



# **UNDER THE HOOD:**

## **Auto Loan Interest Rate Hikes Inflate Consumer Costs and Loan Losses**

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## EXECUTIVE SUMMARY

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Automobiles are the most common nonfinancial assets held by American households.<sup>1</sup> For most American households, car ownership is not a luxury, but a prerequisite to opportunity. Cars not only provide transportation, but also options for where to work and live, and how we interact with our community. As a result, both the affordability and sustainability of auto financing are central concerns for American families.

A car purchase can be a complicated endeavor. Negotiations on the sales price, trade-in value, and financing are all separate transactions. Any of these transactions can have a significant influence on the vehicle's overall cost. Unfortunately, not all of these transactions are transparent to consumers. In particular, on loans made through the dealership, the dealer can markup the interest rate above what the consumer's credit would qualify for. This interest rate markup, also known as "dealer reserve" or "dealer participation," is described by dealers as the way they are compensated for time spent putting a financing deal together. However, since consumers usually do not know what they can actually qualify for, the markup is often a hidden cost to the consumer.

This report takes a look at markups, evaluates how they are used, and identifies their potential consequences. **Our research concludes that interest rate markups from dealerships lead to more expensive loans and higher odds for default and repossession for subprime borrowers.** Based on an analysis of automobile asset-backed securities (ABS), data from 25 auto finance companies representing a combined 1.7 million accounts at year-end 2009, and other information from industry sources, we find the following:

**Finding 1: Consumers who financed cars through a dealership will pay over \$25.8 billion in interest rate markups over the lives of their loans.** Analyzing 2009 auto industry data, the average rate markup was \$714 per consumer with an average rate markup of 2.47 percentage points. Even though the number of vehicle sales declined by 20% from 2007 to 2009, total markup volume increased 24% during this period (from \$20.8B to \$25.8B) largely due to an increase in the level of rate markups on used vehicle sales.

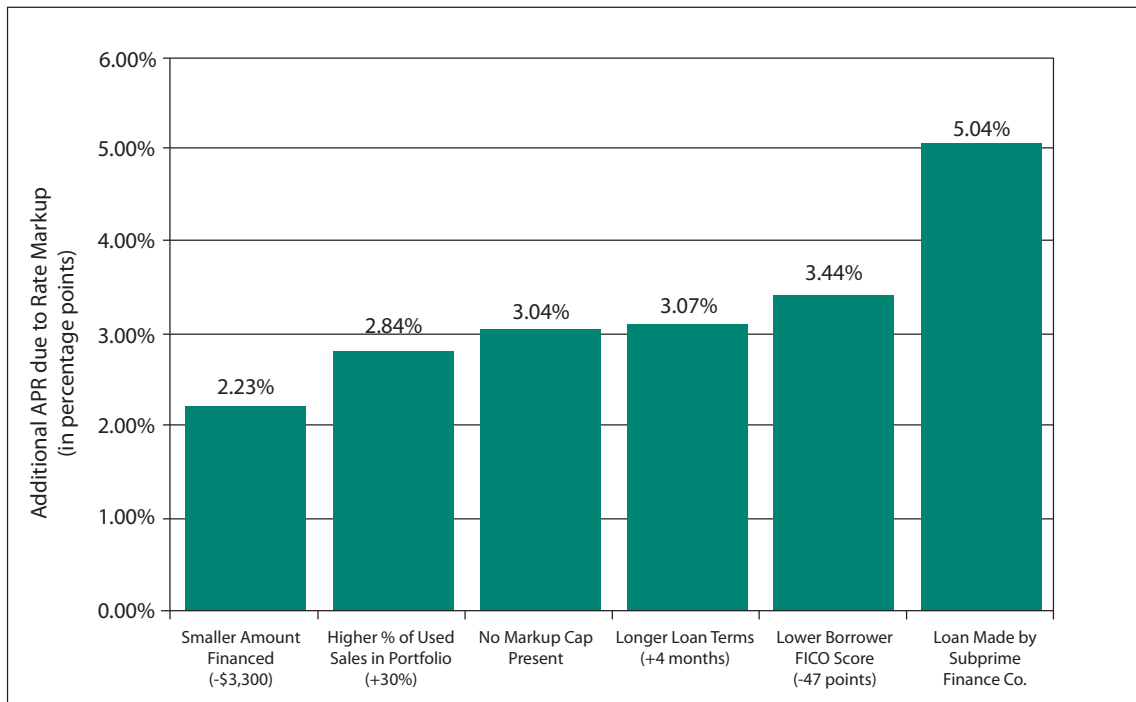
**Figure 1: Total and Average U.S. Markup Volume 2009**

