



# Managing Credit Risk in Times of Uncertainty

#### HousingWire Webinar, April 14, 2022

© 2022 Fair Isaac Corporation. Confidential. This presentation is provided for the recipient only and cannot be reproduced or shared without Fair Isaac Corporation's express consent.



Joanne Gaskin Vice President, Scores and Analytics. FICO



#### Tom Parrent

Model Risk Management Andrew Davidson & Co.



David Christovich Vice President of Credit Risk Management and Pricing, Virginia Credit Union

### **Panelists**

Managing Credit Risk in Times of Uncertainty





- . . . . . . . . . . . .
- . . . . . . . . . . . .
- . . . . . . . . . . . . .
- . . . . . . . . . . . . .
- . . . . . . . . . . . .
- . . . . . . . . . . . . .
- . . . . . . . . . . . .
- . . . . . . . . . . . . .
- . . . . . . . . . . . . .
- . . . . . . . . . . . . .
- . . . . . . . . . . . . .
- . . . . . . . . . . . . .
- . . . . . . . . . . . . .
- . . . . . . . . . . . . .
- . . . . . . . . . . . . .
- . . . . . . . . . . . . .
- . . . . . . . . . . . .
- . . . . . . . . . . . .
- . . . . . . . . . . . . .
- • • • • • •
- • • • • • •
- • • • • • •
- . . . . . . . . . . . . .
- . . . . . . . . . . . . .

### Webinar Agenda

- ABCs of Trended Credit Data: I will briefly discuss what trended credit data is, how it differs from traditional credit data, and how it is now used by FICO.
- Use of Trended Data in Mortgage Modeling: Tom will examine how trended credit data has allowed for new mortgage valuation models with increased predictive powers.
- Case Study: David will discuss how Virginia Credit Union has relied on trended credit data in their loan underwriting decisions.
- Questions and Answers: Post your questions in the Questions or Chat boxes at the bottom of your Zoom screen at any time. We will respond during our Q and A session at the end of today's Webinar.

• •

. . . . . . . . . . . .

• • •

FICO

### What is Trended Credit Data?

- Trended credit data reflects the historical data on borrower credit behavior and includes up to 24 months of tradeline level credit information such as balance, credit limit, high credit, scheduled payment and actual payment. Trended credit data is FCRA-regulated and is disputable.
- Trended data provides a historical view of information such as monthly account balances for the previous 24+ months, giving lenders more insight into how individuals are managing their credit. These in-depth insights can help lenders expertly manage credit risk in these uncertain times, while continuing to make competitive credit offers to consumers.



### What Are Some Benefits of Trended Credit Data?

- With 24 months of historical data (such as payment and balance), lenders may be able to see how consumers have managed their credit accounts over time, allowing them to better predict future behavior and assess risk.
- For example, a consumer with a large credit card balance who pays in full every month (a 'transactor') likely has a higher level of creditworthiness than a consumer with a large credit card balance who only makes the minimum required payment (a 'revolver'). Existing credit reports can't always differentiate between these two types of consumers.
- Tom Parrent will next discuss his firm's research and mortgage valuation models based on this idea of capturing 'transactor' versus 'revolver' data.



## Use of Trended Data in Mortgage Modeling

## HousingWire Webinar: Managing Credit Risk in Times of Uncertainty

Tom Parrent Model Risk Management Andrew Davidson & Co April 2022



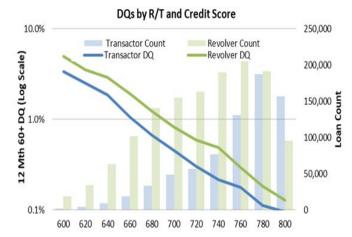
## Trended Data for Mortgage Analysis

- Thanks to a cooperative effort with Equifax, Andrew Davidson & Co., Inc. (AD&Co) can now quantify the impact of Trended Data on credit risk, prepayment rates, and the price of mortgage-related assets such as loans, securities, mortgage insurance and servicing rights.
- Consumers can be segmented into Transactors and Revolvers by comparing their payment behavior and credit utilization over a 24-month period.
- Transactors use credit cards primarily as a convenience and payment mechanism and typically pay down their balances.
- Revolvers carry credit balances and may increase their credit utilization over time.
- Approximately 20% of consumers are segmented as Transactors.



