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dv01

Insights

COVID-19 PERFORMANCE UPDATE—Modifications and Delinquencies

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Introduction

Like the sudden and aggressive nature of COVID-19 itself, the virus has sent shockwaves throughout the financial system and the economy at large. Thus far, there have been dramatic asset price moves and speculation around the future impact on loan performance.

As local and state governments continue to impose shutdowns, unemployment claims hit record highs, and the federal government injects over $2 trillion into the economy, market watchers are anxiously waiting to see the full effect on loan performance across asset classes.

Because performance data is only available on a monthly basis (the typical payment frequency) and is usually reported with a lag, there has been little loan performance information available to see how consumers and businesses are responding to the slowdown.

dv01 is releasing this second installment of its COVID-19 Performance Report. Since dv01 connects directly with the largest online issuers in the consumer world to cleanse, validate, and normalize loan data, we are able to make weekly observations based on daily loan performance.

Our report looked at over 1.7 million active loans with a total outstanding balance of $19B+ from leading U.S. marketplace issuers. The loans have a weighted average FICO of 715, weighted average coupon (WAC) of 13.6%, and an average balance of approximately $11,400. dv01 accessed and analyzed these loans via securitizations, pass-through certificates, and aggregated platform-level reporting.

Based on the data, we've gleaned the following insights:

- Payment impairments have increased by less than the change in unemployment figures.
- There is a surge in loan modifications resulting from programs put in place to help borrowers mitigate economic hardships.
- The rate of modifications has grown substantially faster than the rate of delinquencies, which will help contain ultimate losses for investors.
- Due dates are clustered, with the highest percentage due early in the month. Because of this, the largest increases in payment impairments have already occurred for the month of April.
- Certain geographic regions, such as those with more wide-ranging quarantine efforts, above average exposure to tourism, and oil-dependent regions show higher Payment Impairment % than the remainder of the country.
- Lower-grade, higher-risk loans have materially worse performance than higher-grade, lower-risk loans.

Methodology

The data in this report represents loan performance activity reported from January 1, 2019 through April 9, 2020. Since the first publication, dv01 has substantially expanded the scope of this report. We have incorporated additional issuers with daily performance information and normalized reporting around modifications and hardship relief programs utilized by issuers in order to aid borrowers. The increased coverage results in a more comprehensive analysis of the consumer unsecured universe.

As with the prior report, only issuers reporting loan information on a daily cadence are included in this report. The report is based on the full population of loans without any filtering or sampling for the most accurate and complete picture. All issuer information is aggregated and no issuer-specific commentary is provided.

Beyond looking solely at aggregate performance, dv01 filtered and stratified performance based on a number of attributes. Among the most commonly reviewed attributes is loan grade, which is an issuer-defined categorization of their loan portfolio based on credit attributes and linked to underlying loan interest rates.

Because of the varying grade classifications used by different issuers, dv01 utilized heuristic assumptions to group grades into the following three categories for an apples-to-apples comparison:

- Top grade, representing the lower-risk, lower-interest-rate loans
- Middle grade, representing the medium-risk, medium-interest-rate loans
- Bottom grade, representing the higher-risk, higher-interest-rate loans

On top of loan grade analysis, users can stratify performance by geographic areas down to the state or ZIP code level. To better understand the time and magnitude of COVID-19's impact across the country, dv01 separated out those states that instituted earlier and more aggressive quarantine programs (California, New Jersey and New York) and evaluated the difference in trends.

Investors interested in reviewing consumer unsecured loan performance can do so via dv01's Market Surveillance, Portfolio Surveillance, and Securitization offerings. Users can reconcile daily cash flows, anticipated payment schedules, due dates, and view daily delinquency trends.

Terminology

- Delinquency: A loan is delinquent when a borrower is past due on their loan payment and is not in an active modification.
- Modification: A modified loan means there has been a change made to the original agreed-upon terms of a loan, or that a borrower has been offered a temporary pause on making loan repayments. Borrowers must contact the issuers directly and request a modification in order to qualify, they are not offered automatically. Modifications are discussed in further detail in the Modification and Hardship Relief Trend Analysis section. The majority of loans are made to borrowers that are Current on their loans. 81% of borrowers have 0 days past due at time of modification, and 94% of loans are less than 30 days past due.
- Payment Impairment: A payment impairment refers to any loan that is delinquent or that has an active modification. This category is a combination of delinquencies and modifications.

Description of presentation method

All the charts found in this report represent day-over-day performance metrics in three patterns:

- The first chart set, labeled **Figure X.1**, shows aggregate performance for each calendar day since the beginning of 2019.
- The second chart set, labeled **Figure X.2**, shows performance by day of month in 2020. All monthly performances in 2019 have been aggregated and grouped as "All 2019." These charts show monthly performance over the course of a year and remove the effect of seasonality.
- The third chart set, found in the Appendix and labeled **Figure X.3**, shows the 2019 year performance by day of the month. These charts show how performance varies month to month throughout the year due to typical seasonality trends, which tend to be elevated in times of higher borrowing, such as during the shopping season.

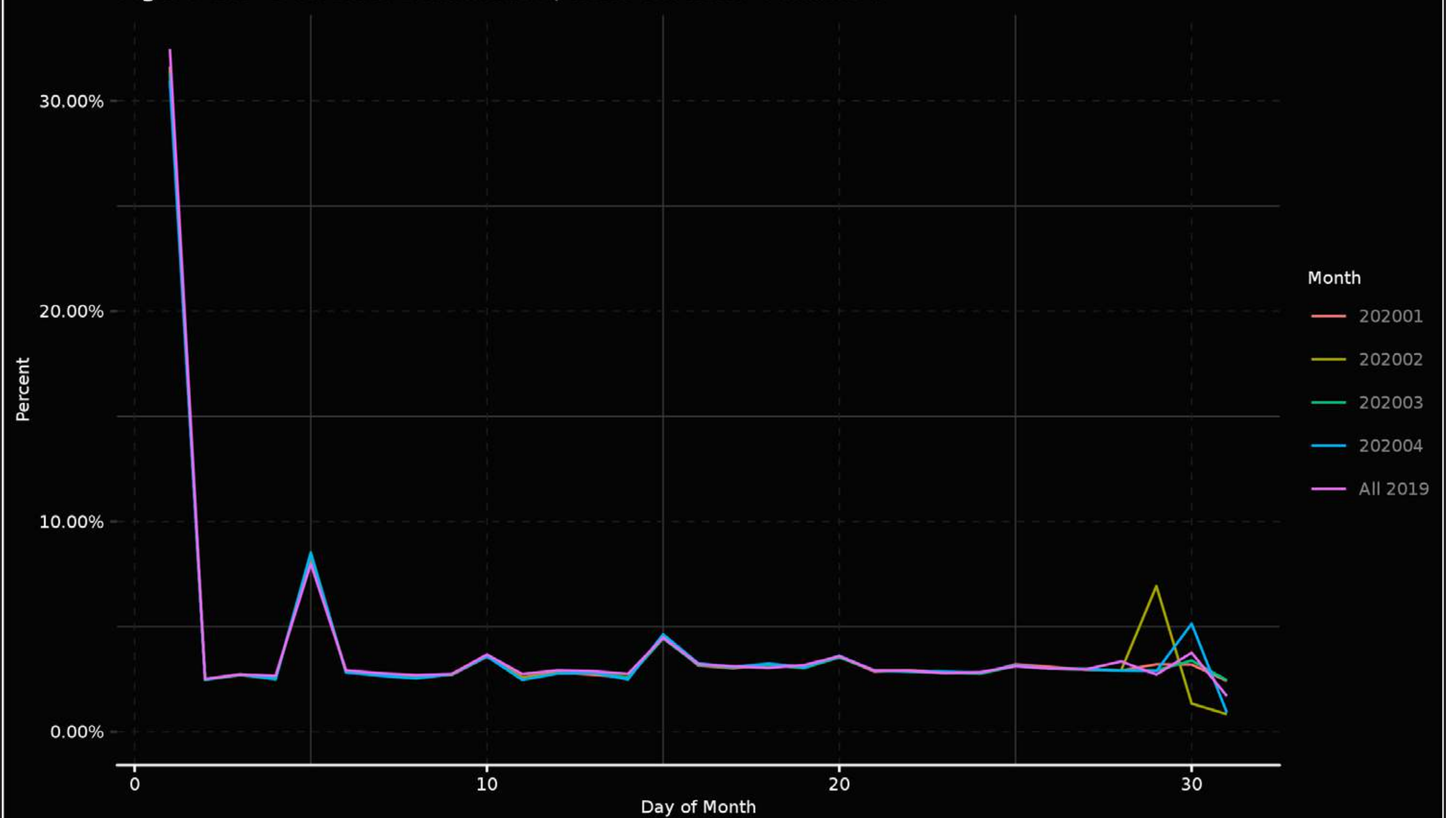
Additionally, since modifications and delinquencies can last several months—with modifications occasionally being permanent—a loan delinquent or modified at the end of one month remains so at the start of the next month. Therefore, due to COVID-19-related increases in delinquencies and modifications in March 2020, April 2020 charts start at elevated levels. This does not indicate massive spikes in negative performance on April 1st. For that reason, you will notice elevated levels in April for charts titled "Total %" within **Figures X.2** and **X.3**.

Distribution of Loan Payment Due Date

To better understand delinquency and modification trends, we must first look at the distribution of loan due dates in a given month, which is the contractual date by which a loan payment is due each month. If a loan does not receive a payment by the due date, it becomes delinquent. Regarding modifications, a loan can be modified at any point, including prior to due date. However, borrowers may delay contacting issuers or resolving loans until the due date, which is certainly understandable given the magnitude of other events going on. Therefore, modification behavior still increases around due dates although the relationship is not as clearly defined as for delinquencies.

Figures 1.1 and **1.2** illustrate the distribution of due dates. They indicate that loan due dates are not evenly distributed, as the largest portions are due at the beginning of the month, with a small spike around the 15th, leveling off toward the end of the month. The dramatic spike at the end of February is due to the month only having 29 days. Since the first increase in delinquency (around March 18th) the majority of borrowers have already faced one payment due date. dv01 anticipates the next spike in performance trends to occur in the beginning of May around the next cluster of due dates.

