

LOANSTREET®

WHITEPAPER



Just Add Seasoning

Evaluating and Comparing Loans as They Age

August 2022

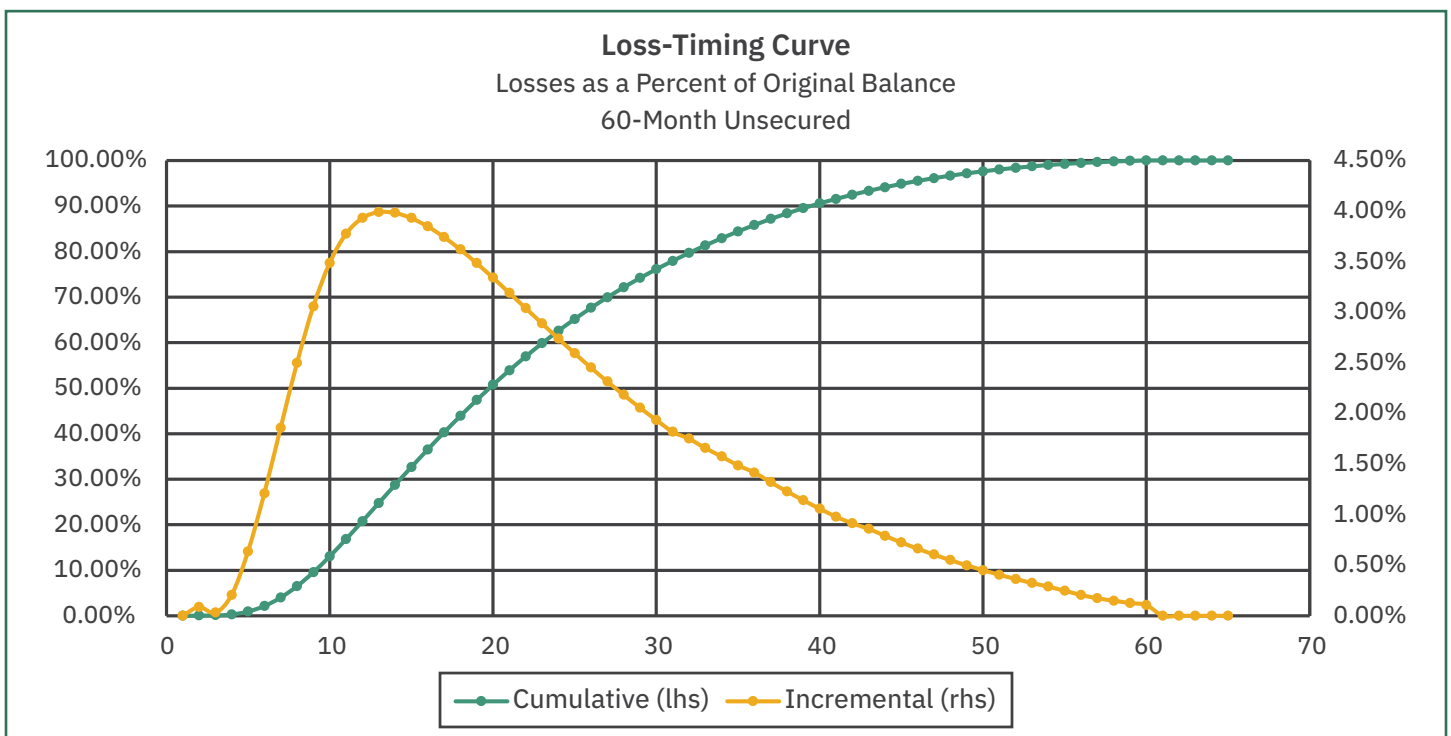
Introduction

While many loan sales are made up of new or nearly-new, loans, some sales consist of more seasoned loans – sometimes several years old. Because the likelihood of certain key events impacting returns changes as loans age (most notably prepayments and defaults), evaluating pools with various levels of seasoning requires accounting for the effects of this aging or seasoning. In fact, the effects of seasoning on expected prepayments and defaults rates can be material.

