

PIT Rating & ABSTRAK Screenshots and Features

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“PIT” (point-in-time) Ratings:

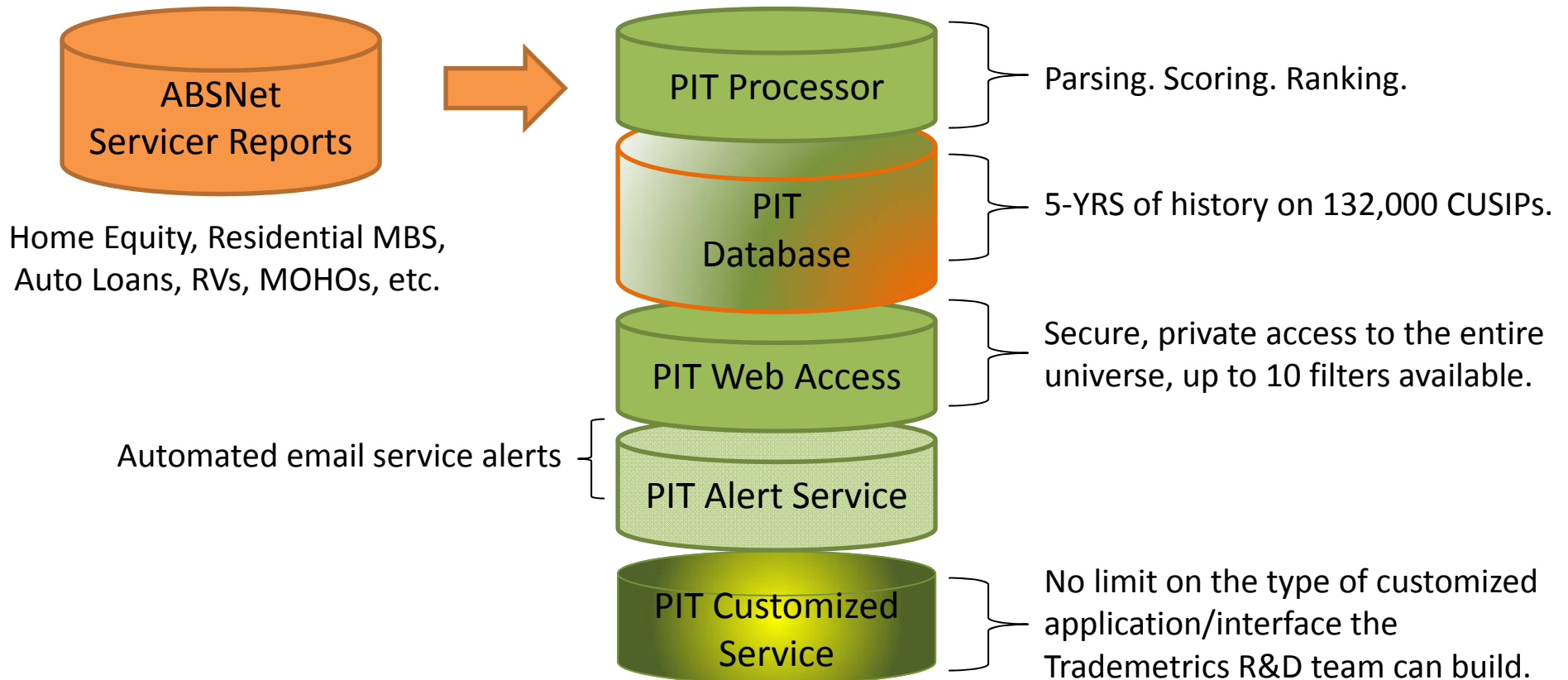
Web-based, unified securities ranking system based on Bayesian volatility analysis.

Use it to—

- Find deals with the desired value profile from a large universe of structured exposures.
- Draw pair-wise or whole-portfolio comparisons based on the current (point-in-time) performance index, without referring to stale NRSRO ratings.
- Discern evolving trends in security performance.
- Optimize the investment portfolio by swapping out weaker “peers” for higher-alpha substitutes.
- Evaluate asset managers using their portfolio-PITS.



Rigorous with respect to rank. Agnostic with respect to price.

