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Understanding HELOCs: Facts versus Fear

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Session overview

- There is a great deal of concern in the consumer lending industry regarding a potential second housing “bubble” resulting from the many home equity lines of credit (HELOCs) that will be exiting their draw period over the next few years

- Let’s start with the risk side of the issue
  - We first define the problem and parameterize the extent of the market’s exposure
  - Next we discuss an analysis of how consumers with HELOCs perform, both on the HELOCs themselves and on other products. The risks are present, but they are manageable

- We end with insights into marketing strategies that can help you drive share capture, improve member loyalty and capitalize on equity growth in the U.S. housing market

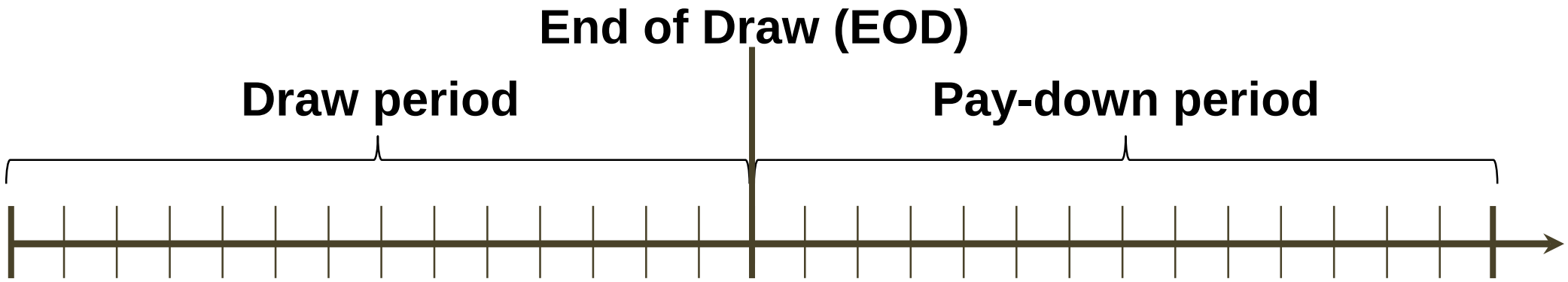
The conversation is driven by risk concerns.
Let’s start there.

What precisely is it about “bubbles” in the lending market that we fear?

1. There exists a risk that we have not even identified
2. We do not understand the **mechanics** of how the risk might manifest itself
3. We cannot determine the **timing** of the risk
4. We do not know **who** poses the risk, because we cannot **measure** the risk. Thus we cannot deploy strategies to combat/mitigate/avoid the risk

Let’s try to tackle these. If we can answer them all, we may sleep easier at night

Let’s begin by identifying the risk. To do so, we need to review the general structure of a HELOC



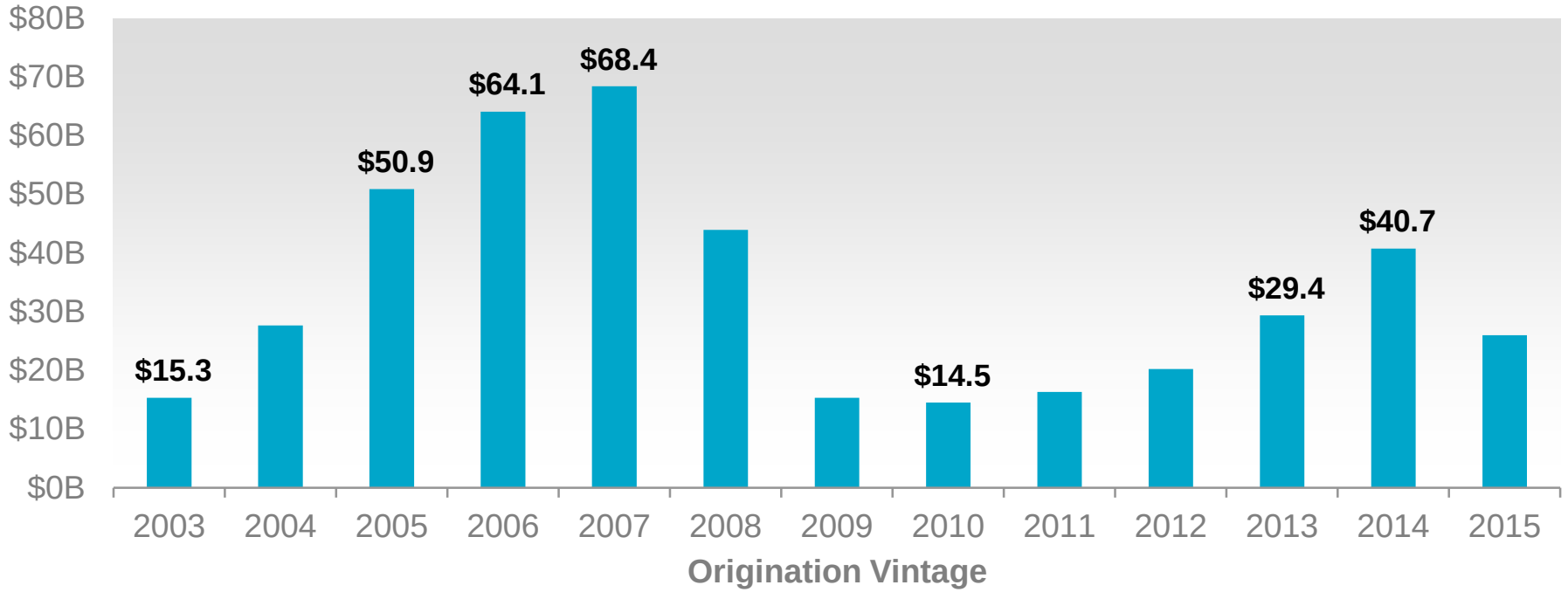
- Usually 5, 7 or 10 years
- Payments interest-only
- APR usually based on an index (e.g., Prime Rate)

- Usually 10-15 years
- Payments fully amortized – no draw capability

The HELOC market is large: lots of HELOCs were extended—and utilized—when home equity was rising

Total HELOC balances as of 06/2015–by vintage

Source: TransUnion consumer credit database



As of June 2015, 14.5 million U.S. consumers held $451 billion in HELOC debt

While not as large as the other primary product classes, HELOC balances are still material

Loan type	Total Balances end of Q2 2015
Mortgages	**$8,162 B**
Student Loans	**$1,115 B**
Auto	**$967 B**
Card	**$727 B**
HELOC	**$451 B**
Consumer Loans	**$252 B**

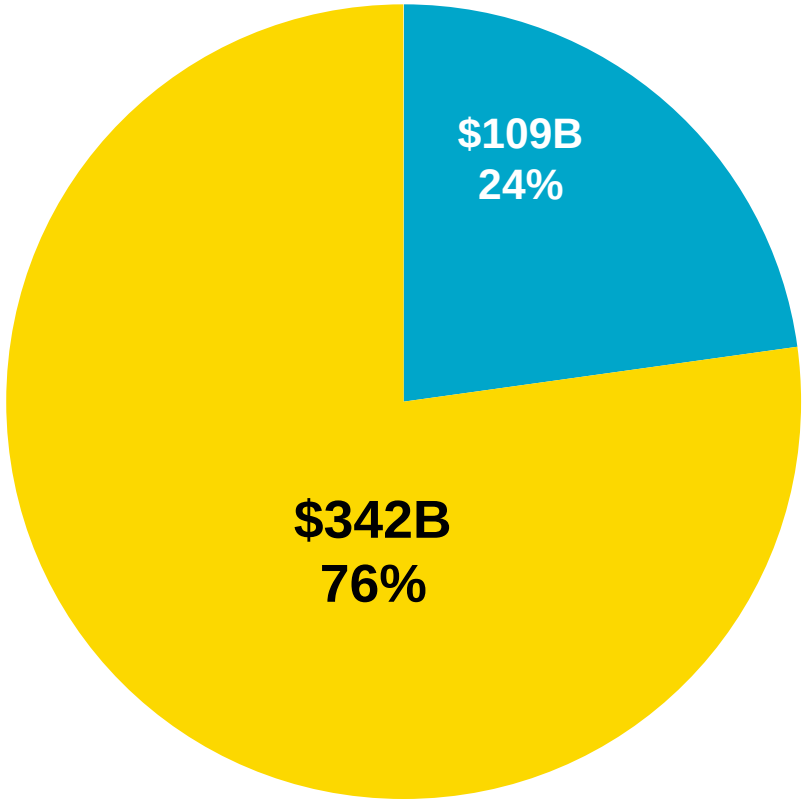
Source: TransUnion consumer credit database

