

From Main Street to Wall Street

Mapping the Mortgage Mess

Valdis Krebs

Financial Risk and Network Theory

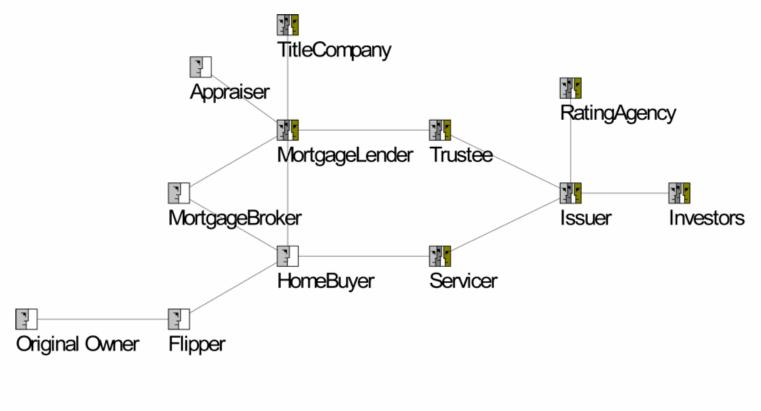
University of Cambridge 23. September 2014

Mortgage Mess in Cleveland, Ohio

- One of the highest foreclosure rates in the USA during 2005-2010
 - Especially in the former steelworker community of Slavic Village
- Foreclosed Cleveland mortgages were found in many Wall Street RBMSes and CDOs



