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FEDERAL RESERVE BANK PHILADELPHIA

Current State of the Auto Lending Market

Sharon Tang and Grace Bai Retail SMT FRB Philadelphia



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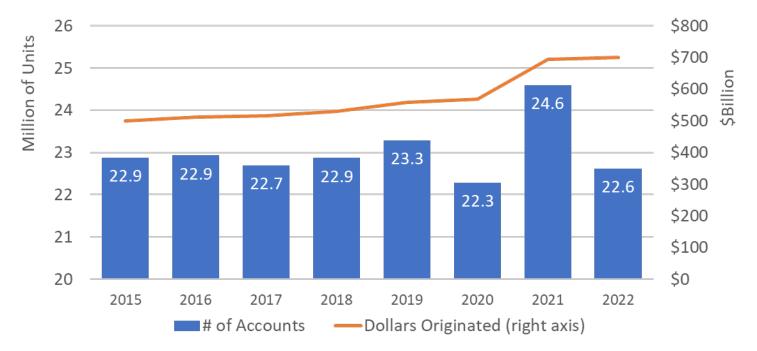


Auto Loan Originations



Auto Loan Originations

• Auto loan origination balances jumped to a new high in 2021 and have remained elevated despite a lower number of auto loan originations in 2022.

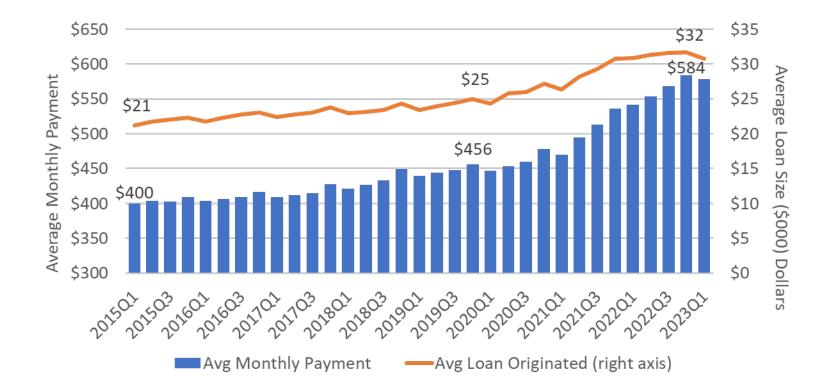


Auto Loan Originations by Year



Average Loan Size and Monthly Payment

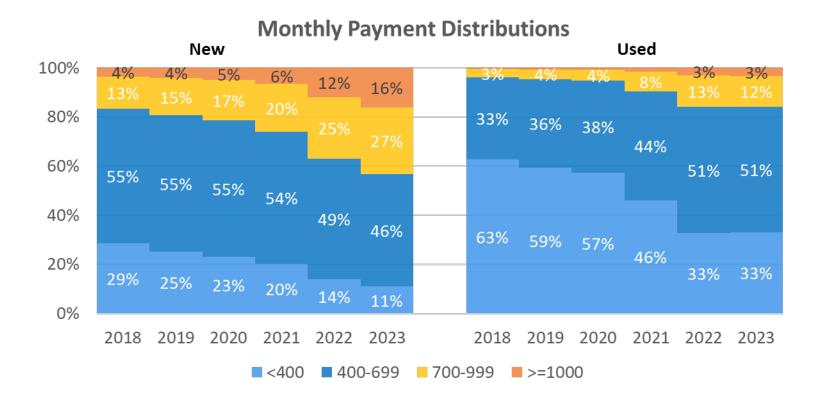
• The average loan size and average monthly payment dipped slightly this most recent quarter, which provided some borrower relief.





Shifts to Higher Monthly Payments

• The percentage of vehicle loans with monthly payments above \$700 have been growing in share over the past three years.

