NOMURA

Oops… They Did It Again[1]

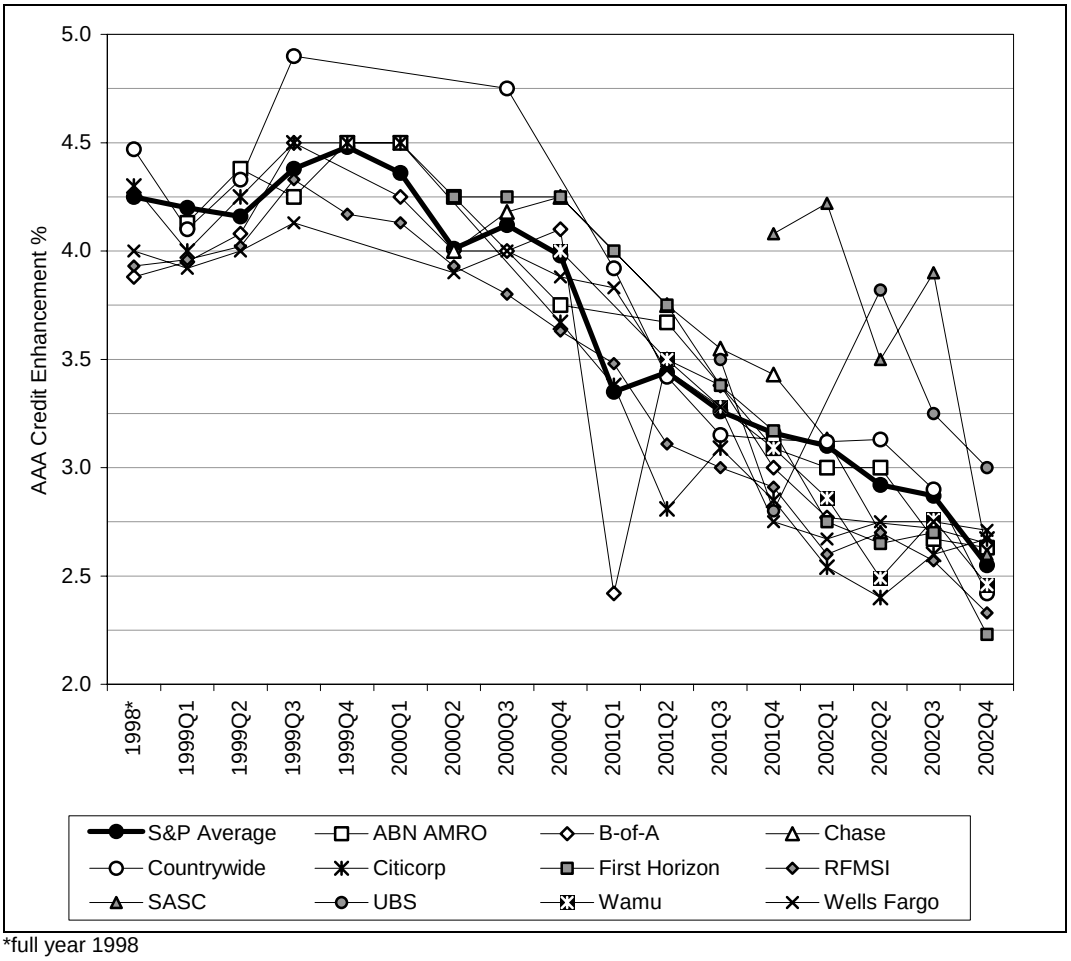
Jumbo MBS Credit Enhancement Levels Keep Falling

2 April 2003

I. Introduction

Credit enhancement levels of jumbo MBS continued their downward trend in 2002. For jumbo FRM30 deals rated by Standard & Poor's, the average enhancement level for AAA-rated tranches fell to **2.55%** in the fourth quarter of 2002 from 3.16% in the fourth quarter of 2001 and 3.98% in the fourth quarter of 2000. Chart 1 shows the trend.[2]

Chart 1: Quarterly Average AAA Credit Enhancement Levels for Jumbo FRM30 Deals



*full year 1998
Source: Standard & Poor's

[1] With apologies to Britney Spears, Jive Records, and Zomba Recording Corporation.

[2] Frank Raiter et al., *Trends in Residential Mortgage Products: Fourth-Quarter 2002 LTV Raios, FICO Scores, and Credit Support Levels*, Standard & Poor's (31 Jan 2003).

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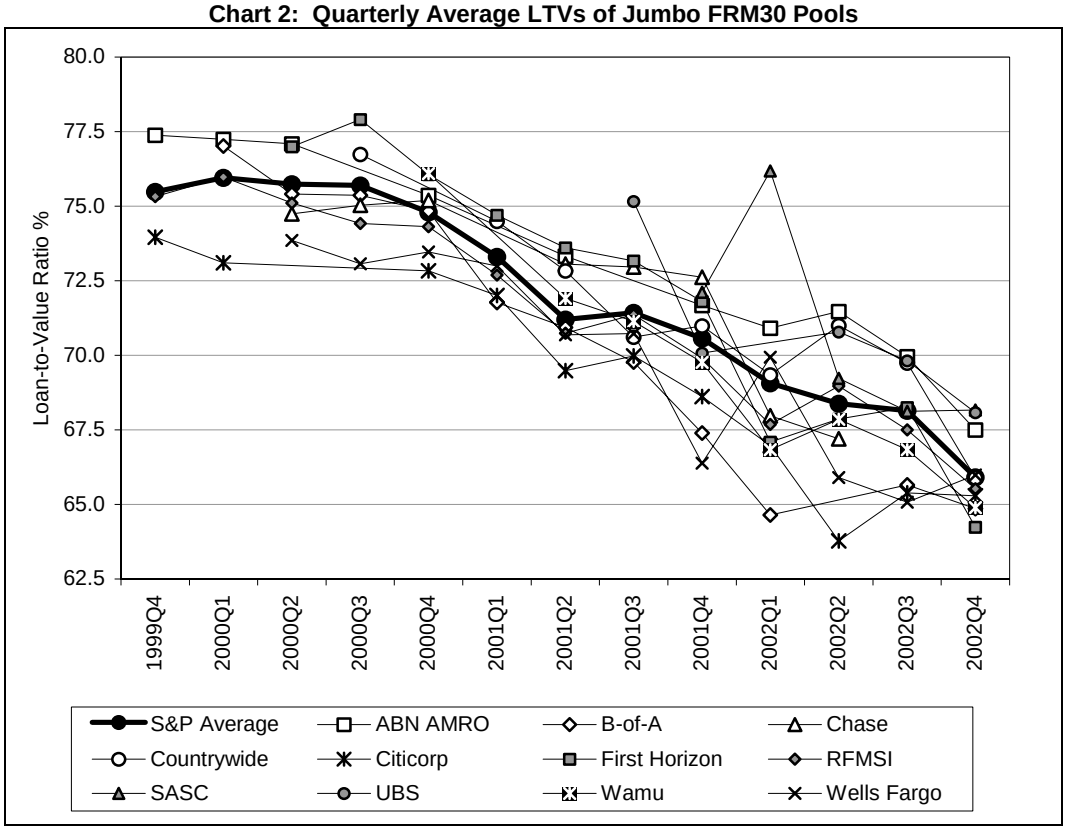
We believe that that trend of declining credit enhancement levels is increasing the riskiness of recently originated jumbo MBS. With 2.55% of credit enhancement, new triple-A MBS might be vulnerable under economic scenarios that would not exhaust the triple-A credit enhancement levels in securitizations backed by bank credit cards receivables, auto loans, sub-prime mortgage loans, or student loans. Today's credit enhancement levels for jumbo MBS tranches rated triple-B or single-B highlight the issue even more vividly (see Appendix).

The driving force behind the new low enhancement levels appears to be the continuing decline in reported loan-to-value ratios (LTVs) and the continuing rise in consumer credit scores (FICO scores). As show on Chart 2 and Table 1, reported average LTVs fell to 66% in the fourth quarter of 2002, from 71% in the fourth quarter of 2001 and 76% in the fourth quarter of 2000. Meanwhile, as shown on Chart 3 and Table 2, average FICO scores rose to 736 in 2002Q4, from 726 in 2001Q4 and 724 in 2000Q4.