However, at the consumer level HELOCs represent a big component of the total wallet for those who have them

Loan Size	% of Balances not yet at EOD at 06/2015
> $100,000	**58%**
$80,000 - $99,999	**10%**
$60,000 - $79,999	**9%**
$40,000 - $59,999	**11%**
$20,000 - $39,999	**9%**
< $20,000	**3%**

Source: TransUnion consumer credit database

Most of those balances have NOT reached EOD as of 06/30/2015

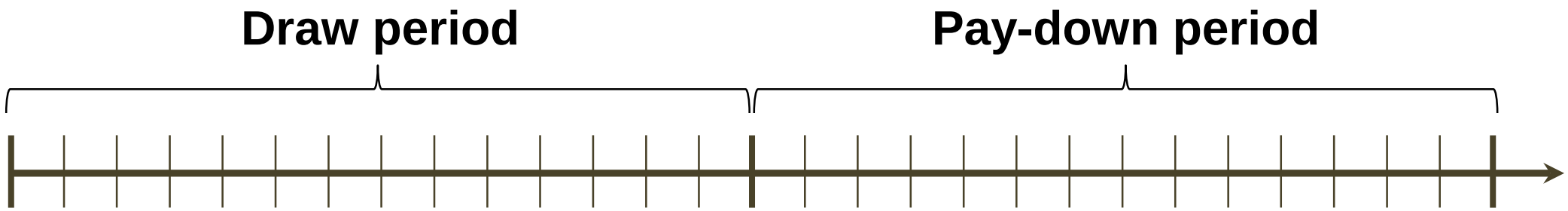


Source: TransUnion consumer credit database

That $378B in HELOCS will be hitting EOD over the next few years. Why is this a concern? Consider this example

Balance = $80K
APR = 7.0%

15-Year Amortization



Payment = $467
(interest only)

Payment = $719
Fully amortized!

Payment shock = $252

Note that, during the draw period, you could actually draw from the HELOC to make your HELOC payments!

Mortgage lenders are concerned that the payment shock may cause borrowers to default on their HELOCs

Product					
Payment	$	$	$	$	$ $ $ $

Other lenders are concerned that the payment shock may cause borrowers to default on their other loan products to pay their HELOCs

And what about the *timing* of this potential payment shock risk?

Draw Period	% of Accounts
Less than 5 years	0.4%
5 years	22.4%
6 years	0.3%
7 years	18.5%
8 years	0.3%
9 years	0.1%
10 years	55.3%
11 – 15 years	2.2%
16+ years	0.3%
Total	100.0%

Of Lines that already hit EOD…

- Over 55% of accounts had a 10-year draw period
- 96% had a draw period of 5, 7 or 10 years

We also noticed that

- Lines with certain draw periods tended to be originated at certain times
- Lenders tended to favor certain draw periods for lines of specific size

Using these insights, we were able to successfully construct an EOD date model

1

Sample

Analyzed 130,000 HELOCs we know reached End-of-Draw between 2010-2014

2

Methodology

Developed a rules-based model to estimate EOD at the individial HELOC level.
Then we calculated the difference between predicted and actual Draw Period

3

Results

Our approach correctly identified the draw period for **81%** of HELOCs

Error in Predicted EOD	% of Sample
No Difference	81%
< 2 years	1%
2-3 years	7%
3+ years	11%

We seem to have answered the first three concerns—that's good progress!

1

There exists a risk that we have not even identified

Many HELOCS are entering fully amortized repayment over the next few years ✓

2

We do not understand the mechanics of how the risk might manifest itself

Payment shock may make borrowers miss payments on the HELOC or on other debt obligations ✓