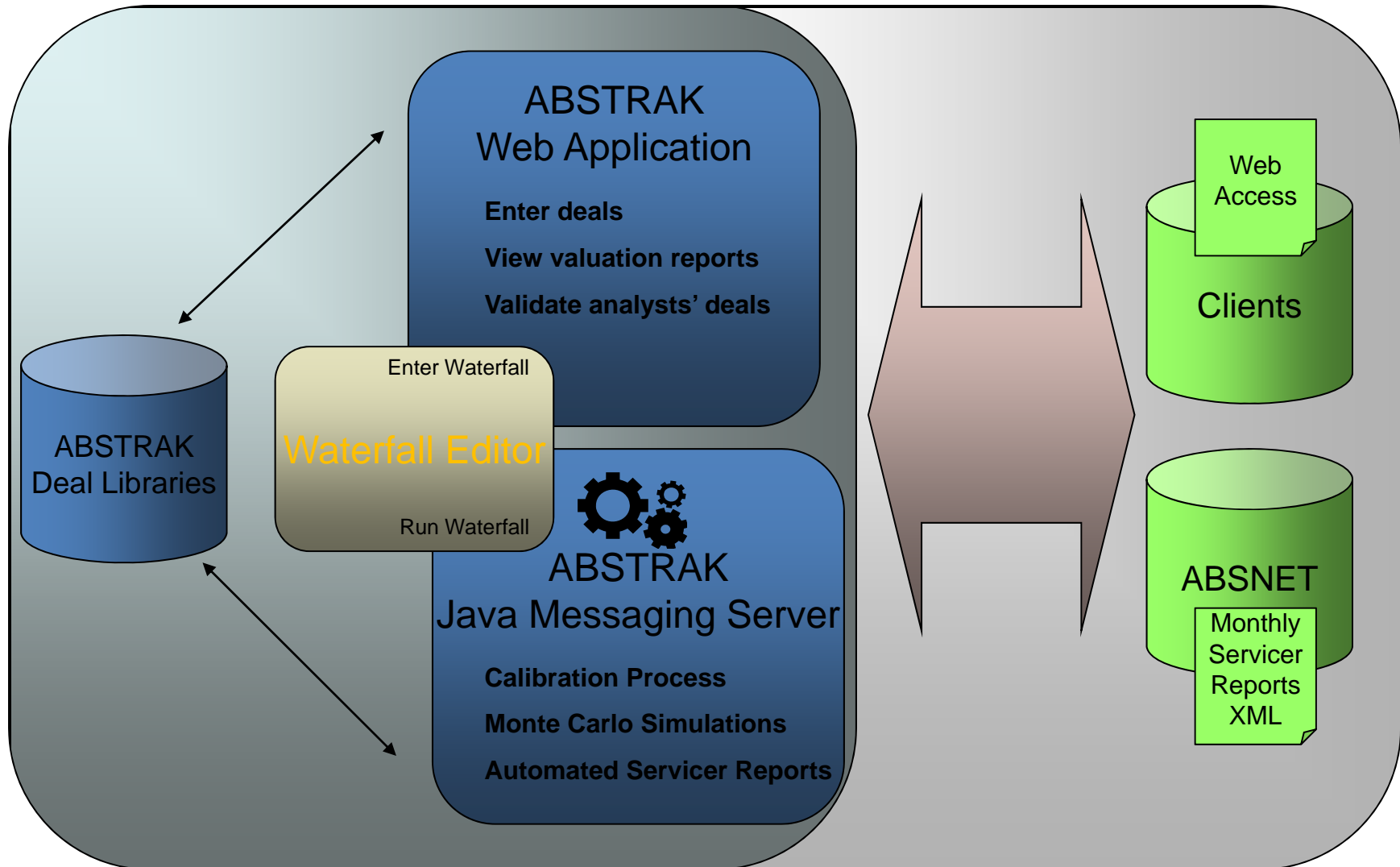


Behind PIT, ABSTRAK[®] Cybernetic Rating Platform

- A unique dynamic monitoring tool for Asset Backed Securities based on R&R's Non Linear Valuation Technique described in "The Analysis of Structured Securities" (<http://www.creditspectrum.com/about/publications/>) and peer-reviewed in *Journal of Structured Finance (JSF)*.
- Automated monthly servicer report integration.
- Perfect liabilities coding through the ultra-flexible Waterfall Editor (WFE) API.
- More than 20 key credit-sensitivity parameters computed for each tranche (Fair Market Value, CDS Spread, Credit Duration, Credit Convexity...) detailed in forthcoming JSF issue-stay tuned....



ABSTRAK: The Framework



Waterfall Modeling: WFE in Two Modes

Viewer

- Freeware, provides a snapshot of the transaction as modeled;
- Facilitates communication about the deal through visual interface;
- Facilitates error-checking through visuals, cash flow outputs;
- *Builder* can be enabled from freeware version.

Builder

- Flexible, fully integrated solution, can replicate any deal feature;
- Has template for modeling asset cash flows (private vectors can be uploaded);
- Debugs and exports cash flows to MS Excel;
- Save, load as XML file;
- Loan by loan structuring can be enabled.

Data Dictionary in WFE

- The Waterfall file format uses standard XML

<?xml?>

- Structure (tranches, allocation schemas, triggers etc...) is completely transparent and detailed in the data dictionary (available on demand)
- Can be easily integrated into user's modeling platform using the Waterfall Editor API

WFE: A Simple Deal – Allocation of Principal

The screenshot displays the Waterfall Editor interface for a deal titled '2tranches.xml'. The main window is titled 'Principal Allocation' and shows a hierarchical tree structure:

- Principal Allocation
 - A Tranche Principal Due
 - A1 Principal Due
 - B Tranche Principal Due
 - B1 Principal Due

On the left, the 'Node Properties' panel is highlighted, showing the 'Pass-Through Method' set to 'Sequential'. Below it, a list of 'Funds Distributed' variables is visible, including 'B1 Total Interest Due Calc', 'B1 Total Principal Due Calc', 'B1 Tranche Balance Calc', 'Cumulative Gross Losses', 'Cumulative Principal Due', 'Current Collections', 'Current Pool Balance', 'Initial Pool Balance', 'Period', 'Pool Average Life', 'Precision (Nb. of digits after decimal)', 'Previous Pool Balance', 'Remaining Available Funds', 'Servicer Fee 1 Due Calc', 'Servicer Fee 1 Paid', 'Servicer Fee 1 Rate', 'Servicer Fee 1 Shortfall', 'Servicing Fee 1 Shortfall Calc', 'Servicing Fee 1 Total Due Calc', 'TotalAmount', 'Total Principal Due', 'Update Previous Pool Balance', 'Weighted Average Coupon', and 'Weighted Average Maturity'.

On the right, the 'Available Variables' panel lists numerous variables, including 'Pool Average Life', 'Precision (Nb. of digits after decimal)', 'Current Pool Balance', 'Weighted Average Coupon', 'Cumulative Principal Due', 'Initial Pool Balance', 'Current Collections', 'Cumulative Gross Losses', 'Weighted Average Maturity', 'Total Principal Due', 'Available Funds', 'Period', 'Previous Pool Balance', 'Servicer Fee 1 Rate', 'Servicer Fee 1 Paid', 'Servicer Fee 1 Shortfall', 'A1 Current Tranche Balance', 'A1 Coupon Rate', 'A1 Interest Paid', 'A1 Interest Shortfall', 'A1 Principal Due', 'A1 Principal Paid', 'A1 Principal Shortfall', 'B1 Current Tranche Balance', 'B1 Coupon Rate', 'B1 Interest Paid', 'B1 Interest Shortfall', 'B1 Principal Due', 'B1 Principal Paid', 'B1 Principal Shortfall', and 'Remaining Available Funds'. An 'Add Selected Variable' button is located at the bottom of this panel.

A blue bracket on the right side of the tree structure points to the text: 'Direct visualization of the allocation mechanism'.

The status bar at the bottom of the window reads: 'The model has been loaded successfully : 2tranches.xml'.