Chart 2: Quarterly Average LTVs of Jumbo FRM30 Pools



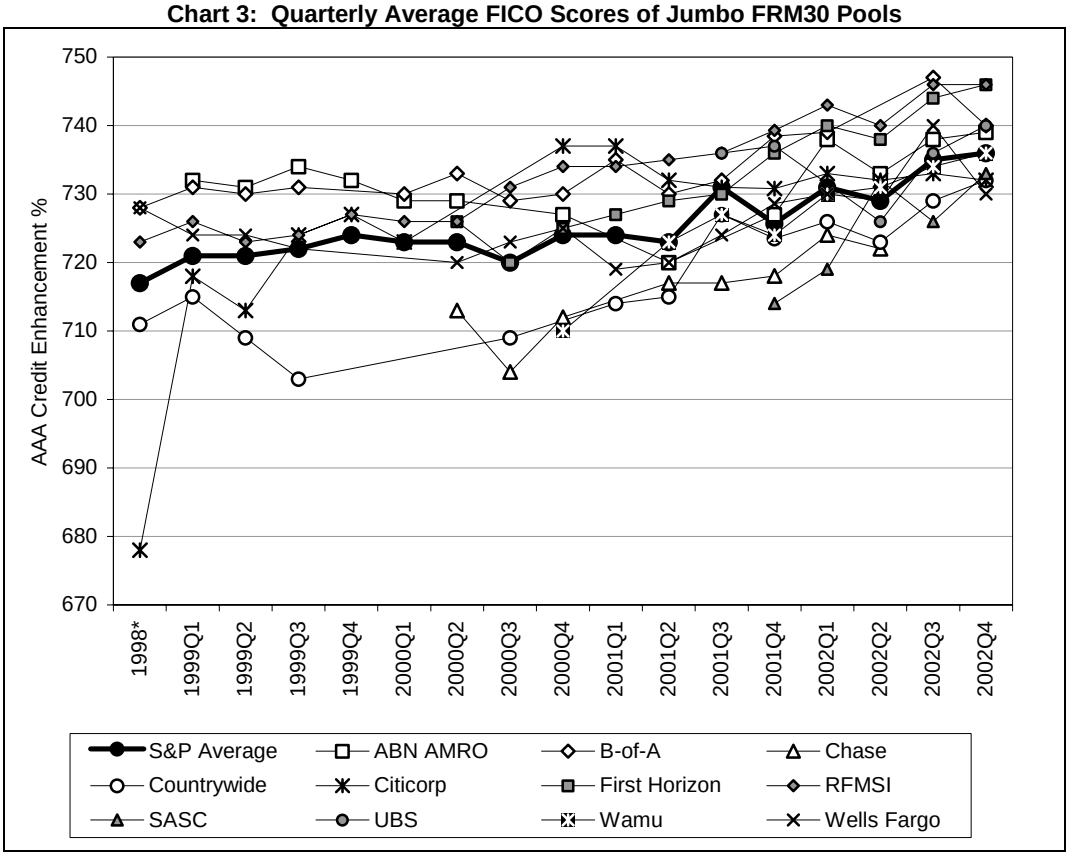
Source: Standard & Poor's

Table 1: Quarterly Average LTVs of Jumbo FRM30 Pools

	1999 Q4	2000 Q1	2000 Q2	2000 Q3	2000 Q4	2001 Q1	2001 Q2	2001 Q3	2001 Q4	2002 Q1	2002 Q2	2002 Q3	2002 Q4
S&P Average	75.48	75.96	75.74	75.70	74.80	73.31	71.20	71.43	70.57	69.07	68.38	68.14	65.91
ABN AMRO	77.38	77.24	77.09		75.37		73.33		71.67	70.91	71.47	69.96	67.50
B-of-A		77.02	75.41	75.37	74.84	71.77	70.93	69.78	67.39	64.65		65.65	64.86
Chase			74.74	75.03	75.19		73.06	72.96	72.62	67.97	67.20		
Countrywide				76.74		74.50	72.83	70.61	70.99	69.35	71.00	69.74	65.89
Citicorp	73.96	73.10			72.83	72.01	69.48	69.98	68.62	66.97	63.78	65.39	65.29
First Horizon			77.00	77.91	76.06	74.70	73.61	73.16	71.80	67.09	67.86	68.25	64.24
GE	76.94	76.82	76.49	76.65									
RFMSI	75.32	75.98	75.11	74.42	74.31	72.69	70.74	71.36	69.90	67.68	68.97	67.50	65.53
SASC									72.11	76.18	69.23	68.12	68.16
UBS								75.16	70.07		70.78	69.82	68.08
Wamu					76.09		71.91	71.14	69.76	66.84	67.85	66.84	64.89
Wells Fargo			73.85	73.07	73.47	72.99	70.69	70.73	66.38	69.94	65.90	65.07	65.99

Source: Standard & Poor's

Chart 3: Quarterly Average FICO Scores of Jumbo FRM30 Pools



*full year 1998
Source: Standard & Poor's

Table 2: Quarterly Average FICO Scores of Jumbo FRM30 Pools

	1998*	1999 Q1	1999 Q2	1999 Q3	1999 Q4	2000 Q1	2000 Q2	2000 Q3	2000 Q4	2001 Q1	2001 Q2	2001 Q3	2001 Q4	2002 Q1	2002 Q2	2002 Q3	2002 Q4
S&P Avg.	717	721	721	722	724	723	723	720	724	724	723	731	726	731	729	735	736
ABN AMRO		732	731	734	732	729	729		727		720		727	738	733	738	739
B-of-A	728	731	730	731		730	733	729	730	735	730	732	738	739		747	740
Chase							713	704	712		717	717	718	724	722		
Countrywide	711	715	709	703				709		714	715	727	724	726	723	729	732
Citicorp	678	718	713	724	727	723			737	737	732	731	731	733	732	733	732
First Horizon							726	720	725	727	729	730	736	740	738	744	746
GE	721	716	714	713	712	711	719	722									
RFMSI	723	726	723	724	727	726	726	731	734	734	735	736	739	743	740	746	746
SASC													714	719	732	726	733
UBS												736	737		726	736	740
Wamu									710		723	727	724	730	731	734	736
Wells Fargo	728	724	724	722			720	723	725	719	720	724	729	730	729	740	730

*full year 1998
Source: Standard & Poor's

II. Borrower Credit Quality (FICO Scores)

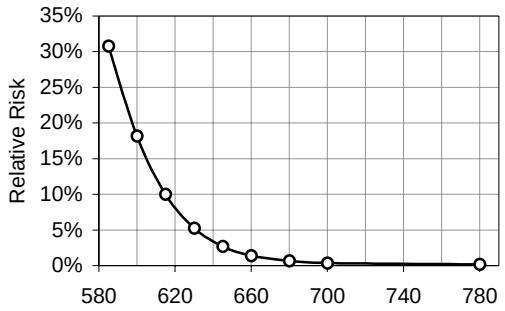
Let's first consider the rise in FICO scores. The increase in average FICO scores to 736 from 726 over the past year represents a very small change in risk. Scores above 700 reflect strong borrower credit quality. All consumers who have scores in that range are substantially less likely than others to become delinquent on their obligations.

The minor impact of the 10-point change from 726 to 736 is visible in certain often-quoted statistics about FICO scores. Strictly speaking, FICO scores represent only *relative* measures of risk and do not purport to correspond to absolute default probabilities. Borrowers at *any* given score level are more likely to default on their obligations when the economy is depressed than when it is booming.

Nonetheless, financial professionals routinely use recent historical performance to project what the default probabilities would be under similar economic conditions in the future. A variety of sources quote the odds shown in Table 3.[3]

Table 3: FICO Score Delinquency Odds

FICO Score	Odds of Becoming Delinquent (90 days or worse)
585	2.25 to 1
600	4.5 to 1
615	9 to 1
630	18 to 1
645	36 to 1
660	72 to 1
680	144 to 1
700	288 to 1
780	576 to 1



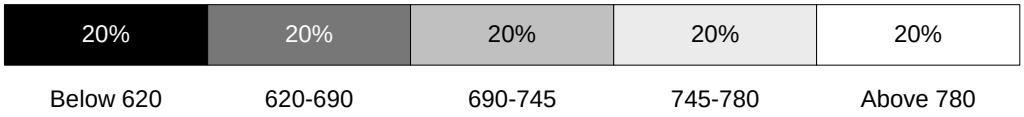
According to the table, the odds of default drop by half as FICO scores rise in 15-point increments from 585 to 660. From that level, the odds drop by half as scores rise in 20-point increments to 700. Above 700, it takes a rise of 80 points to drop the odds in half.

Table 3 suggests that the increase in the average FICO scores to 736 from 726 does not amount to a substantial change in the riskiness of jumbo mortgage pools. In addition, the mini-chart in Table 3 illustrates how the odds of default on *all* loans with FICO scores above 700 appear tiny.

However, the real difference in riskiness is even smaller than suggested by Table 3. As we have noted in prior research,[4] FICO scoring models are optimized to achieve their greatest predictive power over a two-year time horizon. The models are tuned to predict which borrowers are likely to default or become seriously delinquent within two years. The models' predictive power declines gradually as the relevant time horizon extends beyond two years. This effect is not really surprising because the main causes of default for prime-quality mortgage loans – over time horizons significantly longer than two years – are health problems, divorce, job loss, and death. Thus the real difference in risk between an average score of 736 and an average score of 726 is insubstantial.

For the record, Fair Isaac & Company (the creators of FICO scores) discloses the distribution of FICO scores through the general population as follows:[5]

Distribution of FICO Scores in the General Population



[3] Paul Scheper, *FICO Scoring 101*, *at* http://www.duanegomer.com/Articles%5Cfico.asp; Terri Light, *Credit Scoring in the Mortgage Industry, at* http://realtimes.lycos.com/renews/19990611_creditscore.htm; *All about FICO Scoring (Credit Score), at* http://www.carreonandassociates.com/washpostscore.htm; *Mortgages and Credit Scores, at* http://www.bcsalliance.com/z_creditscore_mortgage.html; *Credit FICO Scoring, at* http://www.mortgageyellowpages.com/consumers/html/credit_fico_scoring.html; *FICO (Credit Scoring), at* http://www.renisonrealty.com/newsletterfeb2002.HTM.

[4] *Jumbo MBS: Where's the Credit Enhancement*, Nomura Fixed Income Research (12 July 2001).

[5] *How Do People Score*, *at* http://www.myfico.com/myfico/CreditCentral/ScoringWorks/PeopleScore.asp. FICO scores range from a low of 365 to a high of 840. *See FICO Scores, What Affects Them, How Lenders Look At Them, at* http://www.realestateabc.com/loanguide/fico2.htm.

III. Collateral Coverage (LTVs)

At first blush, the 10-percentage point decline in reported LTVs over the past two years suggests that jumbo mortgage loans must be getting much less risky. However, closer examination reveals that such a conclusion might be wrong. Moreover, even if the drop in LTVs *has* made loans *somewhat* less risky, it might not fully justify the thin levels of triple-A credit enhancement on new deals.

The recent drop in reported LTVs is not sufficient to justify today's credit enhancement levels for a number of reasons:

- First, the non-linear relationship between LTV and credit risk means that successive reductions in LTVs have smaller and smaller effects toward reducing risk (see Chart 4). Thus, the drop in average reported LTVs over the past year (to 65.91% from 70.57%) is probably less significant than the drop over the prior year (to 70.57% from 74.80%).

- Second, a substantial portion of the decline in reported LTVs stems from rising home values over the past several years. During a period of rapid home price appreciation, a simple rate/term refinancing can produce a new loan with an LTV substantially lower than the older loan that it replaced. This happens even though the home is the same and loan amount is almost identical.

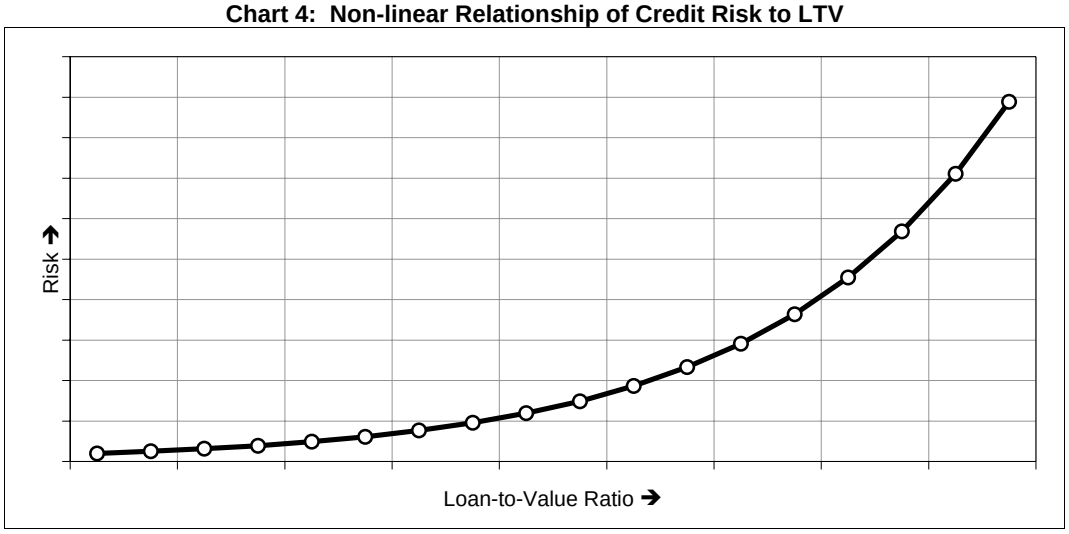
- Third, as an increasing proportion of new loans are refinancings, a greater proportion of reported LTVs are based on appraisals only, rather than on home sales. Appraisal errors and biases arguably make the newer reported LTVs less reliable measures of collateral coverage on the mortgage loans.