Flow from Main Street to Wall Street





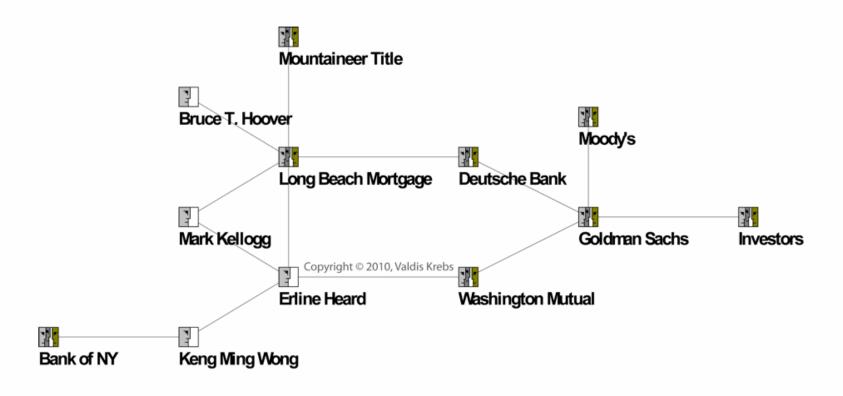


Main Street





3729 East 54th Street



Main Street → Wall Street

Mortgage: 3729 East 54th

Synthetic CDO: ABACUS 2007-AC1



Main Street Detail

	A	В	C	D	E	Initial Purchase	Initial Purchase	Н		sale\$-	К	L	М	N
P	arcel #	Street #	Street Name	Buyer	Seller	Price	Date	Sale Price	Sale Date	ratio	Appraiser	Mortgage Broker	Title	Mortgage Co.
13	3120041	3465	East 50	Boyd, Lula	Lui, Pak Tim	\$61 000	11.03.04	\$87 000	5.23.05	143%	Hoover, Bruce T.	Kellogg, Mark	Mountaineer	Long Beach
1:	3132052	3687	East 50	Gaddis, Julius	Lam, Ken	\$15 750	1.20.05	\$86 000	10.4.05	546%	Hoover, Bruce T.	Kellogg, Mark	Mountaineer	Long Beach
1:	3132053	3689	East 50	Gaddis, Julius	Lam, Ken	\$15 750	1.20.05	\$86 000	10.4.05	546%	Hoover, Bruce T.	Kellogg, Mark	Mountaineer	Long Beach
1:	3133095	3656	East 50	Kellog, Jeffrey	Lui, Pak Choong	\$0	2.20.92	\$75 000	10.24.03					New Century
1:	3132086	3686	East 50	Wells, Pamela	Lui, Hor Pak	\$40 000	8.25.06	\$90 000	4.23.07	225%				First Franklin
13	3120047	3448	East 51	Williams, Lakiesha	Merlave LTD	\$22 500	6.13.05	\$85 000	2.24.05	378%	Hoover, Bruce T.	Kellogg, Mark	Mountaineer	New Century
1:	3120076	3460	East 52	Brown, Patricia	Lui, Yan Chang	\$24 500	5.28.03	\$77 000	6.6.05	314%	n/a	Kellogg, Mark	Mountaineer	Aegis Funding
1:	3121104	3417	East 52	Rahmon, Wesley	Wong, Keng Ming	\$10 000	8.26.05	\$85 000	7.24.07	850%				Chase
1:	3135129	3691	East 53	Johnson, Irvin Anthony	Poplar Assoc.	\$17 500	3.10.06	\$86 000	9.15.06	491%	Hoover, Bruce T.	Kellogg, Mark	Mountaineer	New Century
1:	3135089	3729	East 54	Heard, Erline	Wong, Keng Ming	\$17 000	7.05.05	\$85 000	3.16.06	500%	Hoover, Bruce T.	Kellogg, Mark	Mountaineer	Long Beach
2 13	3122057	3441	East 55	Perkins, F. & M.	Poplar Assoc.	\$31 000	9.26.05	\$87 000	4.26.06	281%	Hoover, Bruce T.	Kellogg, Mark	Mountaineer	Long Beach
1	3211042	3862	East 55	Gibson, Ann	Lui, Pak Yan	\$16 000	8.28.03	\$82 000	5.24.05	513%	Hoover, Bruce T.	Kellogg, Mark	Mountaineer	Long Beach
1	3210156	3811	East 55	Grady, Willie B Jr	Wong, Keng Ming	\$30 000	7.07.03	\$88 000	6.25.04	293%				Argent
1	3222116	4114	East 56	Buck, Eddie	Lui, Pak Yan	\$25 000	1.03.05	\$85 000	6.29.05	340%	Hoover, Bruce T.	Kellogg, Mark	Mountaineer	Long Beach
13	3137099	3726	East 57	Perkins, F. & M.	RJM Home	\$15,000	12 12 06	000.002	5 26 06	600%	Hoover, Bruce T.	First Metro Mtg Co	Mountaineer	New Century
1:	3222066	4068	East 57	Johnson, Ervin	Lui, Pak)6	360%				New Century
13	3217038	3991	East 58	Philpotts, Wykeily	Merlave LTD				6	218%	Hoover, Bruce T.	Kellogg, Mark	Mountaineer	New Century
13	3208177	3674	East 61	Johnson, Ervin	RJM Home)6	600%	Rahmon, Wesley	Bark, Jamie	Mountaineer	Assured
13	3016093	3986	East 64	Burdine, Brent	Grady, Willie				6	300%	Rahmon, Wesley	Higgins, Tanya	Five Star	Long Beach
13	3219030	3987	East 64	Cody, Beverly	YYL, LLC				7	135%				Pak Lui
2 10	0601063	1313	East 65	Lam, Ken	Kwan, Man				6	556%	Lowe, Rayshawn	Mazanec, Mike	Mountaineer	Premier
12	2532006	3395	East 65	Lam, Ken	Lui, Pak Choong	100	3		4	203%	Rahmon, Wesley	Kellogg, Mark	Mountaineer	Argent
12	2528034	3432	East 65	Heard, Erline	Merlave LTD	1		all the	6	405%	Hoover, Bruce T.	Kellogg, Mark	Mountaineer	Long Beach
12	2503044	2994	East 65	Davis, Lana	Lui, Pak Choong	-	-	100	3	563%				People's Choice
12	2528037	3412	East 65	Kellog, Jeffrey	Lui, Pak Yan	1	2	100	3	444%				Argent
1:	3219019	3982	East 66	Mitchell, Natalie	Lui, Pak Choong	1 400	William !	28)4	362%	Rahmon, Wesley	Kellogg, Mark	Mountaineer	Argent
13	3219017	3988	East 66	Williams, Alfonso	Lui, Pak Tim	1	Name .	200)4	217%	Spahr, Daniel	Gonzalez, Alfredo	Five Star	Finance America
1:	2532081	3391	East 66	Harris, Rodney	Wong, Keng Ming	100	1990		4	100%				Argent
1:	2514024	2993	East 67	Lee, Bonita	Wong, Keng Ming	100	1000	11	5	538%	Hoover, Bruce T.	Kellogg, Mark	Mountaineer	Argent