Countrywide CWABS 2005-BC5

Multiple Pool Deal: Distribution Structure for the Common Waterfall

The screenshot displays the ABS*TRAK software interface for a Countrywide Home Loans (CWABS) 2005-BC5 deal. The main window shows a hierarchical tree structure under the 'Distribution' node, detailing the waterfall for interest and principal payments across three tranches (1A, 2A, 3A) and mezzanine/subordinate classes. The tree includes nodes for 'Interest Shortfall Paid', 'Principal Shortfall Paid', and 'Interest Paid' for each tranche, as well as 'Mezzanine Interest Paid', 'Subordinate Interest Paid', and 'Remaining Available Funds'. A 'Recompute' node is also present for each tranche's interest shortfall.

On the left, the 'Tree Editing Tools' panel includes buttons for 'Add Node', 'New', 'Move Up', 'Del. Node', 'Move Down', and 'Delete'. Below this, the 'Node Properties' section shows the 'Pass-Through Method' set to 'Sequential' and a list of 'Funds Distributed' including 'Sum Class M1:M6 Principa...', 'SWAP Default', 'SWAP Fixed Rate', 'SWAP Notional', 'TotalAmount', 'Total Principal Due', and 'Trigger Event 1-4'.

On the right, the 'Available Variables' panel lists various financial metrics such as 'Cumulative Recoveries', 'Actual Balance Delinquencies', 'Actual Prepayments', 'SWAP Notional', 'SWAP Default', 'Total Principal Due', 'Cumulative Prepayments', 'Cumulative Defaults', 'LIBOR', 'Period Interest Collections', 'Initial Pool Balance', 'Actual Balance 60D', 'Period', 'Current Pool Balance', 'Weighted Average Maturity', 'Actual Balance 30D', 'Period Principal Collections', 'Available Funds', 'Pool Average Life', 'Actual Defaults', 'Interest Collections', 'Weighted Average Coupon', 'Precision (Nb. of digits after deci)', and 'PDA Pool Amount'. An 'Add Selected Variable' button is located at the bottom of this panel.

The model has been loaded successfully: 2005-BC5 - pool: C



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Bringing science back to financial engineering

PIT & ABSTRAK: Outputs

ABSTRAK[®] Fair Market Values

Web-based, unified securities valuation system based on Bayesian volatility analysis.

Use it to—

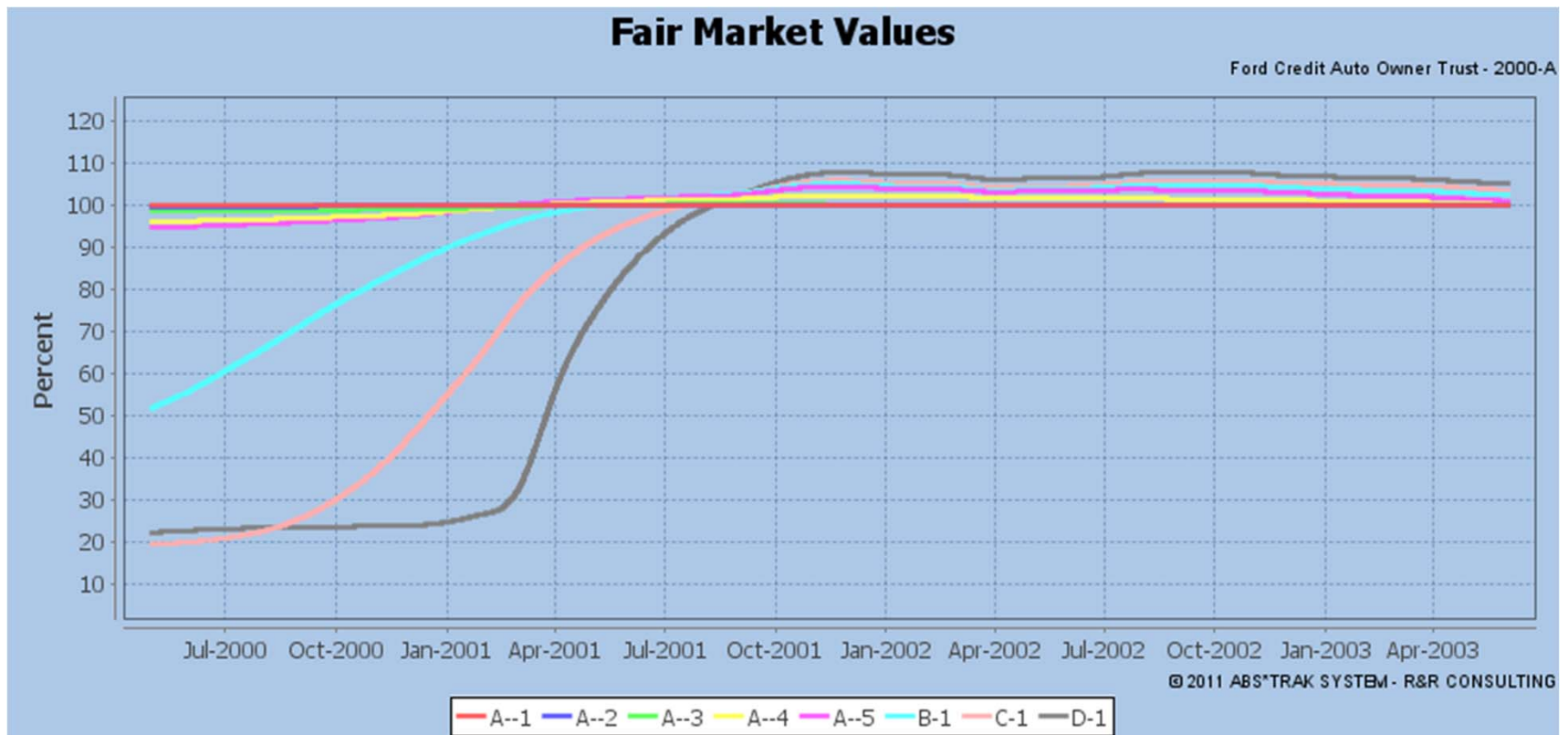
- Assess the forward-looking value on ABS and RMBS securities—or by extension, ABS and RMBS CDOs.
- Compare fair value with market price, free from references to stale NRSRO ratings.
- Predict future security value using ABSTRAK's key credit-sensitivity parameters (“Greeks”).
- Initiate short- or long-term trades with confidence, using the most precise structured valuation tool in the market.