Figure 1.1 - Due Date Distribution, 2020 vs. 2019 Combined

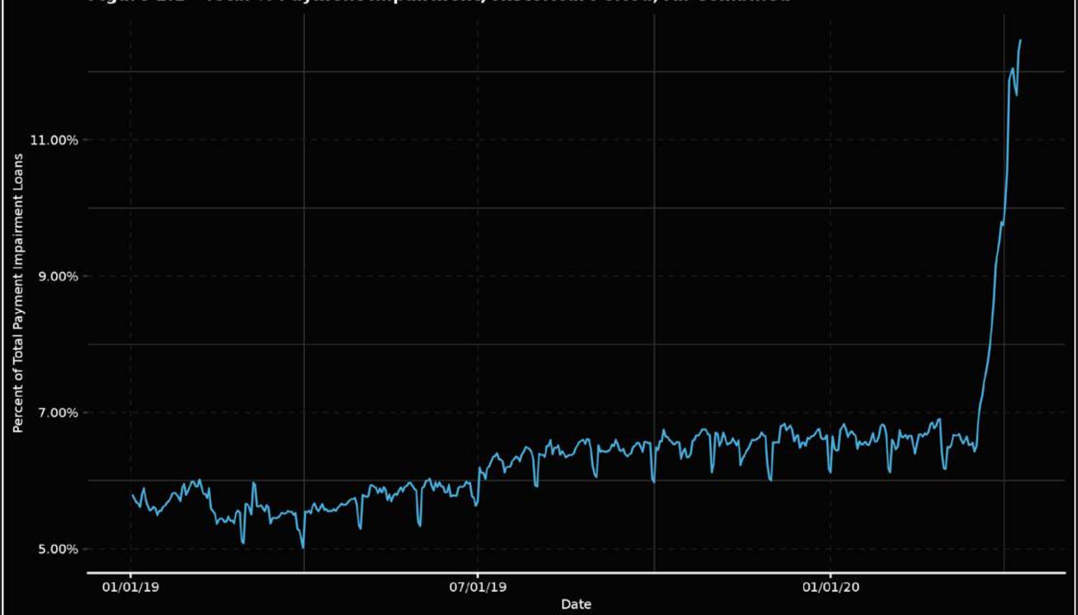


Source: dv01, April 2020

Payment Impairment Trend Analysis

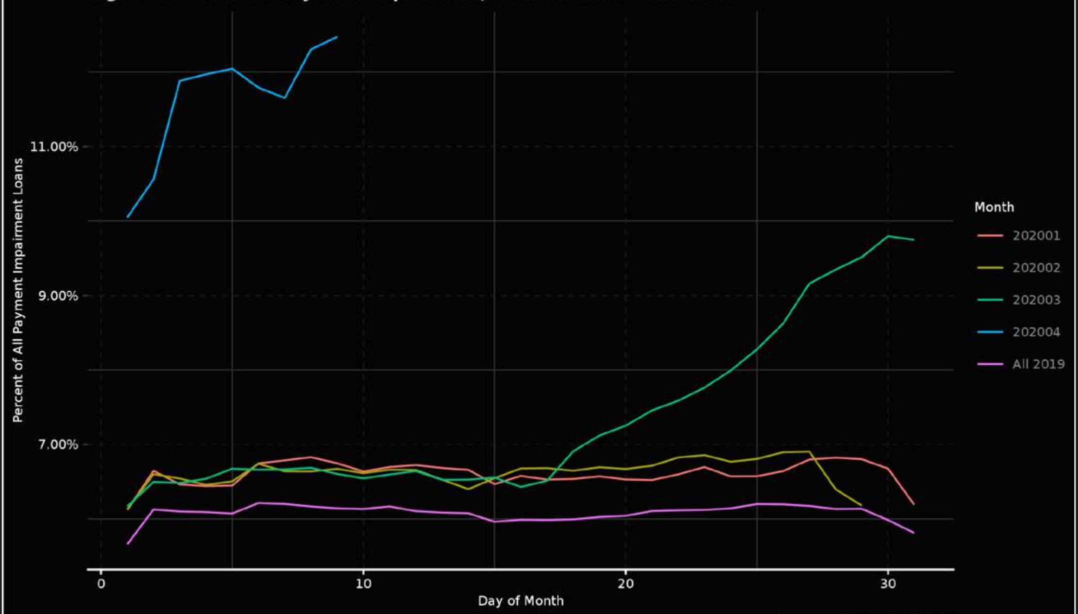
In this section, we discuss our findings on payment impairments. **Figures 2.1** and **2.2** show the total percentage of payment impaired loans over time. The trend shows a dramatic increase in payment impairment since March 18th. However, the rate of increase has slowed in the past few days because the bulk of early due dates have passed.

Figure 2.1 - Total % Payment Impairment, Historical Period, All Combined



Source: dv01, April 2020

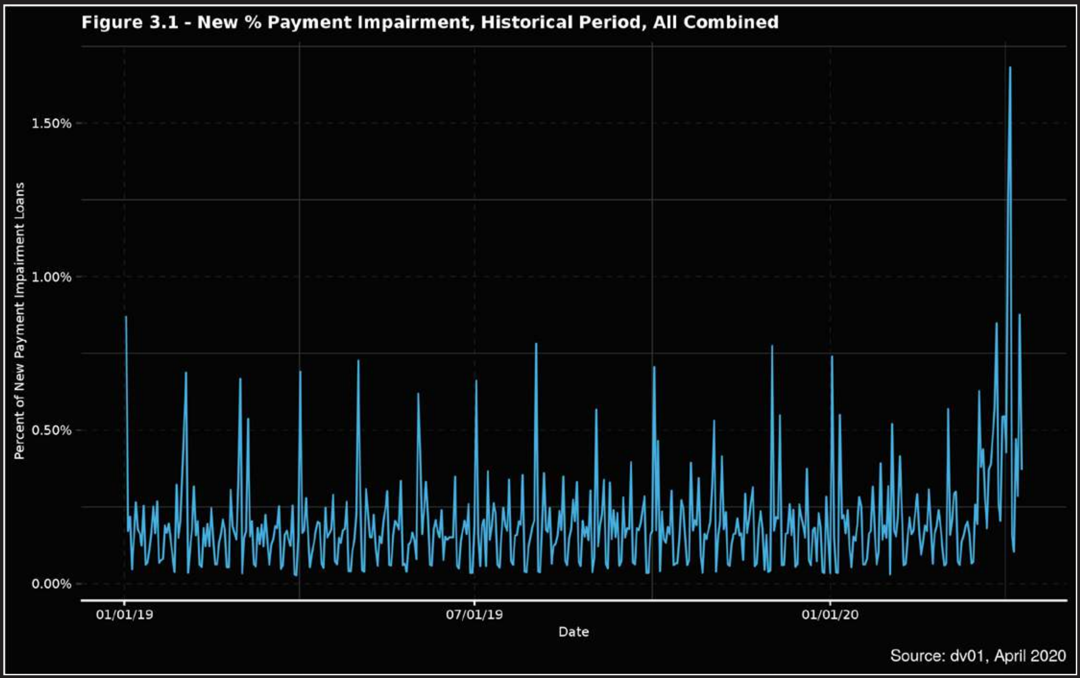
Figure 2.2 - Total % Payment Impairment, 2020 vs. 2019 Combined

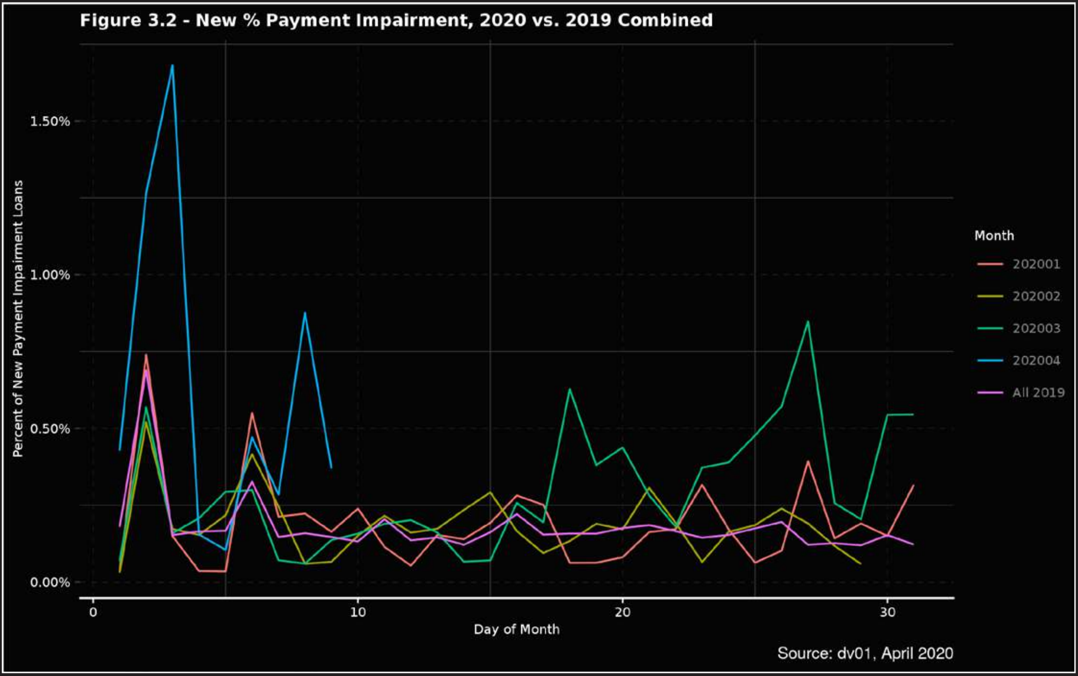


Source: dv01, April 2020

Figures 3.1 and **3.2** show the percentage of newly impaired loans (i.e. loans that became impaired for the first time on a given day). dv01 noticed a significant increase in new impairments starting on March 18th and continuing through April. Since the large spikes in the beginning of April, around when the largest percent of loans come due, the rate of increase for new impairments has slowed substantially, but remains at elevated levels.

dv01 has observed that Total Payment Impairment % has increased by approximately 5.5-6% above its historical average. For comparison, estimates of US unemployment rates related to COVID-19 vary. As of April 4th (five days before our data cutoff) 16.8 million Americans have filed for unemployment aid over the past three weeks versus an average of 0.65 million over any three-week period since 2019[1]. That indicates that about **10%** of the total labor force (approximately 164 million) has filed a claim[2]. Although initial claims do not all translate to unemployment, and official unemployment rates are not yet known, forecasts project the rate to be well above 10% for April—a greater than 6.5% increase from February's rate of 3.5%.





