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Pinto - High LTV, Subprime, and Alt-A Originations 1992-2007

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Exhibit 3 with corrections through 4.21.10

Memorandum

High LTV, Subprime and Alt-A Originations Over the Period 1992-2007 and Fannie, Freddie, FHA and VA's Role

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In prior memoranda I have outlined an inventory of the “stock - the number and dollar amount of subprime and Alt-A loans outstanding in the housing finance system before the financial crisis hit in September 2008. In this I am detailing the “flow” – the number and dollar amount of such loans that were originated between 1992 and 2008. I also outline in detail how I arrived at subprime and Alt-A originations over the period 1992-2007, along with Fannie, Freddie and FHAs participation and domination of these loan types over the same period.

Section A: Definitions

1. Relevant definitions from my “Sizing Total Exposure to Subprime and Alt-A Loans in U.S. First Mortgage Market as of 6.30.08.”

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.”¹ 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 or Subprime by FICO: 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.”² 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).”³

¹ See Appendix 1

² S&P Structured Finance Ratings, January 1997, p. 14

³ See Appendix 1.

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.⁴ 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).⁵ Fannie's SD rate on its traditionally underwritten loans (those loans without any of these high risk characteristics) is 1.78%.⁶ 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 (note: these characteristics could not be tracked for the time period in question);
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 1st and 2nd lien was used to reduce the down payment required. This lending commonly involved an 80% 1st and a 20% second. This lending may also be referred to as Combined LTV >90%

FHA Loans: Loans insured by FHA. 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 <660⁷. FHA is projecting a 21% and 24% claims rate⁸ for its 2006 and 2007 book years

⁴ Fannie Mae 2009 Third Quarter Credit Supplement, p. 5, found at: http://www.fanniemae.com/ir/pdf/sec/2009/q3credit_summary.pdf and Freddie Mac Third Quarter Results Supplement p. 18 found at http://www.freddiemac.com/investors/er/pdf/supplement_3q09.pdf

⁵ Fannie Mae 2009 Third Quarter Credit Supplement, p. 5

⁶ Id. Derived from data found on p.5

⁷ Data in or derived from 2009 Actuarial Review of the Federal Housing Administration Mutual Mortgage Insurance Fund, pp. 42 and 44

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.

2. Additional definitions:

Home Purchase Loan (HPL): The purpose of the loan was to finance a home purchase.

Refinance Loan (RL): The purpose of the loan was to refinance an existing home mortgage.

Government Loans: A loan insured or guaranteed by FHA or VA.

Conventional loan: Not a government loan.

⁸ 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.

Section B: Background

The beginning of the financial crisis extends back to the early-1990s. In the first half of the 1990s, the federal government adopted three policy initiatives that were intended to supplement the work of the Federal Housing Administration (FHA), which had long been the federal government's main vehicle for higher risk home lending:

1. In 1992, Congress imposed affordable housing goals on Fannie and Freddie by Congress⁹ and they became both competitors to FHA and a source of demand for CRA loans;
2. In 1994, HUD began to implement its "Fair Lending Best Practices Agreements" with lenders across the nation;¹⁰ and
3. In 1995, the Community Reinvestment Act (CRA), which had been passed in 1977 but had had little impact on bank lending, was given new life with stronger regulations applicable to all insured banks.

The clear message to the private sector (including Fannie and Freddie) was to promote and expand low and moderate income home lending and use flexible underwriting standards such as lower downpayments to accomplish it.

These four initiatives covered most lenders and most of the secondary market. Each initiative either explicitly (FHA, CRA, and HUD) or implicitly (Fannie and Freddie) required the use of flexible lending standards. This policy was in place for about a dozen years. At the end of this period, our nation suffered a catastrophic and nationwide decline in home prices. It is for this reason that high risk loan origination trends going back to 1992 are important to an analysis of the causes of the financial crisis.