	New Vehicles	Used Vehicles	Total Vehicles
2009 Total Rate Markup Volume	\$4.1 Billion	\$21.7 Billion	\$25.8 Billion
Average Rate Markup 2009	1.01%	2.91%	2.47%
Average Markup Per Loan 2009	\$494	\$780	\$714
Dealer Gross Profit Per Retail Sale 2009	\$1,301	\$1,721	\$1,461

Sources: Data derived from CNW Marketing Research (sales data for dealer financed purchases, excluding leases), 2010 National Auto Finance Automotive Survey (dealer markup data), and YTD 2009 NADA Average Dealership Profile (gross dealer profit). Average markup figures assume a rate markup occurs on every dealer-financed sale, leading to more conservative averages.

**Finding 2: Dealers tend to mark up interest rates more for borrowers with weaker credit.** As shown in the chart below, loans made by subprime finance companies have higher rate markups, and rate markups also increase with lower borrower credit scores. In addition, larger rate markups occur on loans with longer maturities, loans for used vehicles, and when smaller amounts are financed. These findings suggest that dealers may use certain borrower or loan characteristics as a way to identify people who would be vulnerable targets for increased rate markups.

**Figure 2: Change in Amount of Rate Markup Given Changes in Loan Conditions**



Figures are based on results from regression models using auto ABS data. The change in each category is assuming the increase of one standard deviation in the independent variable. Note that the markup increase of each variable does not have a cumulative effect if multiple conditions exist on one loan.

Lenders may use self-imposed markup caps to control pricing. However, finance companies that lend more to subprime borrowers are not likely to have rate markup caps at all. Still, even the typical markup cap can still allow for nearly \$1,700 in extra interest payments over the life of a typical new car loan.

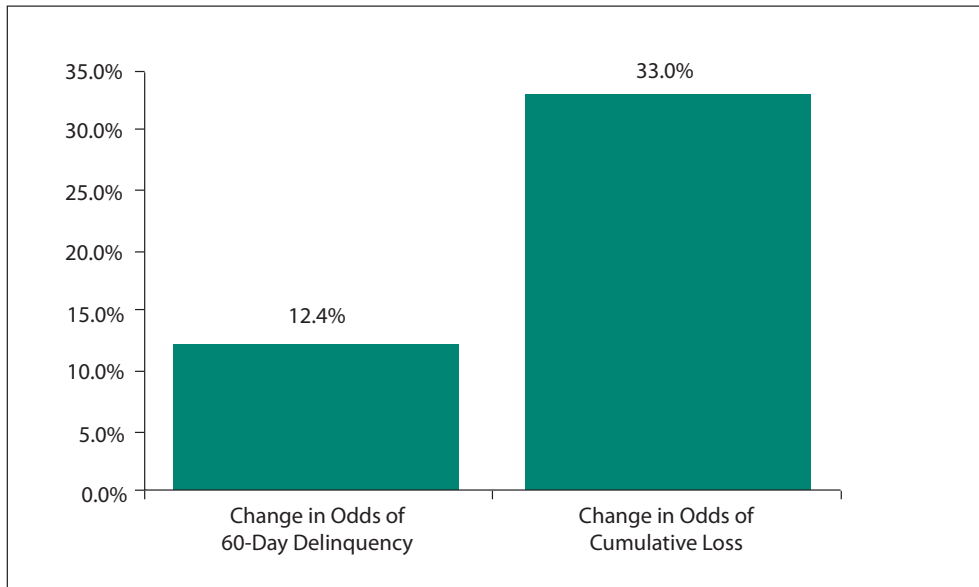
**Figure 3: Example of Potential Extra Interest Payments Due to Rate Markup**

	New Cars	Used Cars
Amount Financed	\$24,500	\$17,500
APR Consumer Qualified For	4.0%	8.0%
APR + 2.5% Rate Markup	6.5%	10.5%
Loan Term in Months	60	60
<b>Potential Extra Interest Payments Resulting from Rate Markup</b>	<b>\$1,690</b>	<b>\$1,278</b>

Note that the average markup amount is \$714 per vehicle, notably more conservative than the totals in this example. This is largely due to the fact that the average amount includes loans that do not have a rate markup, which brings down the average.