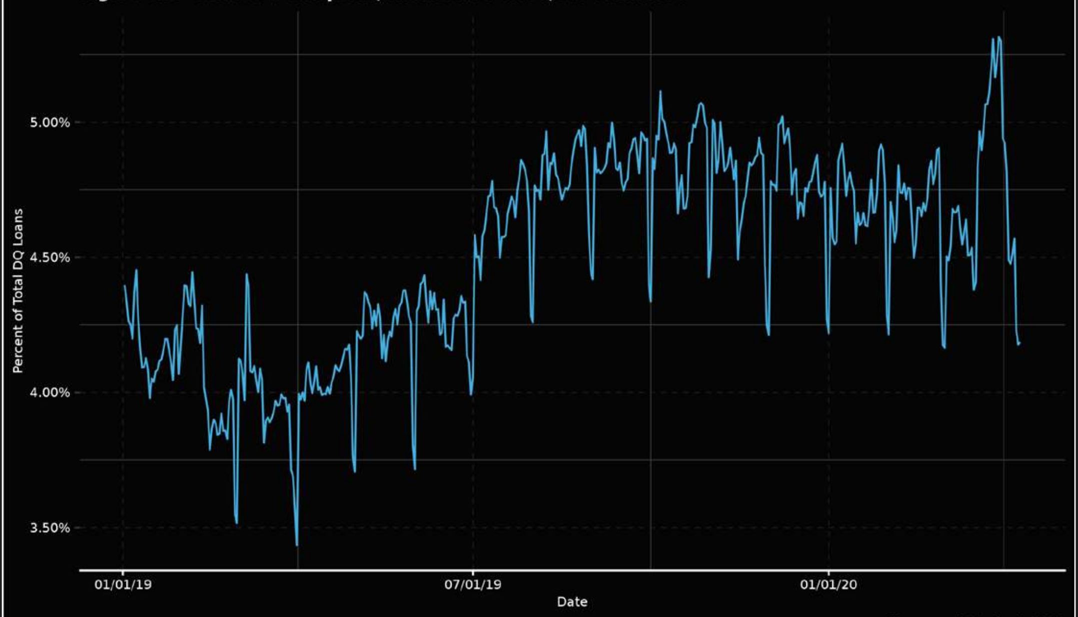
Among the biggest criticisms of marketplace loans is that these loans may substantially underperform during an economic downturn and default multiple times the change in unemployment rate. To date, however, the trends show that the rate of impairment has been below the overall unemployment change, which is a very positive sign for investors.

1 https://fred.stlouisfed.org/series/ICSA
2 https://www.bls.gov/cps/lfcharacteristics.htm#emp

Delinquency Trend Analysis

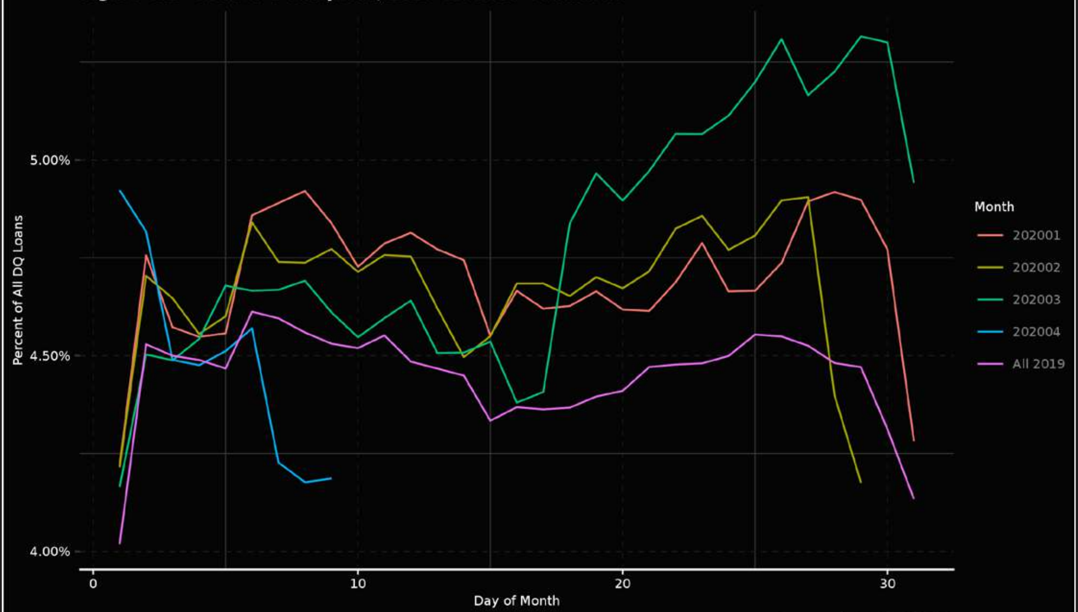
Figures 4.1 and **4.2** illustrate the total percentage of loans that are delinquent. The charts show a material and sustained increase in the total percentage of delinquencies beginning on March 18th through the end of March. Since the end of March, total delinquencies have decreased as a result of more loans receiving modifications.

Figure 4.1 - Total % Delinquent, Historical Period, All Combined



Source: dv01, April 2020

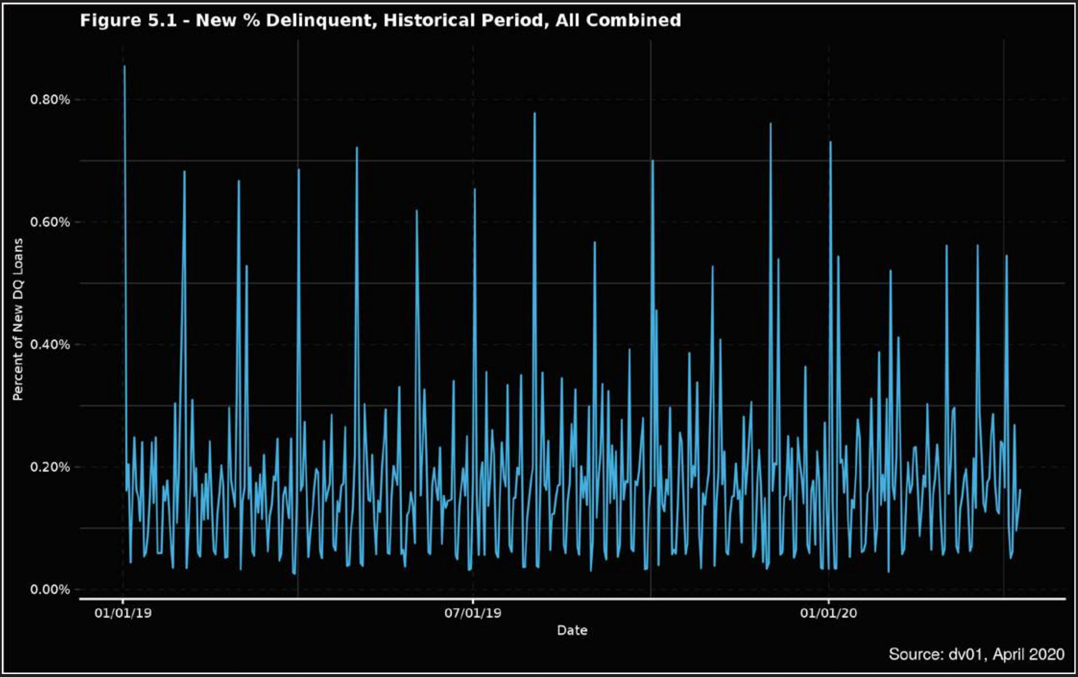
Figure 4.2 - Total % Delinquent, 2020 vs. 2019 Combined

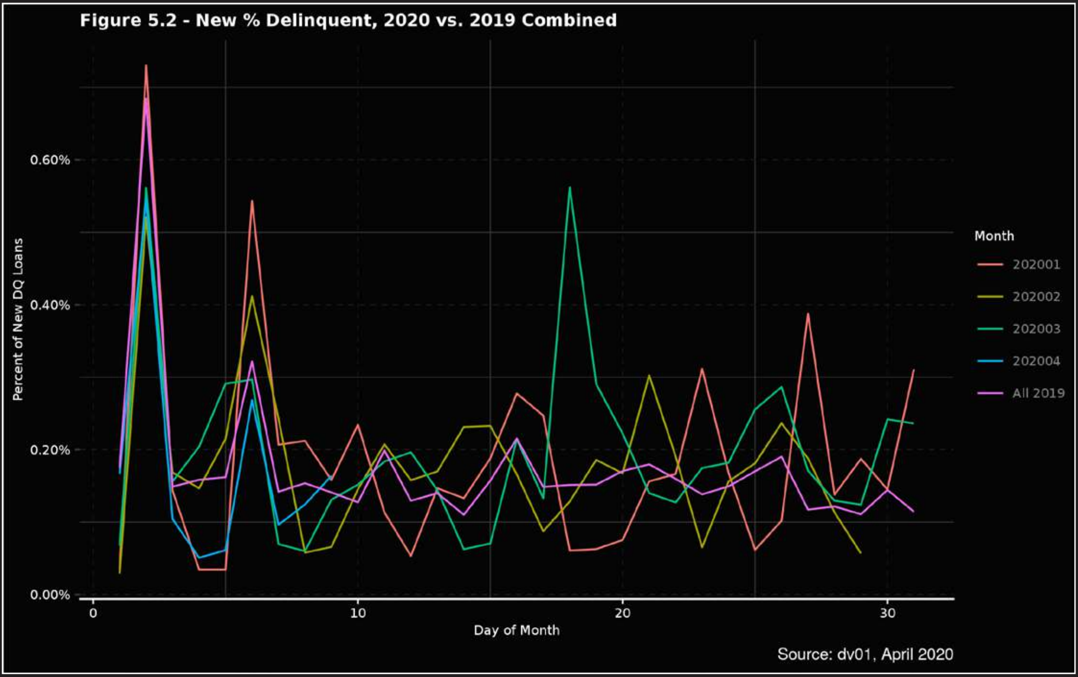


Source: dv01, April 2020

Figures 5.1 and **5.2** illustrate the percentage of new delinquencies. The largest recent increase in new delinquent loans was on March 18th, followed by a smaller increase the day after, and then a slow-down through the remainder of the month. Similar to the change in overall delinquency rate, there has been a substantial decline in new delinquencies as issuers have successfully enrolled more borrowers into their hardship relief modification programs.

