

Market Dynamics among the ABX Index, Credit Default Swaps, and Mortgage-Backed Bonds

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Discussion by Feng Zhao (UTD)

Atlanta Fed / GSU Real Estate Finance Conference
November 30, 2017

Summary of the paper

- Which market is most informative about the subprime RMBS collateral losses, cash bond, single name CDS or ABX index?
 - Information flows to bond market before single name CDS
 - ABX contributes more in price discovery than single name CDS
- Response to monthly release of remittance report
 - Bond: significant, on average negative; single name CDS: insignificant; ABX: significant, on average positive
 - ABX spread often drifts higher between releases and drops on the release
 - argued as an indication of “noise trading”
- Proposing new performance measures
 - Aggregate loss trigger and acceleration feature – designed to divert cash flows from lower tranches to higher seniority tranches
 - Discovery of significant differences on performance data across sources even though all based on remittance reports
 - A comment: These measures somehow have insignificant correlation with bond spread changes, and some significance with ABX (Table XII and XIII)

No-arbitrage relation between subprime RMBS and ABX

- Prices for RMBS, single name CDS and ABX are linked together by no-arbitrage relation
- Price of (defaultable bond + protection) \cong price of default-free bond of same maturity
- ABX-Cash basis = ABX spread – \sum Bond yield spreads
 - If the basis is lower than the funding cost, an arbitrageur can buy bond portfolio and buy protection with ABX
 - If the basis is higher than the funding cost, an arbitrageur can short bond portfolio and write protection with ABX
- The causes for the breakdown of no-arbitrage relation
 - Illiquidity
 - Counterparty default
- If the breakdown is too severe, forces besides underlying collateral performance may be moving the markets and derivatives may not be redundant

How severe are the violations of no-arbitrage relation?

Table V: Summary Statistics for Variables for Basis and Tracking Error Regressions

Variable	Mean	St. Dev.	Min.	Max.	N
Basis	6,164.13	6,183.03	-4,487.56	91,676.98	11,851
ABCDS Spread	7,049.63	7,770.17	25.00	249,720.00	12,328
Bond Spread	165.84	676.92	-560.24	9,960.67	12,837
ABX Tracking Error	202.22	7,211.04	-17,081.98	67,114.45	837

Average ABX – Cash Bond basis around 6,000% or (60%?).

In the updated table (Nov. 28), the number is around -100%?

ABX-Cash Basis - Gordon (2009)

Figure 2: ABX BBB Cash Basis

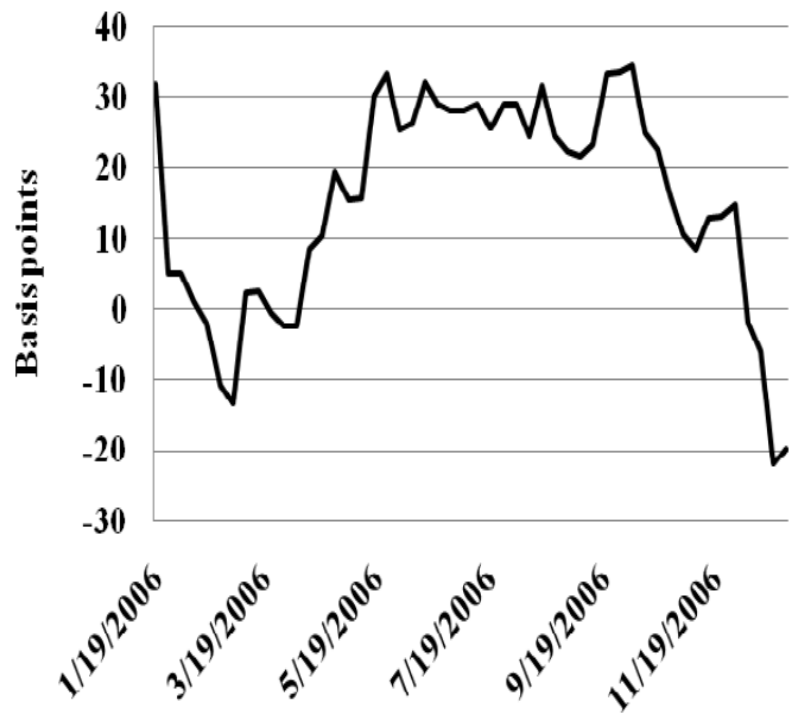
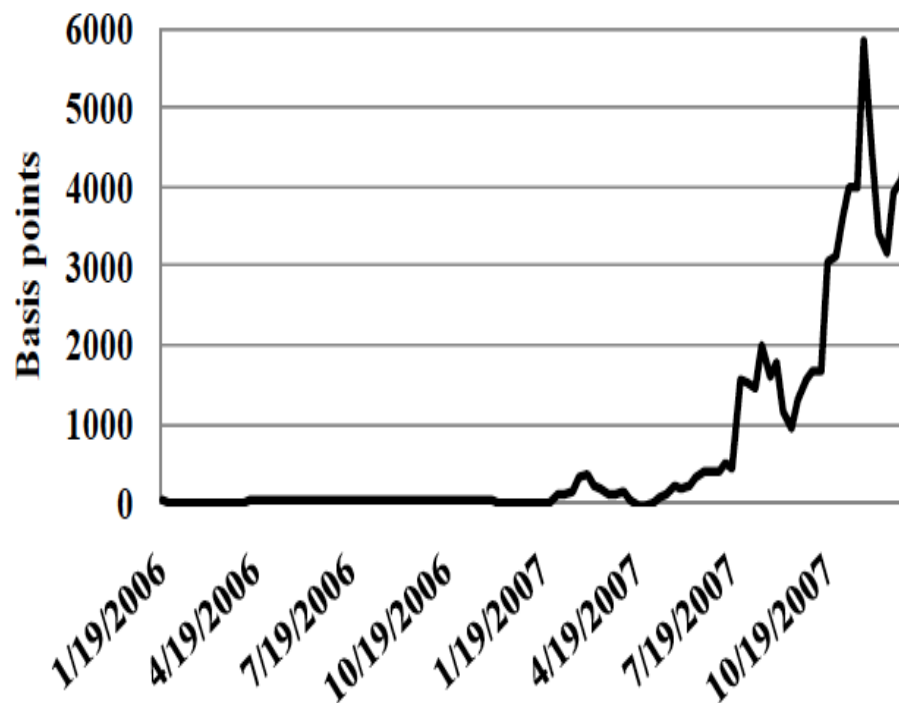


