

Assessing Pay-ups and Risk for Specified Pools?

PoolKinetics (PoolK) is powered by AD&Co's OAS Subroutine along with the LoanDynamics Model (LDM) through a modern delivery platform. It can analyze hundreds or even thousands of specified pools featuring various degrees of prepayment protection and priced at various pay-up levels. LDM quantifies those prepayment deterrents (low loan size, high LTV, low FICO, slow geography, newness) and PoolK derives valuation pay-ups over TBAs and numerous risk measures.

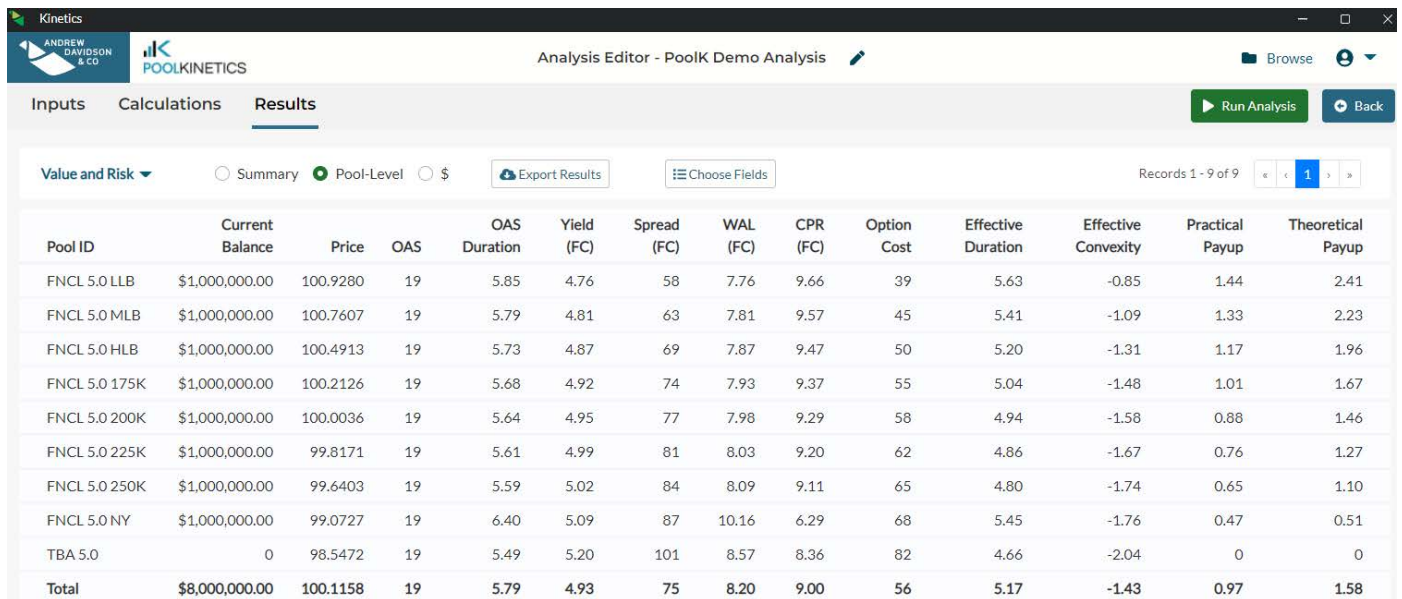
PoolKinetics (PoolK) is our new modular offering on the Kinetics platform.

Analytical Process

- A user creates a flat file for TBAs and another for specified pools (by coupon and issuer).
- PoolK will match pools with same-coupon TBAs and analyze them together to derive...
 - **Theoretical pay-up:** Same-OAS difference between the pool's price and TBA price.
 - **Practical (lower) pay-up:** Same-OAS difference between the pool's price and TBA price assuming the pool is held for a limited holding period and sold back to the market at a TBA price (i.e. with a loss of potential pay-up).

Greeks, Risk-Neutrality, Portfolio Aggregation, Cash Flow Files and Charts

- As with other OAS-based analyses, PoolK computes and reports multiple Greeks including effective duration and convexity.
- LDM can be used in its risk-neutral form thereby accounting for prepay-model risk.
- Automatic portfolio aggregation of all analytical measures.
- Projected cash flow outputs are available, with flexible charts and a flat-file storage.



