \$752 billion. See Appendix 2 for detail regarding the calculation of Freddie's loans with a FICO of 620-659.



Freddie's seventh and final key category (Combined LTV >90%) may now be addressed. Freddie noted in its 2008 Quarter 2 10-Q:<sup>31</sup>

"In prior years, as home prices increased, many borrowers used second liens at the time of purchase to reduce the LTV ratio on first lien mortgages. Including this secondary financing by third parties, we estimate that the percentage of first lien loans we have guaranteed that have a total original LTV ratio above 90% was approximately 14% at both June 30, 2008 and December 31, 2007.

Freddie's percentage of Original LTV >90% (without counting the impact of simultaneous 2nds) is 8%.<sup>32</sup> As a result, \$110 billion of its portfolio at 6.30.08 consists of loans with a Combined LTV >90%.<sup>33</sup> The overlap between this product characteristic and the six that have already been addressed is estimated at 70%, yielding \$33 billion. Assuming these loans have an average balance equal to Fannie's average loan amount of \$152,814 for key product features yields a net 0.216 million loans.

**For the 7 product features that comprise Freddie's single-family credit guarantee portfolio of Subprime by Characteristic, Self-denominated Alt-A and Alt-A by Characteristic loans, the net dollars are \$635 billion (\$602 billion plus \$33 billion) and the net number of loans is 4.155 million (3.939 million plus 0.216 million).**

## **Section E: Detail of Government loan contributions to total subprime and Alt-A loan exposure**

### **1. Determining the contribution by government loans to Subprime and Alt-A:**

The MBA's National Delinquency Survey (NDS) for Q2:08 reports that FHA and VA respectively had 3.492 million and 1.122 million loans outstanding.<sup>34</sup> The NDS does not report rural housing program loans; however loan volume at that time was small. Grossing up using an 82.5% coverage factor<sup>35</sup> yields 5.59 million government loans (3.492 million divided by 0.825 equals 4.23 million plus 1.122 divided by 0.825 equals 1.36 million).

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<sup>31</sup> Freddie Mac Quarter 2 10-Q, p. 60.

<sup>32</sup> Freddie Mac's Second Quarter 2008 Financial Results (slides from conference call) p. 26.

<sup>33</sup> The 6% difference times Freddie's \$1.837 trillion total single-family portfolio yields \$110 billion before deduping.

<sup>34</sup> National Delinquency Survey, Mortgage Bankers Association, Q208

<sup>35</sup> Over the period Q.1:08 to Q.3:09, the MBA reported that it covered over 80% of outstanding first-lien mortgages, between 80% and 85% of outstanding first-lien mortgages, and approximately 85% of outstanding first-lien mortgages. The total number of loans reported by the NDS varies by no more than 800,000 over this time period, indicating that the variance in the total number of mortgages outstanding over this period was at most 1 million loans. I have used a midpoint of 82.5% coverage.

For the period in question, approximately 83% of FHA loans consisted of high Original LTV lending (Original LTV>90%) and approximately 70% had a FICO of <660.<sup>36</sup> Given these high percentages it is highly probable that at least 90% of FHA loans have one of these two characteristics (0.90 times 4.23 million equals 3.81 million). While similar data is not available for the smaller volume VA and rural housing loan programs, I believe that at least 60% of these loans also have one of these two characteristics (0.7 times 1.36 million equals 0.95 million). FHA loans have an average loans balance of \$103,300<sup>37</sup> yields a total loan balance of \$394 billion. I believe VA's average is closer to \$150,000, which yields a total loan balance of \$143 billion.