Figure 3: ABX BBB Cash Basis



Counterparty default risk severely reduces short-term funding liquidity - Gordon (2009)

Table 1: Repurchase Agreement (Repo) Market Haircuts during the Crisis*

Asset Class**	July '07 Pre-Crisis	Late July- August	Q3 2007	Q4 2007	Q1 2008	Q2 2008	Q2--> Current*
Corporates A-AA rated	0%	0%	0%	0%	0%	0%	0%
Corporates BBB rated	0%	0%	0%	0%	0%	0-5%	0-5%
Corporates < BBB-rated	0%	0%	0%	0%	0%	0-5%	0-5%
ABS AA-AA *	0%	2-5%	3-7%	5-10%	10-15%	15-20%	20-25%
ABS BBB-AA	0%	3-7%	5-10%	10-15%	15-20%	20-25%	20-30%+
ABS < BBB	0-2%	5-10%	10-15%	15-20%	20-25%	No financing	No financing

Table XII of the paper shows the funding cost is highly correlated with the ABX spread changes, but not the bond or ABCDS spread changes.

Suggestion/Comment #1: it is useful to distinguish the nature of information, collateral-based or counterparty/liquidity.

Comment #2: Remittance reports can be very helpful

- The paper studies price discovery between the markets using VECM on **daily** data, a cause for concern on the data quality
 - There are indications that bond/ABCDS spreads don't move much day to day
 - Lack of trading in bonds and ABCDS is the reason for the popularity of ABX
- This problem can be solved by focusing on the responses to the release of remittance reports
 - An informative market ought to respond to surprises
 - Can also help on identification of collateral-based information
- The paper currently uses a release date dummy, but more should be done, e.g. surprise or not, good or bad, ...

GSAMP Trust 2005-HE4 CIK#: 0001337184 (see all company filings)

Business Address
85 BROAD STREET
NEW YORK NY 10004

Mailing Address
85 BROAD STREET
NEW YORK NY 10004

SIC: 6189 - ASSET-BACKED SECURITIES

State location: NY | State of Inc.: DE | Fiscal Year End: 1231

(Assistant Director Office: 5)