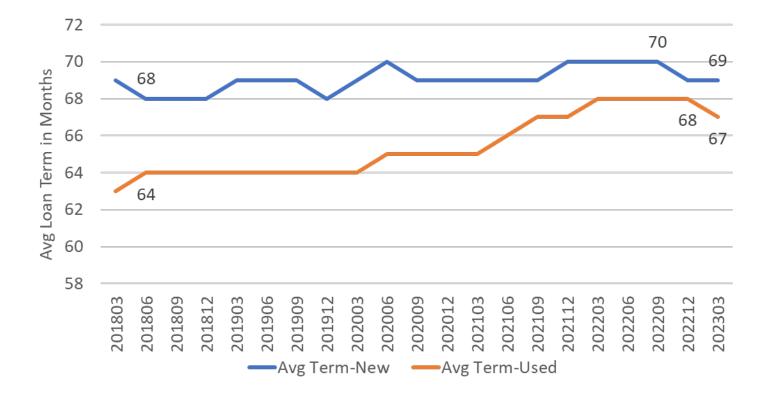


Data source: Experian Velocity/AutoCount



Average Loan Term

• The average loan term increased by two months for new vehicle loans and four months for used vehicle loans.

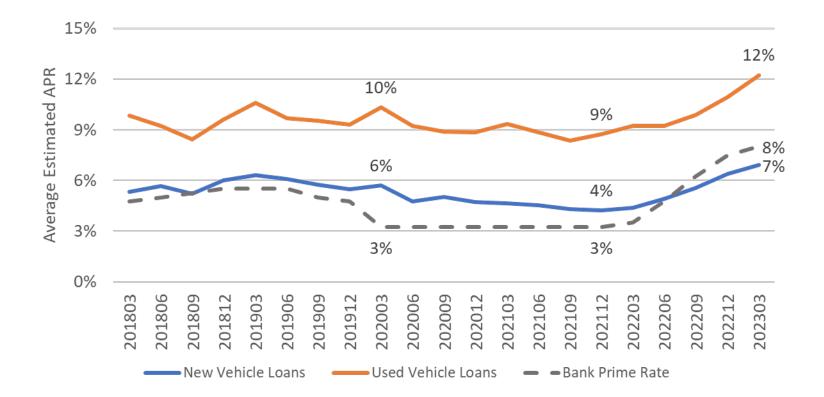


Data source: Experian Velocity/AutoCount



Average Estimated APR of New Originations

• Auto APRs are lagging the bank prime loan rate.

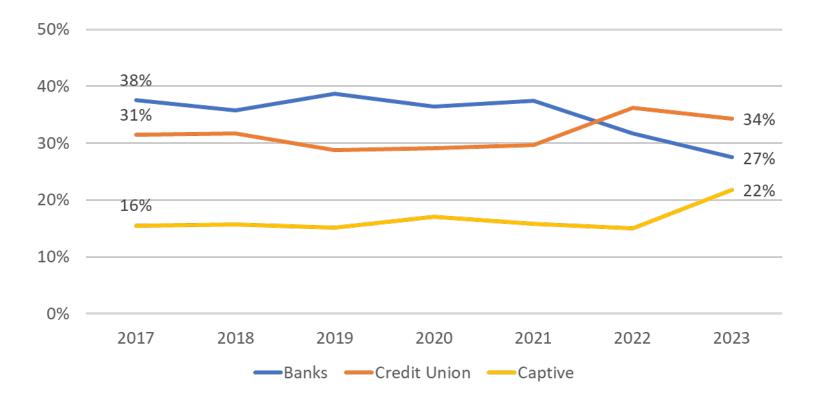


Data source: Experian Velocity/AutoCount



Auto Loan Originations by Lender Types

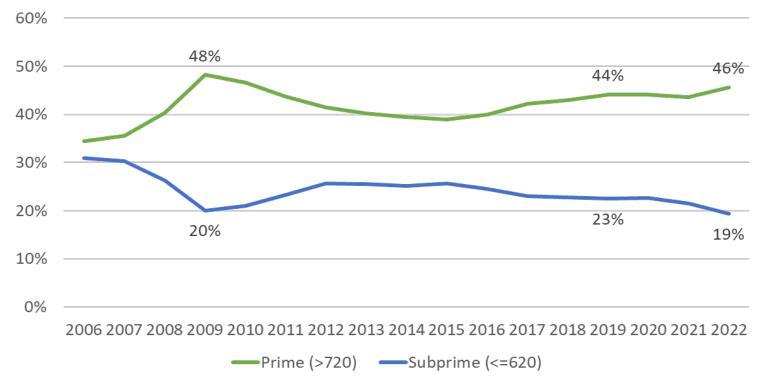
• The Credit Union share of new originations increased in 2022 while the share of Captive firms has shown a large increase in 2023:Q1.