This information is also useful from the perspective of the stimulus applied to the housing market over the period 1993-2007. While the Case-Shiller House Price Index reached its price peak in mid-2006; the peak in the rate of increase for the Case-Shiller 10-City House Price Index (HPI) occurred in mid-2004 and for the 20-City HPI occurred in late-2004.¹¹ Likewise the peak in the percentage of homeownership was reached in 2004 after having risen for 10 straight years.¹² This increases the significance of the loans originated during the run-up to 2004 to any evaluation of the housing boom.

The fact that the above enumerated changes in federal housing policy occurred in the early- to mid-1990s and that prescient warnings about the potential risks presented by Fannie and Freddie go back many years is a compelling demonstration of the need to look at the mortgage market going back 18 years, not just 5 or 6.

For example in 1998, Mr. Tom LaMalfa, in testimony before the House Subcommittee on Housing, warned:

⁹ Federal Housing Enterprises Financial Safety and Soundness Act of 1992

¹⁰ See Appendix 1

¹¹ S&P Case-Shiller HPI

¹² U.S. Census Bureau

“Fannie and Freddie put taxpayers at risk. A meltdown similar to that of the FSLIC six to seven years ago could occur and taxpayers would be forced to come to the rescue given the nature of the implicit federal guarantees in these federal agencies’ securities. Fannie and Freddie are at best mediocre mechanisms for directing subsidies to housing. The GAO concurs with this assessment. More than one dollar of every three gets spent before the consumers get the subsidy. Besides taxpayer risk and inefficiency, there are five other important reasons why Fannie and Freddie should be privatized: 1) they are siphoning most of the economic value from the mortgage business; 2) their special privileges impede the private sector’s growth and financial opportunities; 3) they raise interest rates and indirectly increase the cost of the national debt; 4) they repeatedly have abused their charters; and 5) there is an almost inherent conflict in Fannie and Freddie’s private and public roles. They are at odds. It is a zero-sum game: either shareholders and managers win, or taxpayers and the public win.”¹³

Two years later, Mr. LaMalfa expressed deep concern about Fannie and Freddie’s expanding role in subprime:

“Development three found further and continued change in the subprime market with the disappearance of the independent firms. Profits appear to be far harder to come by, and the predatory lending issue continues to daunt the industry. Delinquency rates on these mortgages are high despite the current level of economic prosperity. Several states are discussing predatory lending legislation. Regrettably, the GSEs are playing politics with the issue, ostensibly to curry favor with certain Congressional and state legislators. And, speaking of Fannie Mae and Freddie Mac, let it be said that they now control the subprime market, having through their Alt A and A minus programs absorbed the largest and best parts of the “old” subprime world. What are left are the C and D segments. Combined, they only account for 20 to 30 percent of all subprime mortgages. (The old subprime market was about 15 percent of the total market.) Fannie/Freddie programs using risk-based pricing now encompass most mortgages with FICO scores of around 540 and up.”¹⁴

This memorandum sets forth activity relating to a number of key data series. Unless noted, each individual data series provides comprehensive coverage for the loan characteristic described:

1. High LTV lending (1992-2007)
 - a. Conventional Home Purchase Loans
 - i. Fannie Home Purchase Loans
 - ii. Freddie Home Purchase Loans
 - b. FHA Home Purchase Loans
 - c. VA Home Purchase Loans
2. Subprime lending (1997-2007)
 - a. Self-denominated Subprime
 - i. Subprime Private MBS
 - b. Subprime by FICO (only for the following 3 categories)
 - i. Fannie loan acquisitions (both Home Purchase and Refinance Loans)
 - ii. Freddie loan acquisitions (both Home Purchase and Refinance Loans)

¹³ Testimony of Mr. Tom LaMalfa before the House Subcommittee on Housing on March 27, 1998

¹⁴ Tom LaMalfa in the “Mortgage Corner column of the Holm Mortgage Finance Report, dated January 19, 2001.