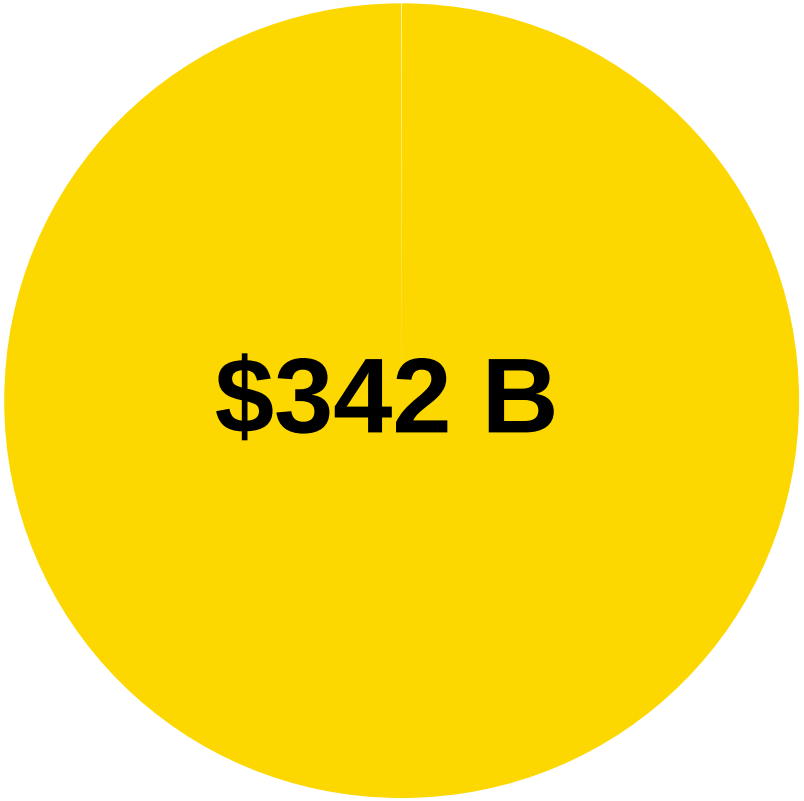
3

We cannot determine the **timing** of the risk

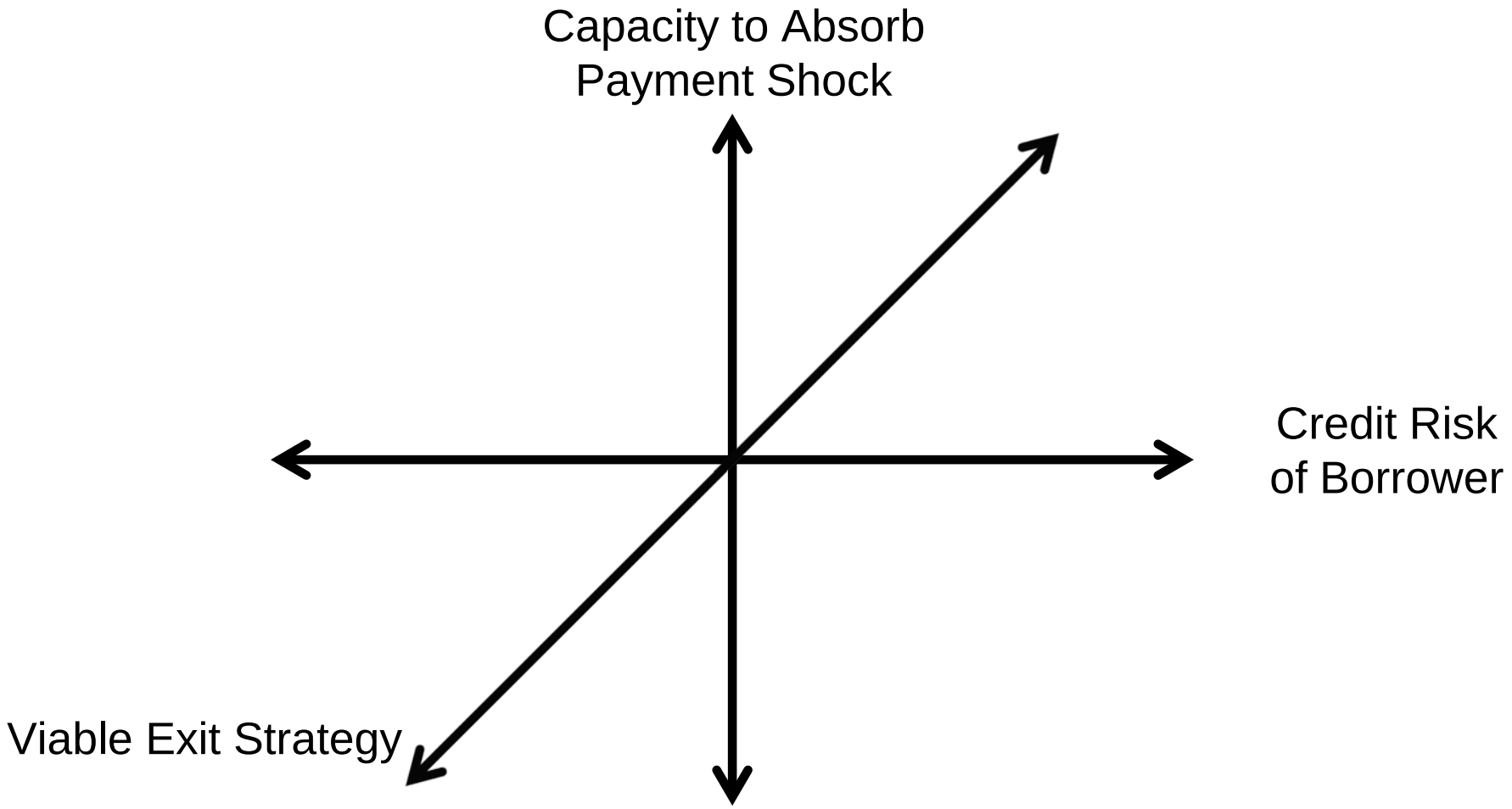
We can accurately estimate the EOD for the vast majority of HELOCs ✓

What about the fourth concern—do we have to worry about ***all*** the HELOCS that have not yet hit EOD?

As of June 2015, $342B in HELOCs had not yet hit EOD



Let’s try to measure the actual risk of these HELOCS in a logical framework



First, let's look at the credit risk distribution of the borrowers

VantageScore® 3.0 range	% of scored population	30+ DPD rate
≥ 800	15.3%	0.0%
760 - 799	28.6%	0.0%
720 - 759	21.0%	0.0%
680 - 719	14.4%	0.3%
640 - 679	11.3%	0.8%
600 - 639	5.5%	4.2%
< 600	3.9%	25.2%
Weighted total	100%	1.35%

Source: TransUnion consumer credit database.

- About 21% of balances belong to non-prime consumers
- Not surprisingly, the VantageScore credit scoring model rank-orders risk

To understand Capacity to Absorb Payment Shock, begin with an Aggregate Excess Payment metric

ΣPayment	$2,000
– ΣMPD	$1,000
	AEP = $1,000

ΣPayment	$125
– ΣMPD	$ 50
	AEP = $ 75

Let us define *Aggregate Excess Payment* (AEP) as total payments – total min. due

AEP can be calculated over any past timeframe up to 30 months using CreditVision data

What does the risk distribution look like in terms of AEP?

AEP range	% of population	30+ DPD rate
≥ $1,000	56.7%	0.2%
$500 to $999	13.0%	0.5%
$200-$499	11.8%	0.7%
$100-$199	5.3%	1.2%
$0-$99	9.4%	1.7%
< $0	3.9%	21.9%
Weighted total	100%	1.35%

Source: TransUnion consumer credit database.

- About 30% of balances belong to consumers with less than $500 in AEP—that is, little capacity to absorb a payment shock
- AEP also clearly rank-orders risk

“Ability to Exit the Loan” may be measured by CLTV. We derived CLTV using data from our partner, CoreLogic®

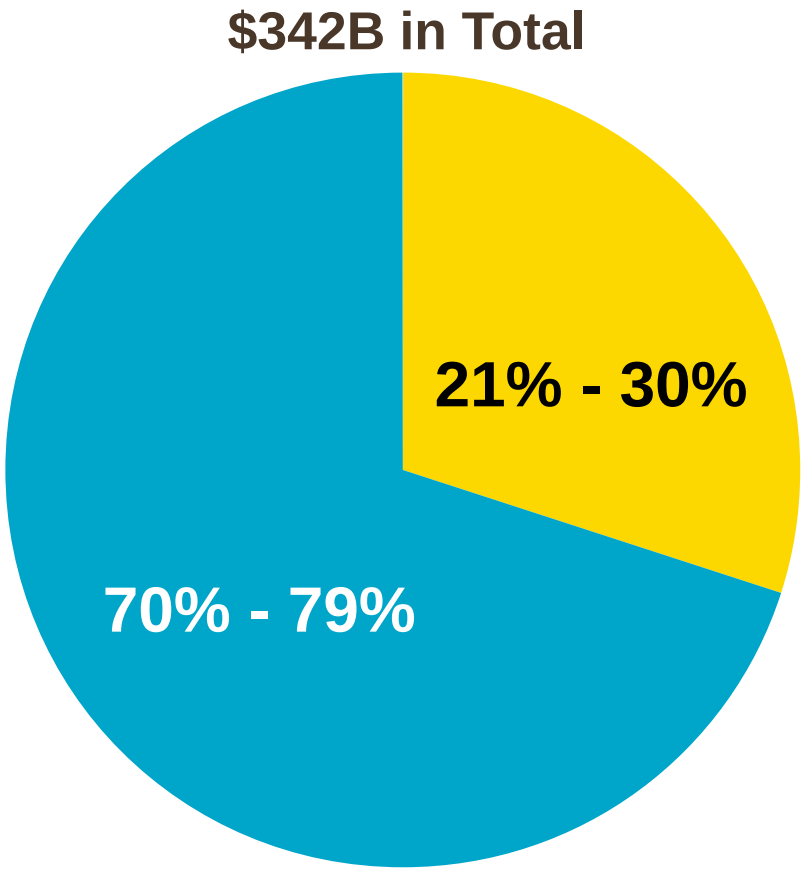
CLTV range	% of population*	30+ DPD rate
≥ 90%	29.0%	3.5%
80%-90%	8.7%	2.4%
70%-80%	9.4%	2.2%
60%-70%	9.5%	2.0%
< 60%	43.5%	1.4%
Total Population	100%	1.5%

Sources: TransUnion consumer credit database and CoreLogic.