**Finding 3: Rate markups are a strong driver of default and repossession among subprime borrowers.** Markups have a strong association with 60-day delinquency and cumulative loss rates (what the lender has to write off due to repossessions) for finance companies that target low-FICO borrowers. These results occur for loans performing within the same macroeconomic environment, discounting the notion that the economy is the sole reason for recent loan defaults. Rate markup increases the odds of delinquency and cumulative loss for subprime borrowers by 12.4% and 33% respectively.

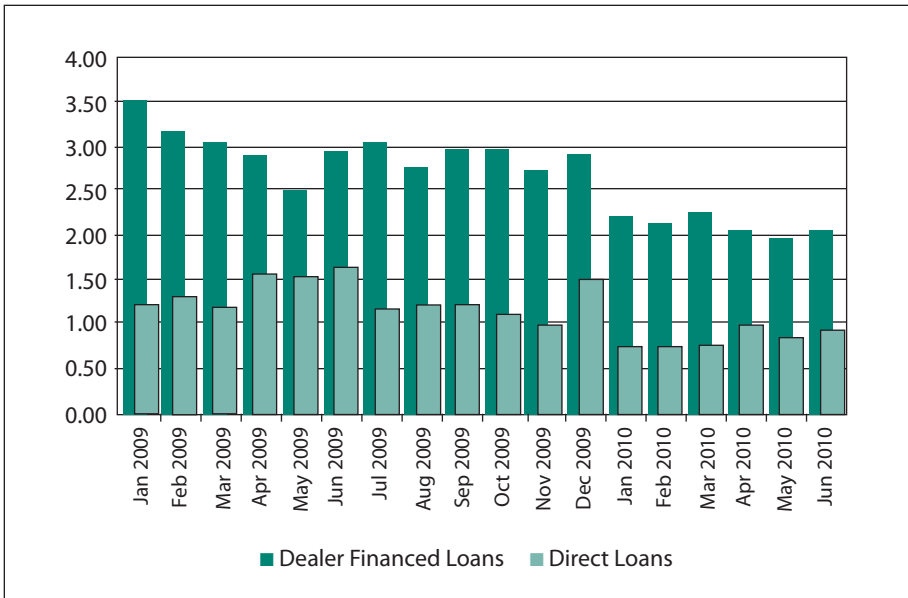
**Figure 4: Increase in Odds of Default Due to Rate Markups for Subprime Finance Companies**



Odds ratios based on coefficients from linear regression models using auto ABS data. Changes in odds are based on an increase of one standard deviation of rate markup for finance companies (4.55%). Regression model for non-finance companies produced results that were not significant.

Interestingly, even with the prevalence of markup caps and other promotional incentives that would lower interest rates, repossession rates for dealer-financed loans consistently outpace those of their direct lending counterparts. Dealers have asserted that the rise in auto repossessions, which peaked at 2 million units in 2008<sup>2</sup>, is mainly caused by larger economic factors outside the dealership's control. But given that direct and indirect lenders operate in the same macroeconomic environment, this argument does not entirely explain why repossession rates for dealer financing have been nearly double the rates of direct auto lending in recent history.

**Figure 5: Direct vs. Dealer-Financed Repossession Rates (Repos per 1,000 Loans)**



Source: American Bankers Association Consumer Credit Delinquency Bulletin. Figures are seasonally adjusted.

## DISCUSSION

With declining sales and narrowing margins on profits from car sales, dealerships have grown increasingly dependent on profit from their finance and insurance (F&I) departments which generate revenue through the financing on the car and selling ancillary products. This pressure on the F&I department can lead to staff taking advantage of the lack of transparency in auto financing, and translating it into profit.

Our analysis shows that rate markups vary widely depending on the terms of the loan. Borrowers have little or no bargaining power to combat this effect and can easily be pushed into a loan that costs more than is required by their credit history or the characteristics of the loan.