- iii. FHA insured loans ((both Home Purchase and Refinance Loans)
- 3. Alt-A lending (self-denominated only)
 - a. Self-denominated Alt-A
 - i. Self-denominated Alt-A reported by Inside Mortgage Finance (1992-2007)¹⁵
 - a. Alt-A Private MBS (1995-2007)
 - ii. Fannie loan acquisitions (2002-2007)
 - iii. Freddie loan acquisitions (2002-2007)

This memorandum tracks high LTV, subprime and Alt-A activity over a 16 year period. There are certain data limitations resulting from the length of the time period involved. Two examples illustrate these limitations:

1. FICO scores are used to identify certain categories of subprime loans. FICO score were first developed in 1989 for consumer credit rather than mortgage credit. They did not come into generalized use in mortgage finance until the mid-1990s. As a result FICO data are not widely available prior to 1997. FICO score for all loans by year of originations is not generally available. The FICO series is limited to Fannie, Freddie, and FHA; and
2. The term “Alt-A” came into use in the early 1990s. Self denominated Alt-A volume developed slowly over the 1990s. 1995 was the first year for which data for both Alt-A loan and securities volumes was reported by Inside Mortgage Finance. Not all loans with Alt-A characteristics were identified as Alt-A.

¹⁵ Inside Mortgage Finance (IMF) is the source for annual Self-denominated Alt-A originations. For the period for which Fannie and Freddie Alt-A purchase data is available (2002-2007) the total of Alt-A Private MBS and Fannie/Freddie Alt-A acquisitions substantially exceeds IMF’s total Alt-A originations for a year. This appears to be due to an undercounting of Alt-A loans in the IMF totals. For that reason, I have concluded that the Fannie and Freddie Alt-A totals were not captured by IMF. The total of Self-denominated Alt-A for 2002-2007 consists of the sum of Self-denominated Alt-A loans reported by IMF and Fannie and Freddie.

Section C: Summary of Trends for High LTV, Subprime and Self-denominated Alt-A loan Activity

Table 2 summarizes the trends in three categories of Subprime and Alt-A lending over the period that the triggers of the financial crisis were developing. In all three instances various federal agencies dominated based on dollar volume. As the federal agencies tended to finance smaller mortgages, this dominance is even greater if computed on the basis of number of loans.

This summary also shows how Fannie and Freddie first became a competitor to and eventually overcame FHA in the area of High LTV Home Purchase lending. The process of crowding out the private sector by the federal agencies in subprime lending is also clear. Fannie and Freddie's role in Alt-A lending is murky as Fannie and Freddie did not classify many of their loans with Alt-A characteristics as Alt-A loans.¹⁶

¹⁶ Fannie and Freddie used their various affordable housing programs and individual lender variance programs (many times in conjunction with their automated underwriting systems once these came into general use in the late-1990s) to approve loans with Alt-A characteristics, however they generally did not classify these loans as Alt-A. This practice started in the early-1990s. Many of the loans had higher debt ratios, reduced reserves, loosened credit requirements, expanded seller contributions, etc.

Table 1: Summary of Trends for High LTV, Subprime and Self-denominated Alt-A loan Activity