- Fourth, home price movements in different regions of the country are becoming increasingly correlated. This potentially reduces the benefit of geographic diversification and heightens the sensitivity of credit risk to LTV.

A. Non-linearity

As with FICO scores, the relationship between LTV and risk is non-linear. It is convex. The riskiness of mortgage loans increases *at an increasing rate* as LTV increases. For example, at lower LTV levels, a small change in LTV translates into a small change in risk. On the other hand, at higher LTV levels, the same change in LTV translates into a larger change in risk. Chart 4 illustrates the general character of the relationship.

Chart 4: Non-linear Relationship of Credit Risk to LTV

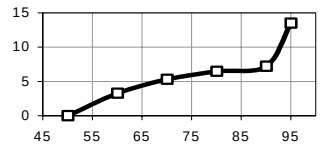
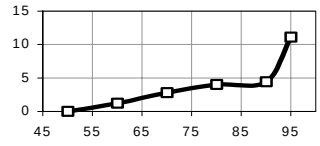
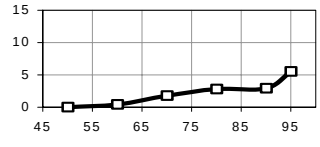


Although various authorities support the proposition a convex relationship between LTV and risk, there is a dearth of empirical studies on the subject. In fact, in marked contrast to the case of FICO

scores, there are no widely accepted tables of default probabilities associated with varying LTV levels.

The rating agencies have been a source of some insight in this area. Despite occasional vagueness about the empirical roots (if any) anchoring their methodologies, the rating agencies all seem to have embraced the notion of a convex relationship between LTV and risk. For example, in a 1996 report, S&P described the effect of LTV on "loss coverage" as follows:[6]

Table 4: Effect of LTV on Loss Coverage* (S&P)
(1996)

LTV (%)	Foreclosure Frequency (%)	Loss Severity (%)	Loss Coverage (%)‡	Loss Coverage (%) at LTV
'AAA' Pool				
50	15.0	0	0.0	
60	15.0	20	3.3	
70	15.0	35	5.3	
80	15.0	43	6.5	
90†	22.5	31	7.2	
95†	45.0	30	13.5	
'AA' Pool				
50	10.0	0	0.0	
60	10.0	12	1.2	
70	10.0	28	2.8	
80	10.0	40	4.0	
90†	15.0	29	4.4	
95†	30.0	27	11.1	
'A' Pool				
50	8.0	0	0.0	
60	8.0	5	0.4	
70	8.0	22	1.8	
80	8.0	35	2.8	
90†	12.0	24	2.9	
95†	24.0	23	5.5	

*Assumes all prime loans, that is, single-family, detached.
‡Loss coverage = foreclosure frequency x loss severity.
†Loans with LTV above 80% covered by primary mortgage insurance down to 75% LTV.
LTV–Loan-to-value.

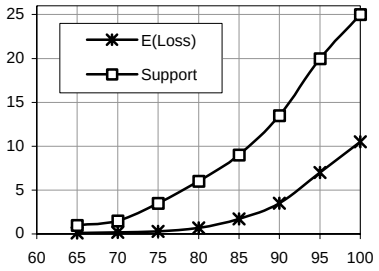
Note that for LTVs higher than 80%, S&P specifies *declining* loss severities. The assumed loss severities for the higher LTVs are intended to reflect the customary presence of primary mortgage insurance on such loans.

Likewise, in a 1990 report, Moody's described the relationship of LTV to risk as follows:[7]

[6] STANDARD & POOR'S, RESIDENTIAL MORTGAGE CRITERIA 7 (1996).

[7] Howard Esaki & Daniel Curry, *Moody's Approach to Rating Residential Mortgage Pass-Throughs*, Moody's Structured Finance Research & Commentary, at 9-10, 15 (1990); *compare* Jay Siegel et al., *Moody's Approach to Rating Residential Mortgage Pass-Through Securties*, Moody's Structured Finance, at 12 (8 Nov. 1996).

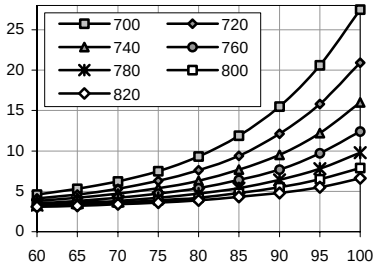
Table 5: Effect of LTV on Expected Losses and Credit Support (Moody's) (1990)		
LTV (%)	Expected Loss for Benchmark Pools (%)	Aa2 Benchmark Credit Support Levels (%)
60.01 - 65	0.1	1.0
65.01 - 70	0.2	1.5
70.01 - 75	0.3	3.5
75.01 - 80	0.7	6.0
80.01 - 85	1.7	9.0
85.01 - 90	3.5	13.5
90.01 - 95	7.0	20.0
95.01 - 100	10.5	25.0



Both the S&P and the Moody's studies noted above are somewhat old. Each rating agency has since revised its MBS rating methodology. More recently, Fitch described the convex relationship between LTV and credit risk in a manner that also reflects the impact of a borrower FICO scores.[8]

Table 6: "AAA" Base Frequency of Foreclosure (Fitch) 30-Year Fixed-Rate Mortgages							
LTV	Borrower FICO Score						
	700	720	740	760	780	800	820
60	4.6	4.1	3.8	3.5	3.3	3.2	3.1
65	5.3	4.6	4.2	3.8	3.6	3.4	3.2
70	6.2	5.3	4.7	4.2	3.8	3.6	3.4
75	7.5	6.3	5.4	4.7	4.2	3.9	3.6
80	9.3	7.6	6.3	5.4	4.7	4.2	3.9
85	11.9	9.4	7.7	6.4	5.4	4.8	4.3
90	15.5	12.1	9.5	7.7	6.4	5.5	4.8
95	20.6	15.8	12.2	9.7	7.8	6.5	5.5
100	27.5	20.9	16	12.4	9.8	7.9	6.6

FICO – Fair, Isaac & Co., Inc. LTV – Loan-to-value ratio. Note: Table assumes 30-year fixed-rate, full documentation, purchase, primary occupancy, single-family detached, $300,000 initial balance.



Thus, all three rating agencies seem to agree with the generally convex relationship between LTV and risk. The drop in average reported LTVs over the past year, therefore, should be viewed as having an even smaller effect toward reducing risk than the decline of the prior year.

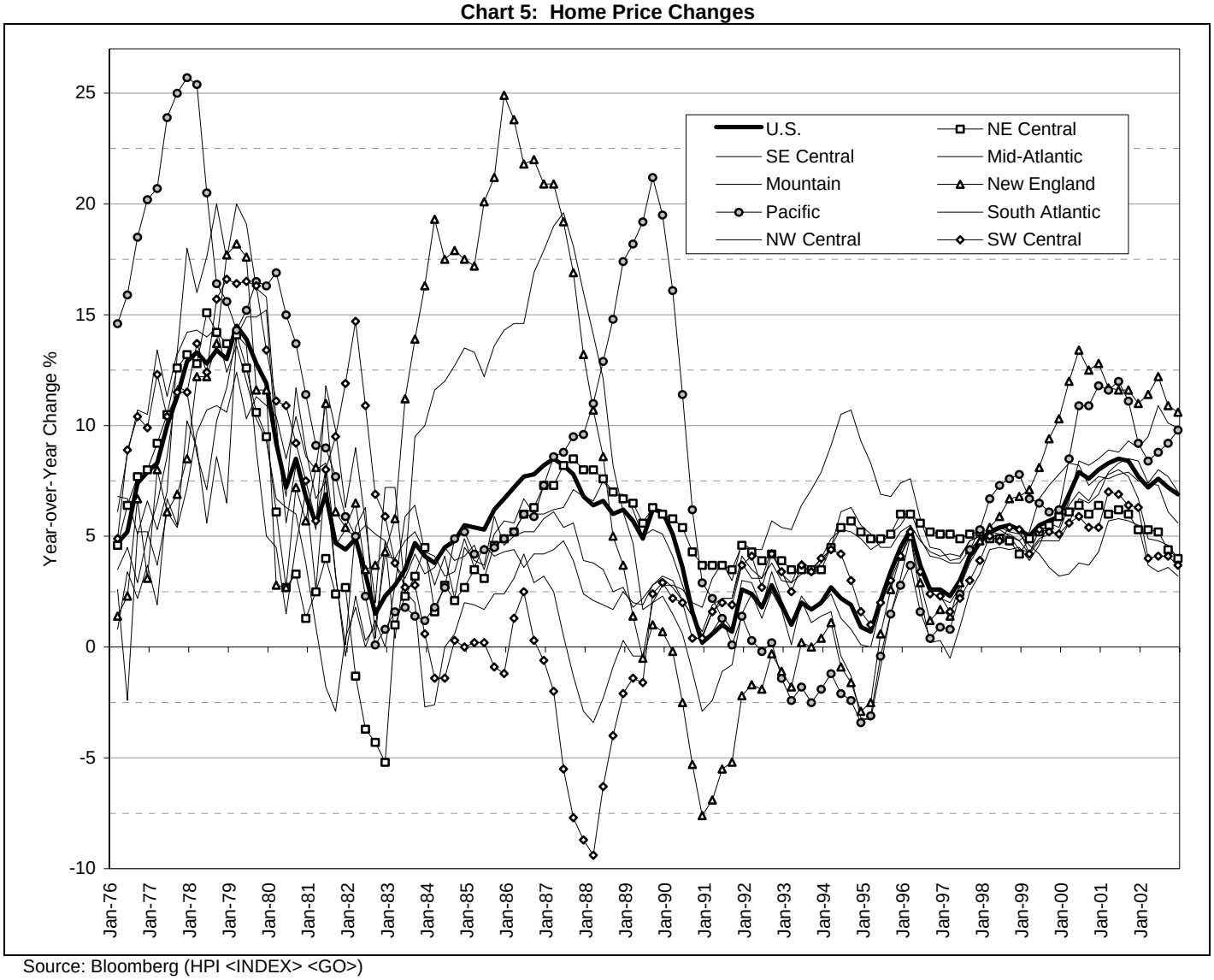
B. Rising Home Values

A substantial portion of the decline in reported LTVs stems from rapidly rising home values over the past several years. In such an environment, a simple rate/term refinancing can produce a new loan with an LTV substantially lower than the older loan that it replaced. This can happen even though the home is the same and loan amount is almost identical. For example suppose a borrower bought a home for $450,000 in 2001 and took a $337,500 mortgage loan (i.e., 75% LTV). If home prices rose by 7% per year for two years, the value of the home would have climbed to $515,205. If the homeowner then refinanced an outstanding balance of $330,000, the reported LTV would have been just 64%. The reported LTV of the new loan would have been 11 percentage points lower than the LTV of the original loan. If a cyclical reversal causes the housing market to take back the two years' worth of gains, the new loan would be in substantially the same risk position as the original loan. However, a jumbo MBS deal backed by the newer loan likely would have less enhancement than did a deal backed by the original loan.