Survey data confirms that the majority of consumers are generally unaware that dealers can markup rates without their consent (79%)<sup>3</sup>, and ultimately unaware of what the APR is on their loan (61%).<sup>4</sup> Industry attorneys advise F&I staff not to tell consumers that their rate is the “best rate they qualify for,” as that could legally be interpreted as deceptive, but instead reiterate “this is the rate that is available.”<sup>5</sup>

Interest rate markups also create the potential for discriminatory outcomes. In the past decade, eleven major lenders that participate in indirect financing have settled class action lawsuits alleging racial discrimination in how markups were assigned to their loans. Loan-level data showed that African-Americans and Latinos disproportionately received interest rate markups more frequently and to a greater degree than their similarly-situated white counterparts.<sup>6</sup>

Dealers argue that the rate markups are legitimate compensation for a valuable service the F&I office provides. However, this does not explain why dealers charge for this service to some customers and not others, nor what methods they use to determine how much to charge. The lack of disclosure also does not allow consumers to determine how much a dealer's services are worth to them. According to the latest industry data, the average customer spends 45 minutes with the F&I department, and only 27 minutes if taking a test drive. With the average rate markup at \$714, dealership staff are effectively billing consumers from \$952 to \$1,587 per hour to finance the vehicle.

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Interest rate markups closely parallel how yield spread premiums operated in the subprime mortgage industry. In that case, yield spread premiums created an incentive for mortgage brokers to structure loan financing toward the upper limits of what borrowers could handle. As a result, many mortgages were not affordable long-term, and resulted in higher foreclosure rates. Further, African-American and Latino borrowers were more likely to receive loans that included yield spread premiums compared with similarly situated white borrowers. Recognizing this, the Federal Reserve recently approved a rule to prohibit the practice altogether.

Likewise, delinquencies and repossessions resulting from unsustainable auto loans can have serious consequences for consumers. Therefore, if rate markups from auto dealers disproportionately contribute to loss and delinquency, then the practice should be reined in as well.

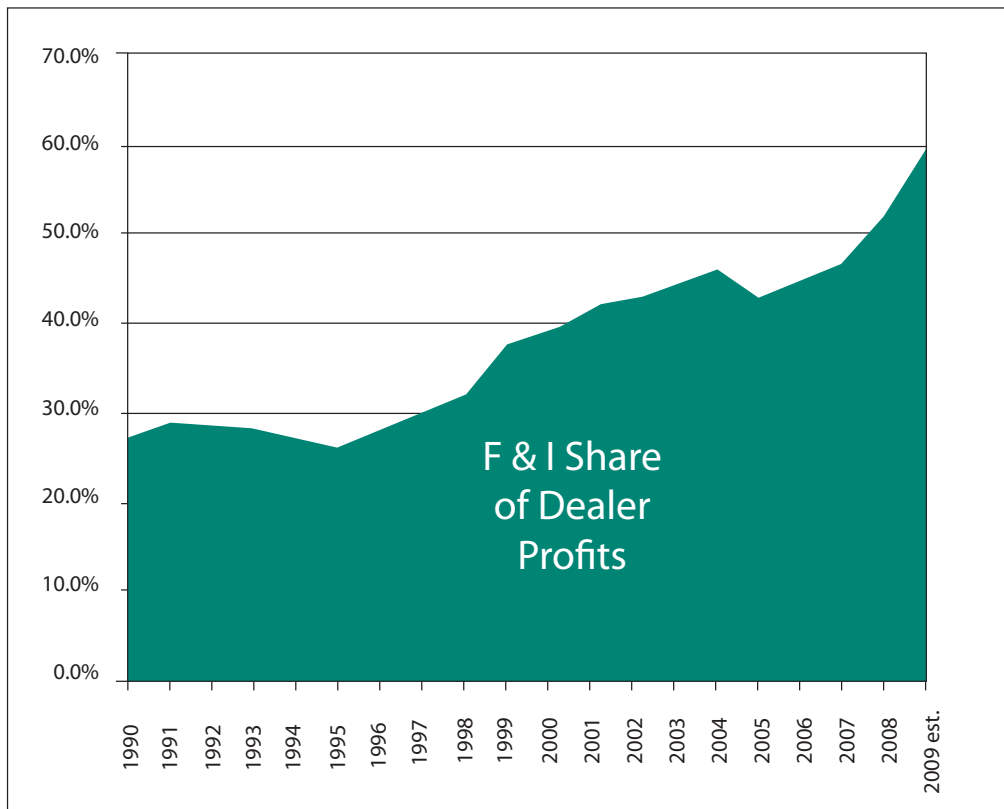
**To avoid higher costs, delinquencies, and losses related to interest rate markups, we recommend completely divorcing dealer compensation from the interest rate on vehicle financing.** Instead, a flat fee is a viable alternative for compensating dealers—this adds transparency and fairness while eliminating any incentive to drive up rates at the detriment of loan sustainability.