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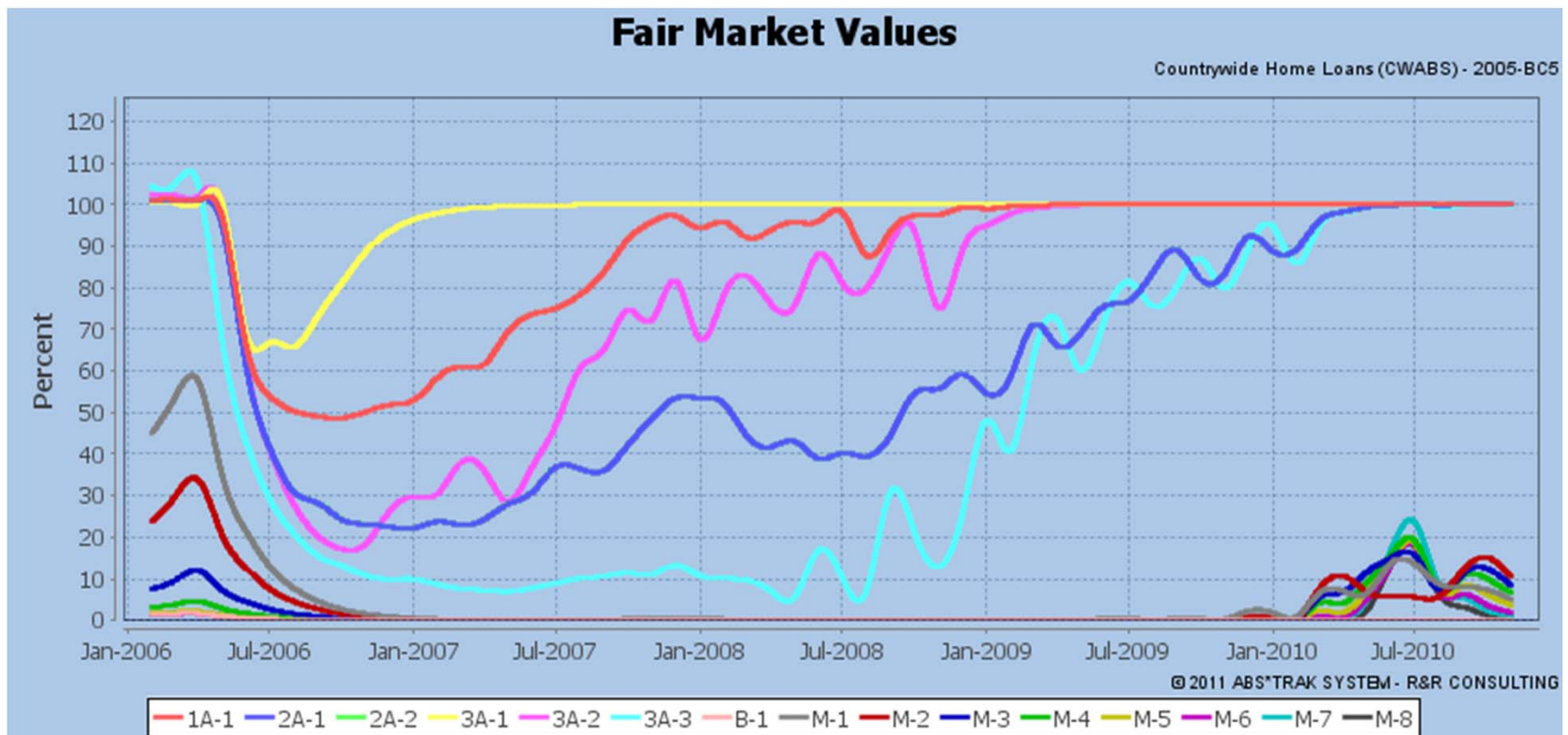
ABSTRAK - Ford Credit Auto Owner Trust 2000-A