### Mortgage Delinquency Differences

- Revolvers exhibit a materially higher delinquency rate than transactors.
- This difference persists across all credit levels.
- The performance difference is large enough to rank higher than well-known performance delineators such as Cash-Out Refi and High DTI.



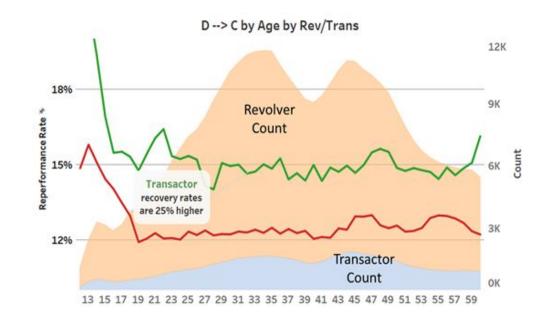
<b>Common Risk Multipliers</b>		
One Borrower	1.81	
Revolver	1.73	
Cashout	1.60	
High DTI / 35	1.59	
Second Home	1.34	



8

## Recovery From Delinquency

- Transactors have a materially higher recovery rate from delinquency than revolvers.
- This behavior has implications for valuation as well as servicing.
- Servicers can direct more resources to Revolvers as Transactors are more likely to self recover.

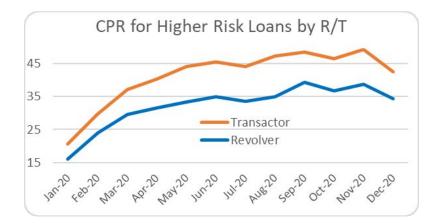




9

### Prepayment Differences

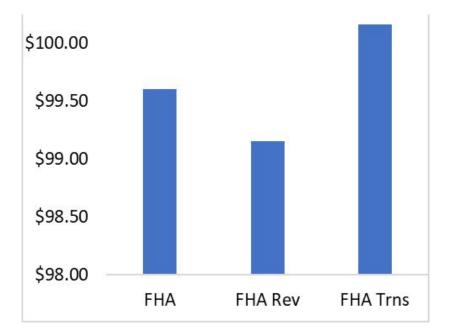
- In the recent fast prepayment environment, Transactors have prepaid at rates around 30% faster than similar Revolvers on higher risk loans.
- Higher risk loans defined as FICO <= 700, LTV >= 90 for this illustration





## Loan Price Implications

- Identification of a borrower as a Transactor or Revolver justifies up to 1 point of price difference.
- Such price differentials could have a material difference in non-QM portfolio construction and pricing.
- Sample loan: 95 LTV, 660 FICO, 3.5% note rate loan valued at an OAS of 150 bp





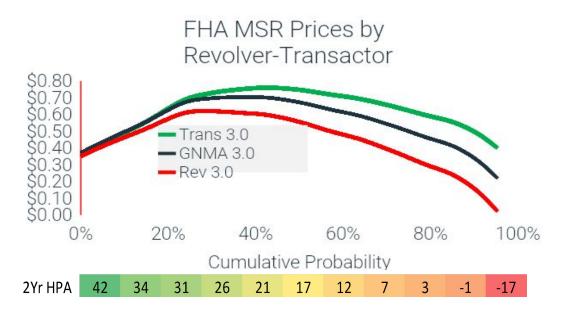
11

## Mortgage Servicing Rights Valuation

- MSR price differentials vary according to the amount of stress.
- Low stress, high HPA environments produce little change in MSR valuation.
- 40 bps price difference under stress
- Average price difference is around 20 bps, representing a 35% price differential.