## I. INTRODUCTION

In any auto sale financed at the dealership, there are primarily two opportunities in which the dealer can realize profit—on the “front end” and on the “back end”. Front-end profit is realized on the sale of the vehicle itself, and is largely determined by the difference between wholesale and retail prices. Back-end profit involves money made on the financing of the deal, including interest payments and sales of add-on products such as service contracts, custom accessories and various types of insurance. The back-end financing and sales are typically handled by the dealership’s finance and insurance (F&I) department.

With the sales decline and narrowing margins on the sales price of the cars themselves in recent years, dealerships have grown increasingly dependent on the profit brought in by F&I departments. According to one industry expert’s explanation, “There’s actually more pressure on the F&I office to maximize profits on each deal because of the fact that front-end profits are falling due to competition, how slow the economy is, and how slow demand is.”<sup>7</sup> The average F&I profit for new and used vehicles is \$737 and \$841 respectively, although 47.5% of F&I departments report at least \$1,000 profit from used sales.<sup>8</sup>

**Figure 1: Finance & Insurance Department Share of Franchise Dealership Profit**



Sources: 1990-2008 data from CNW Marketing Research, F&I Contribution to Dealership Profits (Document 280). Data only for franchised dealers that sell vehicles to private parties. Estimate for 2009 based on average F&I profit per unit (F&I Magazine Benchmarking Study) and gross dealer profit per unit (NADA Average Dealership Profile).



There are several products and practices that can increase F&I profit, however some invite opportunities for abuse. Interest rate markups, loan packing, yo-yo deals and rolling negative equity into a new loan raise costs for consumers, and often take advantage of information that only the dealer may have.<sup>9</sup> This report focuses on the impact of rate markups on consumers' costs and default patterns.

If a customer chooses to finance through the dealership, the F&I department negotiates and finalizes financing with a third-party or “indirect” lender. The dealer is the initial creditor on the retail installment loan contract. The dealer then works with the third-party lender to negotiate the sale of the sales contract to the indirect lender. The indirect lender will quote the dealer an interest rate known as the “buy rate” based on the consumer’s credit standing and down payment.

The indirect lender allows the dealer to add additional percentage points to the buy rate and present a new “contract rate” to the consumer. The markup between the buy and contract rates creates income that is either split between the dealer and lender, or pocketed by the dealer entirely as compensation for arranging the deal. All the while, the dealer never discloses the rate for which the consumer truly qualifies, or the amount of additional interest that the consumer will pay.

In this paper, we estimate the magnitude of these markups industry-wide, explore what factors influence a loan's rate markup, and whether markups have any impact on auto loan defaults.

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## II. BACKGROUND

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Without any legal requirement to disclose the markup or how much it costs, the consumer is at a disadvantage when comparing and negotiating prices. Including rate markups as part of the pricing mechanism also creates an environment of “reverse competition” where dealers have an incentive to drive profit with higher rates, instead of brokering lower rates more beneficial to customers.<sup>10</sup> Industry attorneys advise F&I staff not to tell consumers that their rate is the “best rate they qualify for”, as that could legally be interpreted as deceptive, but instead reiterate “this is the rate that is available”.<sup>11</sup>

Meanwhile, survey data confirms that **the majority of consumers are generally unaware that dealers can markup rates without their consent** (79%)<sup>12</sup>, and ultimately unaware of what the APR is on their loan (61%).<sup>13</sup> Consumers who reported they were under the impression their dealer gave them the “best” loan possible actually paid rates between 1.9 and 2.1 percentage points higher than others with similar credit standing.<sup>14</sup>