- About 29% of balances belong to consumers with CLTV above 90%—that is, exit strategy is limited or nonexistent
- CLTV also rank-orders risk, although perhaps not as strongly as our previous two metrics

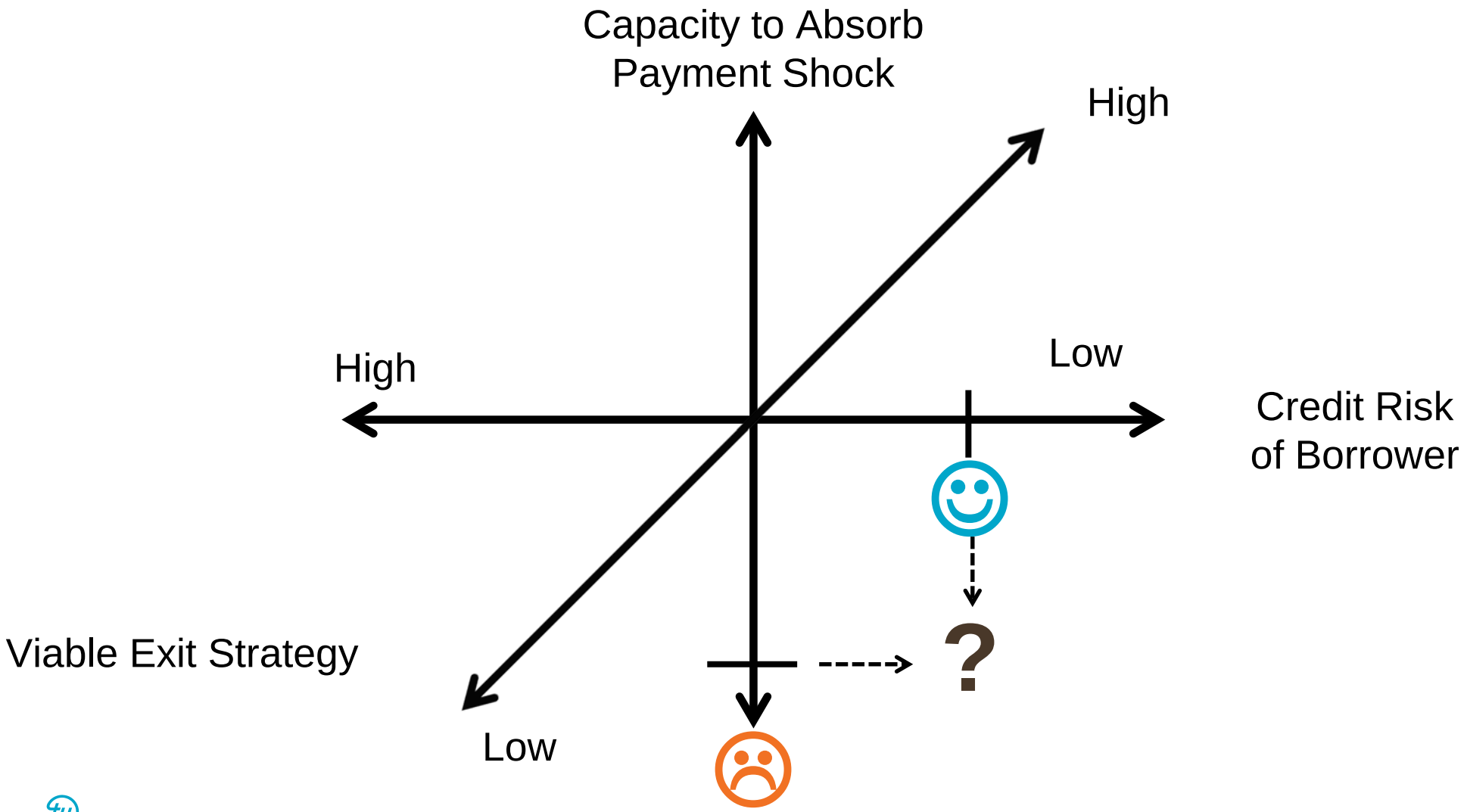
*Where home value data were available in the analytical sample

Based on univariate analysis alone, we've reduced the at-risk balance dramatically



We now have to focus on only $72B – $103B in balances

Our univariate approach is decent, but we can do better. What about interaction effects?



Looking across two dimensions helps us refine our ability to identify pockets of risk

Percent of population by Balance

VantageScore 3.0	Revolving accounts AEP					
	< $0	$0 to $99	$100 to $199	$200 to $499	$500 to $999	$1,000+
800+	0.1%	0.6%	0.5%	1.5%	2.2%	10.5%
760–799	0.4%	1.6%	1.1%	2.9%	3.7%	19.0%
720–759	0.5%	1.8%	1.0%	2.4%	2.6%	12.7%
680–719	0.5%	1.8%	1.0%	2.0%	1.9%	7.2%
640–679	0.6%	1.7%	0.9%	1.7%	1.5%	4.9%
600–639	0.6%	1.1%	0.5%	0.9%	0.7%	1.7%
< 600	1.3%	0.8%	0.3%	0.5%	0.3%	0.6%

- Of the 30% with insufficient AEP, almost 20% have prime risk scores
- Of the 21% who are non-prime, 10% have sufficient AEP
- 11% of the population are looking somewhat grim

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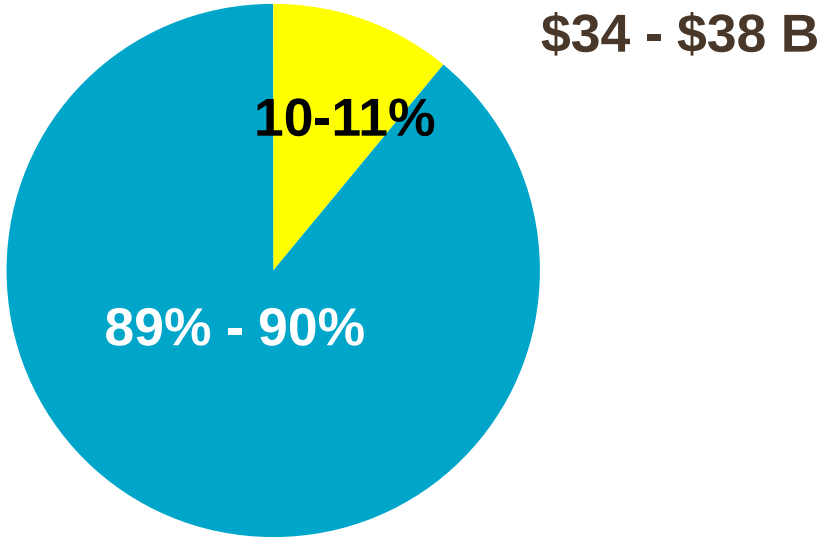
We've improved our identification of the real threat—it appears that no more than 11% of balances are at elevated risk



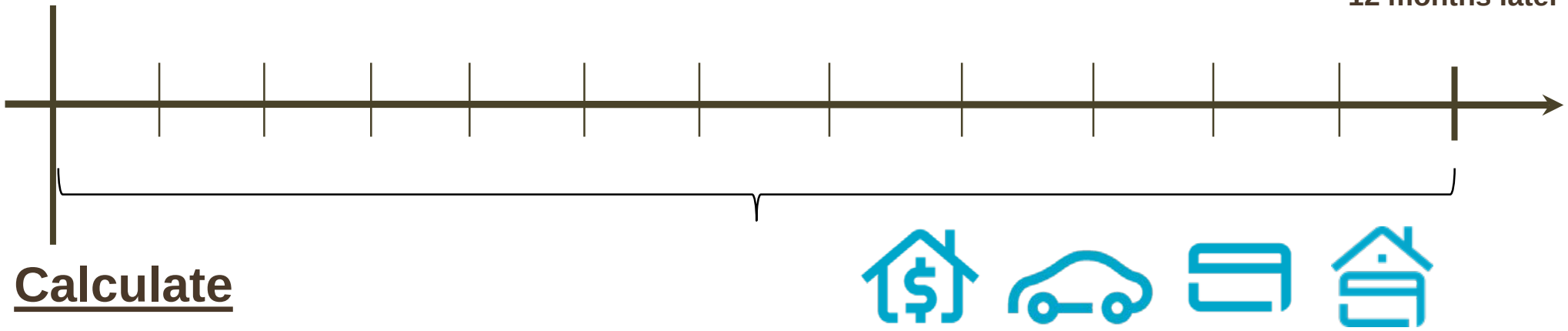
Two questions remain:

- Can we do an even better job of identifying the truly risky segments of the population?
- These HELOCs have not yet hit EOD. Can we estimate what will happen to their risk once they do?