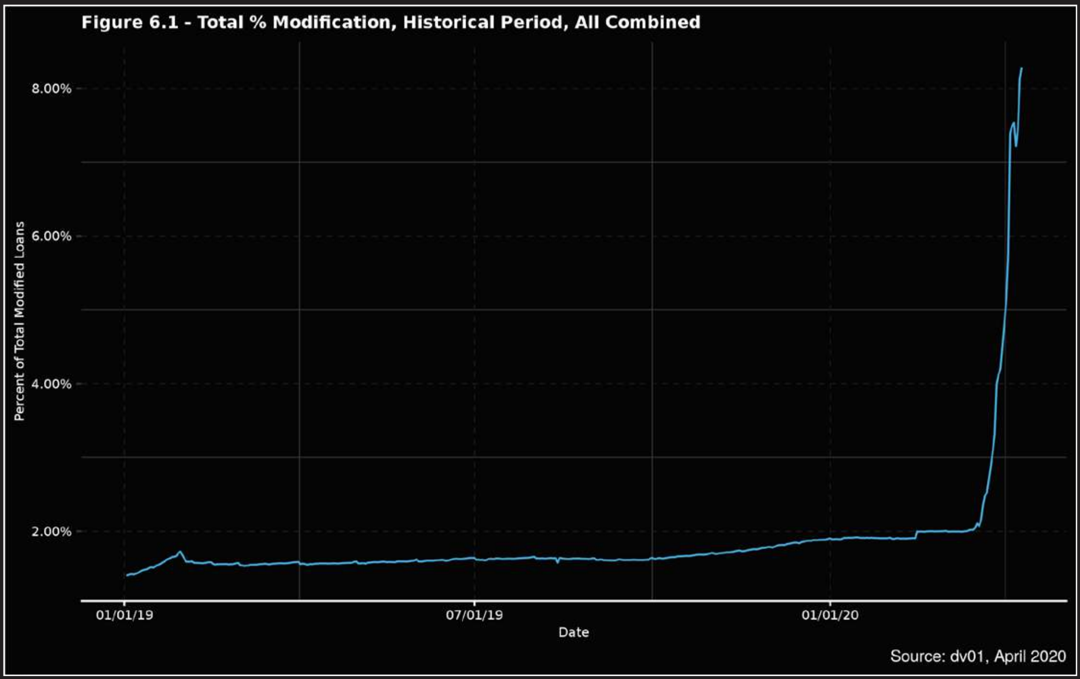
Of note, the trend of total and new delinquencies was substantially lower in April 2020 than in previous months. As discussed earlier in the due date analysis, the largest portion of loans are due at the beginning of the month, which is usually the time with the highest delinquency spikes. This month, many of those delinquent borrowers are going directly to modifications, lowering the overall rate to below-normal seasonal trends. Now that the cluster of loans due in early April have been resolved, the next substantial change in trends should occur at the next due date in early May.





Modification and Hardship Relief Trend Analysis

Marketplace issuers have expanded modification efforts to help borrowers. **Figures 6.1** and **6.2** illustrate the total percentage of borrowers that have an active modification. The charts show a substantial increase in modifications starting March 18th and continuing through today. Furthermore, modifications have gone from being a small percentage of impairments (historically 1-2% modifications versus 6-7% Impairments) to the majority (8% modifications versus 12% impairments today).



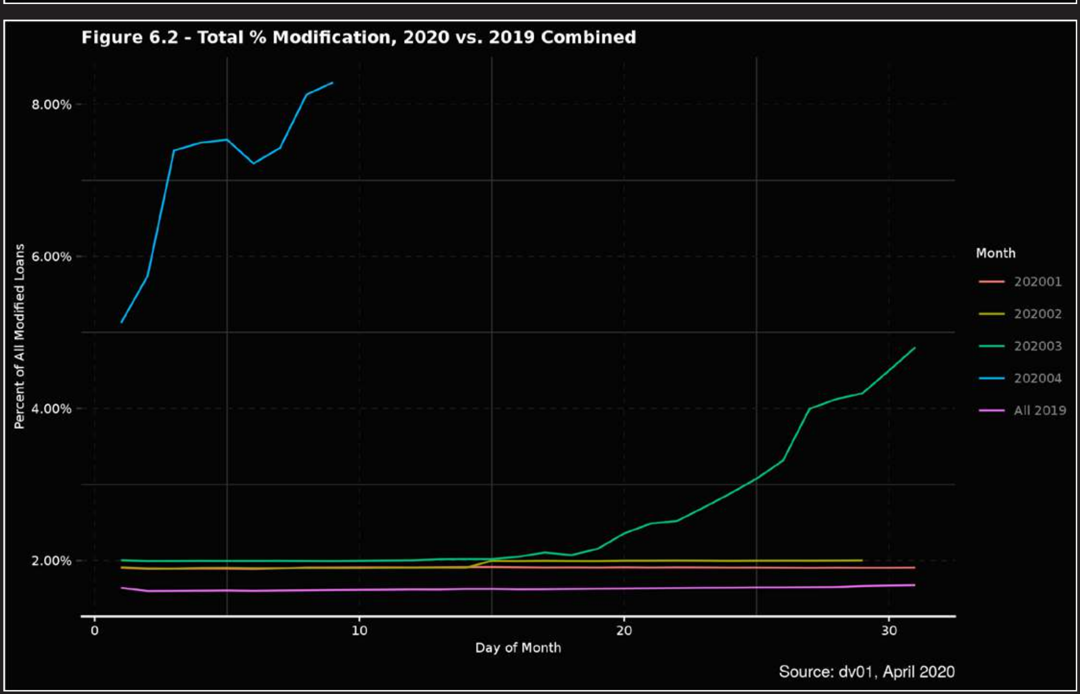
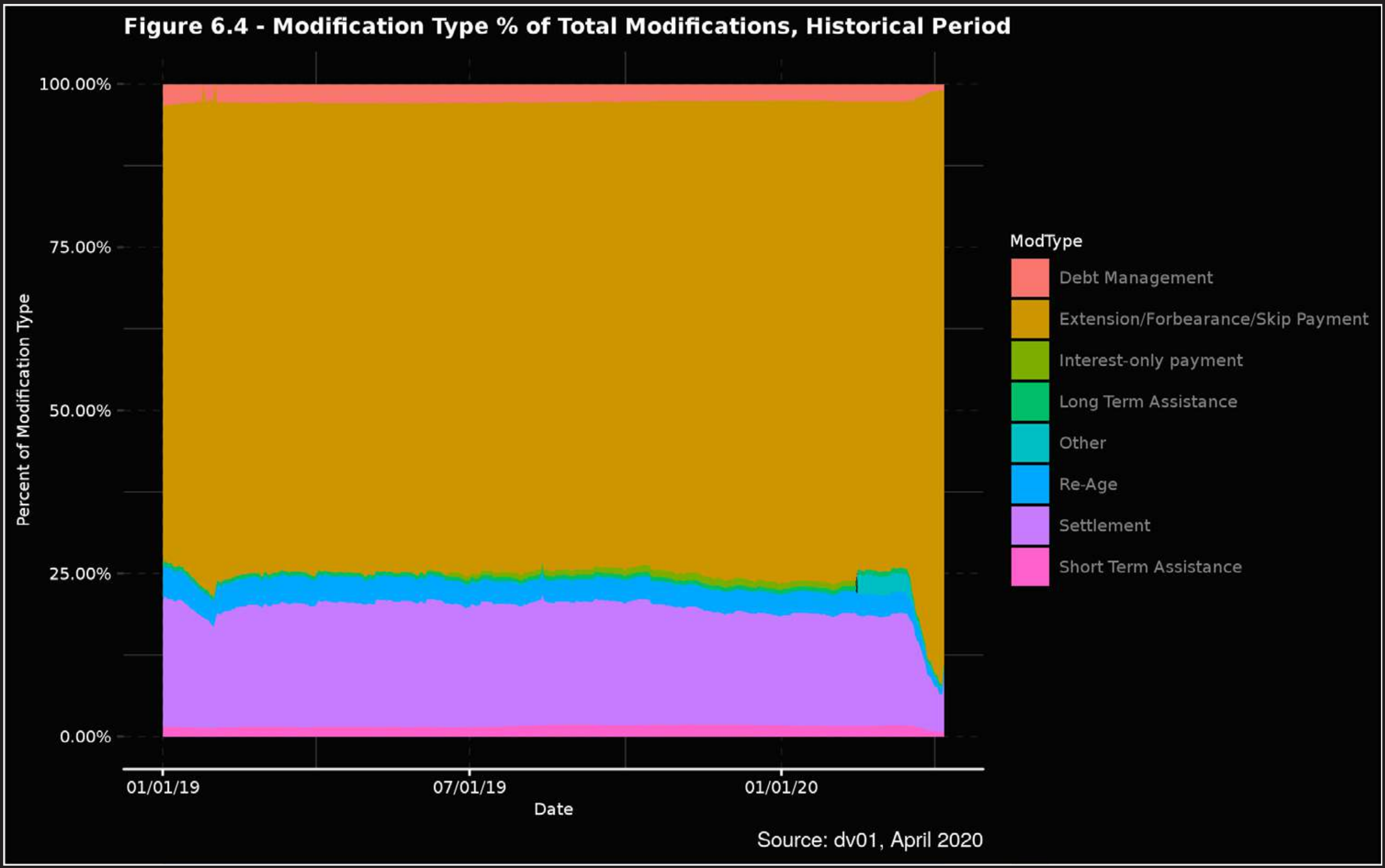
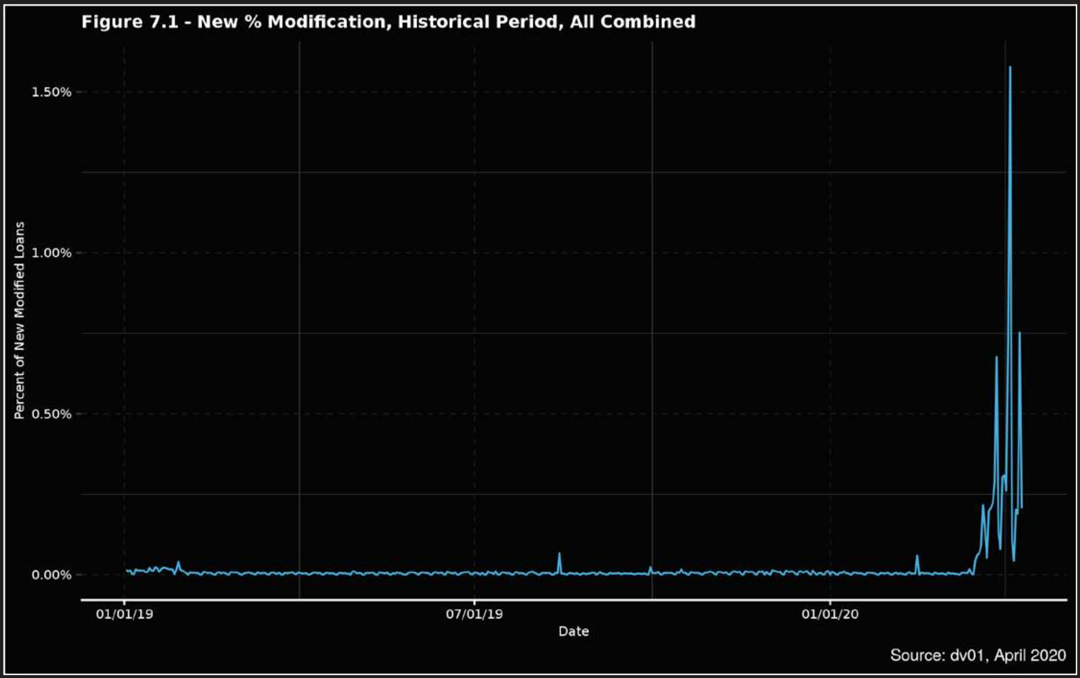