Home values recently have grown in many parts of the country. Chart 5 shows the OFFEO home price index for various regions and for the country as a whole since 1976.

[8] Kenneth Higgins et al., *Fitch IBCA Residential Mortgage-Based Securities Criteria*, FitchIBCA Structured Finance, at 18 (16 Dec 1998).

Chart 5: Home Price Changes



Source: Bloomberg (HPI <INDEX> <GO>)

The chart reveals that home prices have been advancing strongly for a number of years all across the country. Particularly strong growth has occurred in New England and on the West Coast. Based on past experience, it is certainly conceivable – and arguably even reasonably likely – that home prices could reverse their upward trend and enter a period of negative growth (i.e., decline).

C. Appraisals

Appraisal practices and appraisal errors are another factor which raise concern about reliance on the new, low reported LTVs. A very high proportion of new loans are refinancings. The reported LTVs of such loans are based *solely* on appraisals. In contrast, the reported LTV on a purchase-money mortgage loan is based on the lower of purchase price or appraised value. Thus, refinance loans may have an inherent bias toward having lower reported LTVs than purchase-money loans.

Moreover, we expect appraisal biases to be more pronounced on loans with higher LTVs than on loans with lower LTVs. Because cash-out refinancings tend to have higher LTVs than rate/term refinancings, we expect the effect of appraisal biases to be most highly concentrated in cash-out refinancings.

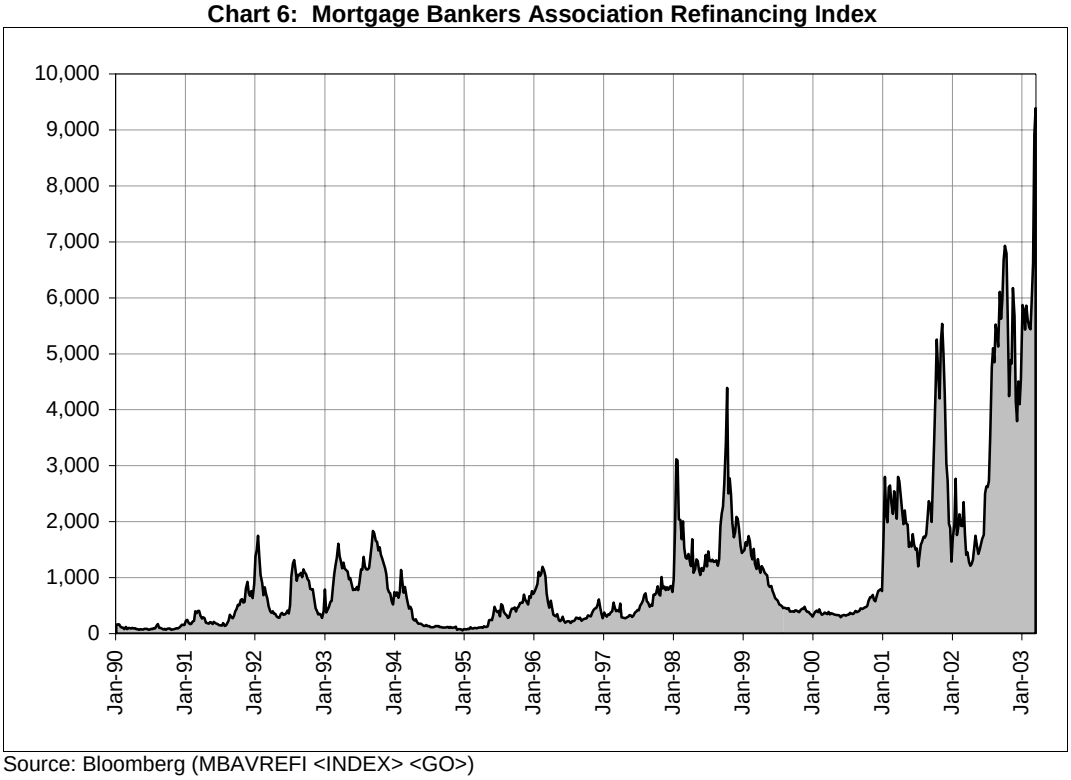
D. Geographic Diversification

A fourth LTV-related area of concern is the seemingly increasing correlation of home price movements in different areas of the country. This is readily visible on Chart 5, where the dispersion of regional year-over-year home price changes narrows markedly starting in 1996. Strong geographic diversification may not be worth as much as it used to be. This could leave pools backed jumbo MBS more vulnerable to a weakening economy.

IV. Prepayments

Fast prepayments have been a key driver behind the strong credit performance of jumbo MBS in recent years. Prepayment speeds have been fast for most of the past several years, and recently have set new records. Chart 6 shows how refinancing activity has spiked sharply several times over the past five years.

Chart 6: Mortgage Bankers Association Refinancing Index



Source: Bloomberg (MBAVREFI <INDEX> <GO>)

A mortgage loan that is prepaid cannot default. Only loans that remain outstanding present ongoing credit risk. In an environment of declining interest rates, loans may be refinanced so quickly following their origination that they never really confront the risk events that many borrowers eventually face (e.g., downsizing, divorce, disability).

Eventually, interest rates will bottom-out. At some point, the U.S. economy will enter a period of generally higher interest rates. That may happen sooner, or it may happen later. Either way, when it does happen, mortgage loans will remain outstanding for longer. Jumbo MBS will then have to squarely bear the burden of *long-term* credit exposures to the underlying borrowers and homes. Divorces, corporate layoffs, and other similar events will create greater stress over longer periods.

V. Conclusion

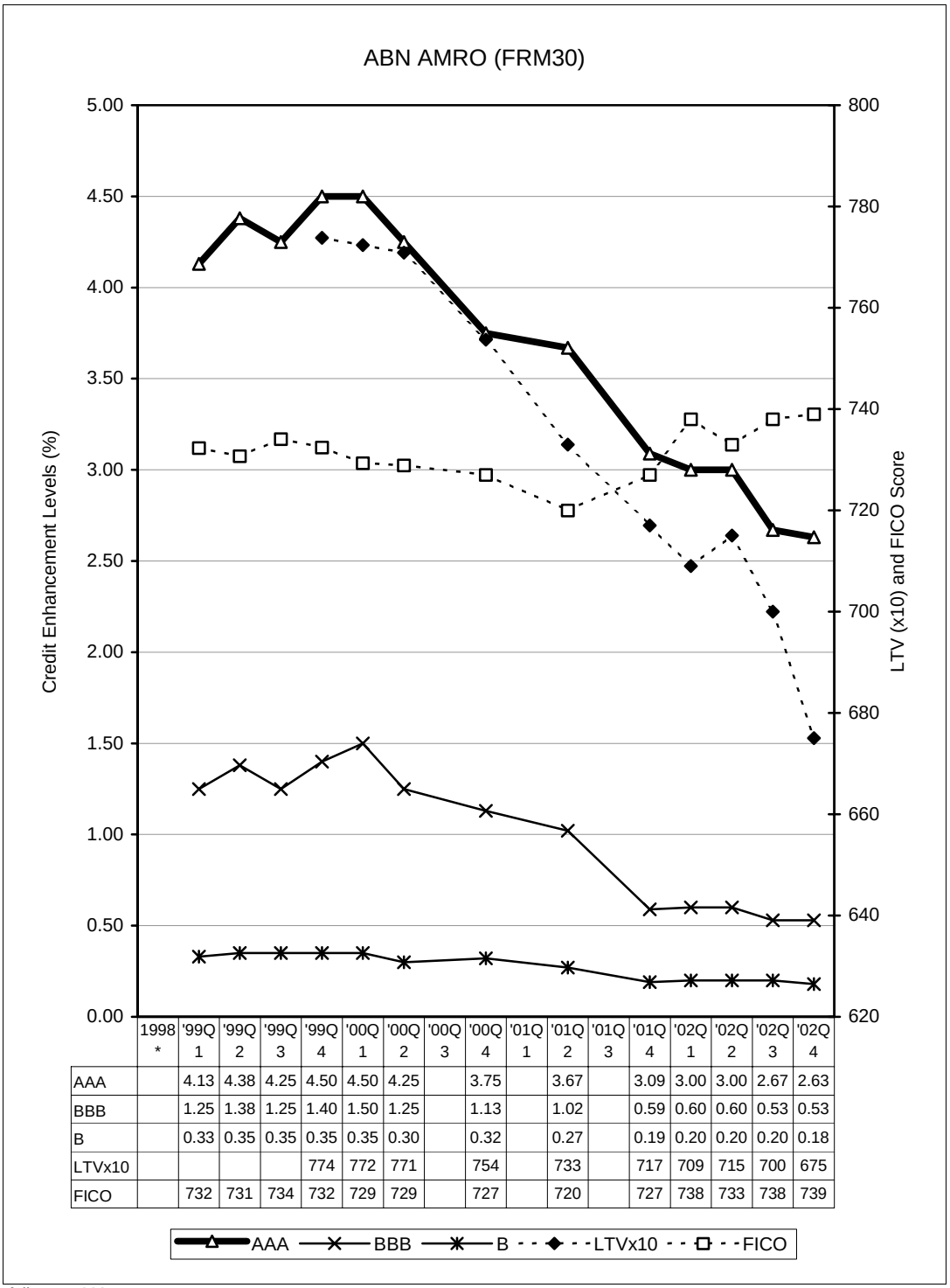
The senior tranches of many of today's jumbo MBS deals seem to have too little credit enhancement to merit their triple-A ratings. The pricing of the securities arguably already reflects this. While the securities are still strong in an absolute sense, they appear weaker than triple-A MBS offerings of years past. The bottom line is this: With due regard for the generally excellent and thoughtful analyses of the rating agencies, on the score of credit enhancement levels for jumbo MBS deals we must respectfully disagree.

Jumbo MBS investors who share our view should consider favoring deals backed by pools with higher proportions of purchase-money loans and lower proportions of cash-out refinance loans, all other things being equal. Such pools potentially have less adverse exposure to appraisal biases than others.