Councilman Anthony Brancatelli



SEC: Main Street -> Wall Street

The Transaction Parties

<u>Sponsor</u>. Goldman Sachs Mortgage Company, a New York limited partnership with its principal executive offices at 85 Broad Street, <u>New York</u>, <u>New York</u> $\underline{10004}$, telephone number ($\underline{212}$) 902-1000.

<u>Depositor</u>. GS Mortgage Securities Corp., a Delaware corporation with its principal executive offices at 85 Broad Street, <u>New York</u>, <u>New York</u> 10004, telephone number (212) 902-1000.

Issuing Entity. GSAMP Trust 2006-HE1.

Trustee. Deutsche Bank National Trust Company, a national banking association. The corporate trust office of the trustee is located at 1761 East

St. Andrew Place, Santa Ana, California 92705-4934, and its telephone number is (714) 247-6000.

<u>Servicer</u>. Litton Loan Servicing LP, a Delaware limited partnership with its main office located at 4828 Loop Central Drive, <u>Houston</u>, <u>Texas</u> 77081, and its telephone number is (713) 960-9676.

Original Loan Sellers. SouthStar Funding, LLC, a Delaware limited liability company, and MILA, Inc., a Washington corporation. The principal executive office of SouthStar is located at 400 Northridge Road, Suite 1000, Atlanta, Georgia, 30350, and its telephone number is (770) 641-4134. The principal executive office of MILA is located at 6021 244th Street S.W., Mountlake Terrace, Washington 98043, and its telephone number is (800) 332-6452. The original loan sellers also include certain entities that sold mortgage loans to the sponsor under its mortgage conduit program. Pursuant to the mortgage conduit program, the sponsor purchases mortgage loans originated by the original loan sellers if the mortgage loans generally satisfy the sponsor's underwriting quidelines.

<u>Custodians</u>. J.P. Morgan Trust Company, National Association, a national banking association, will act as a custodian with respect to 73.07% of the mortgage loans, and U.S. Bank National Association, a national banking association, will act as a custodian with respect to 7.21% of the mortgage loans. The trustee will have the custodial responsibilities with respect to the mortgage files for all other mortgage loans. The principal executive office of J.P. Morgan Trust Company, National Association is located at 2220 Chemsearch Boulevard, Suite 150, <u>Irving</u>, <u>Texas</u> 75062, and its telephone number is (972) 785-5274. The principal executive office of U.S. Bank is located at U.S. Bancorp Center, 800 Nicoliet Mall, <u>Minneapolis</u>, <u>Minnesota</u> 55402, and its telephone number is (651) 695-6105.

Swap Provider. A swap provider that has a counterparty rating of at least "Aaa" from Moody's Investors Service, Inc. and a credit rating of "AA+" from Standard & Poor's Ratings Services, a division of The McGraw-Hill Companies, Inc. (or has a guarantor that has such ratings) will be employed in connection with this transaction.



Wall Street



CONFIDENTIAL – INDICATIVE TERMS

ABACUS 2007-AC1

\$2 Billion Synthetic CDO

Referencing a static RMBS Portfolio

Selected by ACA Management, LLC

February 26, 2007

The information contained herein is indicative only and the actual terms of any transaction will be set forth in the definitive Offering Circular. Capitalized terms but not defined herein shall have the meanings set forth in the definitive Offering Circular.