Originations by Risk Segment

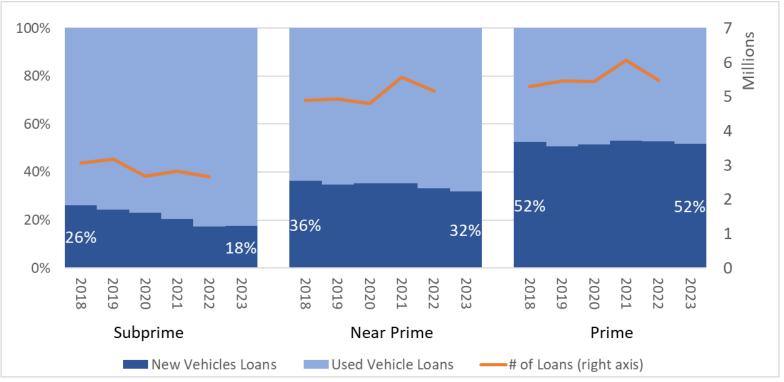
The share of new originations in the prime segment (Equifax Risk Score > 720) increased while the subprime segment (Equifax Risk Score <=620) share decreased.





Share of Origination by Risk Segment

- Prime segment (Experian Risk Score > 720)
 - The number of originations has been increasing despite the share of new vehicle loans remaining steady.
- Subprime segments (Experian Risk Score <= 620)



- A significant drop in loan originations, as well as the share of new vehicle loans, was observed.

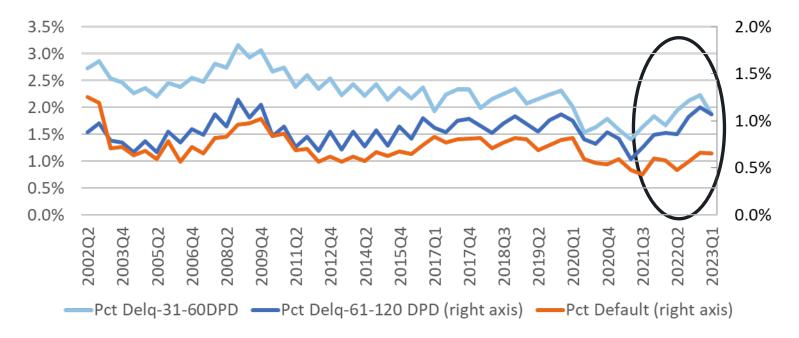
Data source: Experian Velocity/AutoCount

Auto Loan Performance



Auto Loan Performance

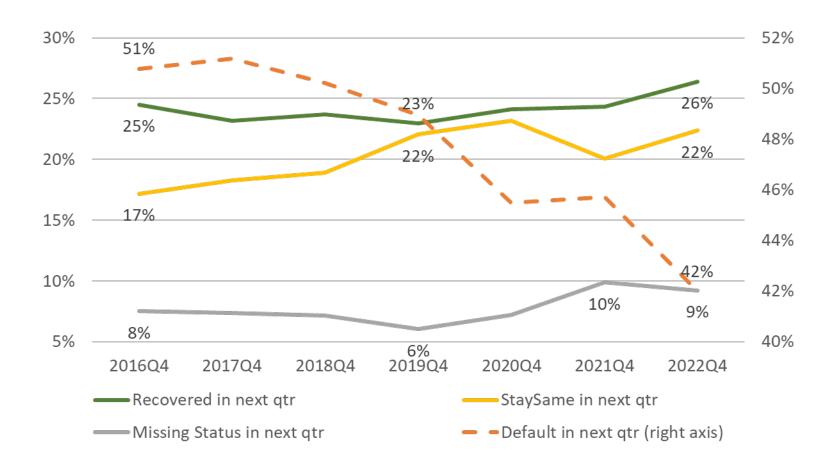
- The 60+ DPD is nearing GFC levels.
- The percentage of accounts transitioning to default is trending upwards.