— E N D —

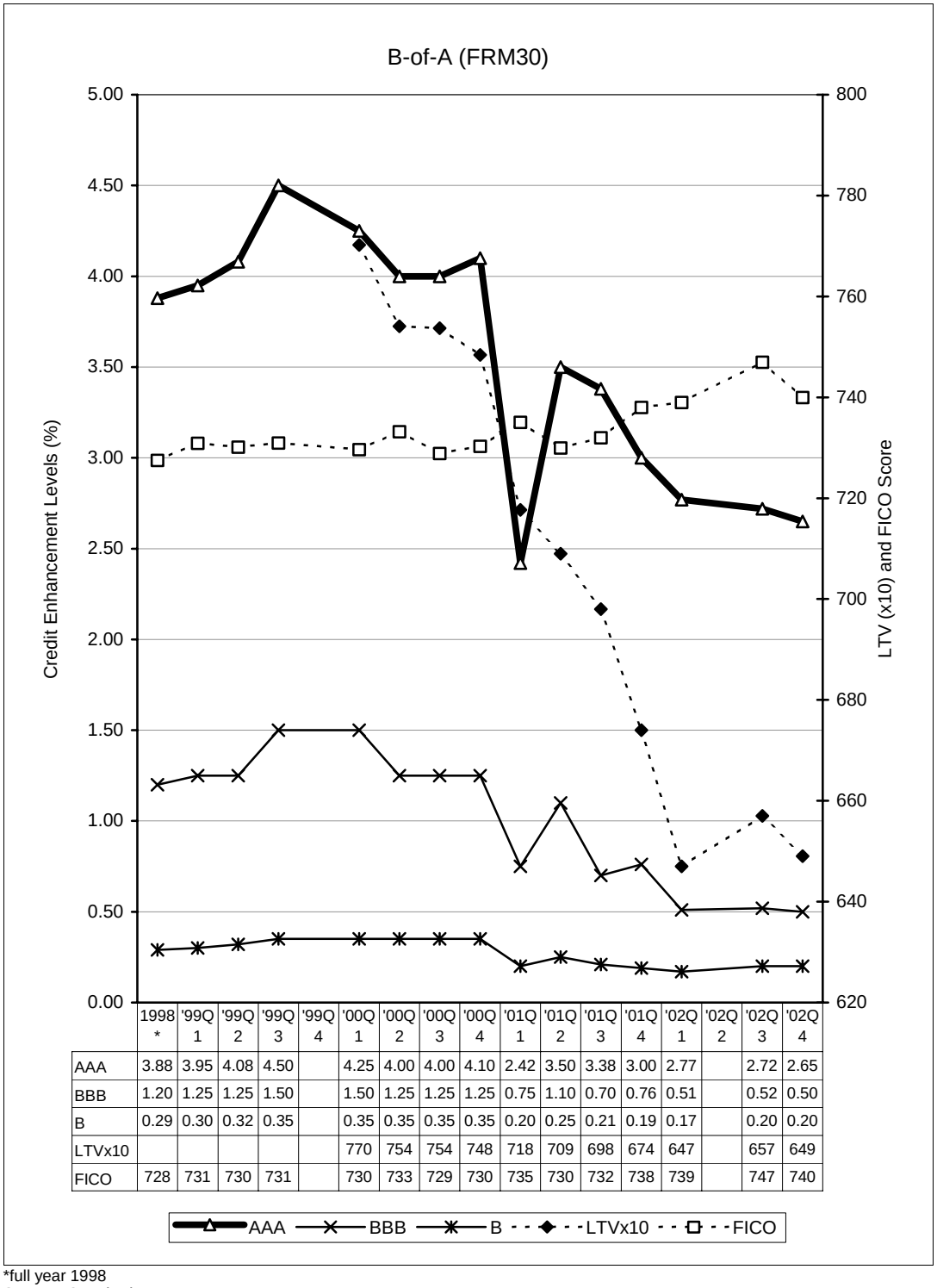
VI. Appendix

The following charts update the ones that we published in last year. The charts illustrate the close relationship among credit enhancement levels, LTVs, and FICO scores, as reported by S&P. By fine-tuning the relative scaling of the left and right axes, the relationship is clearly apparent. However, in our opinion, the changes in LTV and FICO do not necessarily warrant the corresponding changes in enhancement level.



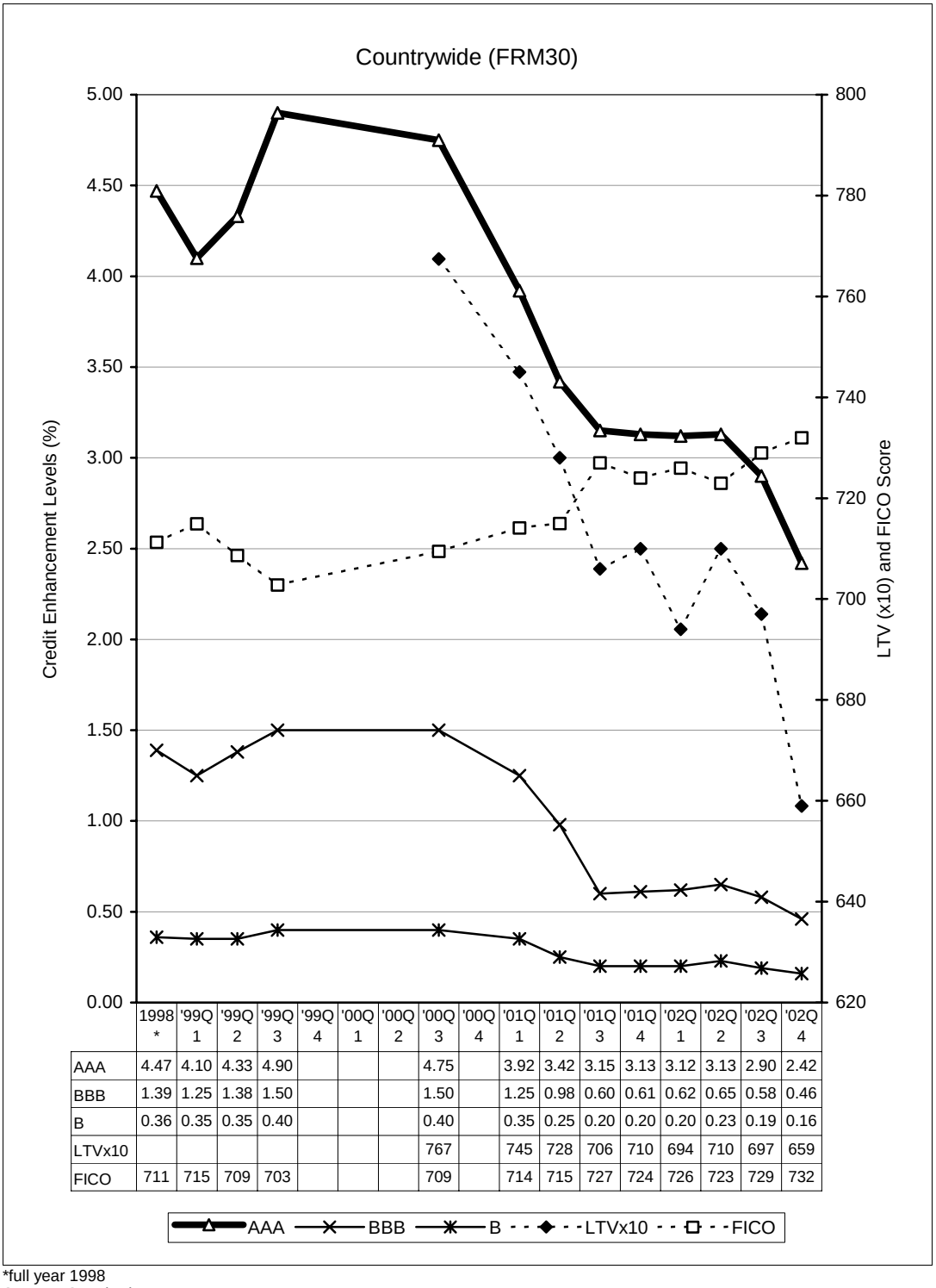
	1998 *	'99Q 1	'99Q 2	'99Q 3	'99Q 4	'00Q 1	'00Q 2	'00Q 3	'00Q 4	'01Q 1	'01Q 2	'01Q 3	'01Q 4	'02Q 1	'02Q 2	'02Q 3	'02Q 4
AAA		4.13	4.38	4.25	4.50	4.50	4.25		3.75		3.67		3.09	3.00	3.00	2.67	2.63
BBB		1.25	1.38	1.25	1.40	1.50	1.25		1.13		1.02		0.59	0.60	0.60	0.53	0.53
B		0.33	0.35	0.35	0.35	0.35	0.30		0.32		0.27		0.19	0.20	0.20	0.20	0.18
LTVx10					774	772	771		754		733		717	709	715	700	675
FICO		732	731	734	732	729	729		727		720		727	738	733	738	739