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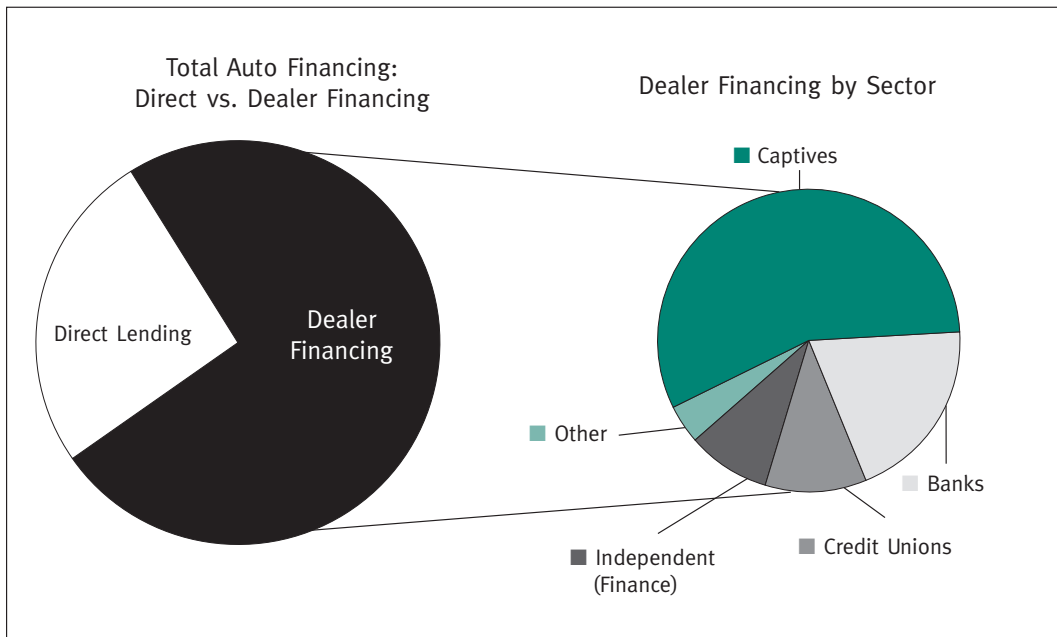
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### Dealer Financing and Captive Finance Companies

In 2010, the auto industry reported \$621 billion in new and used sales representing 48.3 million units.<sup>15</sup> This sales volume is a 7.5% increase from the previous year, but still a 21.2% drop from their peak volume in 2006. In Figure 3, we see that the vast majority (79.2%) of auto loan volume is made through third-party indirect lenders that partner with dealerships to finance customers.

There are several types of lenders that participate in indirect dealer financing: captive lenders that are essentially financing arms for an associated car manufacturer (i.e. Ford Motor Credit Co.), finance companies that focus more on subprime borrowers (i.e. Americredit), as well as traditional banks and credit unions. Captive finance lenders have dominated indirect lending with dealers while credit unions, on the other hand, are responsible for the majority of direct loans not financed at the dealership.

**Figure 2: Direct and Dealer Financed Auto Loan Market Shares by Loan Source**



Source: Richard Howse, How Different is the Indirect Channel from the Direct Channel?, JD Power & Associates, Mar 31, 2008. Percentages based on loan volumes for franchised dealers only.

### III. DATA AND METHODOLOGY

The objectives of this research are threefold: To estimate the magnitude of markups nationally, explore loan conditions that influence rate markup, and investigate rate markup's impact on loan performance.

To estimate the magnitude of rate markup volume, we acquired survey data from 25 auto finance companies that reported information on loan portfolios representing a combined 1.7 million accounts at year-end 2009.<sup>16</sup> The survey allowed us access to self-reported information on revenues gained from rate markups. We then used the weighted averages for markup revenue in the survey along with reported figures for dealer financed loans in 2009 in order to calculate a national estimate.

To examine rate markups more in-depth, we used auto loan asset-backed securities (ABS), and we were able to build a dataset of 32 loan pools from 16 different issuers in 2008. The pool-level data contained information on factors that may influence loan delinquency and loss, including FICO

scores, amount financed, used vs. new purchases, type of lender, loan term and APR. The most recent cumulative loss and 60-day delinquency rates for each pool (as of Nov 2010) were also included from Bloomberg reports. Likewise, knowing the issuer of each pool allows us to control for loans made under self-imposed rate markup caps.

In order to determine the objective investor rate associated with each ABS pool, we documented the yields and payment schedules for each class in every pool in our dataset. Having payment schedules allowed us to calculate one cashflow of all issued classes, and further determine what rate an investor would be willing to pay based on each pool's combined yield and the comparable 5-year Treasury bond rate. Adjustments were made for the presence of overcollateralization and withheld pool tranches, as they both can affect an investor's perception of the pool's risk, and therefore its price.

