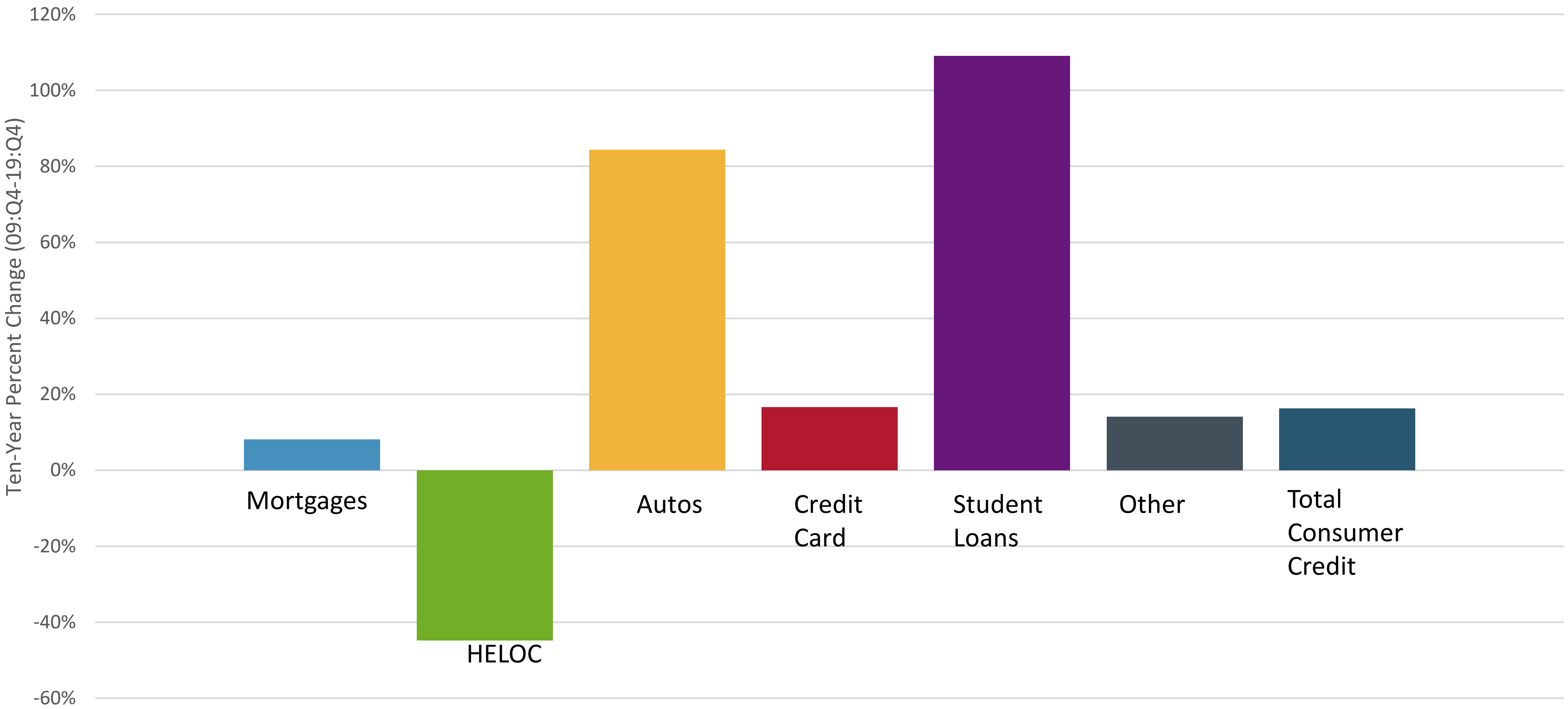