Section with detail	\$ in billions	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Total for yrs. underlined
Section D	A. Total Home Purchase Loans (HPL) with High LTV	\$87	\$100	\$159	\$156	\$173	<u>\$176</u>	<u>\$218</u>	<u>\$231</u>	<u>\$205</u>	<u>\$273</u>	<u>\$307</u>	<u>\$300</u>	<u>\$308</u>	<u>\$271</u>	<u>\$321</u>	<u>\$366</u>	<u>\$2,976</u>
	1. Fannie	NA	NA	NA	NA	NA	<u>\$18</u>	<u>\$25</u>	<u>\$36</u>	<u>\$33</u>	<u>\$50</u>	<u>\$53</u>	<u>\$68</u>	<u>\$53</u>	<u>\$43</u>	<u>\$51</u>	<u>\$93</u>	<u>\$533</u>
	2. Freddie	NA	NA	NA	NA	NA	<u>\$14</u>	<u>\$19</u>	<u>\$26</u>	<u>\$28</u>	<u>\$34</u>	<u>\$34</u>	<u>\$30</u>	<u>\$24</u>	<u>\$26</u>	<u>\$24</u>	<u>\$48</u>	<u>\$307</u>
	3. FHA	\$30	\$37	\$43	\$35	\$52	<u>\$56</u>	<u>\$64</u>	<u>\$82</u>	<u>\$79</u>	<u>\$81</u>	<u>\$82</u>	<u>\$69</u>	<u>\$48</u>	<u>\$31</u>	<u>\$27</u>	<u>\$28</u>	<u>\$647</u>
	4. VA	\$12	\$8	\$28	\$22	\$28	<u>\$24</u>	<u>\$31</u>	<u>\$38</u>	<u>\$20</u>	<u>\$24</u>	<u>\$27</u>	<u>\$32</u>	<u>\$21</u>	<u>\$16</u>	<u>\$14</u>	<u>\$13</u>	<u>\$260</u>
	B. % Fannie/Freddie/FHA/VA acquisitions/insurance of HPL with High LTV loans are of Total HPL with High LTV	NA	NA	NA	NA	NA	<u>64%</u>	<u>64%</u>	<u>79%</u>	<u>78%</u>	<u>69%</u>	<u>64%</u>	<u>66%</u>	<u>47%</u>	<u>43%</u>	<u>36%</u>	<u>50%</u>	<u>66%</u>
Section E	C. Total tracked Subprime loans	*	*	*	*	*	<u>\$167</u>	<u>\$284</u>	<u>\$286</u>	<u>\$231</u>	<u>\$412</u>	<u>\$505</u>	<u>\$684</u>	<u>\$748</u>	<u>\$802</u>	<u>\$774</u>	<u>\$434</u>	<u>\$5,327</u>
	1. Fannie/Freddie	*	*	*	*	*	<u>\$40</u>	<u>\$101</u>	<u>\$92</u>	<u>\$76</u>	<u>\$175</u>	<u>\$244</u>	<u>\$344</u>	<u>\$324</u>	<u>\$308</u>	<u>\$248</u>	<u>\$257</u>	<u>\$2,209</u>
	2. FHA	*	*	\$33	\$19	\$31	<u>\$45</u>	<u>\$66</u>	<u>\$82</u>	<u>\$66</u>	<u>\$93</u>	<u>\$99</u>	<u>\$112</u>	<u>\$64</u>	<u>\$38</u>	<u>\$36</u>	<u>\$48</u>	<u>\$749</u>
	D. % Fannie/Freddie/FHA Subprime acquisitions/insured loans (\$) are of total tracked Subprime loans						<u>51%</u>	<u>59%</u>	<u>61%</u>	<u>61%</u>	<u>65%</u>	<u>68%</u>	<u>67%</u>	<u>52%</u>	<u>43%</u>	<u>37%</u>	<u>70%</u>	<u>56%</u>
Section F	E. Total tracked Alt-A Lending	*	*	*	*	*	*	*	*	*	*	<u>\$133</u>	<u>\$162</u>	<u>\$254</u>	<u>\$457</u>	<u>\$557</u>	<u>\$453</u>	<u>\$2,016</u>
	1. Fannie/Freddie total known Alt-A	*	*	*	*	*	*	*	*	*	*	<u>\$84</u>	<u>\$89</u>	<u>\$94</u>	<u>\$103</u>	<u>\$200</u>	<u>\$193</u>	<u>\$773</u>
	2. Fannie/Freddie known Alt-A (\$) as a % of total tracked Alt-A lending	*	*	*	*	*	*	*	*	*	*	<u>63%</u>	<u>55%</u>	<u>37%</u>	<u>23%</u>	<u>36%</u>	<u>43%</u>	<u>38%</u>

*Not available

Section D: Detail for High LTV Home Purchase Loans

As noted earlier, tracking the full volume of Self-denominated Alt-A and Alt-A by Characteristic loans over the entire 1992-2007 period presents challenges. This Section D presents comprehensive data on High LTV Home Purchase loans, a type of Alt-A by Characteristic loan going all the way back to 1992. This category grew rapidly starting in the mid-1990s as a result of the federal policies described earlier.