How should a loan buyer think about seasoned loan pools to reveal interesting purchase opportunities?

The Loss-Timing Curve

Such an analysis should start with the likelihood of default of such loans over time, which can be shown graphically as a loss-timing curve. In general, both prepay and default rates rise during the early months of a loan's life, often reaching a peak or plateau. While different loan products have different loss-timing curves, the basic curves for most loans – showing the losses as a percentage of the original balance as time passes, both cumulatively and incrementally – looks something like this:



Note that this is a “normalized” curve in that cumulative losses total to 100% and would need to be multiplied by the loss expectations for a particular pool to arrive at the level of actual losses each month. While not shown, prepayment curves will often have similar shapes, though for some assets, such as first-lien mortgages, interest rate effects will often overwhelm the seasoning effect.

For prepayments, this behavior is relatively straightforward to understand: it is unlikely for someone who just received a loan to entertain the time, hassle and expense of applying for a new loan to pay off an existing one. (Of course, there are exceptions, such as individuals engaging in “credit cure” behaviors. Moreover, there are many new fintechs seeking to make the refinancing process simple, easy and fast thereby, reducing the friction to refinance.) Towards the end of the life of the loan, prepayments will often rise as the borrower looks to “clean up” the loan by simply paying it off in full.

For defaults, it is generally less likely that a newly-underwritten loan will fail as financials are verified along with other underwriting due diligence procedures. On the other hand, as a loan nears maturity, defaults also decline because the remaining payments are unlikely to burden the borrower. However, in between those stages, there are a myriad of reasons why borrowers may find that they are no longer willing or able to repay the loan.

Incorporating the Projected Balance Into the Equation

When using these loss curves to analyze the purchase of seasoned loans, one needs to think in terms of annual losses rather than losses as a percentage of original balance. In order to do this, we need to consider what has been happening to the pool balance while the losses are evolving – specifically, as the pool balance has been declining through amortization, paydowns and losses.

By taking the remaining cumulative losses at any given point in time and dividing it by the pool balance at that same point, we arrive at an estimate for losses as a percentage of the then-outstanding pool balance. If this estimate is then divided by the weighted-average life (or better yet, the modified duration), one can now calculate an estimate for the expected annual loss rate for each point in time.

For instance, using the example from above and assuming Conditional Prepayment Rate (CPR) of 30% and cumulative losses for a new pool of 9.7%, the following curve represents the projected losses as a percentage of the remaining balance. Note that this assumes that past due loans are excluded from the pool at each point of seasoning, (a standard LoanStreet practice), which is incorporated in the analysis by excluding any losses expected to occur in the six months following the purchase.



If a loan buyer purchases this loan pool on or after point B, AFTER the majority of the losses have taken place, the buyer will experience lower annualized losses than at any earlier time for this pool, including when the pool is new.

However, if the loan buyer purchases this loan pool at point A, AFTER the initial period when defaults are less likely, though after some pool paydowns have occurred, but BEFORE the steep part of the curve begins, the loan buyer should expect higher annual losses relative to having purchased at origination. The reason for these higher annualized losses is that this “Point A Buyer” is still expecting the majority of the losses for the pool, even after cleaning out past due loans, but has experienced some amount of amortization and prepayments and will have purchased a lower outstanding balance.

Seasoned Loan Pool Analysis In Practice

Properly analyzing a seasoned pool becomes a fairly straightforward process once some basic groundwork has been laid out.

The goal is to arrive at an expected annual loss rate, which you can then compare to other expected annual loss rates. The first step is to create loss-timing curves for any assets being evaluated. This can be

performed in advance as it is unlikely to materially change over the near-term and should represent the percentage of cumulative losses that will occur up to any point of seasoning, ending at 100%. There are numerous sources for this data – a buyer’s own historic performance, loan originators’ due diligence loss reports and rating agency data, to name a few. In cases where the pool is “cleaned out” of past-due loans, an adjustment needs to be made to reflect this fact. Excluding losses that occur over the next several months would capture this effect.