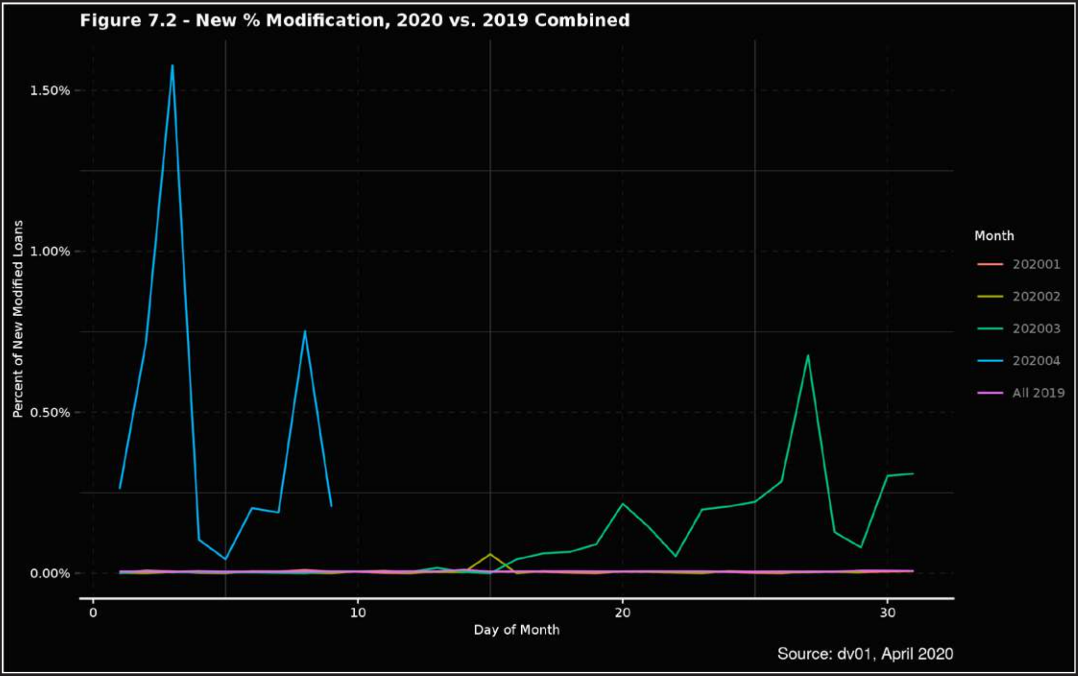
Figure 6.4 shows a breakdown of the types of modifications that borrowers have been offered. The vast majority of modifications come in the form of an extension or forbearance, wherein a borrower is granted a temporary stay of payments for a period of one month or longer before resuming their prior payments. The interest rate, principal, and payment do not permanently change in this type of modification.



Figures 7.1 and **7.2** show the percentage of new modifications. New modifications started increasing on March 18th through the beginning of April, as the largest percentage of loans faced their first due date since COVID-19 was declared a pandemic. The new rate of modification has slowed substantially since the large cohort of loans due at the beginning of the month have already been addressed.

The charts show that modification behavior has increased more substantially and at a higher rate of change than the behavior of delinquency rates. Additionally, while new delinquency and total delinquency rates have moderated, modification rates continue to increase. This indicates that issuers have had success in reaching borrowers before their loans are past due and instead enrolling them in modifications, which can significantly aid in ultimate loss mitigation. Finally, modifications do not display the seasonality trends seen in delinquencies because the same scale of the efforts has not been present prior to the onset of COVID-19.



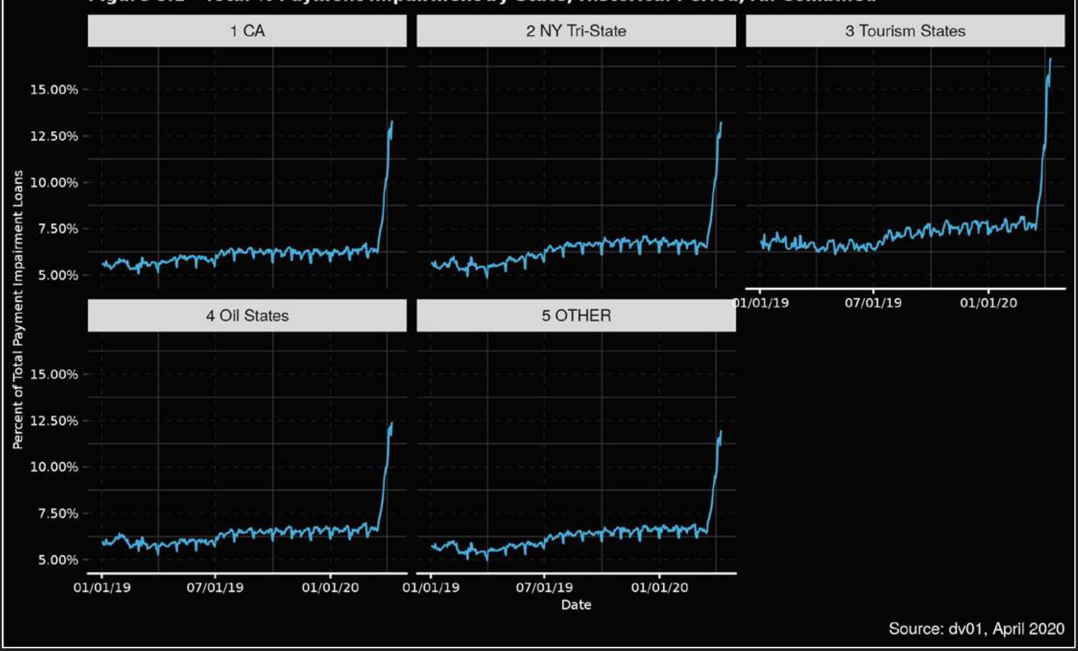


Performance Analysis By Loan Geographic Region

Because the impact of COVID-19 has varied by region, dv01 segmented the universe of loans in order to isolate states with earlier and more aggressive quarantine policies. dv01 identified California, New York, and New Jersey as implementing a wider-spread quarantine effort than the remainder of the country. dv01 also identified Nevada and Hawaii as states where tourism and leisure revenue play a larger role in state employment. Additionally, dv01 has identified Texas, Oklahoma, North Dakota, Louisiana, and Alaska as having more exposure to both employment trends, as well as economics related to oil price. **Figures 8.1** and **8.2** isolate total payment impairments in these states versus the remainder of the country.

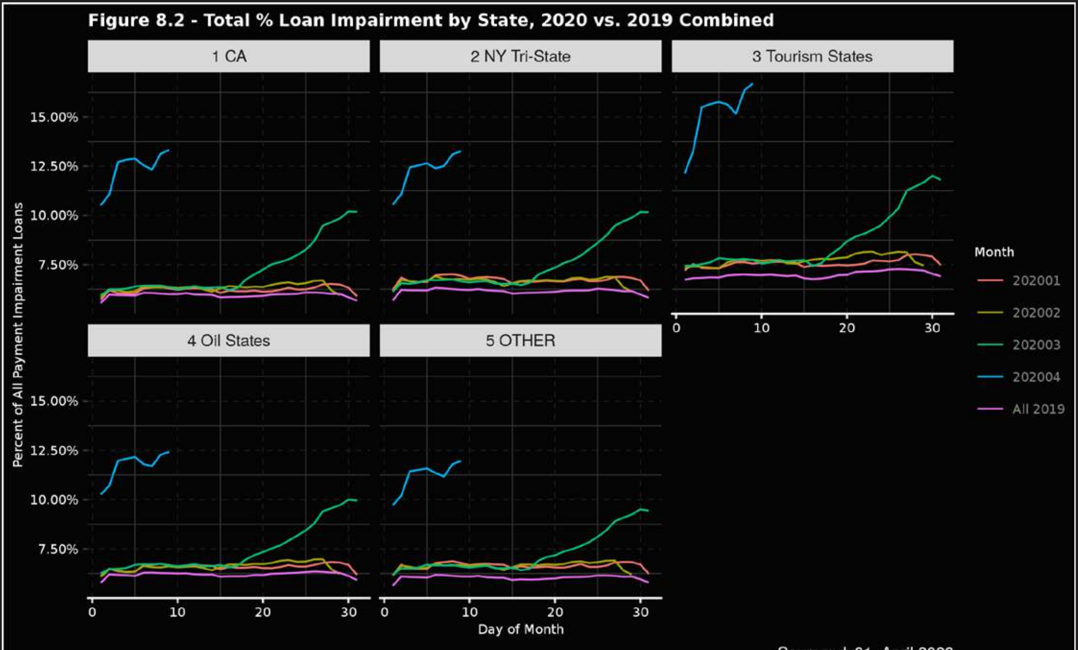
dv01 has concluded that payment impairments rates are higher in California, New York, and New Jersey than in the remainder of the country, reflecting the broader extent of the quarantine efforts in these areas although the rate of increase has moderated. The tourism-heavy states of Nevada and Hawaii have the highest overall impairment rates and fastest growth rate in impairments, as casinos and hotels remain mostly shut and leisure travel has all but halted. Finally, dv01 has observed impairment rates above the national average, but below the rates of California, New York, New Jersey and oil-reliant states since those regions are dealing with the combination of COVID-19-related quarantines and the fallout from plunging crude prices and bankruptcies of oil companies.