In 1992 the percentage of Home Purchase Loans with an LTV >90% was 24%. During the period 1994-2000 it averaged 36.5%, an increase of over 50%. Adjusting the 2001-2007 originations for the increasing use of combination 1st and 2nd loans results in the entire 1994-2007 period averaging about 36% of Home Purchase Loans with an LTV/CLTV >90%.¹⁷ During the entire 1994-2007 period Fannie, Freddie, FHA, and VA were responsible for 66% of all high LTV home purchase loans.

¹⁷ Starting in about 2001, combination 1st and 2nd loans were much more prevalent with respect to home purchase financings. For example, Fannie reported that by the end of 2007 combination loans with a combined LTV>90% would have added an additional 50% to its total of loans with an LTV>90% (Fannie Mae 2007 10-K, p. 128). Freddie had a similar experience. It would have added an additional 75% to its total of loans with an LTV>90% (Freddie Mac Quarter 2 10-Q, p. 60). The percentages in this table do not reflect this impact

Table 2: Detail for High LTV Home Purchase Loans - see endnotes for sources

\$ in billionsⁱ	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	<i>Total for years. underlined</i>
1. Total \$ of Home Purchase Loans (HPL)	\$369	\$375	\$458	\$429	\$460	<u>\$475</u>	<u>\$595</u>	<u>\$615</u>	<u>\$588</u>	<u>\$917</u>	<u>\$1,064</u>	<u>\$1,106</u>	<u>\$1,409</u>	<u>\$1,545</u>	<u>\$1,520</u>	<u>\$1,168</u>	<u>\$11,002</u>
3. % of HPL with High LTV (>90% LTV) ⁱⁱ	24%	27%	35%	36%	38%	37%	37%	38%	35%	30%	29%	27%	22%	18%	21%	31%	
4. \$ of HPL with High LTV (>90% LTV)	\$87	\$100	\$159	\$156	\$173	<u>\$176</u>	<u>\$218</u>	<u>\$231</u>	<u>\$205</u>	<u>\$273</u>	<u>\$307</u>	<u>\$300</u>	<u>\$308</u>	<u>\$271</u>	<u>\$321</u>	<u>\$366</u>	<u>\$2,976</u>
5. Fannie/Freddie/ FHA/VA HPL with High LTV as a % of total HPL with High LTV	NA	NA	NA	NA	NA	64%	64%	79%	78%	69%	64%	66%	47%	43%	36%	50%	
4. % of Conventional HPL with >90% LTV	14%	17%	25%	27%	25%	25%	25%	23%	22%	21%	21%	20%	18%	15%	19%	29%	
5. \$ of Conventional HPL with >90% LTV	\$45	\$55	\$88	\$99	\$93	<u>\$96</u>	<u>\$123</u>	<u>\$111</u>	<u>\$106</u>	<u>\$168</u>	<u>\$198</u>	<u>\$199</u>	<u>\$239</u>	<u>\$224</u>	<u>\$280</u>	<u>\$325</u>	<u>\$2,069</u>
6. % of Fannie HPL with >90% LTV	15%	25%	22%	27%	23%	26%	26%	26%	23%	25%	24%	25%	23%	23%	26%	35%	
7. % of Fannie HPL with >95% LTV	0%	0%	NA	NA	NA	3%	4%	4%	4%	7%	8%	12%	13%	15%	19%	26%	
8. \$ of Fannie HPL with >90% LTV	NA	NA	NA	NA	NA	<u>\$18</u>	<u>\$25</u>	<u>\$36</u>	<u>\$33</u>	<u>\$50</u>	<u>\$53</u>	<u>\$68</u>	<u>\$53</u>	<u>\$43</u>	<u>\$51</u>	<u>\$93</u>	<u>\$533</u>
9. % of Freddie HPL with >90% LTV	13%	16%	12%	20%	22%	23%	30%	27%	26%	26%	26%	27%	19%	16%	16%	29%	
10. % of Freddie HPL with >95% LTV	0%	0%	NA	NA	NA	1%	3%	5%	6%	5%	8%	10%	6%	8%	10%	19%	
11. \$ of Freddie HPL with >90% LTV	NA	NA	NA	NA	NA	<u>\$14</u>	<u>\$19</u>	<u>\$26</u>	<u>\$28</u>	<u>\$34</u>	<u>\$34</u>	<u>\$30</u>	<u>\$24</u>	<u>\$26</u>	<u>\$24</u>	<u>\$48</u>	<u>\$307</u>
12. % of FHA HPL with >90% LTV	82%	83%	85%	86%	86%	85%	87%	88%	91%	89%	88%	85%	85%	85%	84%	81%	
13. % of FHA HPL with >95% LTV	53%	58%	60%	62%	61%	61%	68%	74%	85%	83%	81%	78%	78%	78%	70%	60%	
14. % of FHA HPL with >=97% LTV	14%	25%	27%	28%	26%	24%	23%	44%	52%	57%	57%	54%	54%	56%	49%	42%	
15. \$ of FHA HPL with >90% LTV	\$30	\$37	\$43	\$35	\$52	<u>\$56</u>	<u>\$64</u>	<u>\$82</u>	<u>\$79</u>	<u>\$81</u>	<u>\$82</u>	<u>\$69</u>	<u>\$48</u>	<u>\$31</u>	<u>\$27</u>	<u>\$28</u>	<u>\$647</u>
16. \$ of VA HPL with >90% LTV (all assumed >90% LTV)	\$12	\$8	\$28	\$22	\$28	<u>\$24</u>	<u>\$31</u>	<u>\$38</u>	<u>\$20</u>	<u>\$24</u>	<u>\$27</u>	<u>\$32</u>	<u>\$21</u>	<u>\$16</u>	<u>\$14</u>	<u>\$13</u>	<u>\$260</u>