*full year 1998
Source: Standard & Poor's



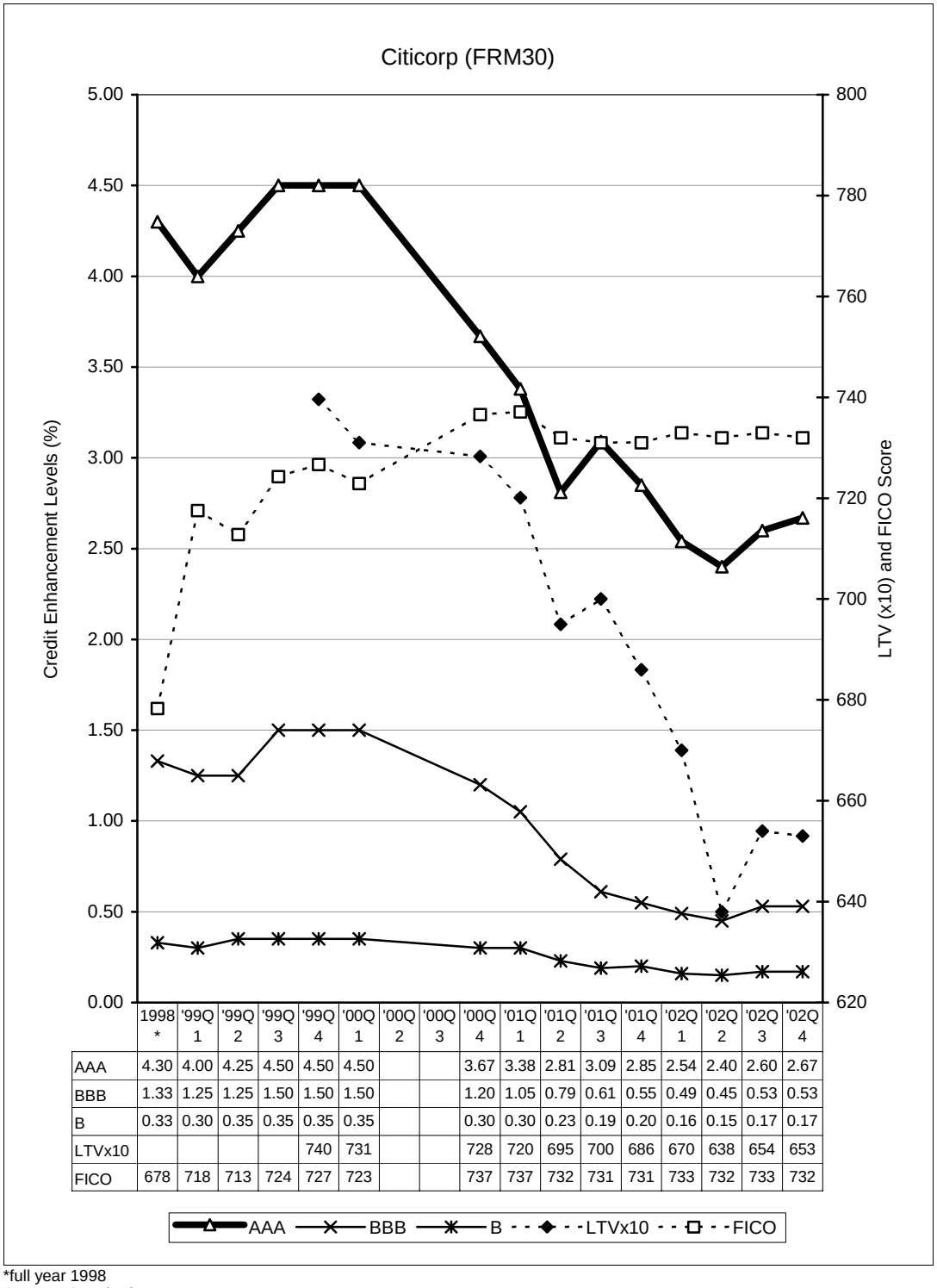
	1998 *	'99Q 1	'99Q 2	'99Q 3	'99Q 4	'00Q 1	'00Q 2	'00Q 3	'00Q 4	'01Q 1	'01Q 2	'01Q 3	'01Q 4	'02Q 1	'02Q 2	'02Q 3	'02Q 4
AAA	3.88	3.95	4.08	4.50		4.25	4.00	4.00	4.10	2.42	3.50	3.38	3.00	2.77		2.72	2.65
BBB	1.20	1.25	1.25	1.50		1.50	1.25	1.25	1.25	0.75	1.10	0.70	0.76	0.51		0.52	0.50
B	0.29	0.30	0.32	0.35		0.35	0.35	0.35	0.35	0.20	0.25	0.21	0.19	0.17		0.20	0.20
LTVx10						770	754	754	748	718	709	698	674	647		657	649
FICO	728	731	730	731		730	733	729	730	735	730	732	738	739		747	740

*full year 1998
Source: Standard & Poor's



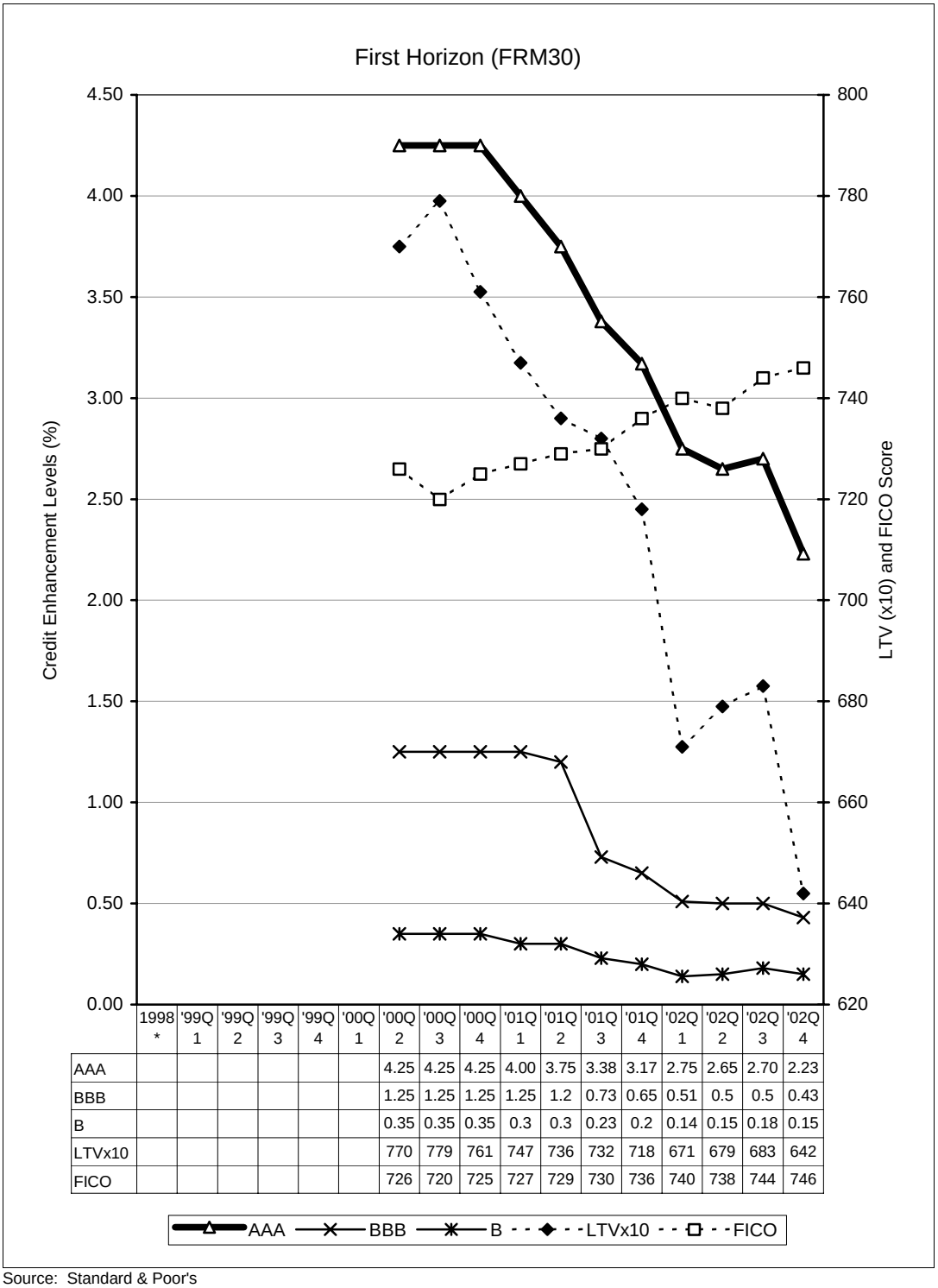
	1998 *	'99Q 1	'99Q 2	'99Q 3	'99Q 4	'00Q 1	'00Q 2	'00Q 3	'00Q 4	'01Q 1	'01Q 2	'01Q 3	'01Q 4	'02Q 1	'02Q 2	'02Q 3	'02Q 4
AAA	4.47	4.10	4.33	4.90				4.75		3.92	3.42	3.15	3.13	3.12	3.13	2.90	2.42
BBB	1.39	1.25	1.38	1.50				1.50		1.25	0.98	0.60	0.61	0.62	0.65	0.58	0.46
B	0.36	0.35	0.35	0.40				0.40		0.35	0.25	0.20	0.20	0.20	0.23	0.19	0.16
LTVx10								767		745	728	706	710	694	710	697	659
FICO	711	715	709	703				709		714	715	727	724	726	723	729	732

*full year 1998
Source: Standard & Poor's



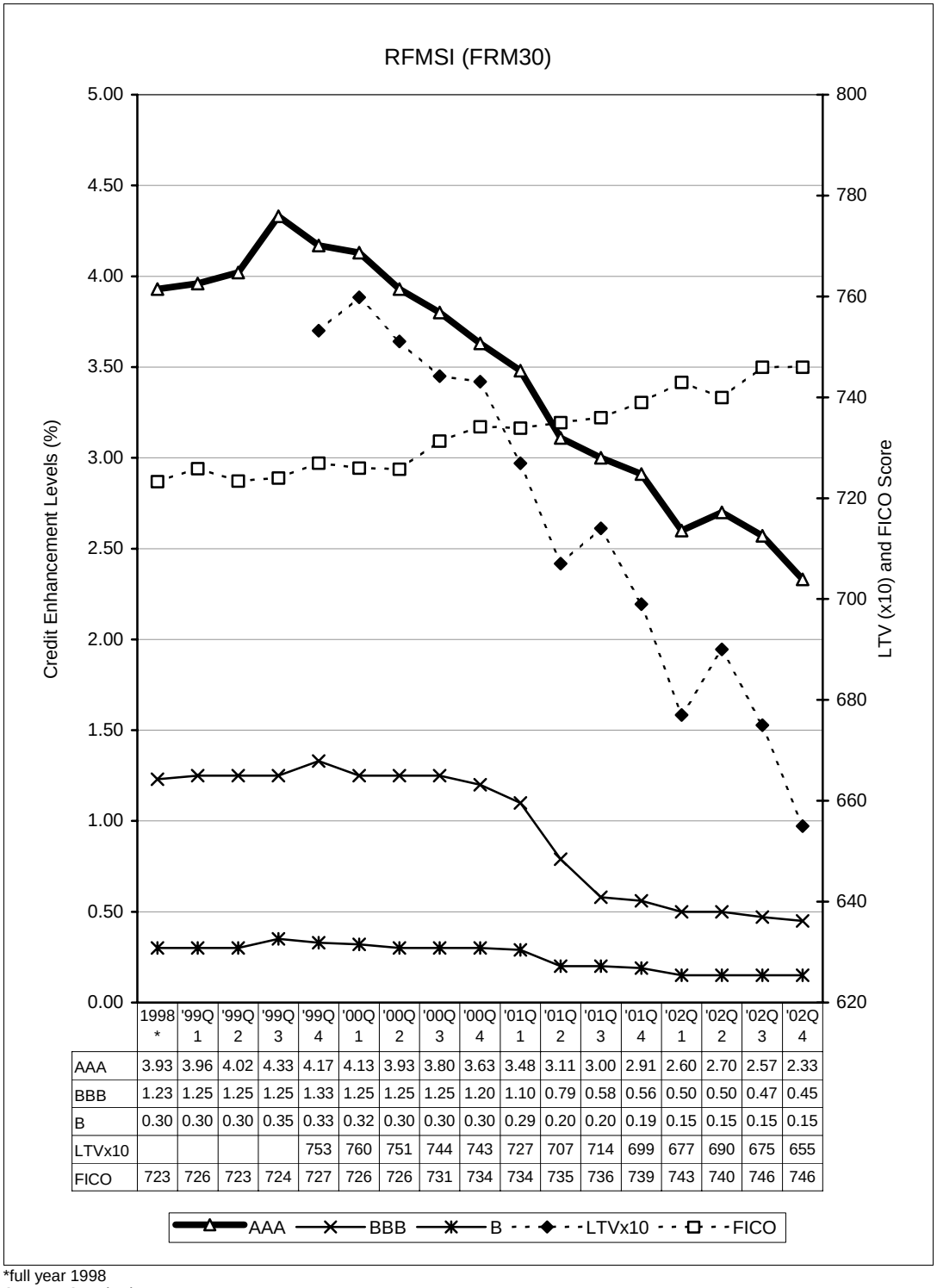
	1998 *	'99Q 1	'99Q 2	'99Q 3	'99Q 4	'00Q 1	'00Q 2	'00Q 3	'00Q 4	'01Q 1	'01Q 2	'01Q 3	'01Q 4	'02Q 1	'02Q 2	'02Q 3	'02Q 4
AAA	4.30	4.00	4.25	4.50	4.50	4.50			3.67	3.38	2.81	3.09	2.85	2.54	2.40	2.60	2.67
BBB	1.33	1.25	1.25	1.50	1.50	1.50			1.20	1.05	0.79	0.61	0.55	0.49	0.45	0.53	0.53
B	0.33	0.30	0.35	0.35	0.35	0.35			0.30	0.30	0.23	0.19	0.20	0.16	0.15	0.17	0.17
LTVx10					740	731			728	720	695	700	686	670	638	654	653
FICO	678	718	713	724	727	723			737	737	732	731	731	733	732	733	732