Portfolio Delinquency and Default Rates

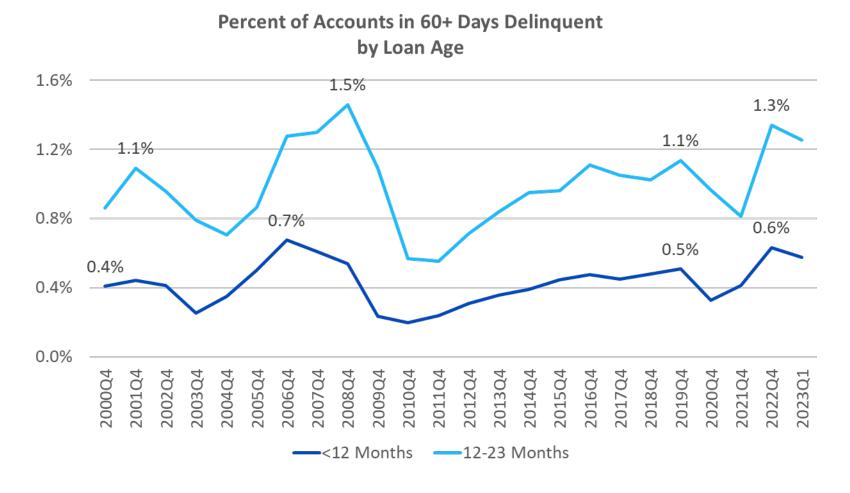


Status Change of Loans in 60+ DPD





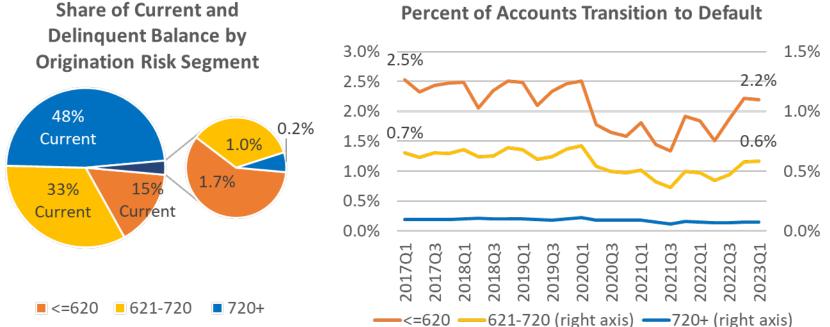
Delinquency by Loan Age





Loan Performance by Origination Risk

- There were \$1.4 trillion of auto loan outstanding balances as of March 2023 and 2.9% of balances were 30+ DPD.
- Default rates are trending towards pre-pandemic levels across all risk segments.

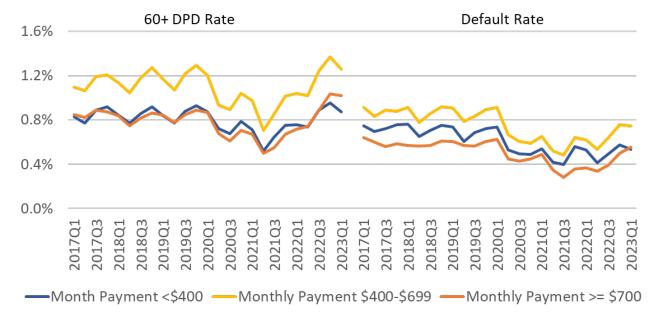


Percent of Accounts Transition to Default



Delinquency and Default by Monthly Payments

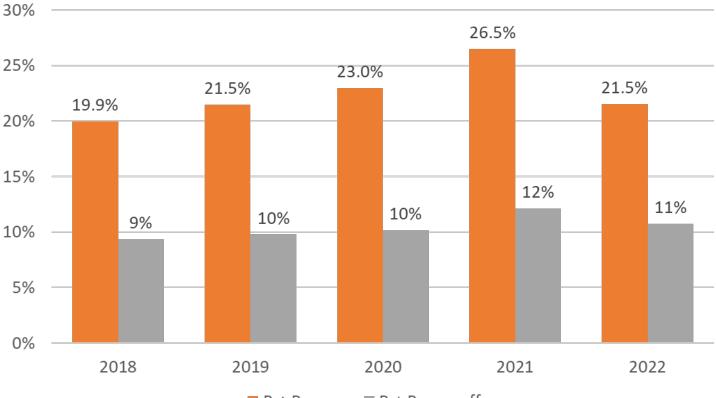
- Accounts with monthly payments between \$400 and \$699 have the highest 60+days delinquent rate and default rate.
- Accounts with monthly payments of less than \$400 have higher default rates than accounts with monthly payments of \$700 and above.