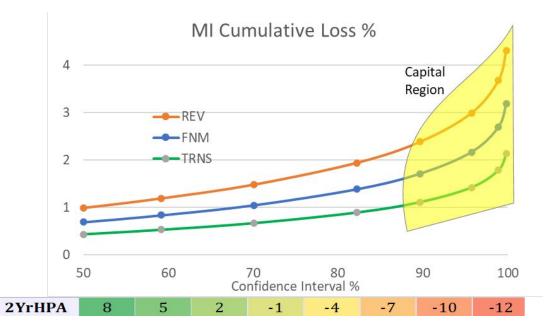
ANDREW

DAVIDSON



### Mortgage Insurance Implications

- Mortgage insurance loss can be twice as high for revolvers compared to transactors.
- This differential occurs across a wide range of economic conditions.
- This could have implications for both reserving and regulatory capital.





### Potential Implications for Expanded Inclusion

- Trended data has the possibility of expanding the lendable population.
- Potential borrowers in the low credit score region may be able to qualify at competitive loan rates if they show credit use patterns as Transactors.
- For lower credit score loan applicants with Revolver characteristics, simple credit counseling can provide a clear path to better personal financial management, and thus loan qualification, through adjusting their current credit usage patterns.
- In order to realize these benefits as well as the value differentials mentioned earlier, credit suppliers should increase their reporting of detailed trend data.



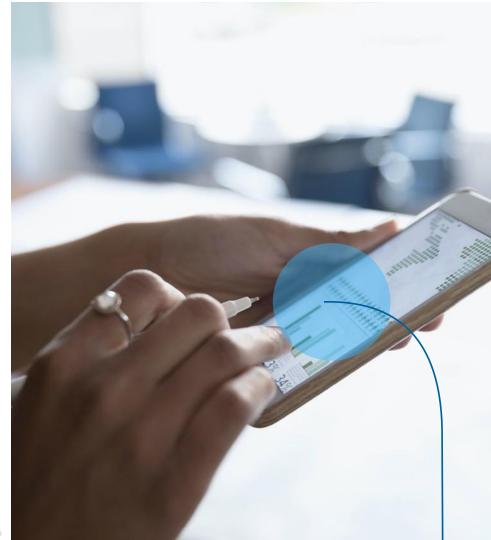
## Disclaimer

This publication is believed to be reliable, but its accuracy, completeness, timeliness and suitability for any purpose are not guaranteed. All opinions are subject to change without notice. Nothing in this publication constitutes (1) investment, legal, accounting, tax, or other professional advice or (2) any recommendation or solicitation to purchase, hold, sell, or otherwise deal in any investment. This publication has been prepared for general informational purposes, without consideration of the circumstances or objectives of any particular investor. Any reliance on the contents of this publication is at the reader's sole risk. All investment is subject to numerous risks, known and unknown. Past performance is no guarantee of future results. For investment advice, seek a qualified investment professional. Note: An affiliate of Andrew Davidson & Co., Inc. engages in trading activities in securities that may be the same or similar to those discussed in this publication.



### FICO<sup>®</sup> Score 10 T: Powerful Trended Data Insights

- David Christovich will next share his insights on how Virginia Federal Credit Union is using trended credit data with FICO<sup>®</sup> Score 10 T.
- But first, a few words about FICO<sup>®</sup> Score 10 T.
- FICO<sup>®</sup> Score 10 T uses a powerful new set of predictive characteristics generated from both traditional and trended credit bureau data.
- FICO<sup>®</sup> Score 10 T has the same minimum score criteria and score range as prior versions of the FICO<sup>®</sup> Score.
- New reason codes for consumer communication support its use of additional credit characteristics to enhance predictiveness.