Tranche Fair Market Values in ABSTRAK using the WFE API



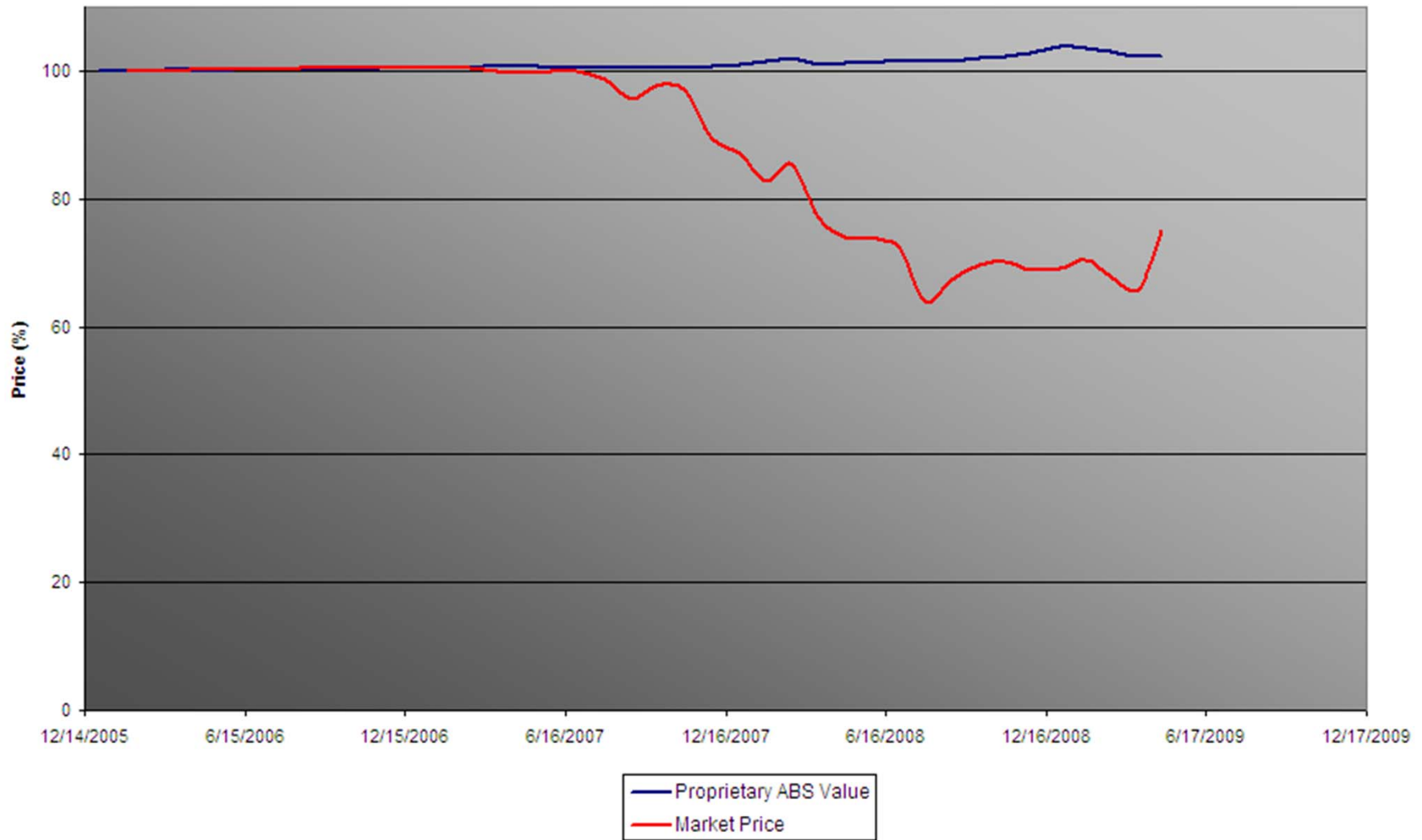
ABSTRAK - Countrywide CWABS 2005-BC5

Tranche Fair Market Values in ABSTRAK using the WFE API



ABSTRAK vs. Market Price – A good deal

Securitized Asset Backed Receivables 2005-HE1.A3C



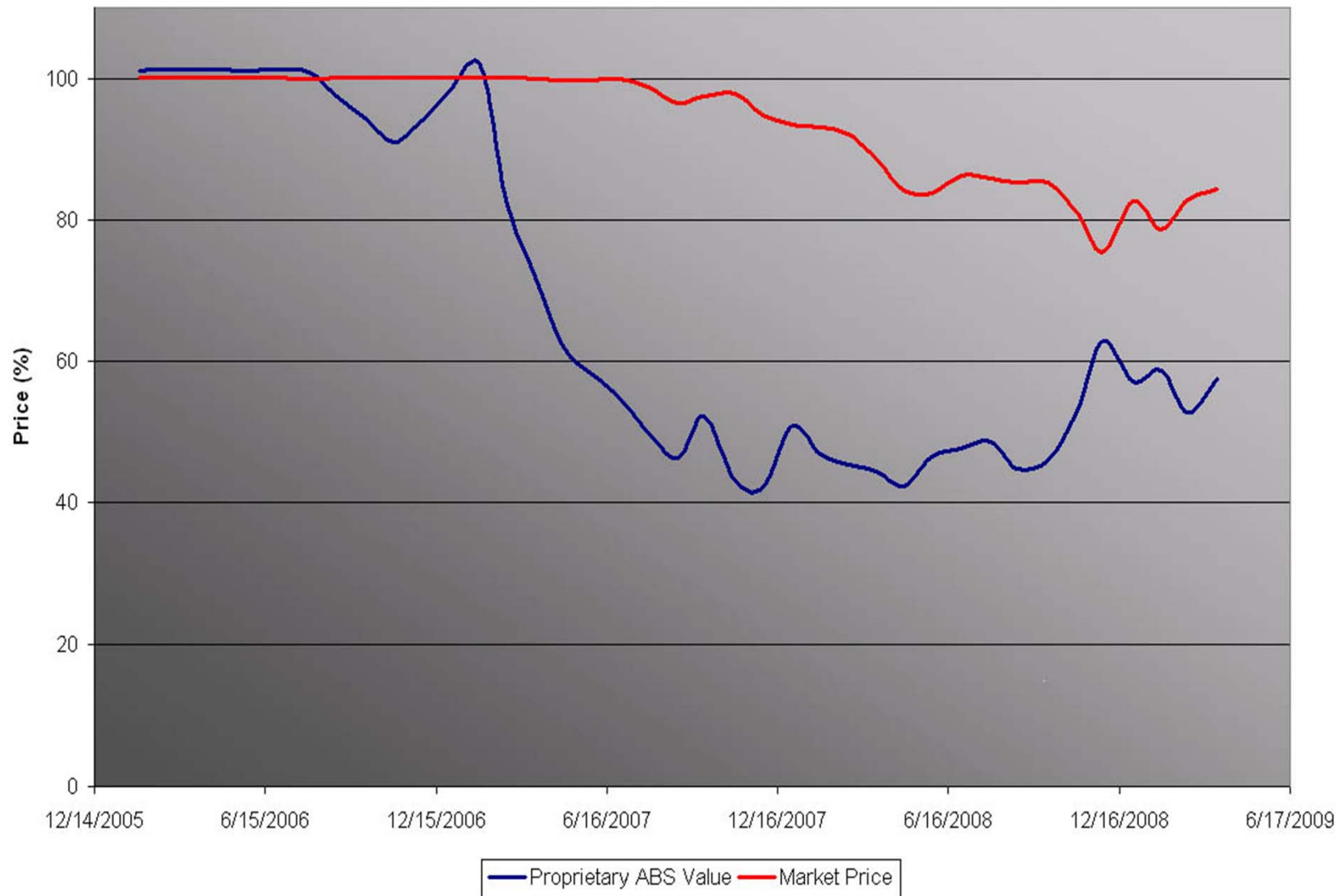
ABSTRAK vs. Market Price – A good deal

Countrywide Home Loans 2005-BC5.A1 (CUSIP: 126670MY1)