Analysis Editor - PoolK Demo Analysis

Inputs Calculations Results

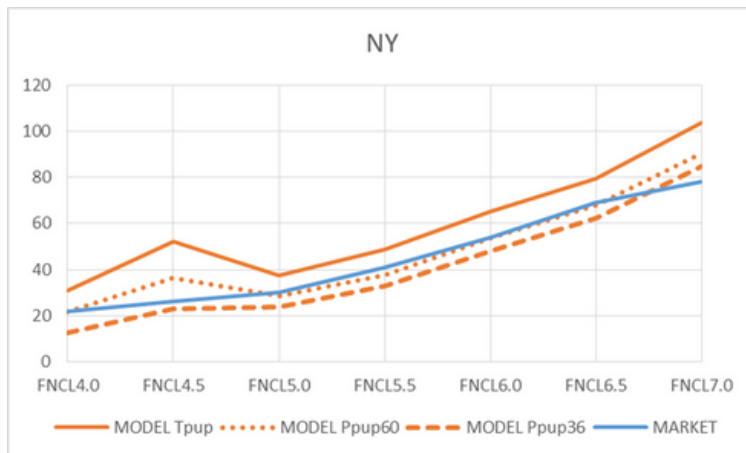
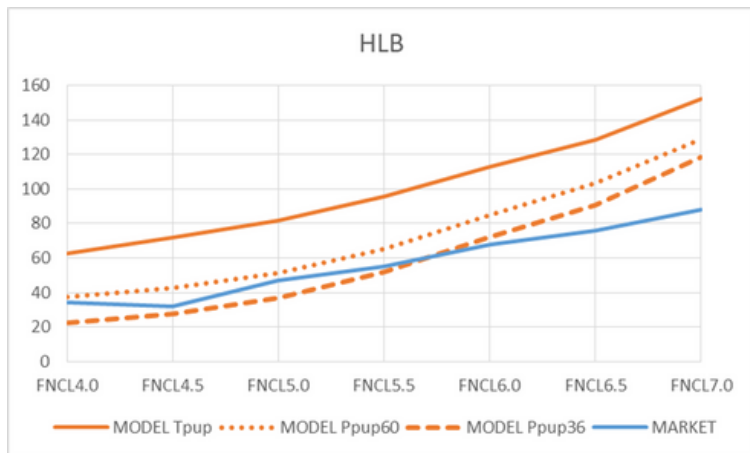
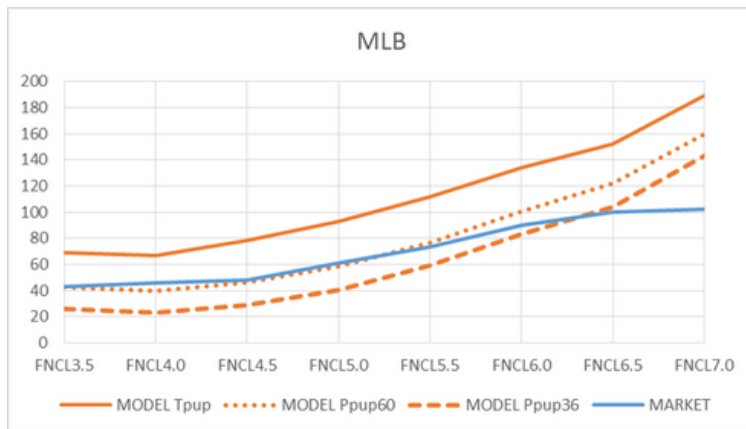
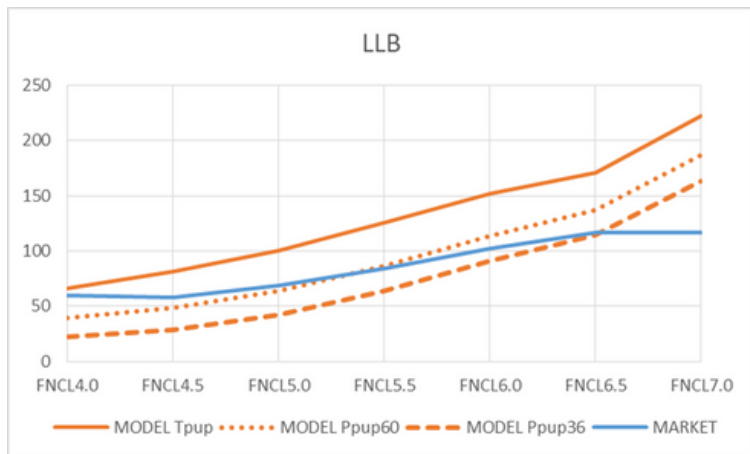
Value and Risk Summary Pool-Level \$ Export Results Choose Fields Records 1 - 9 of 9

Pool ID	Current Balance	Price	OAS	OAS Duration	Yield (FC)	Spread (FC)	WAL (FC)	CPR (FC)	Option Cost	Effective Duration	Effective Convexity	Practical Payup	Theoretical Payup
FNCL 5.0 LLB	\$1,000,000.00	100.9280	19	5.85	4.76	58	7.76	9.66	39	5.63	-0.85	1.44	2.41
FNCL 5.0 MLB	\$1,000,000.00	100.7607	19	5.79	4.81	63	7.81	9.57	45	5.41	-1.09	1.33	2.23
FNCL 5.0 HLB	\$1,000,000.00	100.4913	19	5.73	4.87	69	7.87	9.47	50	5.20	-1.31	1.17	1.96
FNCL 5.0 175K	\$1,000,000.00	100.2126	19	5.68	4.92	74	7.93	9.37	55	5.04	-1.48	1.01	1.67
FNCL 5.0 200K	\$1,000,000.00	100.0036	19	5.64	4.95	77	7.98	9.29	58	4.94	-1.58	0.88	1.46
FNCL 5.0 225K	\$1,000,000.00	99.8171	19	5.61	4.99	81	8.03	9.20	62	4.86	-1.67	0.76	1.27
FNCL 5.0 250K	\$1,000,000.00	99.6403	19	5.59	5.02	84	8.09	9.11	65	4.80	-1.74	0.65	1.10
FNCL 5.0 NY	\$1,000,000.00	99.0727	19	6.40	5.09	87	10.16	6.29	68	5.45	-1.76	0.47	0.51
TBA 5.0	0	98.5472	19	5.49	5.20	101	8.57	8.36	82	4.66	-2.04	0	0
Total	\$8,000,000.00	100.1158	19	5.79	4.93	75	8.20	9.00	56	5.17	-1.43	0.97	1.58

Practical Pay-up Method Approximates Market Levels

- Theoretical pay-ups are good-to-know results typically exceeding market levels.
- Practical pay-ups computed with a 36 to 60 month holding-period assumption replicate market levels reasonably well.
- As one would expect, prepayment protection features lead to longer effective durations and lesser negative convexity in comparison to the coupon-matching TBA.

Pay-up (1/32nds) examples from the use of PoolK v1.11 powered by OAS 9.2, LDM 3.1 (as of 8/2/2024)



Installation, Delivery and Automation

- Installed on client's site
- Accessed via Desktop or Web browser
- Operations can be further automated with REST API or .NET



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