Filter Results:	Filing Type: <input type="text"/>	Prior to: (YYYYMMDD) <input type="text"/>	Ownership? <input checked="" type="radio"/> include <input type="radio"/> exclude <input type="radio"/> only	Limit Results Per Page 40 Entries <input type="button" value="v"/>	<input type="button" value="Search"/> <input type="button" value="Show All"/>
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Filings	Format	Description	Filing Date	File/Film Number
424B3	Documents	Prospectus [Rule 424(b)(3)] Acc-no: 0000914121-07-002160 (33 Act) Size: 46 KB	2007-09-27	333-120274-32 071138232
10-K	Documents	Annual report [Section 13 and 15(d), not S-K Item 405] Acc-no: 0001020242-06-000409 (34 Act) Size: 76 KB	2006-03-30	333-120274-32 06724102
15-15D	Documents	Suspension of duty to report [Section 13 and 15(d)] Acc-no: 0001020242-06-000233 (34 Act) Size: 6 KB	2006-01-13	333-120274-32 06529014
8-K	Documents	Current report, item 8.01 Acc-no: 0001020242-05-001457 (34 Act) Size: 542 KB	2005-12-30	333-120274-32 051292639
8-K	Documents	Current report, item 8.01 Acc-no: 0001020242-05-001302 (34 Act) Size: 499 KB	2005-12-07	333-120274-32 051248110
8-K	Documents	Current report, item 8.01 Acc-no: 0001020242-05-001149 (34 Act) Size: 428 KB	2005-10-28	333-120274-32 051163383
8-K	Documents	Current report, item 8.01 Acc-no: 0001020242-05-001148 (34 Act) Size: 428 KB	2005-10-28	333-120274-32 051163382
8-K/A	Documents	[Amend] Current report, items 8.01 and 9.01 Acc-no: 0000914121-05-002012 (34 Act) Size: 1 MB	2005-10-26	333-120274-32 051157272
8-K	Documents	Current report, item 8.01 Acc-no: 0001020242-05-001049 (34 Act) Size: 427 KB	2005-09-27	333-120274-32 051104470
8-K	Documents	Current report, items 8.01 and 9.01 Acc-no: 0000914121-05-001727 (34 Act) Size: 1 MB	2005-09-09	333-120274-32 051078528
424B5	Documents	Prospectus [Rule 424(b)(5)] Acc-no: 0001125282-05-004519 (33 Act) Size: 1 MB	2005-08-26	333-120274-32 051051109

SIC: 6189 - ASSET-BACKED SECURITIES

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Filter Results:	Filing Type:	Prior to: (YYYYMMDD)	Ownership?	Limit Results Per Page	Search
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Filings	Format	Description	Filing Date	File/Film Number
10-K	Documents	Annual report [Section 13 and 15(d), not S-K Item 405] Acc-no: 0001051170-07-000126 (34 Act) Size: 105 KB	2007-04-02	333-121990-06 07738230
15-15D	Documents	Suspension of duty to report [Section 13 and 15(d)] Acc-no: 0001051170-07-000059 (34 Act) Size: 4 KB	2007-01-25	333-121990-06 07553030
10-D	Documents	Asset-Backed Issuer Distribution Report [Section 13 or 15(d) of the Securities Exchange Act of 1934] Acc-no: 0001051170-07-000010 (34 Act) Size: 65 KB	2007-01-09	333-121990-06 07520042
8-K/A	Documents	[Amend] Current report, items 8.01 and 9.01 Acc-no: 0001162318-06-001623 (34 Act) Size: 299 KB	2006-12-18	333-121990-06 061284336
10-D	Documents	Asset-Backed Issuer Distribution Report [Section 13 or 15(d) of the Securities Exchange Act of 1934] Acc-no: 0001051170-06-000441 (34 Act) Size: 60 KB	2006-12-11	333-121990-06 061267706
10-D	Documents	Asset-Backed Issuer Distribution Report [Section 13 or 15(d) of the Securities Exchange Act of 1934] Acc-no: 0001051170-06-000386 (34 Act) Size: 60 KB	2006-11-07	333-121990-06 061192513
10-D	Documents	Asset-Backed Issuer Distribution Report [Section 13 or 15(d) of the Securities Exchange Act of 1934] Acc-no: 0001051170-06-000334 (34 Act) Size: 58 KB	2006-09-29	333-121990-06 061117334
10-D	Documents	Asset-Backed Issuer Distribution Report [Section 13 or 15(d) of the Securities Exchange Act of 1934] Acc-no: 0001051170-06-000300 (34 Act) Size: 57 KB	2006-09-01	333-121990-06 061071444
10-D	Documents	Asset-Backed Issuer Distribution Report [Section 13 or 15(d) of the Securities Exchange Act of 1934] Acc-no: 0001051170-06-000263 (34 Act) Size: 58 KB	2006-08-03	333-121990-06 061001474
10-D	Documents	Asset-Backed Issuer Distribution Report [Section 13 or 15(d) of the Securities Exchange Act of 1934] Acc-no: 0001051170-06-000239 (34 Act) Size: 63 KB	2006-07-10	333-121990-06 06952727
8-K/A	Documents	[Amend] Current report, items 8.01 and 9.01 Acc-no: 0001162318-06-000891 (34 Act) Size: 36 KB	2006-06-30	333-121990-06 06938722
10-D	Documents	Asset-Backed Issuer Distribution Report [Section 13 or 15(d) of the Securities Exchange Act of 1934] Acc-no: 0001051170-06-000212 (34 Act) Size: 55 KB	2006-06-07	333-121990-06 06890725
10-D	Documents	Asset-Backed Issuer Distribution Report [Section 13 or 15(d) of the Securities Exchange Act of 1934] Acc-no: 0001051170-06-000190 (34 Act) Size: 63 KB	2006-05-03	333-121990-06 06804064
10-D	Documents	Asset-Backed Issuer Distribution Report [Section 13 or 15(d) of the Securities Exchange Act of 1934] Acc-no: 0001051170-06-000184 (34 Act) Size: 66 KB	2006-04-07	333-121990-06 06748119
10-D	Documents	Asset-Backed Issuer Distribution Report [Section 13 or 15(d) of the Securities Exchange Act of 1934] Acc-no: 0001051170-06-000111 (34 Act) Size: 69 KB	2006-03-08	333-121990-06 06671995
8-K	Documents	Current report, items 8.01 and 9.01 Acc-no: 0001162318-06-000180 (34 Act) Size: 1 MB	2006-02-14	333-121990-06 06615983
8-K	Documents	Current report, items 8.01 and 9.01 Acc-no: 0001162318-06-000068 (34 Act) Size: 30 KB	2006-01-27	333-121990-06 06558889
424B5	Documents	Prospectus [Rule 424(b)(5)] Acc-no: 0001162318-06-000067 (33 Act) Size: 2 MB	2006-01-27	333-121990-06 06558815
FWP	Documents	Filing under Securities Act Rules 163/433 of free writing prospectuses Acc-no: 0001162318-06-000063 (34 Act) Size: 28 MB	2006-01-26	333-121990-06 06553606