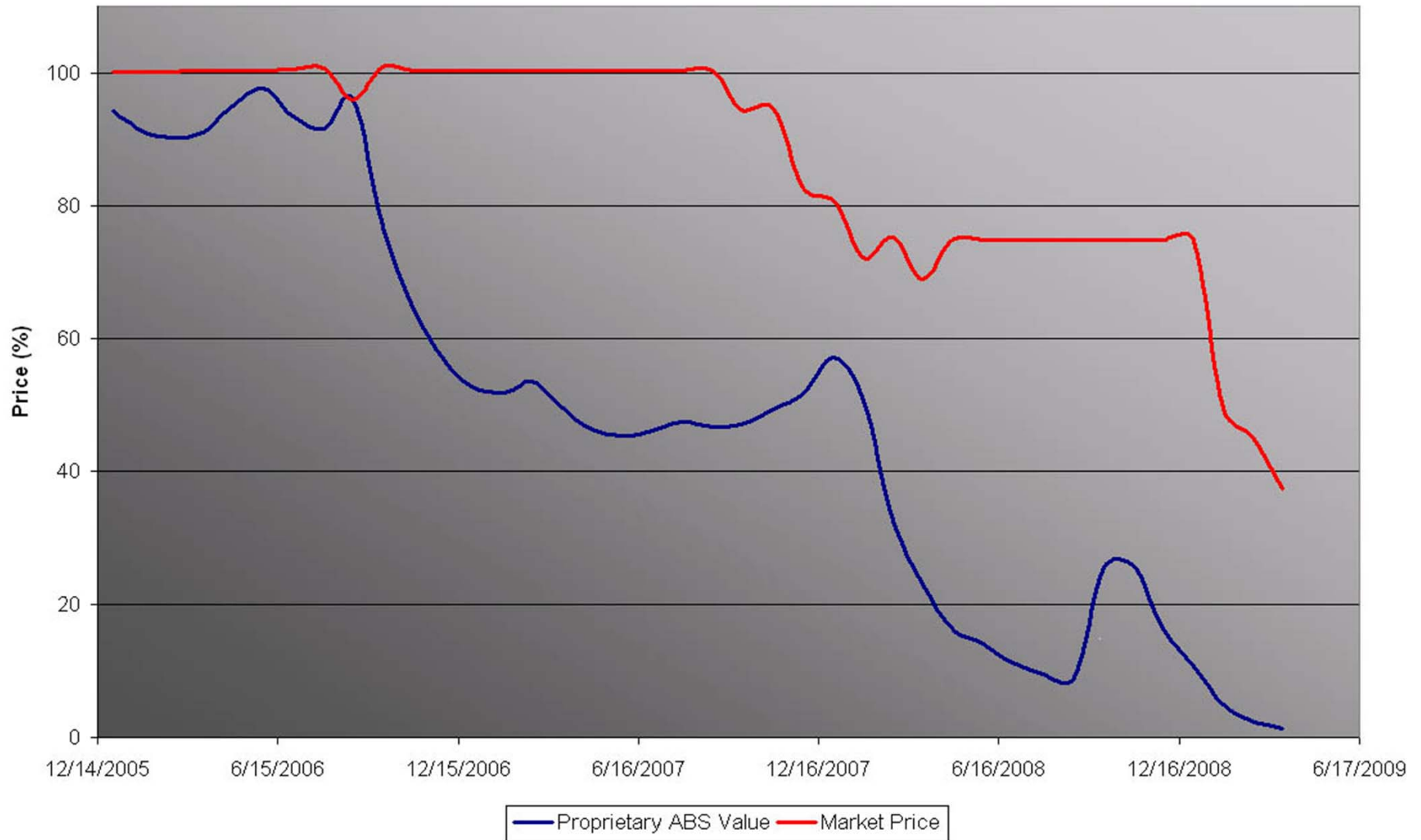
ABSTRAK vs. Market Price – A bad deal

First Franklin Mortgage Loan Trust 2005-FF12.A1 (CUSIP: 32027NXS5)



ABSTRAK vs. Market Price – A bad deal

MASTR ABS Trust 2005-NC2.A4 (CUSIP: 57643LMN3)