Figure 8.1 - Total % Payment Impairment by State, Historical Period, All Combined



Source: dv01, April 2020

Figure 8.2 - Total % Loan Impairment by State, 2020 vs. 2019 Combined

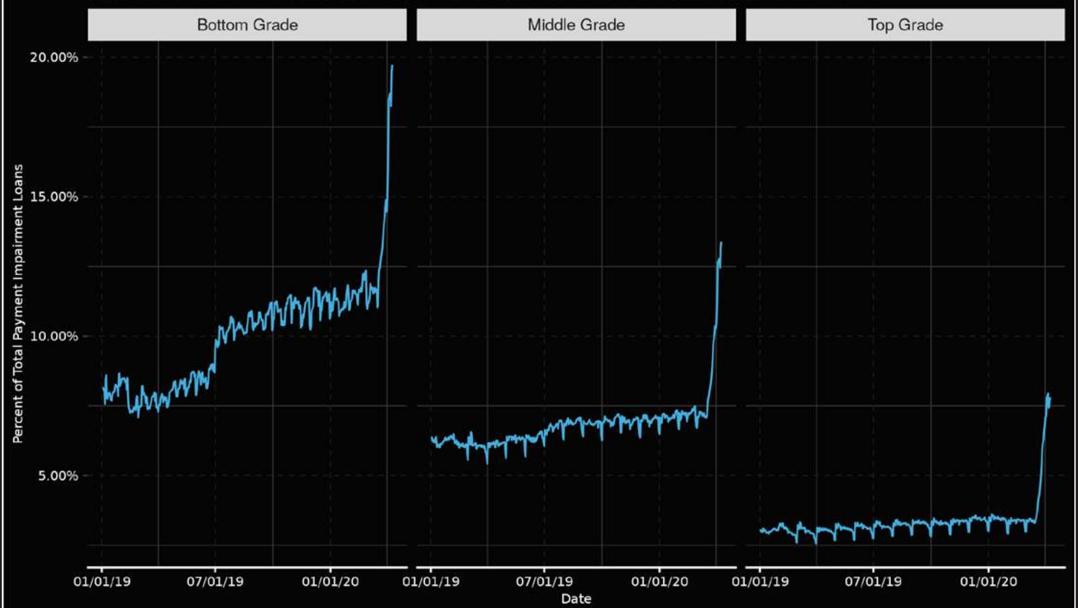


Source: dv01, April 2020

Performance Analysis By Loan Grade

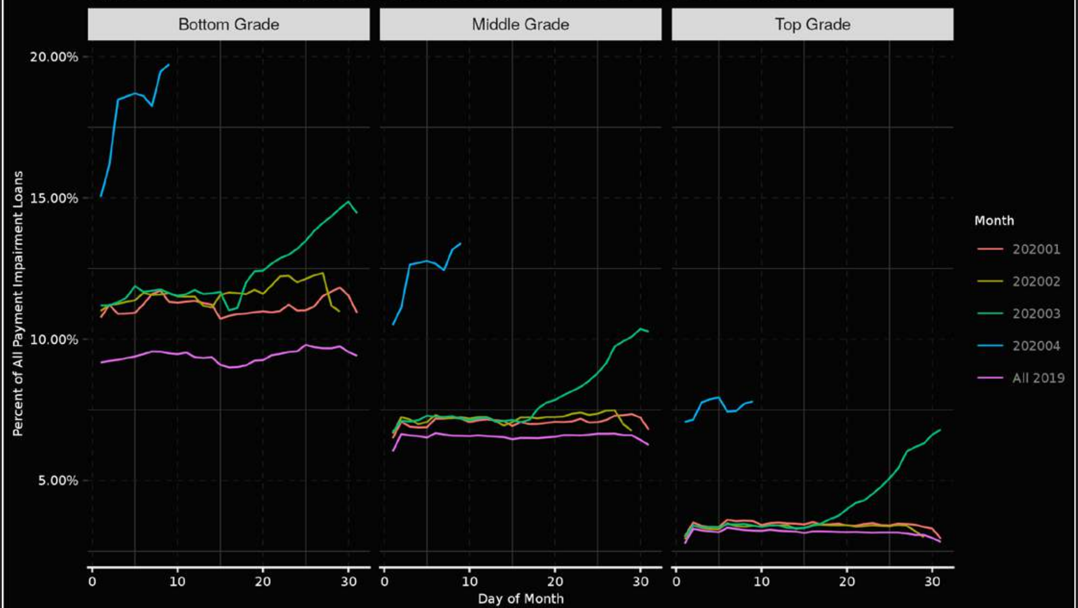
As described earlier in the methodology section, dv01 filtered and stratified loans into three categories and analyzed their performance. **Figures 9.1** and **9.2** below show the most significant increase in payment impairments since March 18th for the **Bottom Grade**, a less pronounced increase in the **Middle Grade**, and the smallest change in the **Top Grade**. Although it is still early in evaluating the economic impact, grade analysis shows that underwriting still plays a significant role in credit performance, despite an external disruption unrelated to origination characteristics.

Figure 9.1 - Total % Payment Impairment by Grade, Historical Period, All Combined



Source: dv01, April 2020

Figure 9.2 - Total % Payment Impairment by Grade, 2020 vs. 2019 Combined



Source: dv01, April 2020

Closing Remarks

Although the market reaction has already been swift, the economic malaise stemming from COVID-19 will be unpredictable and visible for the near future. There has been an increase in payment impairments, which is at or below the change in unemployment, which is a strong boon for loan investors.

The mitigation efforts from marketplace issuers has led to a substantial shift away from delinquency and into loan modifications for borrowers facing hardships. New modifications substantially outnumber new delinquencies, granting borrowers with job or income impairments crucial time to improve their financial standing without impacting their credit standing via defaults or impacting investors' performance via costly losses. dv01 has observed modifications taking the place of delinquencies, and we expect this trend to continue. Additionally, performance trends have not played out evenly, with lower-grade loans exhibiting the most deterioration, and certain regions more impacted by COVID-19-related events showing worse performance as well.

As the largest due date period of the month has passed, dv01 will shift focus in the coming weeks when some borrowers will experience their second due date since the pandemic. Over the coming months, as economic hardships and modification efforts abate and borrowers return to full payment, the efficacy of the programs will be clearer.

With the dv01 suite of offerings, investors can prepare for the torrent of performance changes with daily information on consumer patterns. Investors can stratify and filter for characteristics more relevant to their existing or potential portfolios, review trends and drill down to loan-level detail, incorporate updated assumptions to value future cash flows, and create portfolio reports. dv01, in its role of providing transparency to investors and issuers in consumer credit markets, will continue to monitor trends and provide commentary as we see continuing developments.

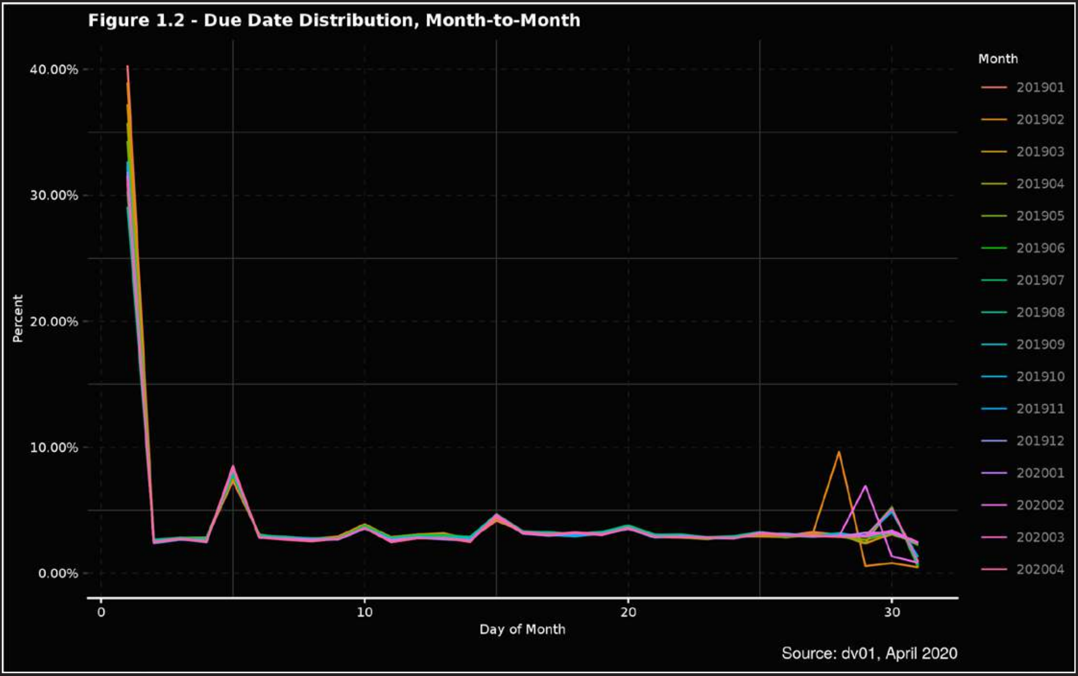
About dv01

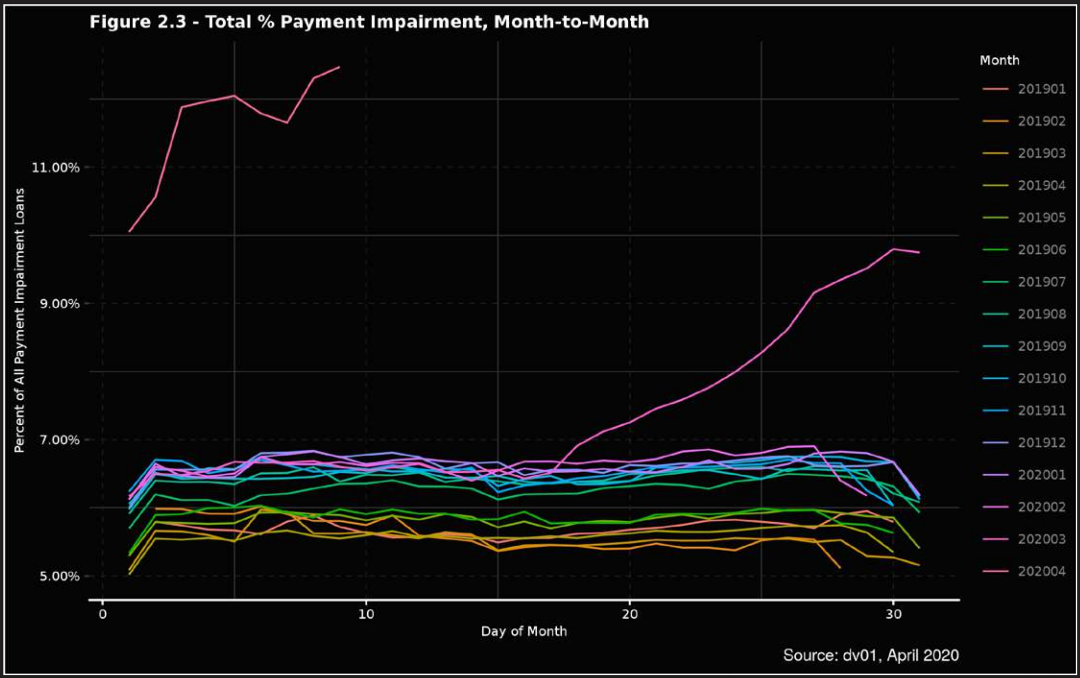
As the world's first end-to-end data management, reporting, and analytics platform for loan-level consumer lending data, dv01 is bringing unparalleled transparency and intelligence to every securitization for every investor.

With 420+ securitizations on the platform, dv01 has partnered with 20+ issuers and provided securitization reporting and analytics across $99 billion consumer unsecured, mortgage, student loans, and small business transactions. Additionally, in 2019, dv01 onboarded the CRT dataset, consisting of 81 transactions for a total notional balance of $2.4 trillion.