Wall Street 10414 NELSON AVENUE 10612 SANDUSKY AVE 10616 SANDUSKY AVE 10916 MOUNT OVERLOOK 12007 OAKLAND AVENUE 12014 GRIFFING AVENUE 1223 E 87TH ST FFML2006-FF16 FFML2006-FF17 FFML2006-FF7 12412 LENACRAVE AVE 1345 W61 STREET FFML2006-FF9 FFML2007-FF1 1358 SHAWMEW AVE FMLT2006-AM7 FMLT2006-B 1532 E 47TH ST 16227 EDGEWOOD CT FMC2006-3 16527 KIPLING AVENUE 17103 OLYMPIA RD GSAMP2006-FM2 HASC2006-HE2 1814 BRAINARD AVENUE 2086-2088 WEST 93RD STREET HEAT2006-3 HEAT2006-5 21015 NORTH STREET HEAT2006-6 21128 GOLLER AVE HEAT2006-7 2938 F 121ST ST HEAT2007-1 3069 W 105TH ST 3174 W 82ND STREET IXIS2006.HE3 JPMAC2006-CM2 JPMAC2006-FRE JPMAC2006-WMC JBMLT2006-11 3231 E 125TH ST 3266 WEST 88TH STREET 3397 E 143RD STREET ABACUS 2007-AC1 LBMLT 2006-4 3420 ALTAMONT AVENUE 3432 E 65TH STREET 3437 E 72ND STREET BMLT2006-6 LBMLT2006-7 LBMLT2006-8 3572 E 82ND ST 3593 E 61ST ST LBMLT2006-9 3603 HILDANA ROAD LBMLT2006-WL1 3729 E 54TH STREET MABS2006-HE5 MABS2006-NC2 3731 W 39TH ST 3806 E 54TH STREET 3859 W41ST STREET MLMI2006-HE6 3950 E 74TH ST 420 ALTAMONT AVENUE MLMI2006-WMC1 MSAC2006-HE7 4623 MEHLING COURT 5101 DOLLOFF ROAD 5105 ANSON AVENUE MSAC2006-HE8 MSAC2006-NC4 518 E 125TH STREET MSAC2006-NC5 MSAC2006-WMC1 5922 KIMBERLY DRIVE 6307 HEISLEY AVE 6611 PERCY AVENUE 6714 HOSMER AVENUE 733 QUILLIAMS RD MSAC2007-NC1 MSC2006-HE2 MSI/2006-1E2 MSI/2006-2B2 NHEL 2006-5 NHEL 2006-5 NHEL 2006-FM1 8022 GARFIELD BLVD 8910 CONNECTICUT AVENUE 901 E 131ST STREET 9016 BLAINE AVE 984-986 E 129TH ST 9909 COLUMBIA AVENUE Failed Cleveland Mortgages Mortgage Orgnet Loan **Trusts** Copyright © 2014, Valdis Krebs

Obvious vs. Non-Obvious

- Documents allow extraction of standard transaction data
- Map obvious transactions & see flows
- But what about the non-obvious?
- What are the patterns behind the visible flows?