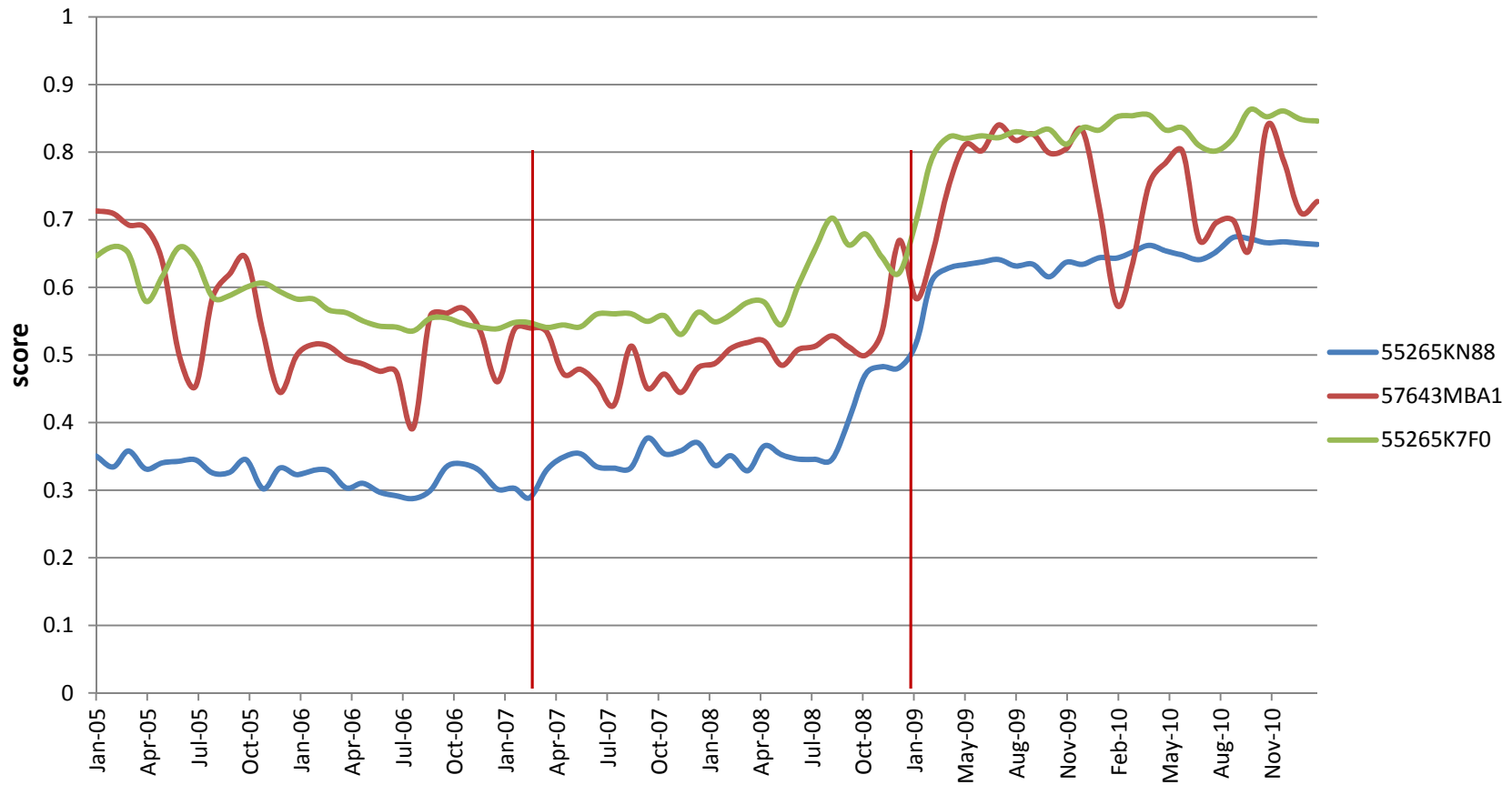


PITs: equally rigorous, price-agnostic.

- From (I): the intrinsic volatility and expected future performance of CUSIPs 55625KN88, 57683MBA1, 55265K7F0, invisible to the naked eye, are laid out clearly in this peer comparison.
- From (II): sell the end-of-year dip in 2007—or if you miss it the first year, the one in 2008.
 - These dips appear to be non-analytic, i.e., manufactured by Treasury by advancing or substitution.
 - *If you miss both opportunities, you still have 1-2 months' advance notice before negative watch-listing of S&P.*
- From (III): at June 2007 buy CUSIP 1266713YO and sell CUSIP 126671P34.
 - Both are nominally AAA/Aaa but the path of separation is established three years before Moody's takes a rating action.
 - *Other trades are possible from the remaining rating arbitrage (126671P34 does not appear to hold value comparable to some other A-rated ABS) but require further searches into peer collateral.*

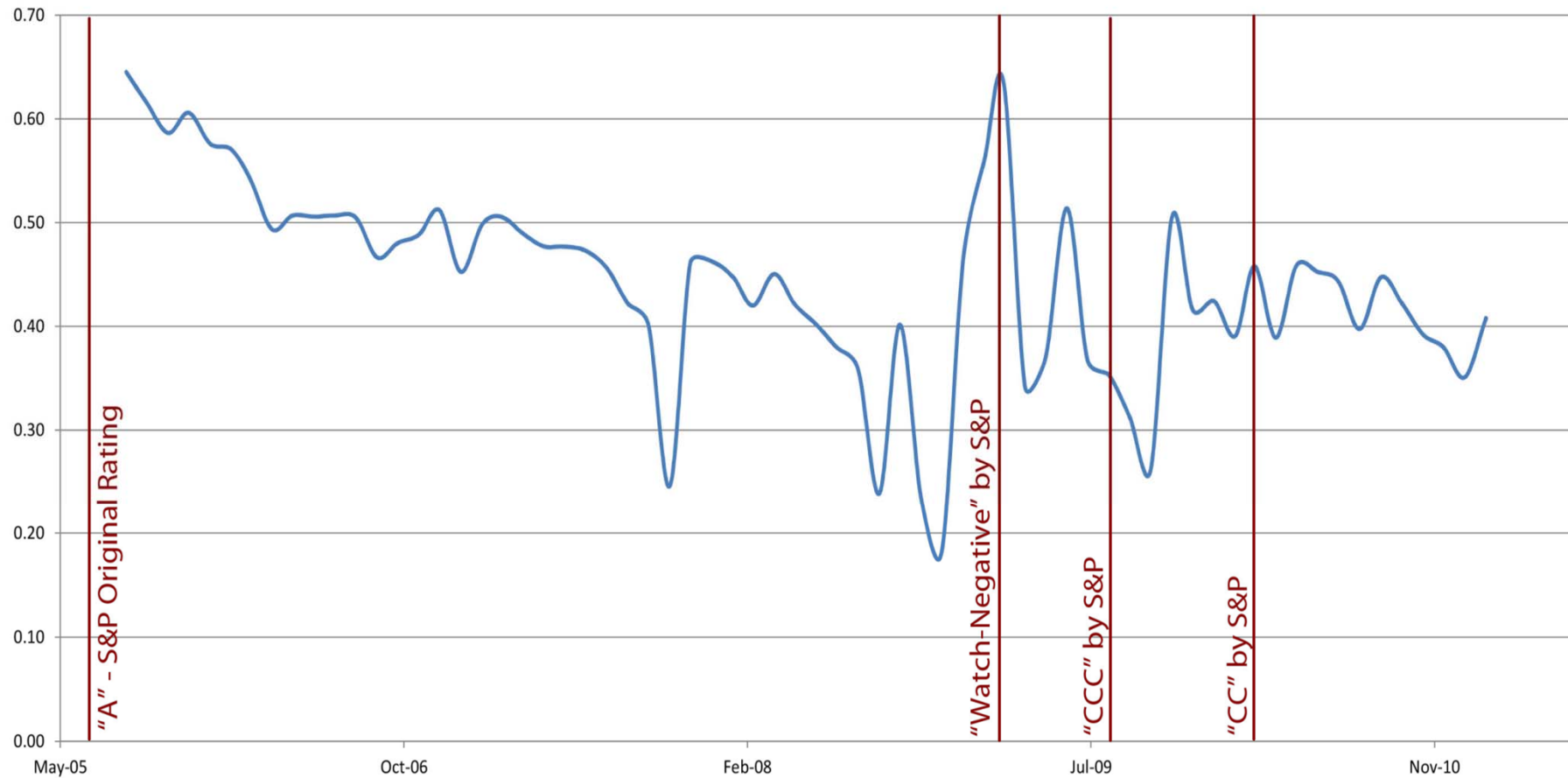


Crystal ball into the future with PIT (I)