The answer to both, of course, is yes. Remember, we have a pool of HELOCs that have already hit EOD

SAMPLE

- **515K HELOCs reached End-of-Draw Jan 2012- Jun 2014**



Calculate

- VantageScore® 3.0
- Bankcard AEP
- Balance and payment status across loans on credit file

Evaluate 60+ DPD delinquency and performance outcomes

Build decision trees to segment behavior based on our metrics

We also got a bit more sophisticated in our *Capacity to Absorb Payment Shock* metric

First we calculate the Card AEP

ΣPayments	$2,000
– ΣMPD	$1,000
AEP =	$1,000

Next we calculate the Payment Shock

Fully Amortized	$719
– Interest-Only	$467
Payment Shock =	$252

CtA = $1,000 – $252 = $748

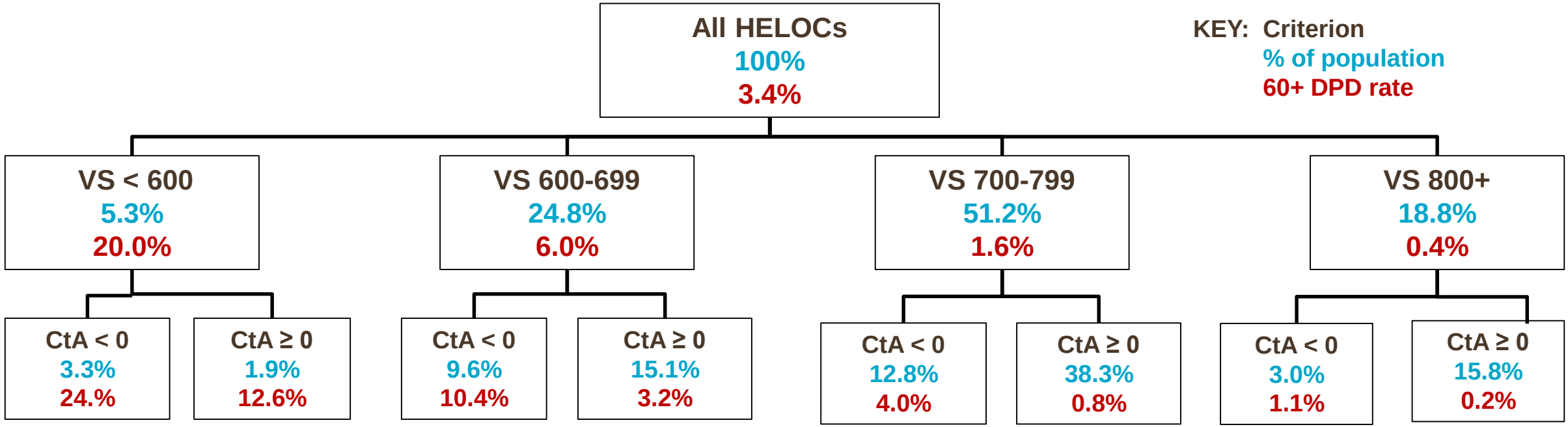
Finally, we define the "Capacity to Absorb" (CtA) a payment shock as

CtA = AEP – Payment Shock

Our CtA metric is a simple, conservative measure of the ability to manage increased debt service obligations

ΣPayments	$2,000	$125
ΣMPD	$1,000	$50
AEP	$1,000	$75
HELOC Balance	$80,000	$120,000
Fully Amortized Pmnt.	$719	$1,078
Interest-Only Pmnt.	$467	$700
Payment Shock	$252	$378
CtA	$748	- $303

We found tremendous risk differentiation for HELOC performance



* Current HELOCs at EOD

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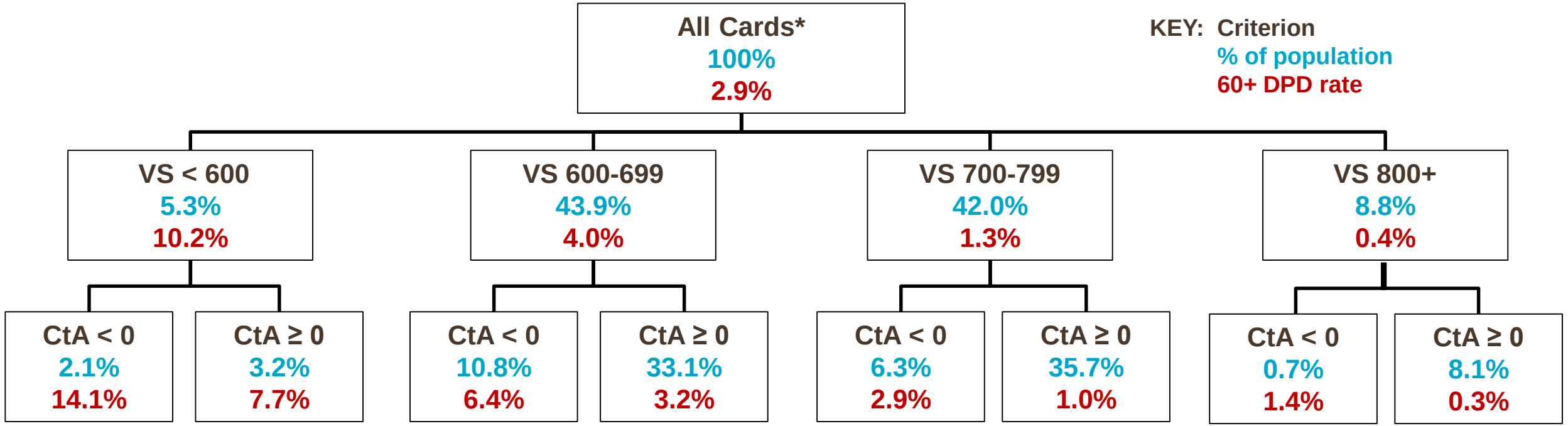
We can also use this methodology to great effect in the Card space