**This results in \$537 billion in net loan dollars (\$394 billion plus \$143 billion) and 4.76 million loans (3.81 million FHA loans plus 0.95 million VA/rural loans).**

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<sup>36</sup> Data derived from 2009 Actuarial Review of the Federal Housing Administration Mutual Mortgage Insurance Fund, pp. 42 and 44

<sup>37</sup> Derived from the FHA Biweekly report for July 16-31, 2008 found at: <http://www.hud.gov/offices/hsg/comp/rpts/ooe/ol2009.pdf>

## **Section F: Detail of FHLBs' contributions to total subprime and Alt-A loan exposure**

### **1. FHLBs' holdings of Subprime Private MBS and Alt-A Private MBS as of 6.30.08:**

As of year-end 2008, various FHLBs were reported to hold \$76 billion in private MBS.<sup>38</sup> While little has been disclosed regarding the type of private MBS making up this portfolio, it would be reasonable to assume that 66% of the total or \$50 billion would be backed by Alt-A and subprime loans.<sup>39</sup> Based on an average loan amount of \$160,000 (blended average used for Fannie and Freddie's holdings of Private MBS and Alt-A Private MBS) results in 0.313 million loans.

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<sup>38</sup> <http://uk.reuters.com/article/idUKTRE5077I320090108>

<sup>39</sup> Inside Mortgage Finance data indicates that 66% of private MBS issuances over 2004-2007 were either Alt-A or subprime.

## Section G: Detail of Community Reinvestment Act (CRA) contributions to total subprime and Alt-A loan exposure

Two federal programs resulted in CRA or CRA-like single-family mortgage originations:

1. Loans undertaken to meet CRA requirements (CRA Loans).
2. Loan undertaken pursuant to HUD's "Declaration of Fair Lending Principles and Practices" (HUD Program and HUD Program Loans). As CRA applied only to banks and thrifts, in 1994, HUD established this companion program for mortgage bankers.<sup>40</sup> Like CRA it had as its goal increasing affordable housing opportunities and addressing obstacles facing homebuyers by providing products and programs that help bring home ownership to those who are under-served and the use of underwriting guidelines developed to be as flexible as possible.<sup>41</sup>

CRA and HUD Program Loans were not tracked in any organized manner. There is, however, a substantial amount of loan origination volume information available with respect to five of the largest participants. With this and other information an estimate may be made as to the volume of CRA and HUD Program Loans outstanding at 6.30.08. This information includes:

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<sup>40</sup> "Countrywide Is First Mortgage Lender to Voluntarily Agree to Fair Lending Goals with HUD" PASADENA, Calif., Sept. 14, 1994, PRNewswire: "The nation's largest mortgage lender and servicer, Countrywide Funding Corp., signed a voluntary Declaration of Fair Lending Principles and Practices ("Declaration") with the U.S. Department of Housing and Urban Development (HUD) -- the first such document -- underscoring Countrywide's commitment to increase the number of home loans made to minority and low-income borrowers....Countrywide implemented its House America program in October 1992.... Countrywide has made a \$5 billion commitment with Fannie Mae and Freddie Mac to make such loans in 1994/1995 under its House America program."

Additional Countrywide commitments:

- o In 2000 \$80 billion in community development lending included as a provision in Countrywide's reaffirmation of its 1994 HUD agreement (noted in *Mortgage Banking*, May 1, 2000);
- o In 2001 an expanded \$100 billion in community development lending through 2005. This goal was exceeded by early 2003 (Countrywide press release dated May 14, 2001);
- o In 2003 an expanded \$600 billion goal, extended to 2010 (noted in *Mortgage Banking*, Feb. 2005); and
- o In 2005 an expanded \$1 trillion goal (noted in *Mortgage Banking*, Feb. 2005).

From the point in time Countrywide started participating in HUD's program, it went from being the 22<sup>nd</sup> largest subprime originator in 1996 (as far back as the data goes) to the 7<sup>th</sup> largest in 2000, finally to the 3<sup>rd</sup> largest in 2004 through 2007. During the period 2004-2007 it was either the nation's largest or second largest Alt-A lender. During the period 1995-2007 it was, on a combined basis, Fannie and Freddie's largest lender nine times and 2<sup>nd</sup> largest lender four times. In 2007 it accounted for 29% and 18% of Fannie and Freddie's acquisitions respectively. This was up from 17% and 8% respectively in 1995. Source: Inside Mortgage Finance