GSAMP Trust 2005-HE4

Mortgage Pass-Through Certificates

2005-HE4

December 27, 2005 Distribution

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		4. Collateral Report	9
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		8. Prepayment Report	17
		9. Prepayment Detail Report	20
		10. Realized Loss Report	24
Servicer(s)		11. Realized Loss Detail Report	27
J. P. Morgan		12. Triggers and Adj. Cert. Report	28
		13. Additional Certificate Report	30
Underwriter(s)			
Goldman Sachs & Co.			
		Total Number of Pages	30
Dates		Contacts	
Cut-Off Date:	August 01, 2005	Hang Luu	
Close Date:	August 25, 2005	Administrator	
First Distribution Date:	September 26, 2005	(714) 247-6000	
		hang-thai.luu@db.com	
		Address:	
		1761 East St. Andrew Place, Santa Ana, CA 92705	
Distribution Date:	December 27, 2005		
Record Date:	November 30, 2005	Factor Information:	(800) 735-7777
	December 23, 2005	Main Phone Number:	(714) 247-6000
		https://www.tss.db.com/invr	

More detailed information regarding the mortgage loans, including the % of mortgage loans in the transaction affected by Hurricane Katrina, can be seen at www.absnet.net/subscribe/gpdata.asp
The information will be posted at such time as it becomes available.

EX-99.1 Monthly report distributed to holders of J.P. Morgan
Mortgage Acquisition Corp. 2006-FRE1 Asset-Backed
Pass-Through Certificates, Series 2006-FRE1 relating
to the December 26, 2006 distribution.

EX-99.1
J.P. Morgan Mortgage Acquisition Corp, 2006-FRE1
December 26, 2006

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Comment #3: Why did data vendors have different readings from the remittance reports?

- Poor data quality
- Deal Characteristics
 - Ambiguity in collateral
 - Complexity in deal structure
- Intentional omission, misreporting, obfuscating
- Understanding the nature/time variation of the dispersion can further identify the forces moving the three markets

Comment #4: Heterogeneous market participants can affect the market dynamics

- Some RMBS investors are the buy-and-hold type
- ABCDS market has the most severe adverse selection problem
- ABX is popular with speculators/arbitrageurs and cross-hedgers
- There are alternatives for the ABX spread to drift lower between releases during this particular sample period
 - During the crisis, ABX is the only viable venue for short selling
- It requires more to argue bond holders are more informed
 - Not enough liquidity for them to sell during the crisis

Heterogeneous investors – Zhang, Zhao and Zhao (2017)

- We examine the determinants for mutual funds and insurance companies initial holdings of AAA-rated non-agency RMBS.
- Contents in free writing prospectus and risk factors section in prospectus supplements can explain over 15% of the deal collateral loss beyond common characteristics and macroeconomic conditions.
- Mutual funds initial holdings are sensitive to these contents, insensitive to headline numbers such as FICO and housing price run-up.
- Insurance companies initial holdings are insensitive to contents, sensitive to headline numbers.

Conclusion

- I enjoyed a lot from reading the paper and learned a lot.
Thank you.
- I commend the authors for the tremendous amount of work!
 - Getting data from multiple sources, including hand-collected remittance reports
 - Substantial amount of results (99 pages, 20 tables and 13 figures in this draft)
 - The comparison of the collateral performance data could be a separate paper
- Hopefully securitization + derivatives can be doubly beneficial, not doubly toxic!