*full year 1998
Source: Standard & Poor's



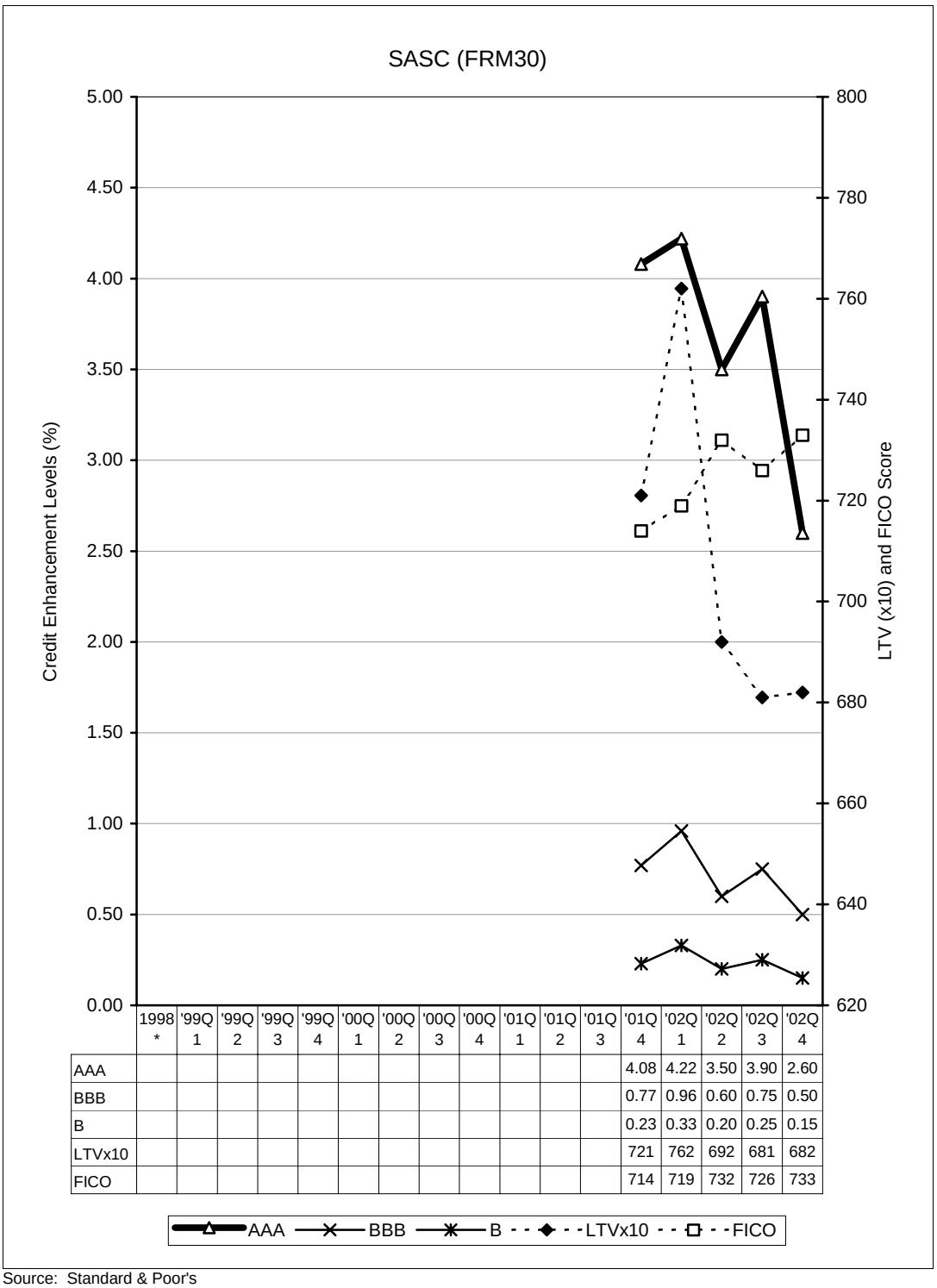
	1998 *	'99Q 1	'99Q 2	'99Q 3	'99Q 4	'00Q 1	'00Q 2	'00Q 3	'00Q 4	'01Q 1	'01Q 2	'01Q 3	'01Q 4	'02Q 1	'02Q 2	'02Q 3	'02Q 4
AAA							4.25	4.25	4.25	4.00	3.75	3.38	3.17	2.75	2.65	2.70	2.23
BBB							1.25	1.25	1.25	1.25	1.2	0.73	0.65	0.51	0.5	0.5	0.43
B							0.35	0.35	0.35	0.3	0.3	0.23	0.2	0.14	0.15	0.18	0.15
LTVx10							770	779	761	747	736	732	718	671	679	683	642
FICO							726	720	725	727	729	730	736	740	738	744	746

Source: Standard & Poor's



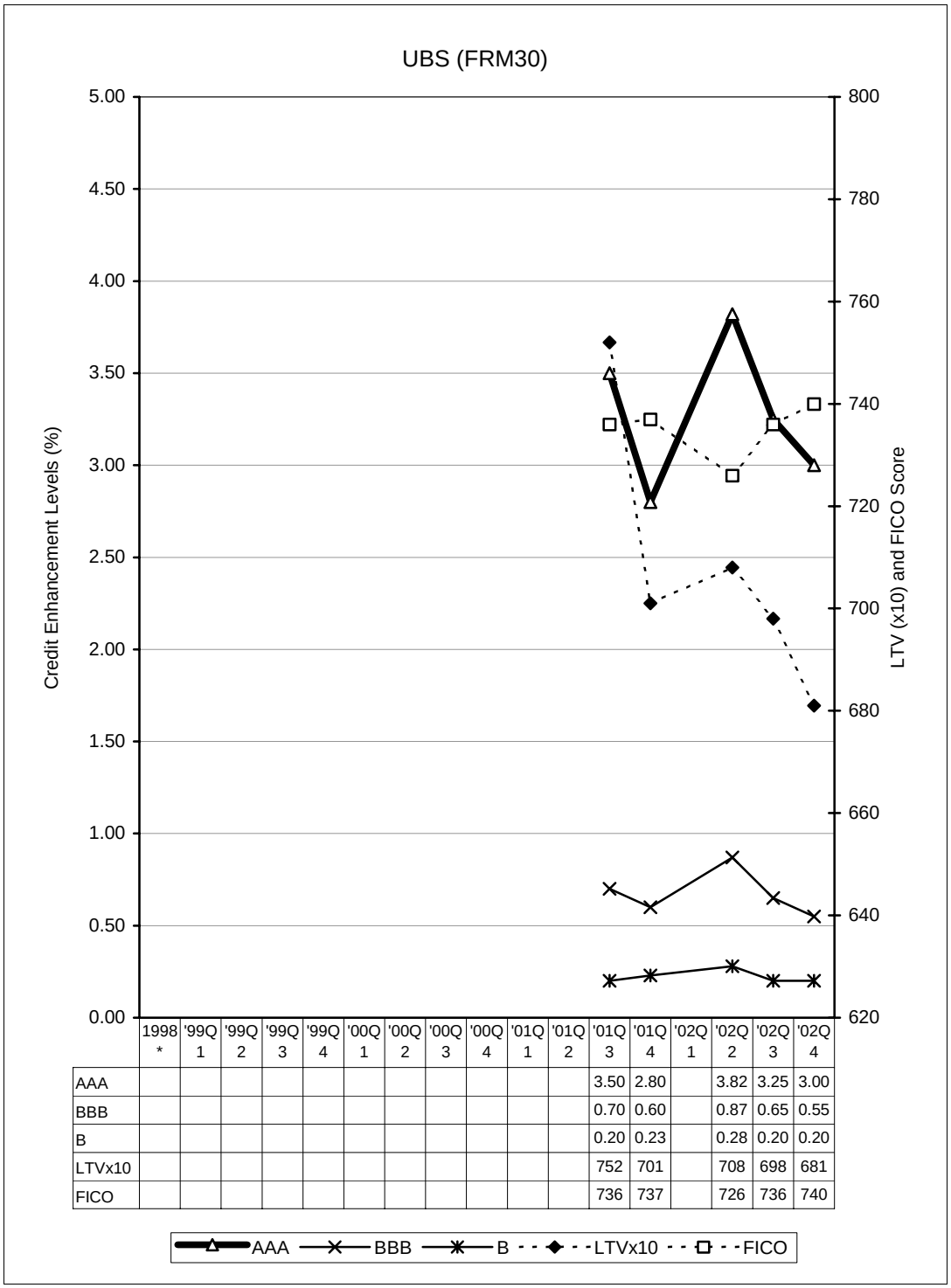
	1998 *	'99Q 1	'99Q 2	'99Q 3	'99Q 4	'00Q 1	'00Q 2	'00Q 3	'00Q 4	'01Q 1	'01Q 2	'01Q 3	'01Q 4	'02Q 1	'02Q 2	'02Q 3	'02Q 4
AAA	3.93	3.96	4.02	4.33	4.17	4.13	3.93	3.80	3.63	3.48	3.11	3.00	2.91	2.60	2.70	2.57	2.33
BBB	1.23	1.25	1.25	1.25	1.33	1.25	1.25	1.25	1.20	1.10	0.79	0.58	0.56	0.50	0.50	0.47	0.45
B	0.30	0.30	0.30	0.35	0.33	0.32	0.30	0.30	0.30	0.29	0.20	0.20	0.19	0.15	0.15	0.15	0.15
LTVx10					753	760	751	744	743	727	707	714	699	677	690	675	655
FICO	723	726	723	724	727	726	726	731	734	734	735	736	739	743	740	746	746