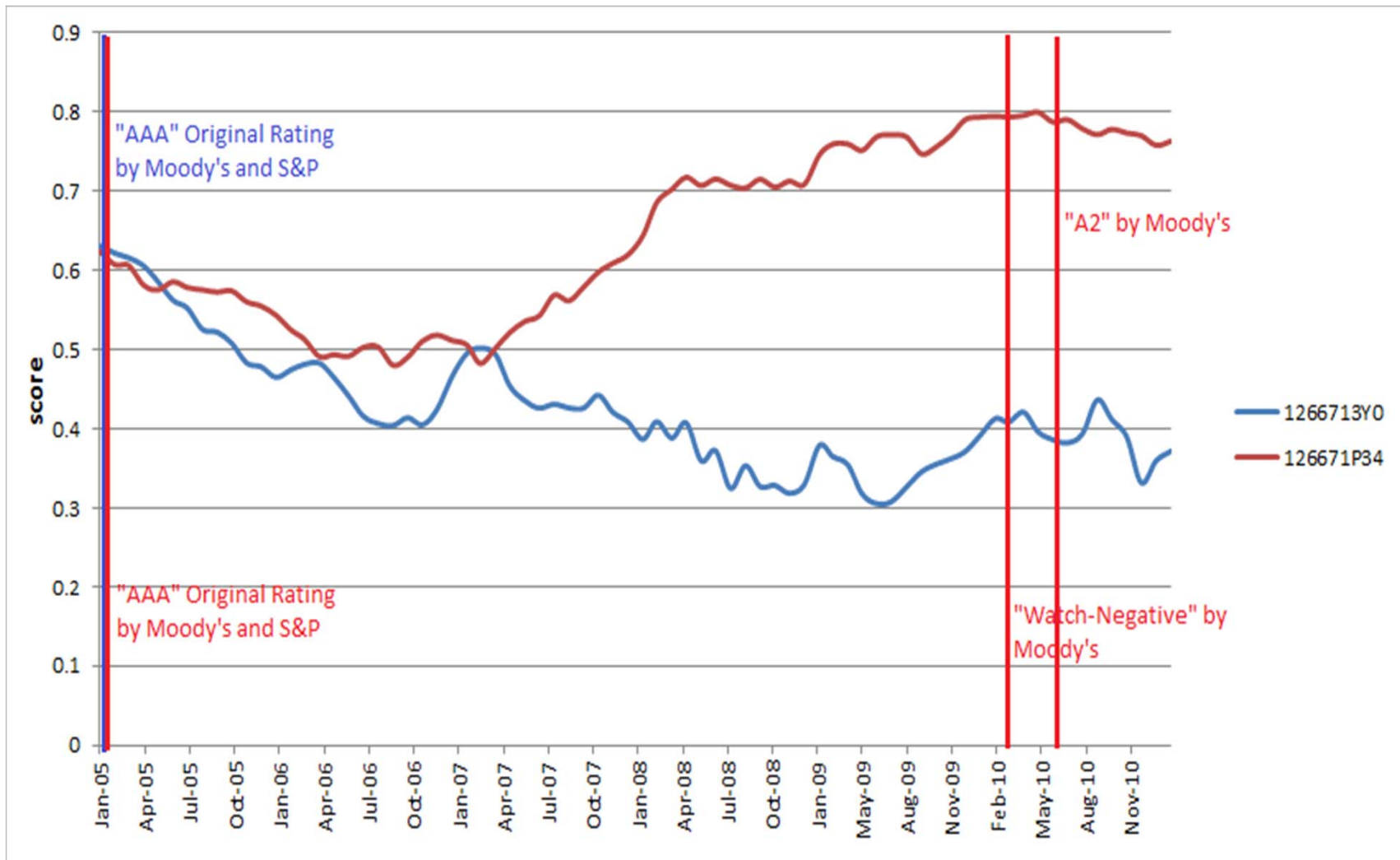


PIT vs. NRSRO-Rating Changes (II)

12667GHS5



PIT vs. NRSRO-Rating Changes (III)



More PIT Examples

- A portfolio risk manager or regulatory examiner makes a “sanity check” on the firm’s internal scores on ABS inventory, e.g.:
 - ID#1 and ID#33 have internal scores of 4 and 3 (1 is “prime”)
 - The PIT ratings of 32,912 and 22,623, respectively
 - *The result is reasonable because it ranks risk in the same direction.*
- An asset manager swaps out a security in portfolio that has a PIT rating of 14,333, and swaps in a security of the same collateral type and rating, but with a longer average life (+3 months).
 - The PIT rating of the new security is 19,023 with an improving performance trend
 - The asset manager books a gain of 20% and raises the portfolio valuation.
 - *In 3-6 months, the new PIT rating will improve. The manager will swap it out and book a portfolio gain.*
- Before investing in discounted ABS, a fund manager looks up the average PIT rating among several well-known ABS investors and discovers that portfolio size and household brand do not always equal value or safety.

Top Home Equity Movers (6-7/2011)

<i>Downgrades</i>						
	CUSIP	Class	Origination	DEAL NAME	UNDERWRITER	ISSUER
1	39678WAA6	A	March-05	Greenwich Capital Structured Products 2005-1	RBS	Greenwich Structured ARM Products
2	12669C2Y5	B2	August-02	Countrywide MBS 2002-17 Alt-11	CS First Boston	Countrywide Home Loans (CWMBS)
3	86358RA49	B3	March-02	Structured Asset Securities Corp. 2002-6	Lehman Brothers	Structured Asset Securities Corp.

<i>Upgrades</i>						
	CUSIP	Class	Origination	DEAL NAME	UNDERWRITER	ISSUER
1	17307GLR7	M-3	October-04	C-Bass Mortgage Loan Asset-Backed Certs 2004-CB7	Citigroup	C-BASS ABS, LLC
2	17307GLQ9	M-2	October-04	C-Bass Mortgage Loan Asset-Backed Certs 2004-CB7	Citigroup	C-BASS ABS, LLC
3	319339EC7	B-1	August-93	CS First Boston Mortgage Securities Corp. 1993-6	CS First Boston	CSFB Mortgage Securities Corp.