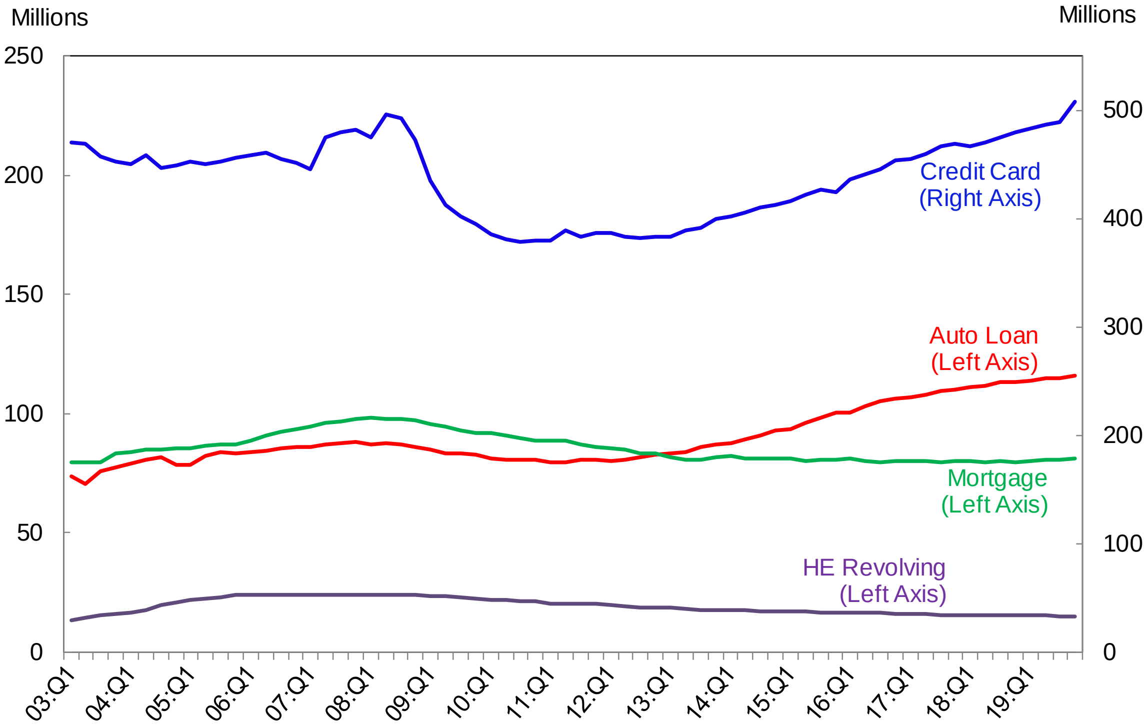
Ten-Year Changes in Consumer Credit