Section E: Detail for Subprime Loans (Note: not all loans with FICO<660 are tracked on this chart)

Subprime Loans as a percentage of total originations were fairly constant for the period 1997-2003, averaging about 19.5%. The percentage averaged 26% for 2004-2006, before declining to 18% in 2007. Fannie, Freddie and FHA accounted for 49% of tracked Subprime Loan volume in 1997, the first year for which comprehensive data is available. They averaged 55.5% of tracked Subprime Loan dollar volume for 1999-2003. This dropped to 24% for 2004-2006, before returning to 56% in 2007. Over the entire period of 1997-2007, Fannie, Freddie, and FHA averaged 55% of the total tracked Subprime Loan dollar volume. As the average loans sizes of Fannie, Freddie, and FHA subprime loans were smaller than the remaining subprime loans, Fannie, Freddie, and FHA acquired about 63% of all tracked subprime loan over the 1997-2007 period.¹⁸

¹⁸ Fannie Mae 2008 Q. 2 10-Q Investor Summary p. 30, Freddie Mac 2008 Second Quarter Financial Results p. 26, and NY Fed subprime database at http://www.newyorkfed.org/regional/techappendix_spreadsheets.html#sub_loans

Table 3: Detail for Subprime Loans - see endnotes for sources

\$ in billions ⁱⁱⁱ	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Total for years underlined
1. Total of all originations	\$894	\$1020	\$773	\$639	\$785	\$860	\$1,450	\$1,310	\$1,048	\$2,215	\$2,885	\$3,945	\$2,920	\$3,120	\$2,980	\$2,430	\$25,163
2. Total \$ of tracked Subprime Loans	*	*	*	*	*	\$167	\$284	\$286	\$231	\$412	\$505	\$684	\$748	\$802	\$774	\$434	\$5,327
3. Total tracked Subprime \$ as a percentage of total originations	*	*	*	*	*	19%	20%	22%	22%	19%	18%	17%	26%	26%	26%	18%	21%
6. Fannie/Freddie/FHA Subprime as a % of total tracked Subprime	*	*	*	*	*	51%	59%	61%	61%	65%	68%	67%	52%	43%	37%	70%	55%
5. \$ of Self-denominated Sub-prime Loans	\$80	\$85	\$75	\$60	\$70	\$85	\$135	\$130	\$100	\$160	\$200	\$310	\$540	\$625	\$600	\$191	\$3116
6. \$ of Private MBS (includes portion acquired by Fannie/Freddie)	*	*	*	\$18	\$38	\$66	\$83	\$60	\$56	\$94	\$134	\$203	\$401	\$508	\$483	\$219	\$2307
7. \$ of Private MBS acquired by Fannie/Freddie	*	*	*	*	*	\$3	\$18	\$18	\$11	\$16	\$38	\$82	\$180	\$169	\$110	\$62	\$707
8. Total \$ of Fannie, Freddie, & FHA Subprime by FICO	*	*	*	*	*	\$82	\$149	\$156	\$131	\$252	\$305	\$374	\$208	\$177	\$174	\$243	\$2252
9. \$ acquired by Fannie	*	*	*	*	*	\$21	\$46	\$41	\$41	\$102	\$137	\$185	\$94	\$86	\$89	\$127	\$969
10. \$ acquired by Freddie	*	*	*	*	*	\$16	\$37	\$33	\$24	\$57	\$69	\$77	\$50	\$53	\$49	\$68	\$533
11. \$ acquired by FHA	*	*	\$33	\$19	\$31	\$45	\$66	\$82	\$66	\$93	\$99	\$112	\$64	\$38	\$36	\$48	\$749