Auto Prepayments

• The percent of accounts with prepayments decreased in 2022.



Pct Prepay Pct Prepayoff

Data source: FRBNY Consumer Credit Panel/Equifax Data

Auto Consumers



Profile by Product Mix

- 78% of auto borrowers hold a credit card; their average Equifax Risk Score is 8 points higher visà-vis the overall auto loan average.
- 40% of auto borrowers also carry a mortgage; on average, they are older and show a significantly higher Risk Score.
- Auto borrowers who are carrying student loans have a much lower Risk Score and tend to be younger.
- 13% of auto borrowers have no other major credit products. These borrowers have the lowest Risk Score, the lowest auto balance outstanding, and the highest 90+ DPD transition rates.

Product Mix *	Freq	Risk Score	Age**	Auto 90+ Transition	Auto Bal	Card/Mort/ Stu Bal
w/ Card	78%	715	48	0.66%	\$23,726	\$7,578
w/ Mortgage	40%	752	50	0.22%	\$25,948	\$256,100
w/ Student Loan	22%	675	41	0.97%	\$22,417	\$42,397
Auto Only	13%	663	47	2.83%	\$13,062	
All Auto	100%	707	48	0.86%	\$21,581	

Auto Consumer Profile by Product Mix as of 2023Q1

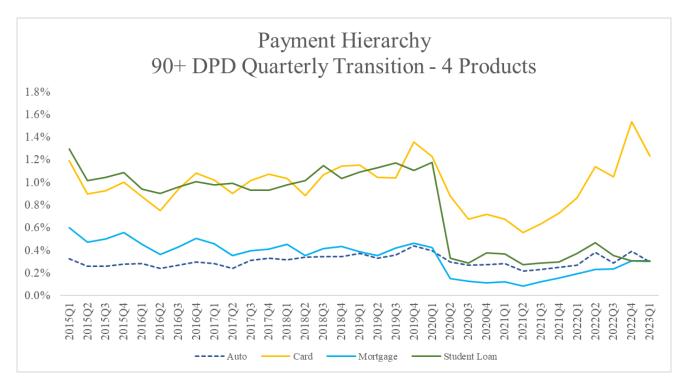
* Not mutually exclusive; consumers can show up in multiple categories

** Approximated based on birth year



Payment Hierarchy – 4 Products

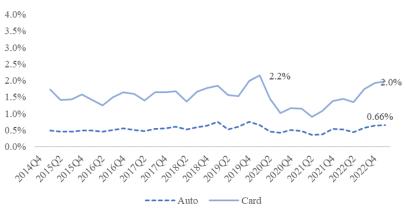
- For consumers with auto, card, mortgage, and student loans, auto loans were the last to default leading up to the pandemic.
- The mortgage and student loan default rates saw a significant drop and remained low throughout the pandemic due to loan forbearance.



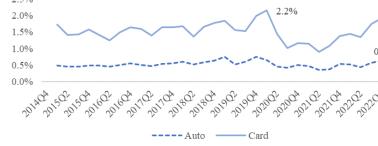


Payment Hierarchy – 2 Products

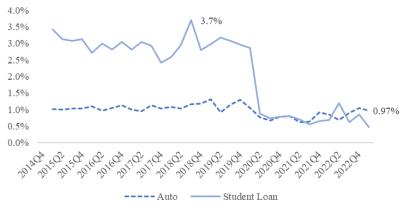
- 2-product priority patterns are consistent with the 4-product mix.
- In 2023:Q1, auto borrowers with ulletstudent loans are much more likely to become 90+ DPD than other product mix.