<sup>41</sup> See Appendix 1 "Since 1994, HUD has signed Fair Lending Best Practices Agreements with lenders across the nation that are individually tailored to public-private partnerships that are considered on the leading edge. The Agreements not only offer an opportunity to increase low-income and minority lending but they incorporate fair housing and equal opportunity principles into mortgage lending standards. These banks and mortgage lenders, as represented by Countrywide Home Loans, Inc., serve as industry leaders in their communities by demonstrating a commitment to affirmatively further fair lending." <http://www.hud.gov/local/hi/working/nlwfal2001.cfm>

1. Announcements of CRA commitments (CRA Commitments) were tracked by the National Community Reinvestment Coalition (NCRC). In 2007 NCRC published data indicating that from 1994 to 2007, CRA Commitments totaled \$4.5 trillion (NCRC 2007 Report). An analysis of the commitments indicated that 94% of those announced were made by Bank of America, JP Morgan Chase, Citibank, and Wells Fargo or banks and thrifts that these banks purchased or merged with;<sup>42</sup>
2. Countrywide Funding announced its commitments made pursuant to its participation in the HUD Program (HUD Commitments);
3. Other CRA loans were originated by banks and thrifts without having first announced a CRA Commitment. These loans are particularly difficult to identify and size;
4. Most loans originated pursuant to the Community Development Programs were single-family;<sup>43</sup>
5. As will be demonstrated below, announced CRA Commitments went on to be filled; and
6. Fannie data indicated that ninety-eight percent of its loans that were outstanding as of 6.30.08 were originated in 2001 or later. Given Fannie's large size and high percentage of affordable housing loans, this percentage is useful in estimating the volume of Community Development Loans outstanding at 6.30.08.<sup>44</sup>

While these facts make it possible to develop a robust estimate of the single-family CRA and HUD Program Loans that were made as a result of announced commitments and were outstanding as of June 30, 2008, we don't have nearly as detailed information as to where these loans ended up (Fannie, Freddie, FHA, Subprime Private MBS or bank portfolios) or their characteristics. As a result, the later part of this analysis on CRA and HUD Program Loans requires more in the way educated guesses.

Washington Mutual (WaMU), JP Morgan Chase (Chase), Citibank (Citi), Bank of America (B of A), and Countrywide Funding (CWF) either published annual reports or issued press releases detailing their activities pursuant to their announced CRA Commitments. In addition, WaMu, Chase, Citi, and B of A, reported their actual loan volumes undertaken in furtherance of each bank's CRA Commitment(s) as reported in NCRC 2007 Report. CWF reported its loan volume in terms of progress made in fulfilling its HUD Commitments.

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<sup>42</sup> Source: National Community Reinvestment Coalition's 2007 CRA Commitments report found at: <http://www.community-wealth.org/pdfs/articles-publications/cdfis/report-silver-brown.pdf>. Note: commitments generally represent a multi-year, multi-product commitment to originate CRA loans. Loans made under CRA Community Lending Programs can be single-family, multi-family, commercial, or other types of loans.

<sup>43</sup> CRA Community Development Program lending by banks was heavily weighted to single-family lending. For example, JP Morgan Chase announced an \$800 billion community development commitment in 2004, of which \$675 billion (84%) was committed to home mortgages. CRA Community Development Program lending by thrifts was even more heavily weighted to single-family lending, as that was the main business of thrifts. Likewise, with the HUD Community Development Program lending, as it was applicable to mortgage bankers, whose business almost entirely related to single-family lending.

<sup>44</sup> Based on Fannie's experience as set forth in its Second Quarter 2008 10-Q, p. 75.