*** Current Cards at EOD**

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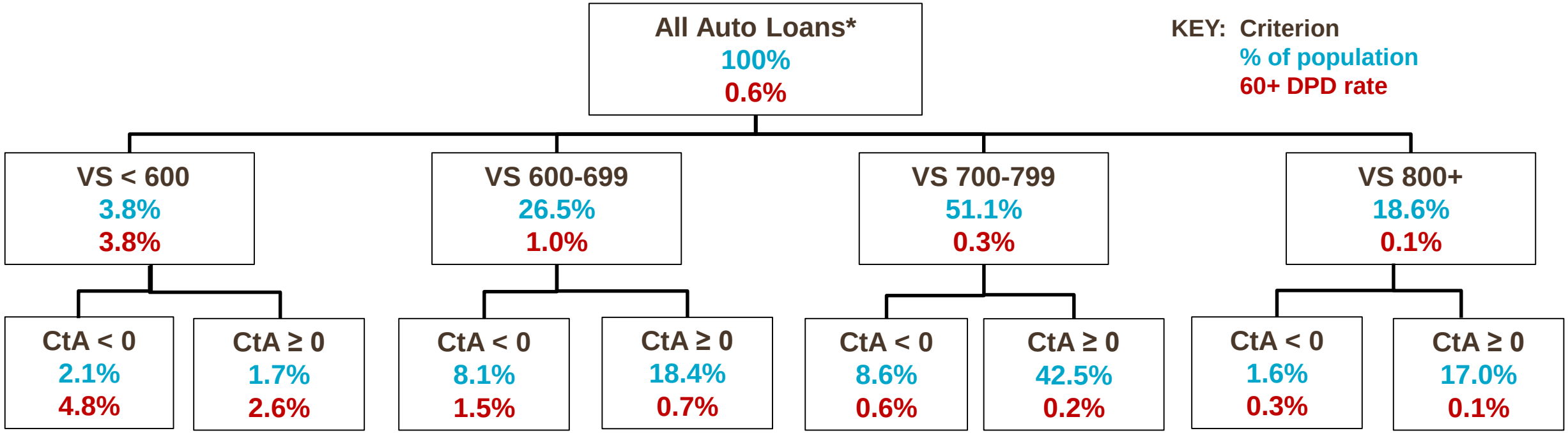
Not surprisingly, this approach is also effective at differentiating risk among auto loans



*** Current Auto Loans at EOD**

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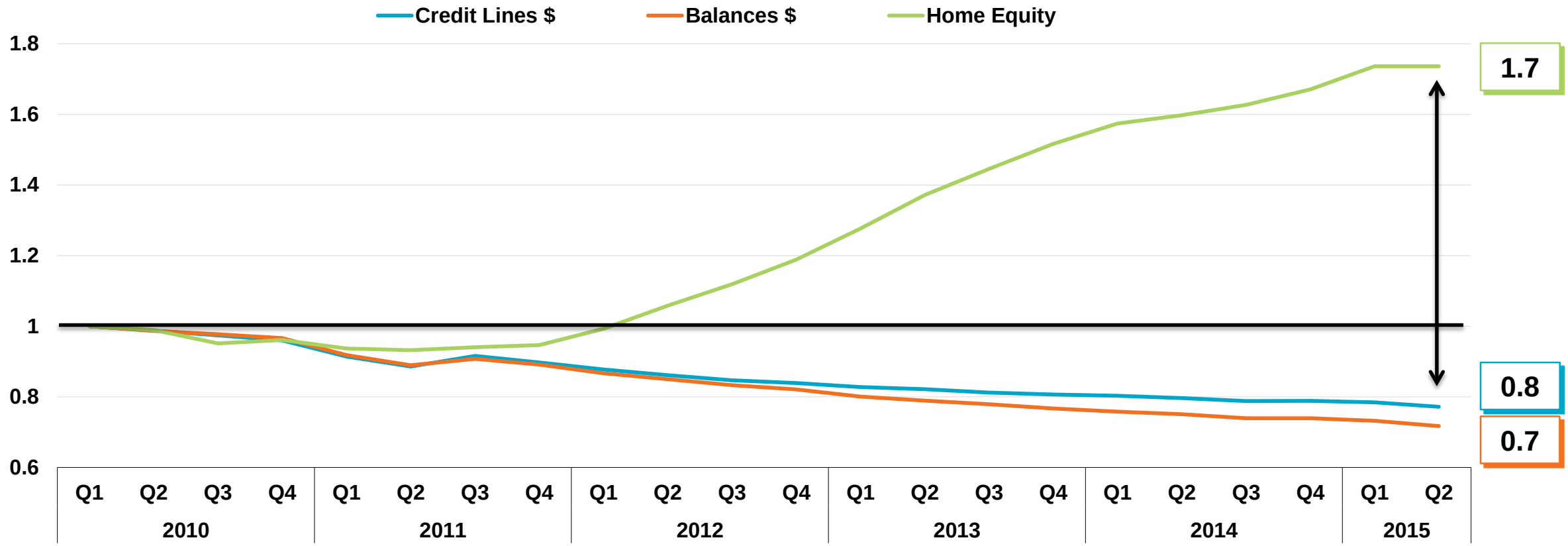
We have addressed all four risk concerns. Our approach is easily delivered and incorporated into strategy

- We can provide the following metrics using existing CreditVision credit report data:
  - Payment Shock Estimator
  - Estimator of timing of End-of-Draw period
  - Capacity to Absorb Payment Shock
  - HELOC and total equity-based balances
  - Several generic and proprietary credit risk scores
  - Many more, customized as desired
- These metrics are all FCRA-compliant and hence adverse-actionable
- In addition, CLTV estimation models are available from partners like CoreLogic®

That’s the risk story. It’s manageable.
What about the marketing story?

U.S. home equity has risen at a faster rate than HELOC availability. Lenders will try to close this gap—this spells OPPORTUNITY

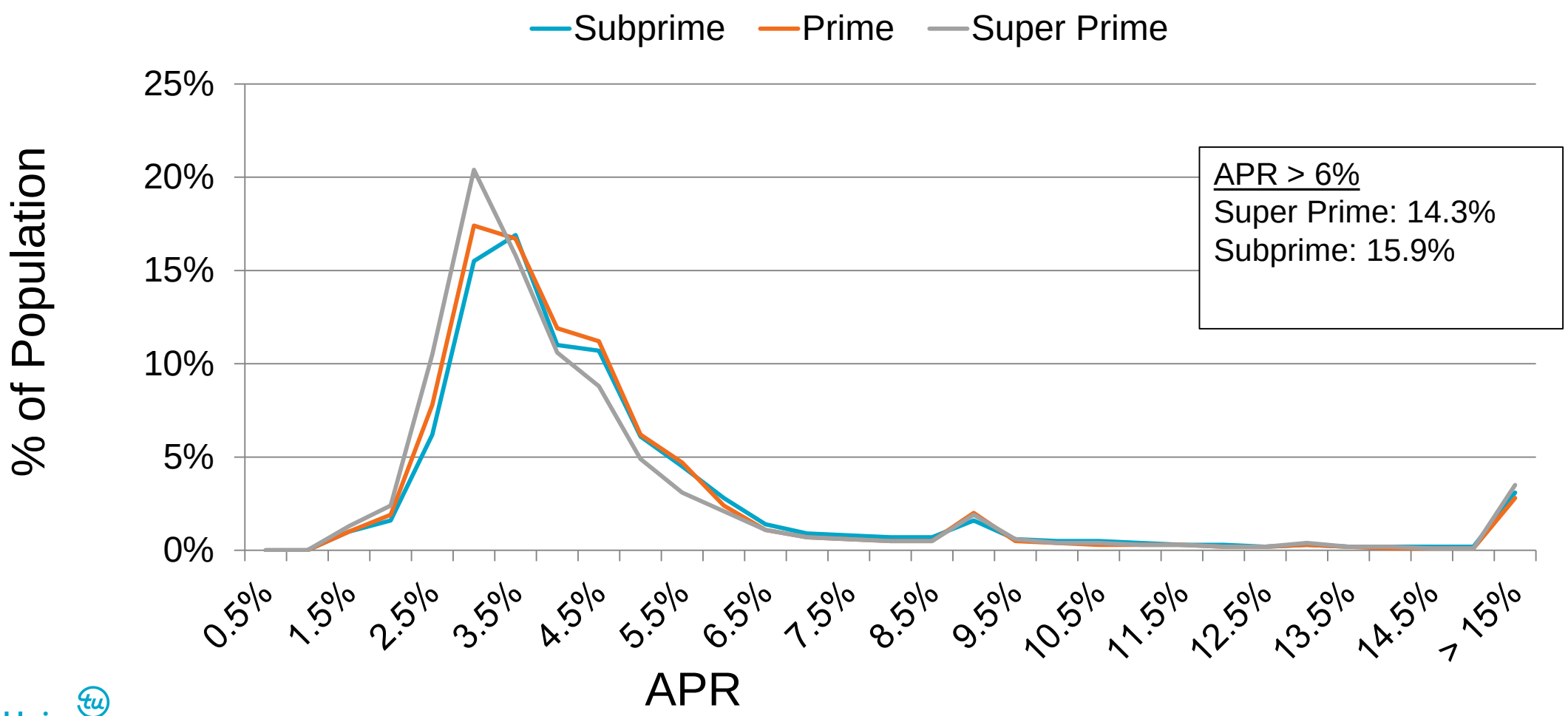
HELOC credit lines, balances and home equity (indexed to Q1 2010)