By building the most comprehensive library of MBS and ABS data, dv01 is empowering the capital markets with world-class tools to make safer data-driven decisions. Learn more at dv01.co or contact sales@dv01.co for more information.

Appendix A—2019 Combined broken into Month-to-Month charts





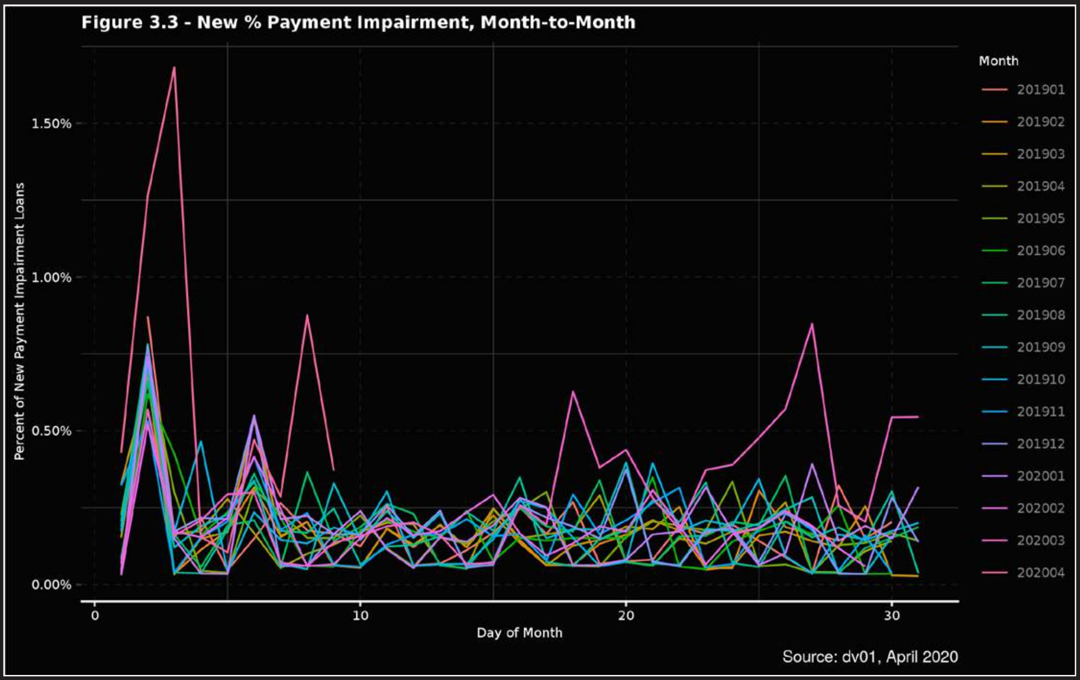


Figure 3.3 - New % Payment Impairment, Month-to-Month
Percent of New Payment Impairment Loans
Day of Month
Month
201901
201902
201903
201904
201905
201906
201907
201908
201909
201910
201911
201912
202001
202002
202003
202004
Source: dv01, April 2020

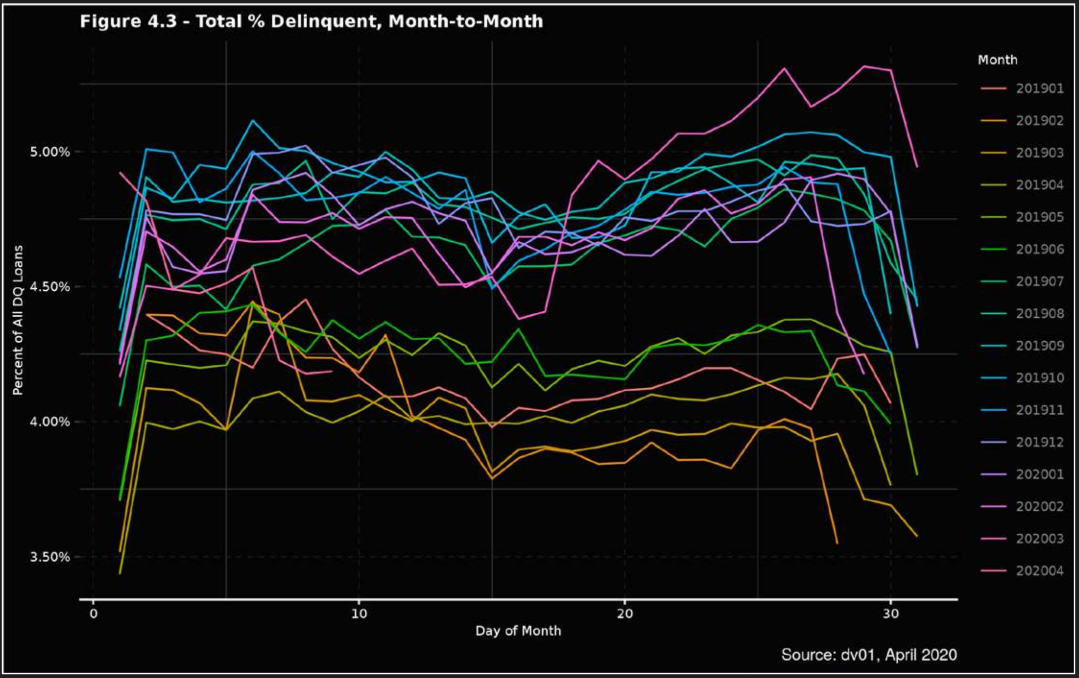


Figure 4.3 - Total % Delinquent, Month-to-Month
Percent of All DQ Loans
Day of Month
Month
201901
201902
201903
201904
201905
201906
201907
201908
201909
201910
201911
201912
202001
202002
202003
202004
Source: dv01, April 2020

Figure 5.3 - New % Delinquent, Month-to-Month

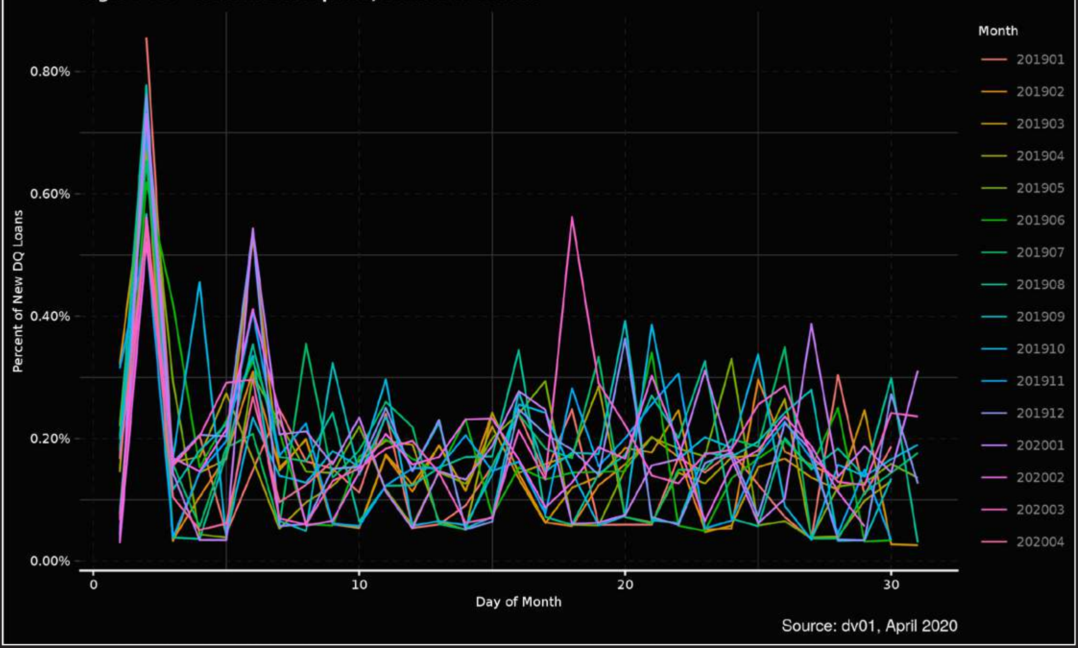
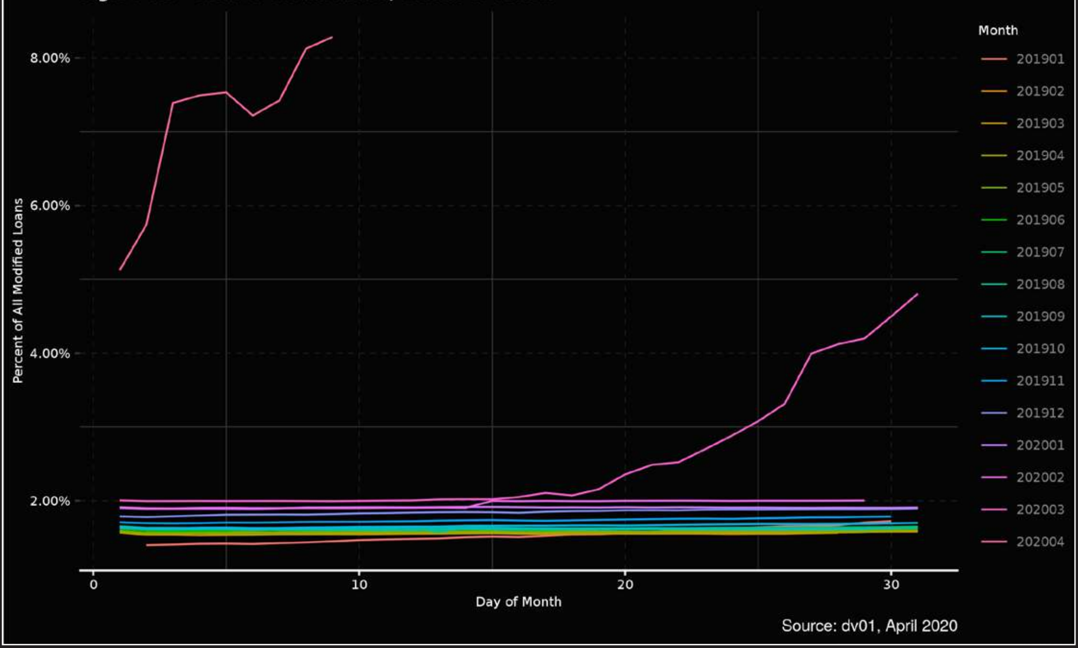
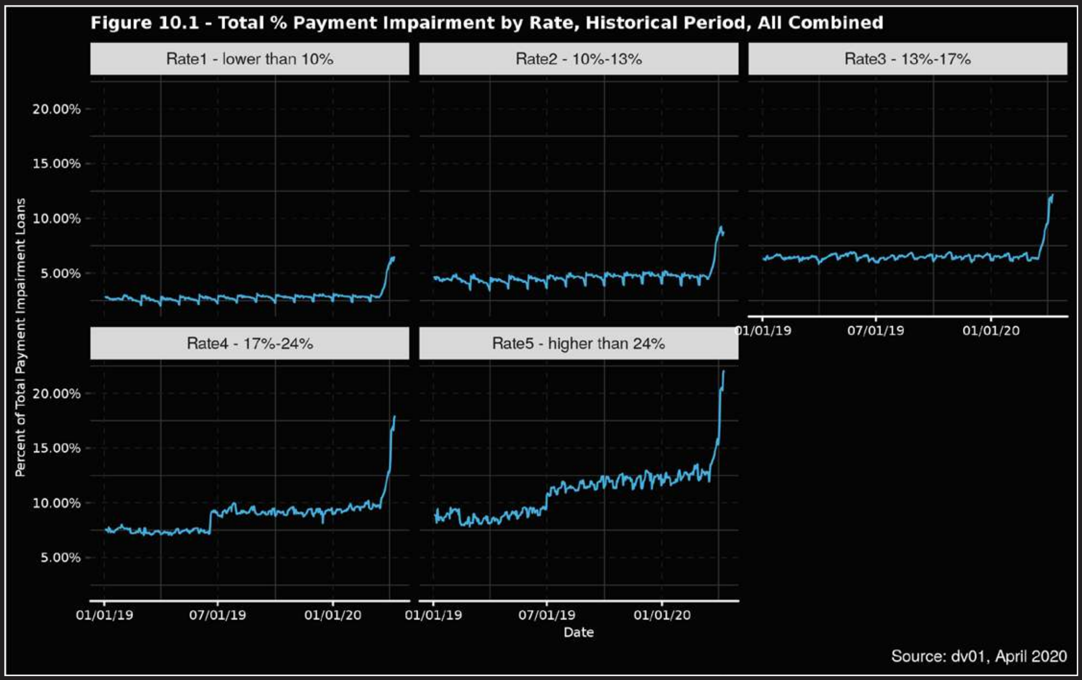
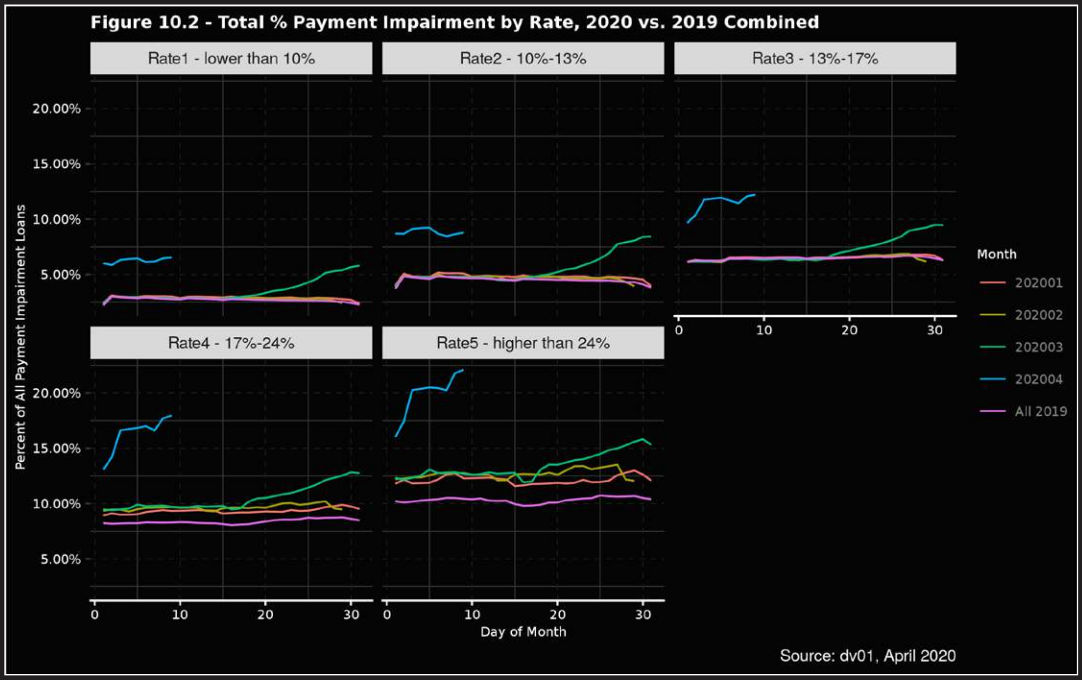