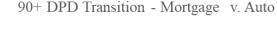


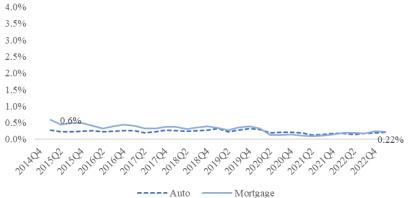
90+ DPD Transition - Card v. Auto









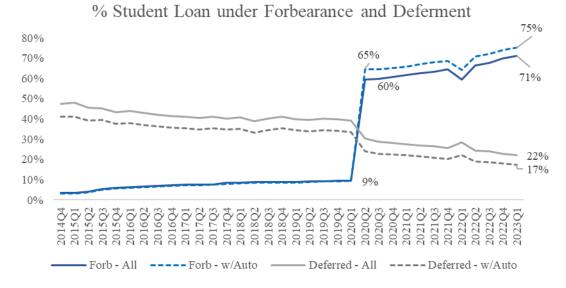


Auto consumers can show up in multiple charts

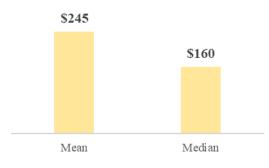


Student Loan Payment Resumption

- Student loan interest will resume accruing in Sept, and payments will be due starting in October.
- Less than 10% of student loans were in non-deferral forbearance (measured by no scheduled payment) prior to the pandemic. The forbearance rate suddenly increased to 60% in 2020:Q2, and it now sits at 71%.
- Overall, adding loans currently in deferment, 90%+ of student loans had no scheduled monthly payment as of 2023:Q1.
- 18% of auto loan borrowers have at least 1 student loan in forbearance. The resumed student loan payment for those consumers could be \$245 on average or \$160 as a median.



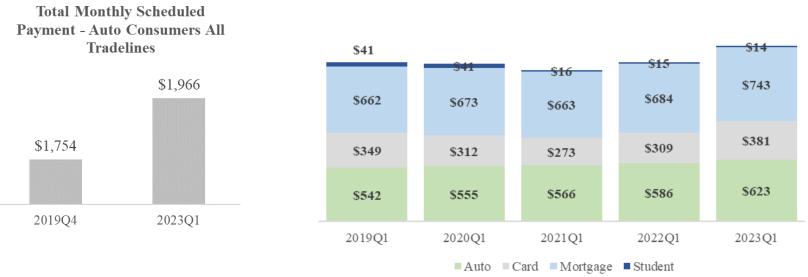
Expected Monthly Student Loan Payment after the Resumption -Auto Consumers





Total Scheduled Payment - Auto Consumers

- Auto loan borrowers' monthly obligations across all tradelines increased during the pandemic; now they are approaching \$2000.
- As of 2023:Q1, average auto consumers were scheduled to pay \$623 on auto loans, \$381 on credit cards, \$743 on mortgages, and \$14 on student loans.

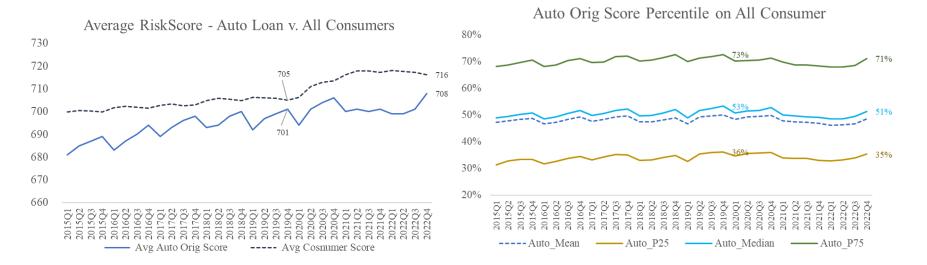


Average Monthly Scheduled Payment - Auto Consumers



Origination Score Ranking

- The average consumer score migrated to a higher level during and after the pandemic.
- The average auto origination score also increased by 7 points between 2019:Q4 and 2022:Q4.
- The auto origination score's ranking among all consumers remains stable despite the score migration.
 - Before and after the pandemic, the median auto origination score ranked around the 53rd and the 51st percentile, respectively, among all concurrent consumer risk scores.





Questions?