**Table 3 (\$ in billions) - lists single-family originations only:**

<b>Lender</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008 (½ year)<sup>45</sup></b>	<b>Total all years</b>
WaMu <sup>46</sup>	\$20	\$40	\$80	\$50	\$65	\$45	\$32	NA	\$332
Chase <sup>47</sup>	\$40	\$60	\$82	\$54	\$68	\$75	\$62	\$62	\$503
Citi <sup>48</sup>	\$10	\$14	\$26	\$67	\$50	\$43	\$62	\$2	\$274
B of A <sup>49</sup>	\$20	\$20	\$20	\$20	\$35	\$44	\$54	\$16	\$229
CWF <sup>50</sup>	\$50	\$50	\$130	\$111	\$150	\$165	\$133	NA	\$789
<b>Total</b>	<b>\$140</b>	<b>\$184</b>	<b>\$338</b>	<b>\$302</b>	<b>\$368</b>	<b>\$372</b>	<b>\$343</b>	<b>\$80</b>	<b>\$2,127</b>
Est. balance at 6.30.08 <sup>51</sup>	\$13	\$37	\$135	\$151	\$254	\$283	\$295	\$80	\$1,248
Est. balance at 6.30.08 grossed up to include balance of CRA and HUD Program Loans (Prior line times 1.25) <sup>52</sup>	\$16	\$46	\$169	\$189	\$318	\$354	\$369	\$100	\$1,561

<sup>45</sup> 2008 originations were reduced by 50% to approximate originations during the first 6 months of the year.

<sup>46</sup> According to the NCRC's 2007 report, WaMu announced a \$75 and \$120 billion CRA commitments in 1997 and 1998 respectively. Based on these commitments and WaMu's estimated 2002 volume, \$20 billion for 2001 would be reasonable. Washington Mutual's 2006 and 2007 Community Annual Reports were the source for 2002-2007.

WaMu announced that it had fulfilled its \$375 billion commitment made in 2002 and that single-family originations contributing to this total amounted to \$312.8 billion, with actual amounts given for 2006-2007. This \$312.5 billion was spread over the 2002-2007 period. WaMu was purchased by Chase in 2008.

<sup>47</sup> "Making Dreams Come True: The Chase Dream Maker Commitment in Action", Chase press release dated July 14, 2004 source for 2001-2003. Noting a \$500 billion pledge made by its mortgage lending unit (Chase Home Finance), Chase noted that \$182 billion in single-family loans had been originated during the previous 3 years. This \$182 billion was spread over the 2001-2003 period. "JP Morgan Chase invests \$153 billion in low- and moderate-income families, communities and small businesses JP Morgan Chase press release dated September 19, 2006 source for 2004-2005. "Chase Invests \$338 Billion in Low- and Moderate-Income Families, Communities and Small Businesses in Four Years" Chase press release dated May 13, 2008 was the source for 2006-2007. Chase notes a cumulative \$259 billion in mortgage originations to minority- and lower-income borrowers made over 2004-2007. This \$259 billion was spread over the 2004-2007 period. Lending was pursuant to Chase's \$800 billion CRA Community Lending Program commitment announced in 2004. In a report entitled "Reaching out to homeowners" Chase noted: "In the [\$800 billion] program's first five years, Chase made about \$380 billion in loans towards its goal of \$675 billion in mortgage lending." This was an increase of \$121 billion over the year-end 2007 total.

<sup>48</sup> Citigroup "Citizenship Reports 2005, 2006, and 2007" and "Community Relations" report source for 2001-2008.

<sup>49</sup> According to the NCRC's 2007 report, NationsBank (purchaser of B of A) announced a \$350 billion CRA commitment in 1998. Based on this commitment and B of A's estimated 2005 volume, an estimate of \$20 billion for 2001-2004 would be reasonable. B of A table showing 2005-2007 total single-family community development originations of \$133 billion and 2007 single-family community development originations of \$54 billion. The \$79 billion remainder for 2005-2006 was divided between the two years. Community Development link of B of A's web site. In 2008, B of A provided \$31 billion in affordable housing.

[http://www.bankofamerica.com/community/index.cfm?template=cdb\\_threefiftybillionni](http://www.bankofamerica.com/community/index.cfm?template=cdb_threefiftybillionni)

<sup>50</sup> As noted in *Mortgage Banking*, Feb. 2005, CWF's previous commitment [\$600 billion] covered the years 2001-2010 and provided \$341 billion of home loans as of Dec. 31, 2004. This amount was spread over 2001-2004. In a question and answer statement released by CWF in late-2007 it noted \$789 billion in loan originations towards its \$1 trillion goal. (<http://www.realtown.com/articles/view/questions-and-answers-from-countrywide-about-lending>). This \$448 billion increase over the 12.31.04 total was spread over 2005-2007. B of A acquired CWF in 2008.