*full year 1998
Source: Standard & Poor's



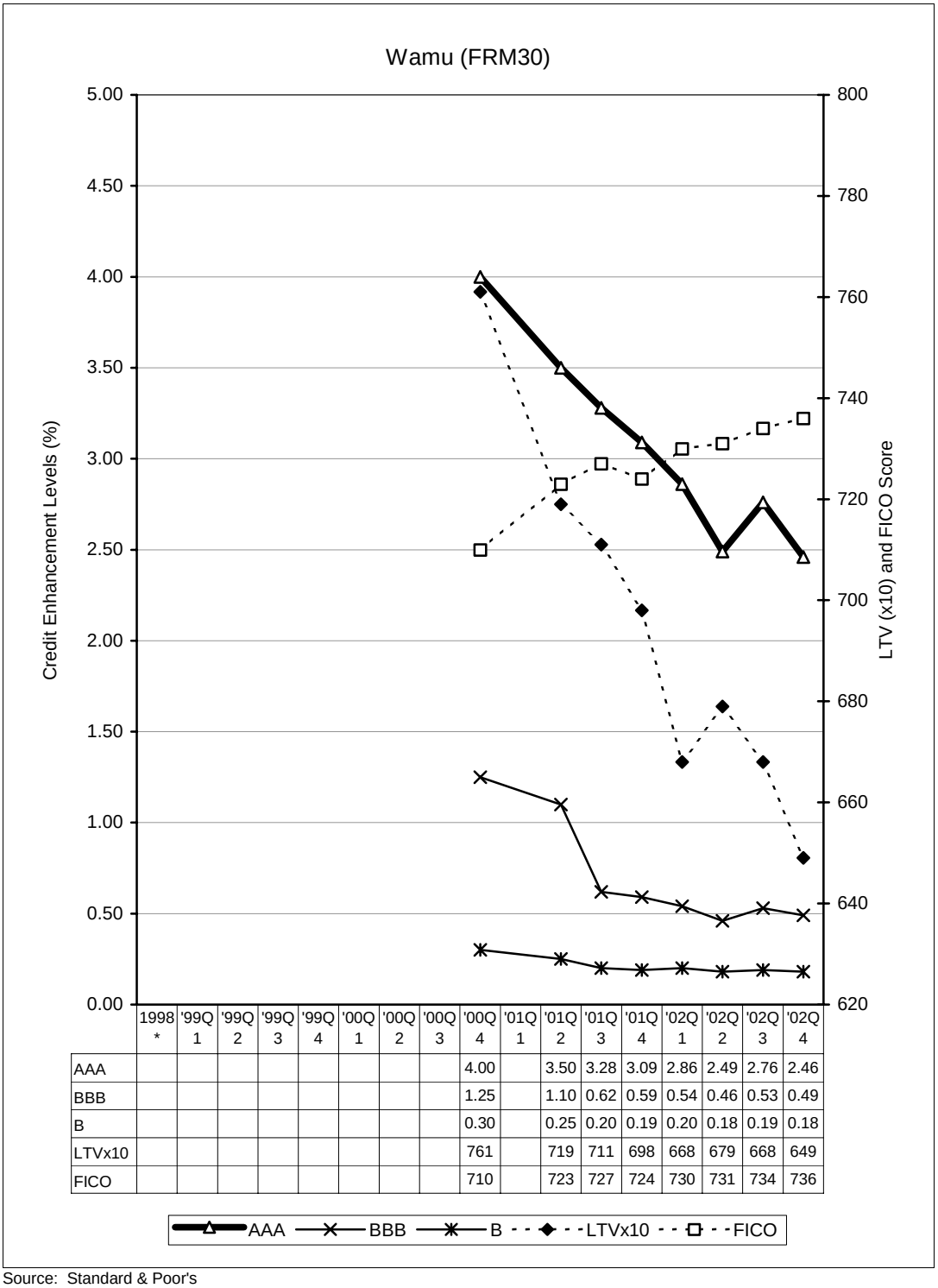
	1998 *	'99Q 1	'99Q 2	'99Q 3	'99Q 4	'00Q 1	'00Q 2	'00Q 3	'00Q 4	'01Q 1	'01Q 2	'01Q 3	'01Q 4	'02Q 1	'02Q 2	'02Q 3	'02Q 4
AAA													4.08	4.22	3.50	3.90	2.60
BBB													0.77	0.96	0.60	0.75	0.50
B													0.23	0.33	0.20	0.25	0.15
LTVx10													721	762	692	681	682
FICO													714	719	732	726	733

Source: Standard & Poor's



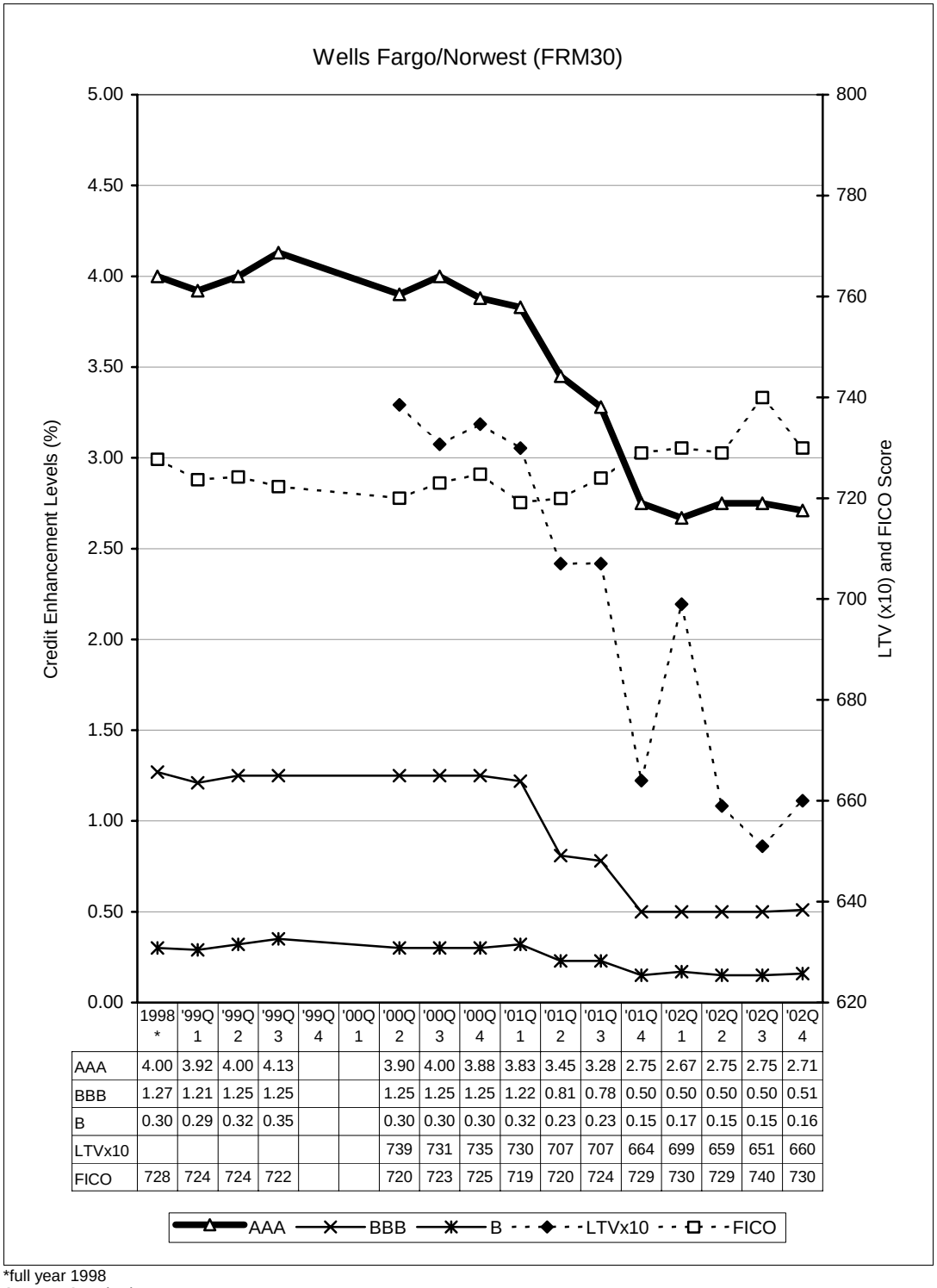
	1998 *	'99Q 1	'99Q 2	'99Q 3	'99Q 4	'00Q 1	'00Q 2	'00Q 3	'00Q 4	'01Q 1	'01Q 2	'01Q 3	'01Q 4	'02Q 1	'02Q 2	'02Q 3	'02Q 4
AAA												3.50	2.80		3.82	3.25	3.00
BBB												0.70	0.60		0.87	0.65	0.55
B												0.20	0.23		0.28	0.20	0.20
LTVx10												752	701		708	698	681
FICO												736	737		726	736	740

Source: Standard & Poor's



	1998 *	'99Q 1	'99Q 2	'99Q 3	'99Q 4	'00Q 1	'00Q 2	'00Q 3	'00Q 4	'01Q 1	'01Q 2	'01Q 3	'01Q 4	'02Q 1	'02Q 2	'02Q 3	'02Q 4
AAA									4.00		3.50	3.28	3.09	2.86	2.49	2.76	2.46
BBB									1.25		1.10	0.62	0.59	0.54	0.46	0.53	0.49
B									0.30		0.25	0.20	0.19	0.20	0.18	0.19	0.18
LTVx10									761		719	711	698	668	679	668	649
FICO									710		723	727	724	730	731	734	736

Source: Standard & Poor's



	1998 *	'99Q 1	'99Q 2	'99Q 3	'99Q 4	'00Q 1	'00Q 2	'00Q 3	'00Q 4	'01Q 1	'01Q 2	'01Q 3	'01Q 4	'02Q 1	'02Q 2	'02Q 3	'02Q 4
AAA	4.00	3.92	4.00	4.13			3.90	4.00	3.88	3.83	3.45	3.28	2.75	2.67	2.75	2.75	2.71
BBB	1.27	1.21	1.25	1.25			1.25	1.25	1.25	1.22	0.81	0.78	0.50	0.50	0.50	0.50	0.51
B	0.30	0.29	0.32	0.35			0.30	0.30	0.30	0.32	0.23	0.23	0.15	0.17	0.15	0.15	0.16
LTVx10							739	731	735	730	707	707	664	699	659	651	660
FICO	728	724	724	722			720	723	725	719	720	724	729	730	729	740	730

*full year 1998
Source: Standard & Poor's

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