Sources: TransUnion Credit Database and Federal Reserve Flow of Funds series

There is a wide range of APRs in the marketplace, even when we control for risk. But that distribution is surprisingly consistent

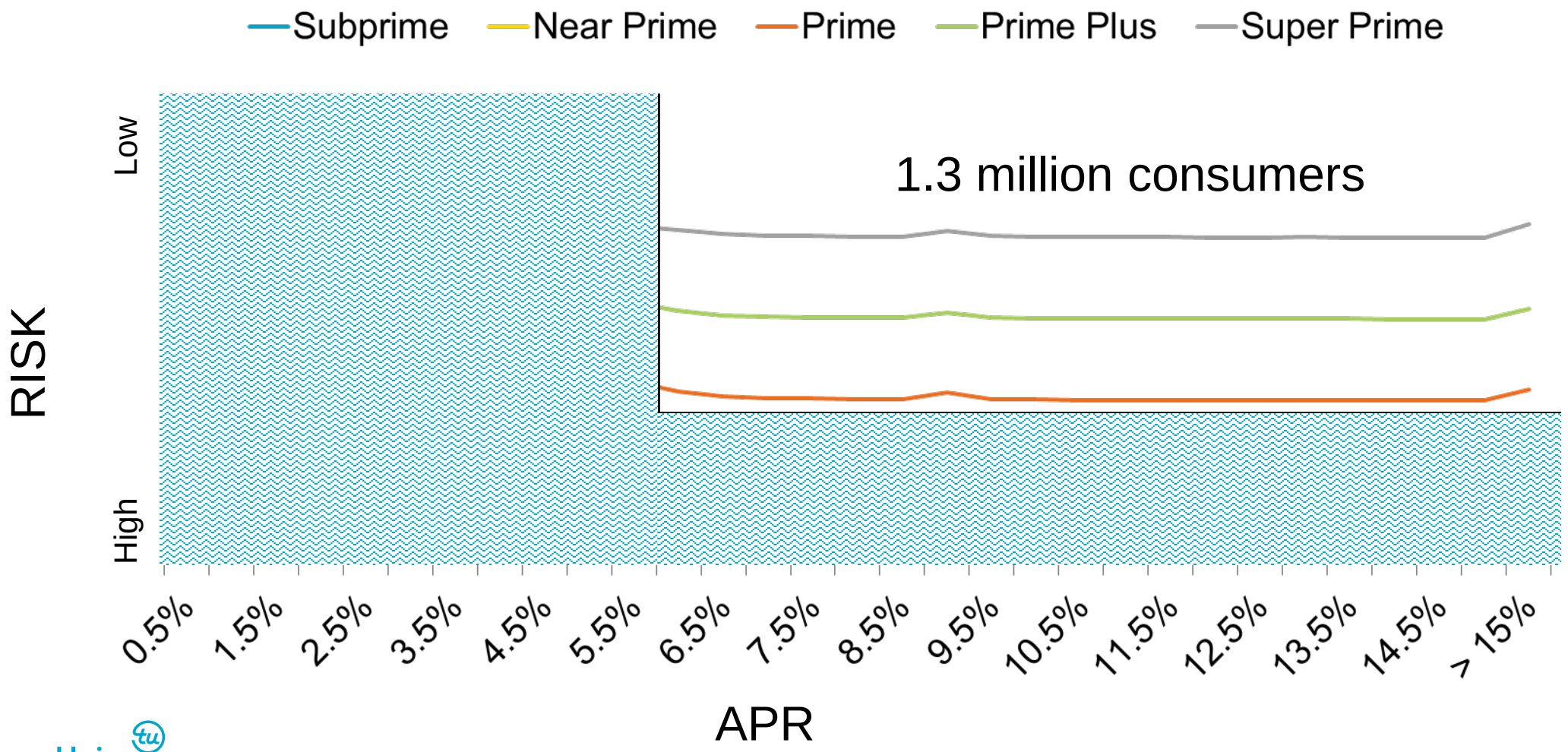
Distribution of Interest Rates for Existing HELOCs—As of 06/2015



Sources: TransUnion Credit Database

With this insight, you can select a refi target group that meets your risk criteria and would be delighted with your offer

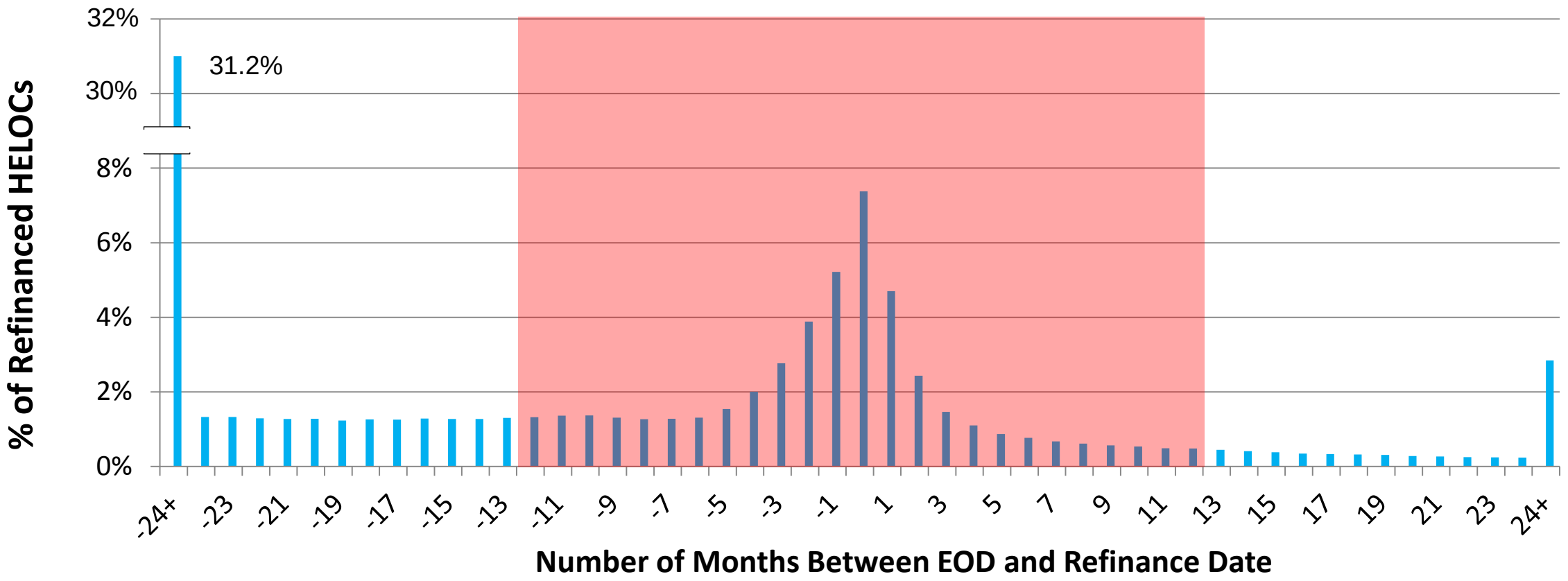
HELOC credit lines, balances and home equity (indexed to Q1 2010)