<sup>51</sup> See Appendix 3

<sup>52</sup> The CRA and HUD Program Loans documented in Table 3 represent the production of 5 large lenders. There are over 7000 additional bank and thrift lenders subject to CRA and over 100 lenders participating in HUD's Program. Assuming that the 5 documented lenders account for 80% of Community Lending, the remaining lenders would conservatively add 25% to #6.

An estimated single-family CRA and HUD Program Loan total of \$1.561 trillion remaining at 6.30.08 and an average loan balance of \$139,000 yields an estimated 11.2 million Community Lending loans.<sup>53</sup> This analysis demonstrates that an estimated \$1.5 trillion (11.2 million loans) in Community Lending was outstanding as of 6.30.08. *A crucial question that must be addressed in detail is: where are these loans today, what are their characteristics, and how are they performing? This answer can easily be gotten from the three survivors (Chase, Cit, and B of A), which have detailed records on 80% of these loans.*<sup>54</sup>

Given the Community Development Programs' targeted income requirements and goals of flexible underwriting, it is reasonable to assume that most of these loans (say 60% or 6.7 million) had either subprime (FICO below 660) or Alt-A characteristics (High Original LTV, High Combined LTV, or other flexible underwriting standards). Most of these loans (estimated at 65%) are believed to have been acquired by Fannie and Freddie or insured by FHA and have already been included in the counts for Fannie, Freddie and FHA. The balance (35%) ended up in Subprime Private MBS and lenders' portfolios. As a result, 60% of this 35% balance, or about 20%, are estimated to be Subprime or Alt-A Loans found in Subprime Private MBS or lenders'.

**Subprime and Alt-A Community Lending loans placed in Subprime Private MBS or remaining in lenders' portfolios total \$312 billion (\$1.561 trillion times 20%) and 2.24 million loans (11.2 million loans times 20%).**

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<sup>53</sup> Derived from Fannie Mae 2008 10-K Investor Summary p. 5. The blended average loan amount (\$139,000) for loans with a FICO<660 and original LTV >90% was calculated. This is representative of Community Lending loans.

<sup>54</sup> Of the original five lenders, four were major Self-denominated Subprime lenders. In 2006 CWF was ranked #3 with a 6.8% share, CitiMortgage was ranked #4 with a 6.3% share, WaMu was ranked #11 with a 4.4% share and Chase was ranked 17 with a 1.9% share. Total share for these four banks was 19.4%.

## Appendix 1:

Additional background on HUD's Community Lending Programs and its Fair Lending Best Practices Agreements.

HUD reports on its website:

“Since 1994, HUD has signed Fair Lending Best Practices Agreements with lenders across the nation that are individually tailored to public-private partnerships that are considered on the leading edge. The Agreements not only offer an opportunity to increase low-income and minority lending but they incorporate fair housing and equal opportunity principles into mortgage lending standards. These banks and mortgage lenders, as represented by Countrywide Home Loans, Inc., serve as industry leaders in their communities by demonstrating a commitment to affirmatively further fair lending.”<sup>55</sup>

I believe that the Fair Lending Best Practices Agreement that was entered into between HUD and Investor Lending Services (ILS) is representative. It provides:

“As a mortgage lender, we are committed to increasing affordable housing opportunities and addressing obstacles that face today's homebuyers, by providing products and programs that help bring home ownership to those who are under-served.”

and

“It is ILS' policy and expectation that every loan applicant will be considered for financing, where available. In addition an alternative loan product may be offered or recommended based upon the applicant's credit history and the interest rate desired, as well as the terms and conditions of the loan. ILS may engage in advertising campaigns or targeted solicitations with respect to alternative loans.”

and

“ILS is committed to taking a leadership role in the lending community, by supporting affordable housing programs which benefit our communities and contribute towards helping people finance their investment properties. We realize that participating in such programs not only benefits society as a whole but contributes to the continued viability and financial well being of ILS.”