Once these curves are created, they can be referenced repeatedly in future analyses. When details of a potential pool are made available, buyers can look up on the loss-timing curve the percentage of the original losses still remaining based on the pool’s seasoning.

To arrive at the expected annual loss rate, the next steps are as follows:

- 1** Estimate the “pool factor,” (i.e., how much of the original loan principal remains), based on a prepayment assumption layered on top of the expected amortization of the pool. A spreadsheet using the pool’s weighted-average characteristics would suffice for this purpose.
- 2** Divide the remaining loss figure (determined from the loss-timing curve) by the “pool factor” to determine the “loss factor.”
- 3** Estimate the expected cumulative losses for the pool being analyzed, as if the loans were new (and not seasoned).
- 4** Multiply the expected cumulative losses by the “loss factor” to determine the losses as a percent of the current pool.
- 5** Divide the losses as a percent of the current pool by the weighted-average life or modified duration of the pool, which can either be independently calculated or simply taken off the offering sheet if provided (LoanStreet offering sheets have both the weighted-average life and modified duration), to determine the “annual loss rate.”
- 6** Finally, the “annual loss rate” is used to estimate the loss-adjusted yield by subtracting it from the non-loss-adjusted yield.

As examples, the following table shows the projected annualized loss rate for a pool of 60-month unsecured loans (the example used for the loss-timing curves above).

Unsecured Loan Pool				
Original Term (months)		60		
Weighted Average Interest Rate		11%		
Original Cumulative Loss Expectation		9.70%		
		New	8-Mos Seasoned	35-Mos Seasoned
a	Remaining Cumulative Loss Factor	100.00%	71.25%	8.45%
b	Pool Factor	100.00%	70.65%	17.10%
c	Loss Factor (a/b)	100.00%	100.86%	49.41%
e	Remaining Cumulative Loss Expectation (c* original loss expectation)	9.70%	9.78%	4.79%
f	Weighted-average Life	1.637	1.501	0.895
g	Annualized Losses (e/f)	5.93%	6.52%	5.36%

While this may seem like a lot of work, much of it can be completed in advance and, once created, can be used repeatedly on similar assets. Everything up to and including calculating the loss factors can be set up in a spreadsheet and referenced as new pools are evaluated. You can then reference the appropriate loss factor, estimate the new pool's cumulative loss projection, multiply the two, and then divide by the weighted-average life or modified duration. The result is the expected annual loss rate!

Now you can compare seasoned pools to other seasoned pools, as well as to new pools.

Conclusion

The key to evaluating seasoned loans to add to one's balance sheet is recognizing the pattern that the annual loss expectations for pools follow. These annual loss expectations (i) rise slightly for the first few months of a pool's life, (ii) then level off, and then finally (iii) decline as a pool becomes more and more seasoned. The shape of these expectations is the result of the interaction between the loss-timing curve and the pool factor. As a rule of thumb, significantly seasoned pools can expect materially lower annualized loss rates than newer pools, and when properly evaluated, can represent compelling purchasing opportunities.

Author: Eric Marcus, Managing Director & Head of Capital Markets, LoanStreet

About LoanStreet

LoanStreet is the primary vehicle for financial institutions to share, report, and analyze their loan trading activities through an integrated, online platform. Our specialized software makes every step of the process as smooth as possible. From identifying your first pool of loans on the marketplace to receiving your monthly consolidated reports, creating a seamless, scalable loan trading workflow has never been easier.

Get in touch to learn more about our platform. With over 1,300 financial institutions registered, we are ready to help you build a more efficient lending model.

Contact:

sales@loan-street.com

www.loan-street.com

Disclaimer:

LoanStreet Inc. is not a law firm and cannot offer legal advice of any kind. The information contained in this document is general in nature and provided as reference material only. This information is neither specific legal advice about the application of the law to a particular fact scenario, nor does it replace (or purport to replace) any requirement to obtain specific legal advice. If you require specific legal advice about your organization's position in relation to anything covered in this document, that advice should always be obtained from a qualified legal practitioner. LoanStreet does not undertake to advise recipients of any changes or developments in law that may affect the subject matter hereof.