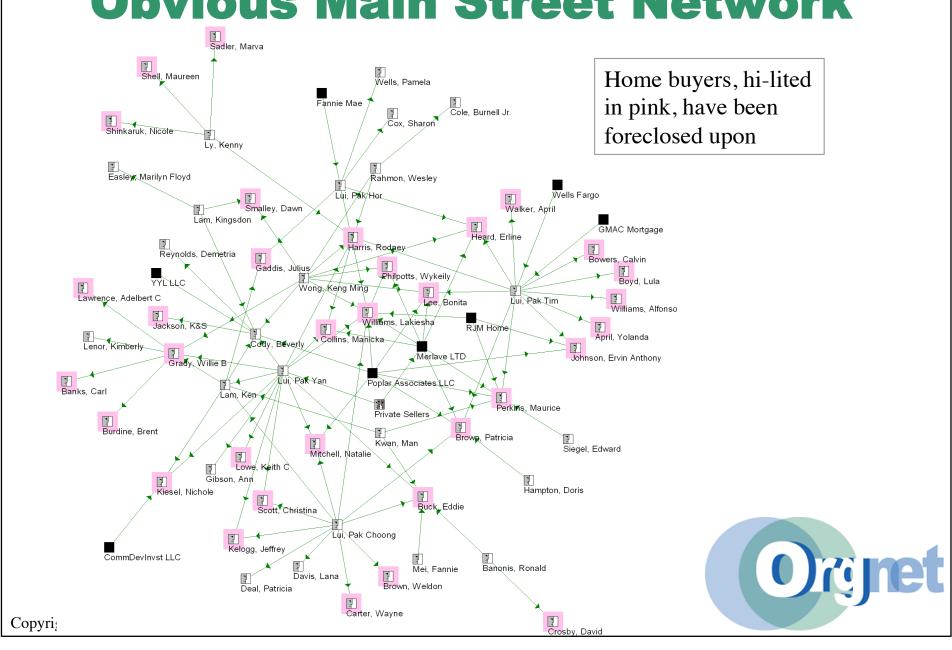


Main Street Detail Data

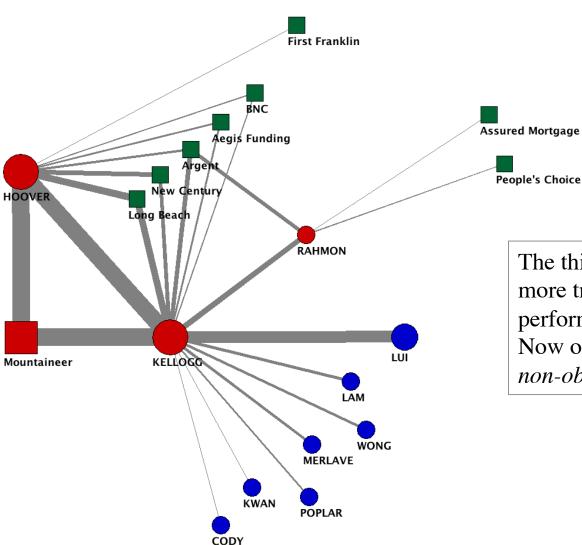
A	В	C	D	E		G	H			K		M	N
Parcel #	Street #	Street Name	Buyer	Seller	Initial Purchase Price	Initial Purchase Date	Sale Price	Sale Date	sale\$- initial\$ ratio	Appraiser	Mortgage Broker	Title	Mortgage Co.
1312004	3465	East 50	Boyd, Lula	Lui, Pak Tim	\$61 000	11.03.04	\$87 000	5.23.05	143%	Hoover, Bruce T.	Kellogg, Mark	Mountaineer	Long Beach
13132052	3687	East 50	Gaddis, Julius	Lam, Ken	\$15 750	1.20.05	\$86 000	10.4.05	546%	Hoover, Bruce T.	Kellogg, Mark	Mountaineer	Long Beach
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13133098	3656	East 50	Kellog, Jeffrey	Lui, Pak Choong	\$0	2.20.92	\$75 000	10.24.03					New Century
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13120047	3448	East 51	Williams, Lakiesha	Merlave LTD	\$22 500	6.13.05	\$85 000	2.24.05	378%	Hoover, Bruce T.	Kellogg, Mark	Mountaineer	New Century
13120076	3460	East 52	Brown, Patricia	Lui, Yan Chang	\$24 500	5.28.03	\$77 000	6.6.05	314%	n/a	Kellogg, Mark	Mountaineer	Aegis Funding
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13135129	3691	East 53	Johnson, Irvin Anthony	Poplar Assoc.	\$17 500	3.10.06	\$86 000	9.15.06	491%	Hoover, Bruce T.	Kellogg, Mark	Mountaineer	New Century
13135089	3729	East 54	Heard, Erline	Wong, Keng Ming	\$17 000	7.05.05	\$85 000	3.16.06	500%	Hoover, Bruce T.	Kellogg, Mark	Mountaineer	Long Beach
13122057	3441	East 55	Perkins, F. & M.	Poplar Assoc.	\$31 000	9.26.05	\$87 000	4.26.06	281%	Hoover, Bruce T.	Kellogg, Mark	Mountaineer	Long Beach
13211042	3862	East 55	Gibson, Ann	Lui, Pak Yan	\$16 000	8.28.03	\$82 000	5.24.05	513%	Hoover, Bruce T.	Kellogg, Mark	Mountaineer	Long Beach
13210156	3811	East 55	Grady, Willie B Jr	Wong, Keng Ming	\$30 000	7.07.03	\$88 000	6.25.04	293%				Argent
13222116		East 56	Buck, Eddie	Lui, Pak Yan	\$25 000	1.03.05	\$85 000	6.29.05	340%	Hoover, Bruce T.	Kellogg, Mark	Mountaineer	Long Beach
13137099	3726	East 57	Perkins, F. & M.	RJM Home	\$15 000	12.13.05	\$90 000	5.26.06	600%	Hoover, Bruce T.	First Metro Mtg Co	Mountaineer	New Century