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<sup>55</sup> Found at: <http://www.hud.gov/local/hi/working/nlwfal2001.cfm>



and

“An element of judgment and subjectivity enters into all underwriting decisions. To give the widest possible latitude to good judgment, the underwriting guidelines are developed to be as flexible as possible.”<sup>56</sup>

By 1997 HUD had entered into 117 such agreements.<sup>57</sup>

This program appears to have made a significant contribution to the flexible lending policies espoused by the federal government and is a significant and appropriate area for inquiry.

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<sup>56</sup> Found at: [http://ilsfunding.com/equal\\_housing.htm](http://ilsfunding.com/equal_housing.htm)

<sup>57</sup> Found at: <http://www.hud.gov/offices/fheo/39steps.pdf>

## Appendix 2:

### FICO 620-659 held by Fannie and Freddie as of 6.30.08:

Type	Number of loans	\$ amount
Fannie		
620-659 FICO <sup>58</sup>	1.882 million	\$267 billion
Freddie		
620-659 FICO <sup>59</sup>	1.148 million	\$164 billion

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<sup>58</sup> Fannie Mae 2008 Q. 2 10-Q p. 74 indicates that 10% of the single-family book of business had a FICO of 620-659. Fannie Mae 2008 Q. 2 10-Q Investor Summary p. 30 indicates that the single-family book of business totaled \$2.667 trillion, resulting in \$267 billion of loans with a FICO of 620-659. Fannie Mae 2008 Credit Supplement p. 5 indicates an average loan size of \$141,748 for loans with a FICO of 620-659 resulting in 1.882 million loans.

<sup>59</sup> Freddie Mac disclosed the dollar amount of its exposure to loans with a FICO of 620-659 in its Fourth Quarter 2008 Financial Results Supplement p. 15. Number of loans derived from total unpaid principal balance and average unpaid principal loan balance per loan (\$143,177).

### Appendix 3:

\$ in billions	2001	2002	2003	2004	2005	2006	2007	2008 (1 <sup>st</sup> half)	Total
1. Fannie's originations by year <sup>60</sup>	\$568	\$804	\$1,322	\$588	\$537	\$524	\$651	\$252	
2. Orig. year (by %) of total loans of \$2.667 outstanding at 6.30.08 <sup>61</sup>	2%	6%	20%	11%	14%	15%	21%	9%	
3. \$ based on % in #2. times \$2.667	\$53	\$160	\$533	\$293	\$373	\$400	\$562 <sup>62</sup>	\$252 <sup>63</sup>	
4. % of year still outstanding (#3. divided by #1.)	9%	20%	40%	50%	69%	76%	86%	100%	
5. \$ of Community Lending from Table 3	\$140	\$184	\$338	\$302	\$368	\$372	\$343	\$80	\$2,127
6. Est. amount left (#4. times #5.)	\$13	\$37	\$135	\$151	\$254	\$283	\$295	\$80	\$1,248
7. Gross up for balance of Community Lending by banks and thrifts (#6. times 1.25) <sup>64</sup>	\$16	\$46	\$169	\$189	\$318	\$354	\$369	\$100	\$1,561

<sup>60</sup> Source: 2001-2006 - FHFA Mortgage Markets and the enterprises (Table 1) <http://www.fhfa.gov/webfiles/682/MortgageMarkets2006.pdf>. 2007 and 1<sup>st</sup> ½ of 2008

<sup>61</sup> Based on Fannie's experience as set forth in its Second Quarter 2008 10-Q, p. 75.

<sup>62</sup> Fannie Mae 2008 Q. 2 10-Q Investor Summary p. 31

<sup>63</sup> Id.

<sup>64</sup> The Community Lending documented in Table 3 represents 5 large lenders. There are over 7000 additional bank and thrift lenders subject to CRA. Assuming that the 5 documented lenders account for 80% of Community Lending, the remaining lenders would conservatively add 25% to #6.