* Unknown

Section F: Detail for Self-denominated Alt-A Loans

Self-denominated Alt-A Loans had low volumes for the period 1992-2001, accounting for 3% or less of total originations. Once Fannie and Freddie became active Alt-A purchasers in 2002, Alt-A market share expanded tremendously over the next 6 years. Since the average loans size of Fannie and Freddie's Alt-A loans was a little more than ½ of the Alt-A loans they did not buy, they accounted for 53% of all self-denominated Alt-A acquisitions

Table 4: Detail for Self-denominated Alt-A Loans - see endnotes for sources

\$ in billions ^{iv}	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Total for years underlined
1.Total of all originations	\$894	\$1020	\$773	\$639	\$785	\$860	\$1,450	\$1,310	\$1,048	\$2,215	<u>\$2,885</u>	<u>\$3,945</u>	<u>\$2,920</u>	<u>\$3,120</u>	<u>\$2,980</u>	<u>\$2,430</u>	<u>\$18,280</u>
2. \$ of total Self-denominated (SD) Alt-A as a % of \$ of total originations	1%	1%	1%	1%	3%	3%	2%	3%	2%	2%	<u>5%</u>	<u>4%</u>	<u>9%</u>	<u>15%</u>	<u>19%</u>	<u>19%</u>	<u>11%</u>
3.\$ of Fannie/Freddie (F/F) SD Alt-A as a % of total \$ of SD Alt-A	*	*	*	*	*	*	*	*	*	*	<u>63%</u>	<u>55%</u>	<u>37%</u>	<u>25%</u>	<u>36%</u>	<u>43%</u>	<u>38%</u>
4.# of F/F SD Alt-A as a % of total # of SD Alt-A \$173,000 F/F average loan balance & \$310,000 balance for other Alt-A)	Unk	Unk.	Unk	Unk	Unk	Unk.	Unk.	Unk.	Unk.	Unk.	Unk.	Unk.	Unk.	Unk.	Unk.	Unk.	53%
5.Total \$ of SD Alt-A (#6 + #9)	\$9	\$11	\$10	\$10	\$20	\$25	\$35	\$40	\$25	\$40	<u>\$133</u>	<u>\$162</u>	<u>\$254</u>	<u>\$457</u>	<u>\$557</u>	<u>\$453</u>	<u>\$2,016</u>
6. Total \$ of Inside Mortgage Finance SD Alt-A Loans	\$9	\$11	\$10	\$10	\$20	\$25	\$35	\$40	\$25	\$40	<u>\$67</u>	<u>\$85</u>	<u>\$190</u>	<u>\$380</u>	<u>\$400</u>	<u>\$275</u>	<u>\$1397</u>
7. \$ of Private MBS (includes portion acquired by F/F	*	*	*	<\$1	\$1	\$4	\$18	\$15	\$14	\$36	<u>\$53</u>	<u>\$74</u>	<u>\$159</u>	<u>\$332</u>	<u>\$366</u>	<u>\$250</u>	<u>\$1234</u>
8. \$ of Private MBS acquired by F/F	*	*	*	*	*	*	*	*	*	*	<u>\$18</u>	<u>\$12</u>	<u>\$30</u>	<u>\$36</u>	<u>\$43</u>	<u>\$15</u>	<u>\$154</u>
9. \$ of SD Alt-A acquired by F/F (not part of #5).	**	**	**	**	**	**	**	**	**	**	<u>\$66</u>	<u>\$77</u>	<u>\$64</u>	<u>\$77</u>	<u>\$157</u>	<u>\$178</u>	<u>\$619</u>