13222066	4068	East 57	Johnson, Ervin	Lui, Pak	\$26 667	1.19.06	\$96 000	10.10.06	360%				New Century
13217038	3991	East 58	Philpotts, Wykeily	Merlave LTD	\$39 000	3.15.05	\$85 000	7.25.06	218%	Hoover, Bruce T.	Kellogg, Mark	Mountaineer	New Century
13208177	3674	East 61	Johnson, Ervin	RJM Home	\$15 000	5.30.06	\$90 000	10.30.06	600%	Rahmon, Wesley	Bark, Jamie	Mountaineer	Assured
13016093	3986	East 64	Burdine, Brent	Grady, Willie	\$33 000	4.11.06	\$99 000	7.21.06	300%	Rahmon, Wesley	Higgins, Tanya	Five Star	Long Beach
13219030	3987	East 64	Cody, Beverly	YYL, LLC	\$17 000	1.31.07	\$23 000	5.15.07	135%				Pak Lui
10601063	1313	East 65	Lam, Ken	Kwan, Man	\$15 300	4.19.06	\$85 000	4.19.06	556%	Lowe, Rayshawn	Mazanec, Mike	Mountaineer	Premier
12532006	3395	East 65	Lam, Ken	Lui, Pak Choong	\$29 000	6.26.03	\$58 900	11.3.04	203%	Rahmon, Wesley	Kellogg, Mark	Mountaineer	Argent
12528034	3432	East 65	Heard, Erline	Merlave LTD	\$21 000	4.08.05	\$85 000	3.27.06	405%	Hoover, Bruce T.	Kellogg, Mark	Mountaineer	Long Beach
12503044	2994	East 65	Davis, Lana	Lui, Pak Choong	\$13 500	4.01.93	\$76 000	2.24.03	563%				People's Choice
12528037	3412	East 65	Kellog, Jeffrey	Lui, Pak Yan	\$18 000	1.09.03	\$80 000	4.30.03	444%				Argent
13219019	3982	East 66	Mitchell, Natalie	Lui, Pak Choong	\$21 000	6.09.03	\$76 000	10.25.04	362%	Rahmon, Wesley	Kellogg, Mark	Mountaineer	Argent
13219017	3988	East 66	Williams, Alfonso	Lui, Pak Tim	\$40 475	6.07.04	\$88 000	12.13.04	217%	Spahr, Daniel	Gonzalez, Alfredo	Five Star	Finance America
1253208	3391	East 66	Harris, Rodney	Wong, Keng Ming	\$80 000	11.06.03	\$80 000	1.13.04	100%				Argent
12514024	2993	East 67	Lee, Bonita	Wong, Keng Ming	\$16 000	2.10.04	\$86 000	3.10.05	538%	Hoover, Bruce T.	Kellogg, Mark	Mountaineer	Argent



Obvious Main Street Network



Non-Obvious Main Street Network



The thicker the line the more transactions performed together.
Now obvious who the non-obvious players are!



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Someone Goes to Jail



http://archive.wkyc.com/news/story.aspx?storyid=136388