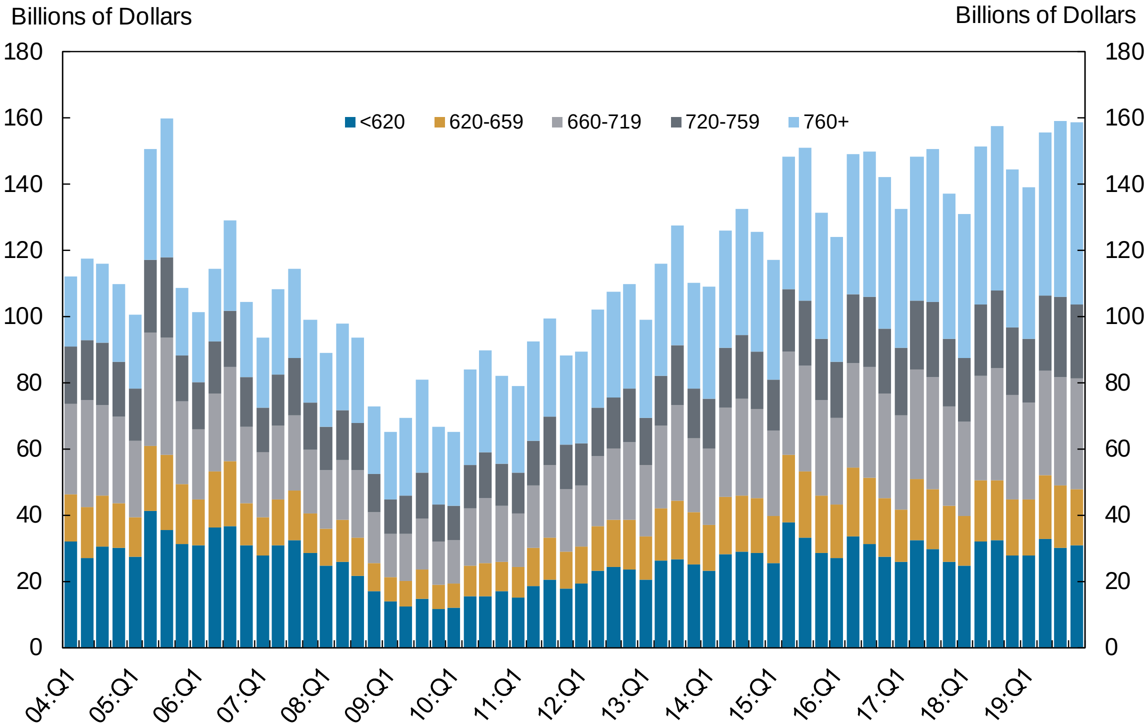


Number of Accounts by Loan Type



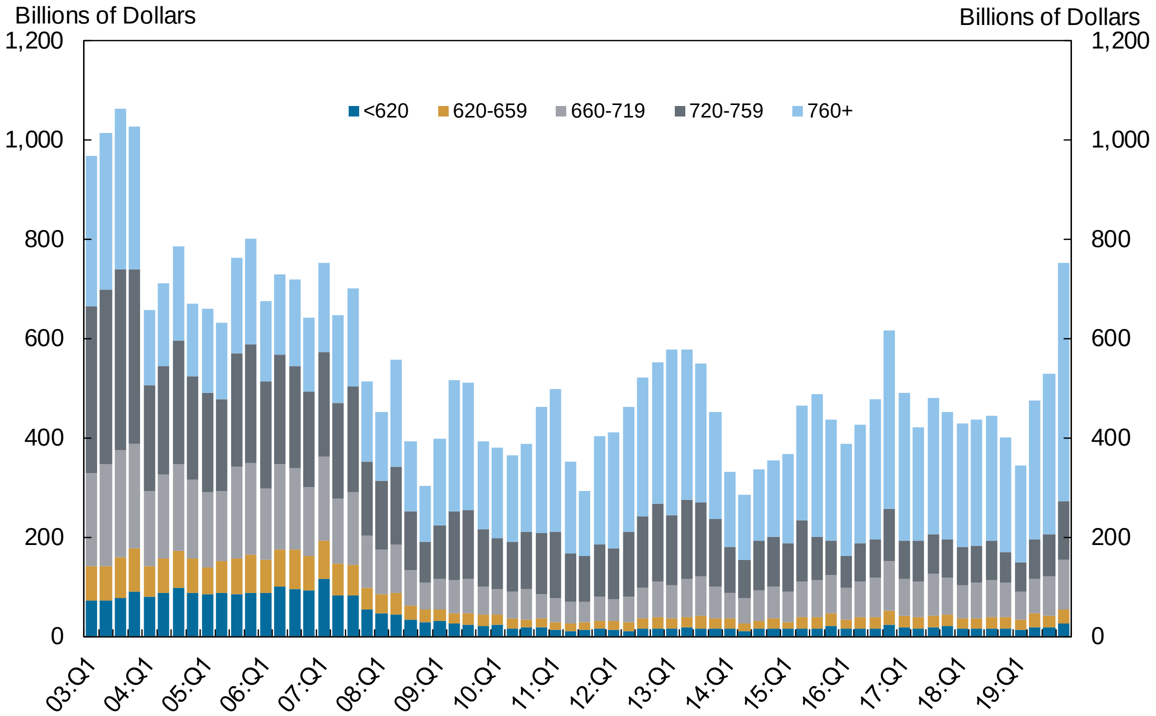
Source: New York Fed Consumer Credit Panel/Equifax