Sources: TransUnion Credit Database

It gets better: There is evidence that EOD is a trigger for refinance

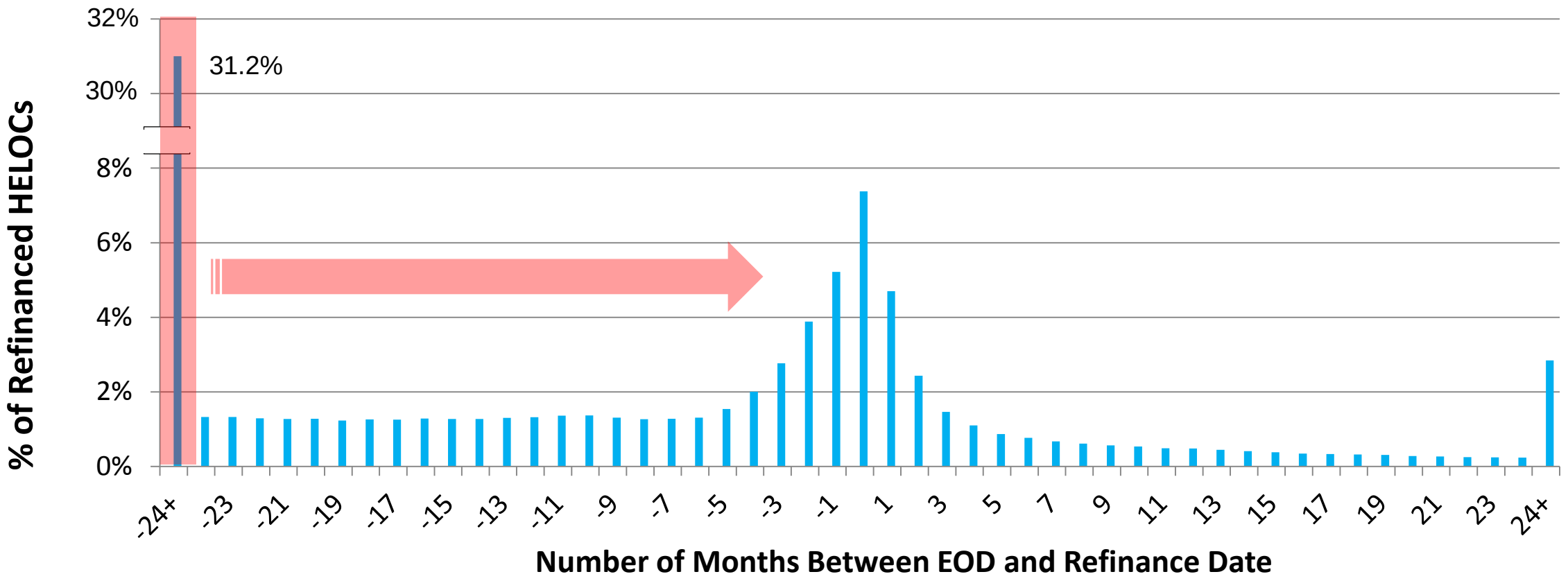
47% of HELOC borrowers who refinanced did so within 12 months of EOD



Sources: TransUnion Credit Database

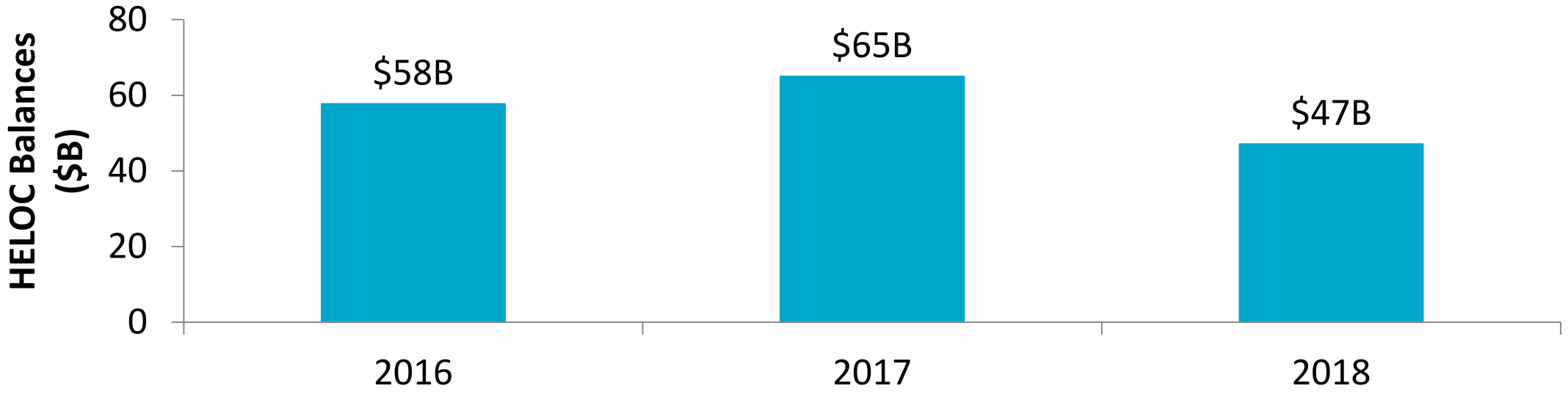
This provides a compelling anchor for *when* to make a refi offer

We believe rising rates will drive more activity closer to EOD



Sources: TransUnion Credit Database

In the next 3 years, we expect nearly 3M HELOCs to reach EOD – presenting a sizeable lending opportunity



EOD Year	Loan Count	Balance ($B, as of 06/15)
2016	951,200	$57.72
2017	1,073,946	$64.99
2018	842,194	$47.10

Sources: TransUnion Credit Database

Bringing it all together: Guidelines for Strategy

Risk Management

- Identify those members in your own HELOC portfolios who present elevated risk of default using credit scores and CtA. Understand the timing of that elevated risk.
- Identify those of your current or prospective members who have HELOCs elsewhere. Who presents elevated risk? Screen when reviewing applications for credit (of **any** type).

Marketing

- Recognize the refi opportunity that exists across the market.
- Target based on your risk appetite and return requirements. We can help identify existing pricing.
- Timing is important! Look to make your offers when members are just beginning to consider their looming end-of-draw. We can help identify timing.

Summary

- There is a lot of market concern over a potential HELOC “bubble.”
  We find that the elements driving that fear can be effectively **identified**, **anticipated** and **measured**—you can ***manage*** that risk

- We have developed a framework to identify pockets of risk.
  Careful measurement and planning can do a lot to ease concerns

- HELOC risk appears quite manageable with the right tools. It should continue to abate as home values ↑ and unemployment ↓

- What has not been as widely discussed in the marketplace—but appears to be a big opportunity—is the ***marketing*** aspect of HELOCs approaching EOD. You should capitalize on this dynamic over the next few years!

- We will continue to partner with you to develop and deliver strategic solutions to address emerging challenges and opportunities in the marketplace