Unk. = unknown

* Volume believed to be either \$0 or minor.

**Fannie and Freddie used their various affordable housing programs and individual lender variance programs (many times in conjunction with their automated underwriting systems once these came into general use in the late-1990s) to approve loans with Alt-A characteristics, however they generally did not classify these loans as Alt-A. This started in the early-1990s. Many of the loans had higher debt ratios, reduced reserves, loosened credit requirements, expanded seller contributions, etc.

ⁱ Sources:

1. Total Home Purchase Loans: IMF Volume 1, p. 4
4. % of Conventional Home Purchase Loans >90% - Federal Housing Finance Board
- 5., 12, 13, 14, 15, & 16: \$ of Conventional Home Purchase Loans >90% - #1. minus FHA and VA Home Purchase Lending (FHA HPL from FHA 2009 Actuarial Report and HUD PDR Historical Data). VA HPL calculated based on FHA percentages. FHA and VA total volume from FHFA (OFHEO).
- 6, 7, 8, 9, 10, & 11: HUD PDR reports – Profiles of GSE Mortgage Purchases. These are new calculations based on a new, more accurate data source. Earlier editions of this exhibit contained data that was based on estimates using OFHEO data.

ⁱⁱ High LTV Home Purchased Lending does not include High Combined LTV Home Purchase lending. This type of lending became much more prevalent starting in 2001. As noted above, Fannie and Freddie report that their volume of High LTV loans would have increased by 50% (Fannie) and 75% (Freddie) if loans with Combined LTVs above 90% were included.

ⁱⁱⁱ Sources:

1. Inside Mortgage Finance
5. Inside Mortgage Finance
6. Inside Mortgage Finance
7. OFHEO's "Mortgage Markets and the Enterprises" annual reports. Actual purchases for years 2002-2007. Estimates for years 1997-2001 based on Fannie and Freddie total purchases of PMBS for those years multiplied by 57% which is the percentage that subprime PMBS purchases constituted of their total PMBS acquisitions in 2002.
9. Fannie Information Statements for 2000-2007. At 12.31.2000 14% of Fannie's book had a FICO of <660. For 2000 acquisitions the percentage was 18%. Based on this data, the percentage of loans acquired with a FICO < 660 for the years 1997-1999 are estimated to have averaged 13%.
10. Freddie Information Statements for 2001-2007. At 12.31.2001 14% of Freddie's book had a FICO of <660. For 2001 acquisitions the percentage was 14%. Based on this data, the percentage of loans acquired with a FICO < 660 for the years 1997-2000 are estimated to have averaged 13%.
11. FHA 2009 Actuarial Report. Note: FICO's for 1994-2004 are based on samples.

^{iv} Sources:

1. Inside Mortgage Finance
4. Fannie Mae 2008 Q. 2 10-Q Investor Summary p. 30, Freddie Mac 2008 Second Quarter Financial Results p. 26, and NY Fed Alt-A database found at <http://data.newyorkfed.org/creditconditions/>. Average loan balance of \$300,000 found at New York Fed site adjusted upwards to \$310,000
6. Inside Mortgage Finance
7. Alt-A PMBS issuances (also included in Alt-A originations 4. above) Inside Mortgage Finance. 1995-1996 volumes based on UBS data - BIS Quarterly Review. March 2006
8. OFHEO's "Mortgage Markets and the Enterprises" annual reports.
9. OFHEO's "Mortgage Markets and the Enterprises" annual reports and Fannie and Freddie Information Statements and Annual Reports