Auto Loan Originations by Credit Score*



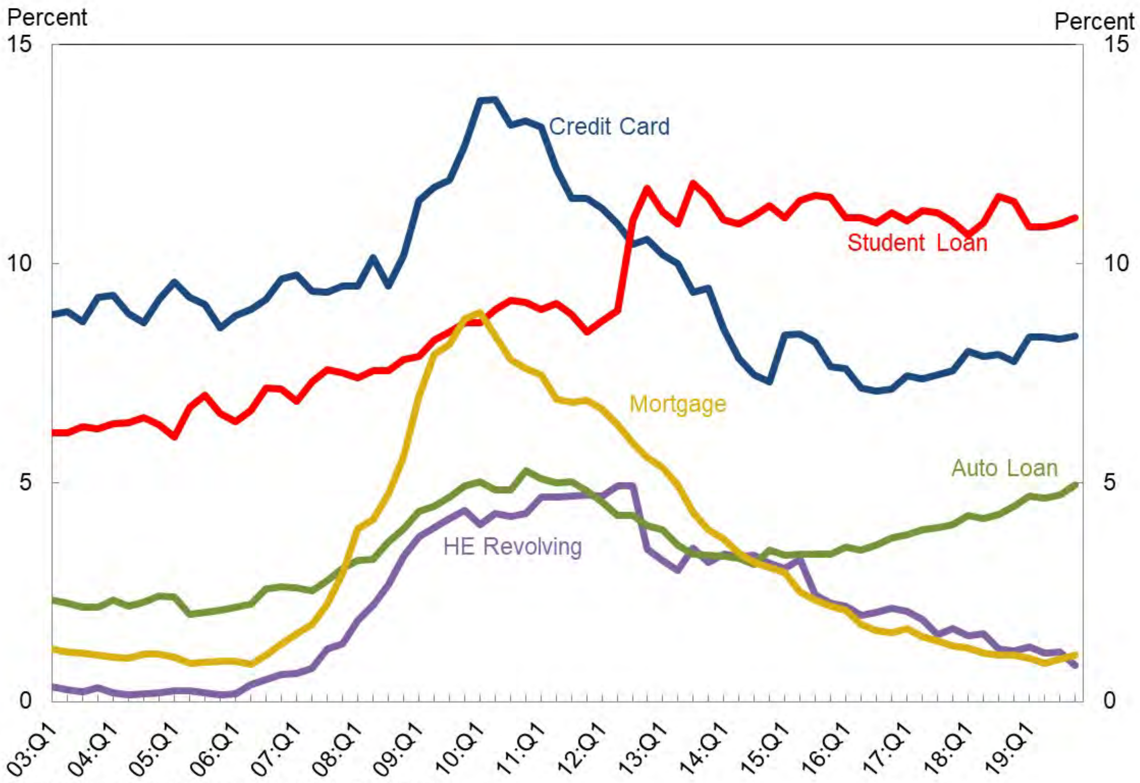
Source: New York Fed Consumer Credit Panel/Equifax
* Credit Score is Equifax Riskscore 3.0

Mortgage Originations by Credit Score*



Source: New York Fed Consumer Credit Panel/Equifax
* Credit Score is Equifax Riskscore 3.0

90+ Delinquency by Credit Type



Source: New York Fed Consumer Credit Panel/Equifax

Why Are Auto Loan Balances Growing So Quickly?

Borrowers Have Higher Maturity Elasticities Than Rate Elasticities

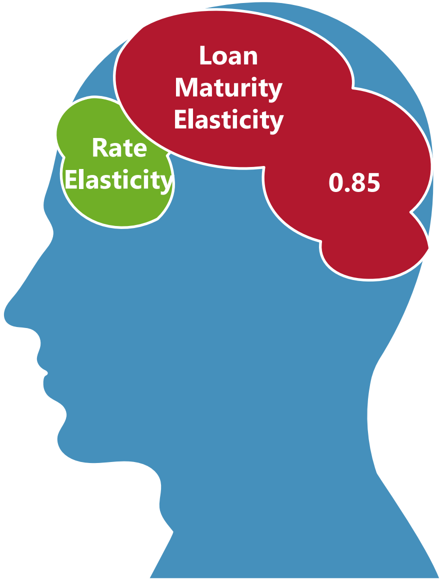
Interest Rate Calibration

Consider Typical Loan:

$20,000 Loan Amount

5% Interest Rate

A 10% decrease in offered interest rate (from 5% to 4.5%) would result in an a 1.7% increase in loan amount, from $20,000 to $20,338



Maturity calibration

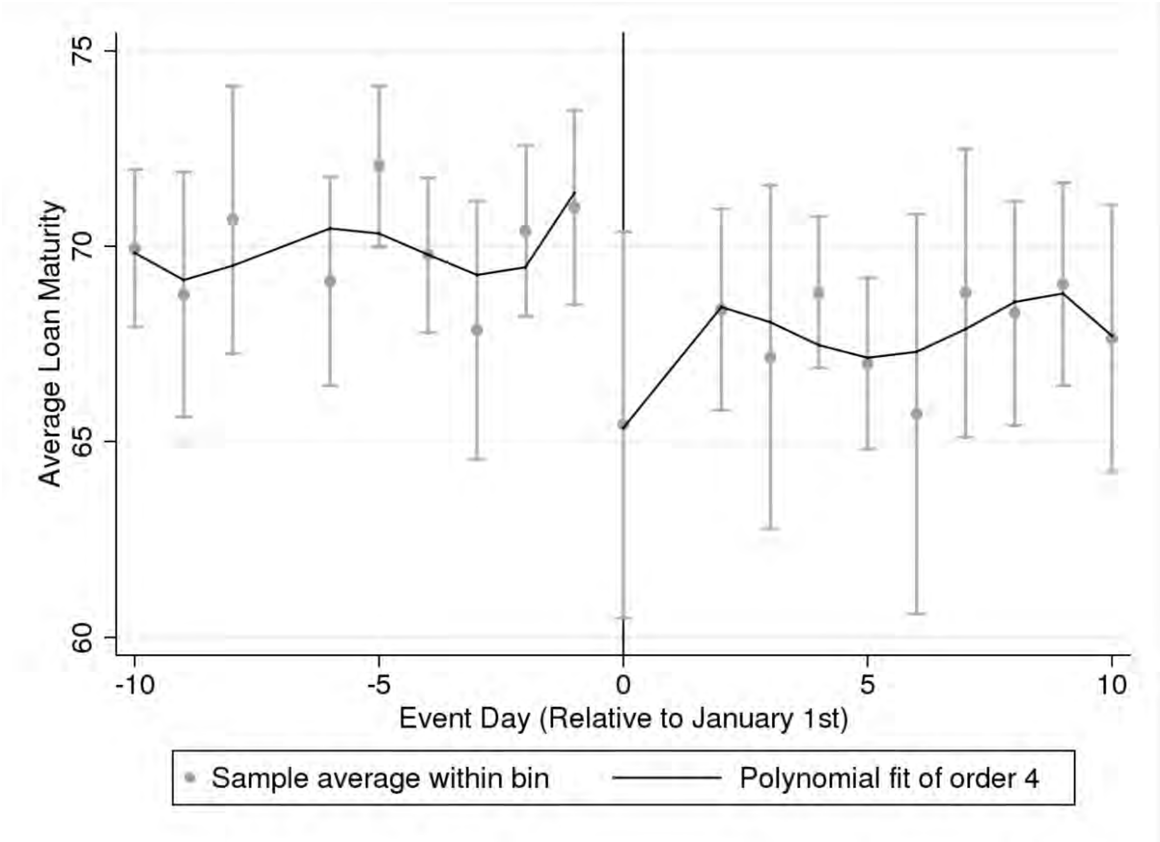
Consider Typical Loan:

$20,000 Loan Amount

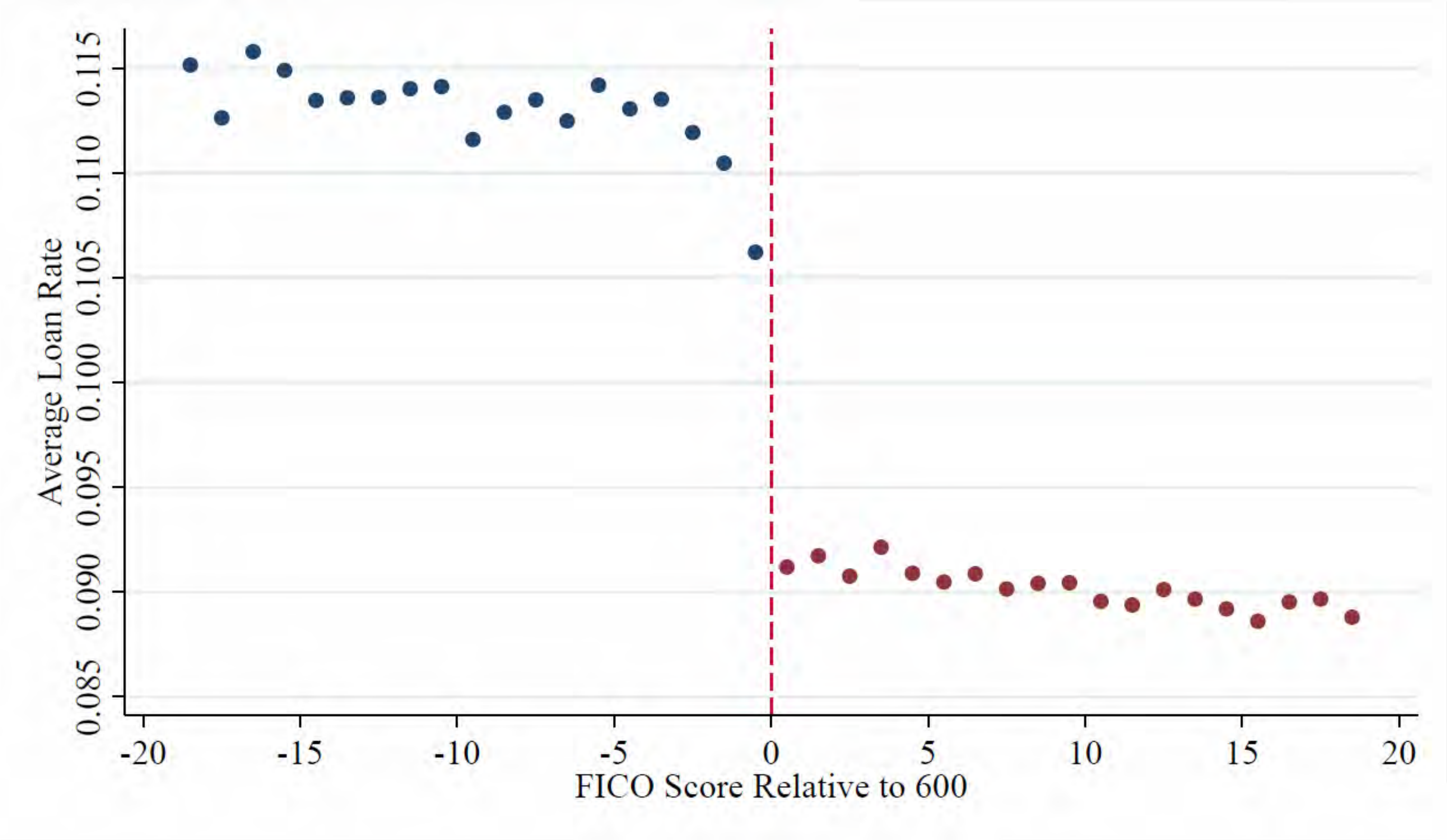
5% Interest Rate

A 10% increase in offered maturity (from 60 months to 66 months) would result in an 8.5% increase in loan amount, from $20,000 to $21,708