FICO

### FICO<sup>®</sup> Score 10 T Outperforms or Matches Prior FICO<sup>®</sup> Scores

Model Performance Metrics: Total Population K-S, 2017-2019 Development Data

	FICO <sup>®</sup> Score 10 T	K-S Gain Over FICO <sup>®</sup> Score 9	K-S Gain Over FICO <sup>®</sup> Score 8	K-S Gain Over FICO <sup>®</sup> Score 4
All Industries, Originations	54.6	1.7	3.6	3.9
All Industries, Account Management	66.1	0.8	2.6	3.4
Auto, Originations	59.3	1.1	2.6	2.7
Auto, Account Management	68.6	0.1	1.2	1.3
Bankcard, Originations	59.7	1.8	3.3	3.8
Bankcard, Account Management	65.5	1.1	2.8	4.1
Mortgage, Originations	60.1	2.9	4.0	4.2
Mortgage, Account Management	75.4	-0.5	0.5	0.5

**K-S** Comparisons



### In Mortgage Originations, FICO<sup>®</sup> Score 10 T outperforms prior FICO Scores



#### Mortgage Originations

FICO<sup>®</sup> Score **10 T** provides

- 4.2 K-S point gain over FICO<sup>®</sup> Score 4
- 4.0 K-S point gain over FICO<sup>®</sup> Score 8
- 2.9 K-S point gain over FICO<sup>®</sup> Score 9
- 13% reduction in delinquency rate relative to FICO® Score 2 at cutoff of ~680 (Experian)
- 17% reduction in delinquency rate relative to FICO® Score 5 at cutoff of ~680 (Equifax)
- 20% reduction in delinquency rate relative to FICO® Score 4 at cutoff of ~680 (TransUnion)





## **FICO<sup>®</sup> Score 10 T Utilization**

April 2022

The contents of this communication are confidential and proprietary to Virginia Credit Union, Inc. and may not be reproduced, published, or disclosed to others without express authorization of Virginia Credit Union, Inc. Presentation content and materials provided for general understanding only and are not intended to replace professional, legal or other advice.

### **Objectives and Background**

- Pre-emptive evaluation of credit risk tools to protect against changing consumer behavior and stressed economic events
- Review alternative tools with FICO, particularly FICO<sup>®</sup> Score 10 T and the FICO<sup>®</sup> Resilience Index
- Select the most credit and economic sensitive product(s) for initial testing and usage
- Implement new approaches and tools
- Measure performance to evaluate effectiveness of new tools



### **Credit Card Application Previous Methodology**

#### **Previous Methodology**

- Utilize FICO<sup>®</sup> Score 8 and Equifax BNI to establish credit risk tiers
- Set line assignment using modeled income, current and proposed liabilities, available borrowing capacity and credit risk tier

The contents of this communication are confidential and proprietary to Virginia Credit Union, Inc. and may not be reproduced, published, or disclosed to others without express authorization of Virginia Credit Union, Inc. Presentation content and materials provided for general understanding only and are not intended to replace professional, legal or other advice.

VIRGINIA Credit Union.

2

### **Credit Card Application of New Tools and Approaches**

#### Revised Methodology (2020)

- Upgrade to FICO<sup>®</sup> Score 10 T to capture recent consumer credit trends
- Incorporate FICO<sup>®</sup> Resilience Index to reflect borrower capacity to withstand adverse economic and consumer stress
- Incorporate tools to capture actual income when available. Develop secondary line assignment methodology to allow higher lines when actual income is known



### **Credit Card Application Results**

#### Results

- Performance has been comparable to better using revised methodology
- Recent credit losses and delinquency have been historically good across all lending products, which makes conclusive assessment difficult
- The relative age of the vintages is too new to draw significant conclusions



### Learn More About Trended Credit Data

Product Sheet	• FICO Score 10 Suite
Experts Here	<ul> <li>Tom Parrent: tparrent@ad-co.com</li> <li>Joanne Gaskin: joannegaskin@fico.com</li> <li>David Christovich: david.christovich@vacu.org</li> </ul>
White Papers Online	FICO Score 10 Suite Performance Results
FICO Blogs	<ul> <li>Improving Predictive Score with the FICO Score 10 Suite</li> <li>FICO Score 10 Suite Available from All Three Credit Bureaus</li> <li>Innovation Never Sleeps: Why We Redevelop the FICO Score</li> </ul>



**FICO** 





## **Thank You!**

© 2022 Fair Isaac Corporation. Confidential. This presentation is provided for the recipient only and cannot be reproduced or shared without Fair Isaac Corporation's express consent.