Figure 6.3 - Total % Modification, Month-to-Month



Appendix B—Additional performance charts by credit characteristics





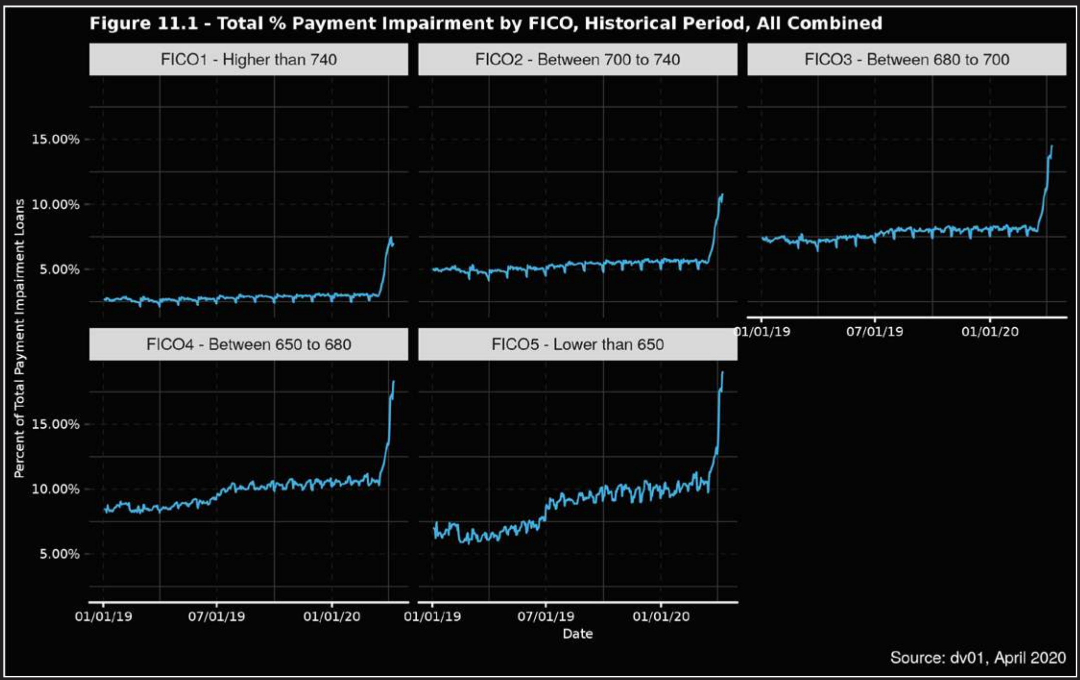


Figure 11.1 - Total % Payment Impairment by FICO, Historical Period, All Combined
FICO1 - Higher than 740
FICO2 - Between 700 to 740
FICO3 - Between 680 to 700
FICO4 - Between 650 to 680
FICO5 - Lower than 650
Percent of Total Payment Impairment Loans
15.00%
10.00%
5.00%
01/01/19
07/01/19
01/01/20
Date
Source: dv01, April 2020

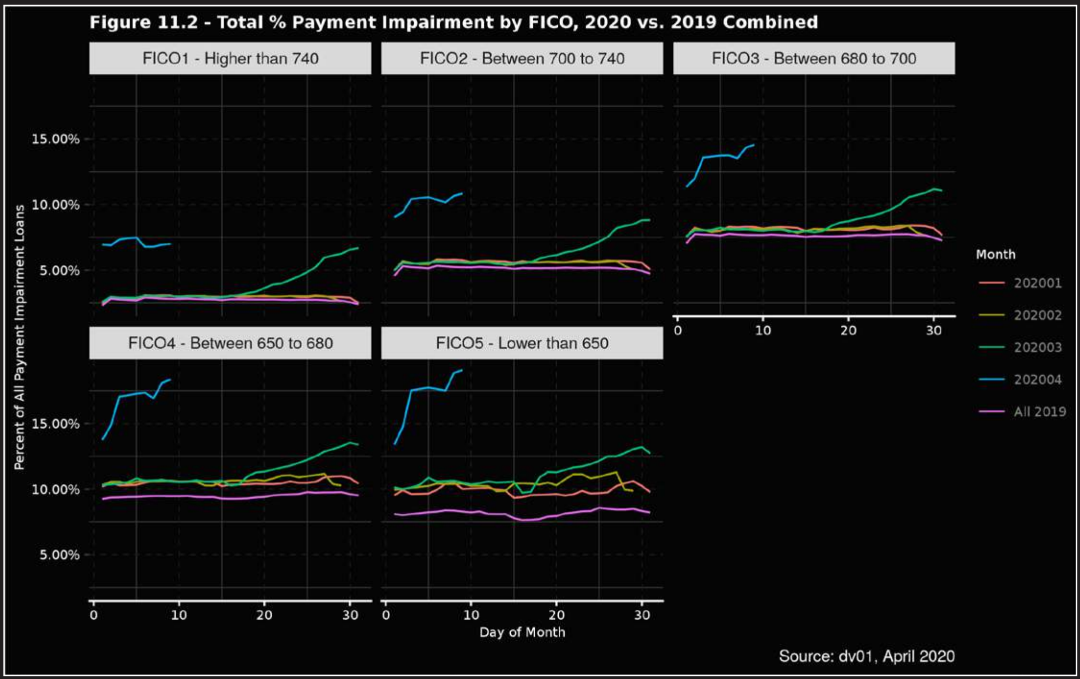


Figure 11.2 - Total % Payment Impairment by FICO, 2020 vs. 2019 Combined
FICO1 - Higher than 740
FICO2 - Between 700 to 740
FICO3 - Between 680 to 700
FICO4 - Between 650 to 680
FICO5 - Lower than 650
Percent of All Payment Impairment Loans
15.00%
10.00%
5.00%
0
10
20
30
Day of Month
Month
202001
202002
202003
202004
All 2019
Source: dv01, April 2020

Disclaimer

- This report is intended as a general overview and discussion. It does not constitute an offer to sell or a solicitation of an offer to buy any security.
- dv01 does not make an effort to differentiate or opine on specific issuers or issuer performance trends within a specific sector.
- dv01 also does not seek to influence future performance or opine on the investment returns of any particular investment strategy.
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