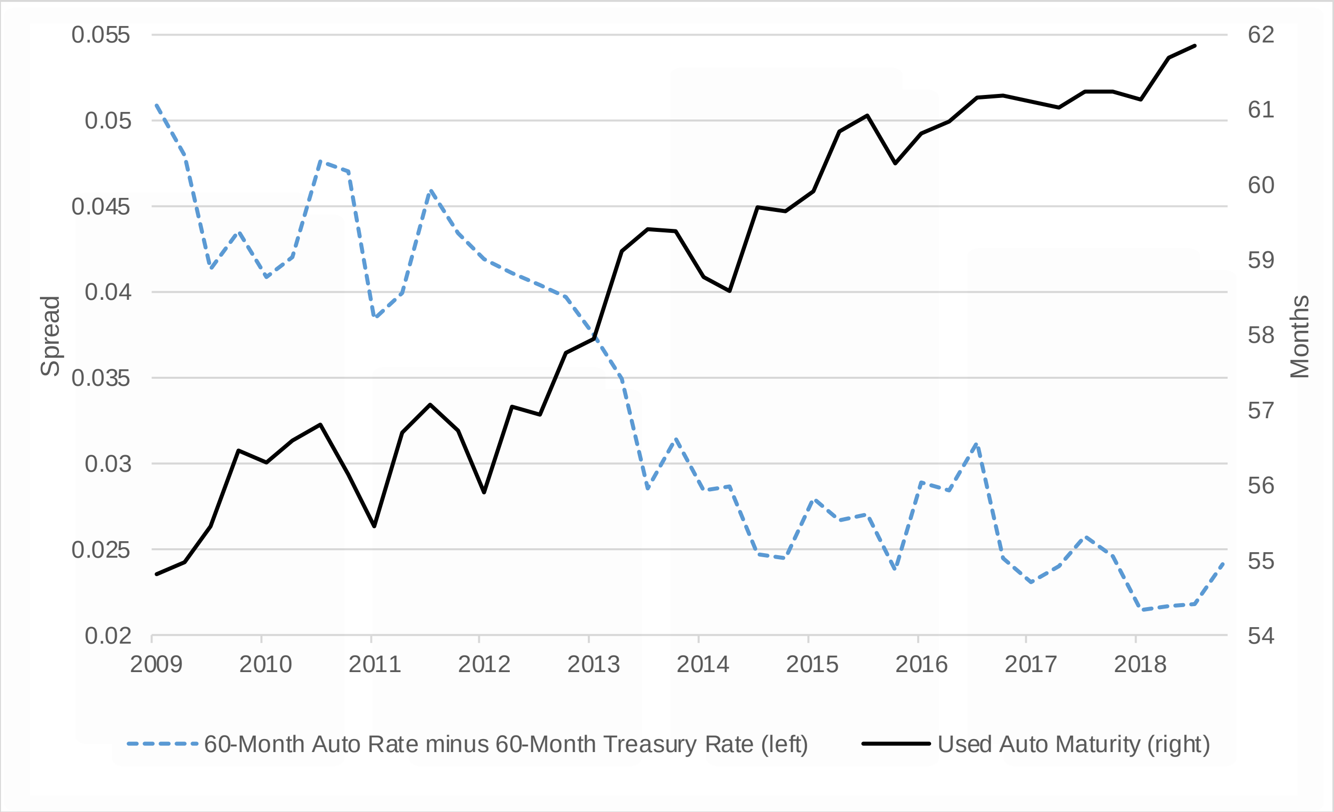
How do we Measure Maturity Elasticity?



How do we Measure Interest Rate Elasticity?



Why Auto Loan Balances Are Growing So Quickly



Back of the Envelope Calculation

~$514 Billion increase in Auto loan balance from 2009-2019 (67% increase)

INCREASE IN THE SUPPLY OF MATURITY (E.G. MATURITY INCREASES FROM 72 MONTHS TO 84 MONTHS)

+

HIGH MATURITY ELASTICITY (E.G. ELASTICITY ESTIMATES OF 0.84)

=

~ 25% INCREASE IN AGGREGATE AUTO LOAN BALANCES

Punchline: About 25% of the total increase in aggregate auto loan balances could be explained by the combination of increases in offered maturities and large maturity elasticities.

The Monthly Payment Targeting Phenomenon

The Monthly Payment Targeting Phenomenon