The calculated rate after adjusting for overcollateralization and withheld tranches is what we estimate as an objective market rate on each pool as determined by investors. Therefore, a pool's weighted average APR in which consumers observe on their financing includes both the objective market rate, plus an overage that is allowed for dealer compensation and profit. We determine this estimated overage as a dealer rate markup that is assigned on a much more subjective basis. Having this estimate for subjective rate markup allowed us to use it as a dependent variable in linear regression, while using other loan conditions (term, FICO, etc.) as independent variables.

In analyzing the impact of rate markup on loan performance, we separated the pools in our dataset into two cohorts: pools from subprime finance companies and pools from all other lenders. Then using 60-day delinquency and cumulative loss rates as dependent variables, we conducted a linear regression controlling for rate markup as an independent variable. A separate regression model was conducted for each cohort in order to analyze rate markup's impact given different lending environments. Stratifying into two groups not only allowed us to explore rate markup's relationship with defaults, but also see if that relationship differs between lenders that target different lending markets.

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## IV. RESEARCH FINDINGS

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**FINDING 1: Consumers who financed cars through a dealership will pay over \$25.8 billion in interest rate markups over the lives of their loans.** Analyzing 2009 auto industry data, the average rate markup was \$714 per consumer with an average rate markup of 2.47 percentage points. Even though the number of vehicle sales declined 20% from 2007 to 2009, total markup volume increased 24% during this period (from \$20.8 billion to \$25.8 billion) largely due to an increase in the level of rate markups on used vehicle sales.

**Figure 3: Total and Average U.S. Markup Volume 2009**

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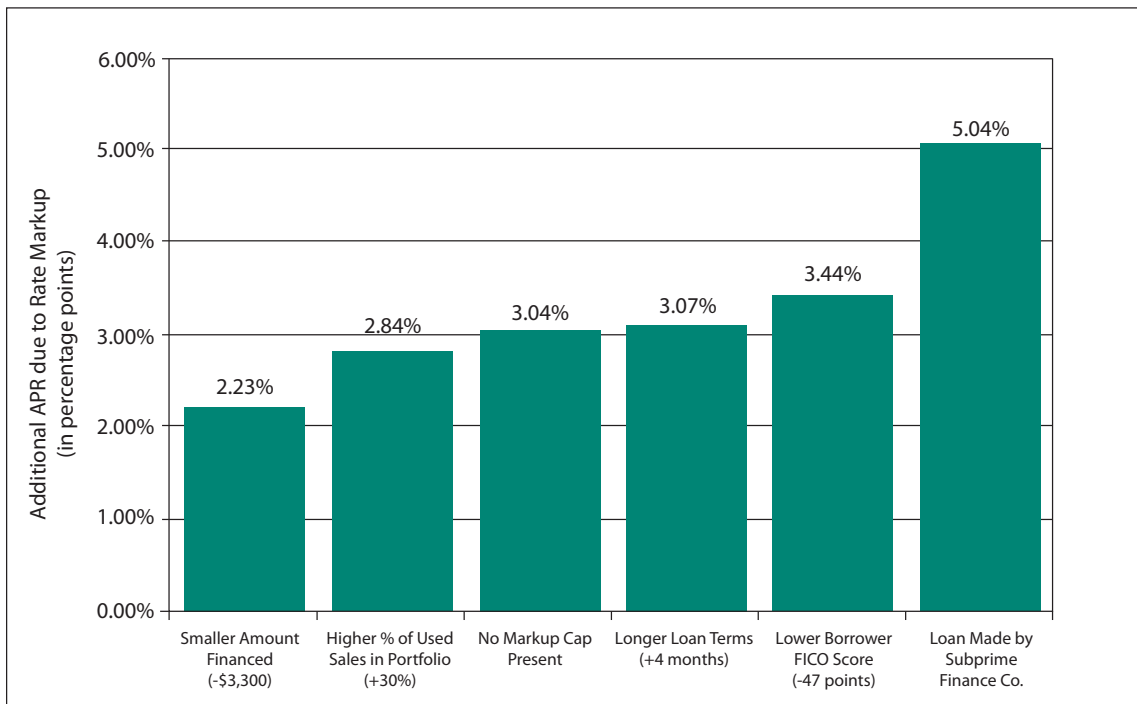
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**FINDING 2:** Dealers tend to mark up interest rates more for borrowers with weaker credit. As shown in the chart below, rate markups increase with lower borrower credit scores. In addition, larger rate markups occur on loans with longer maturities, used vehicle sales and smaller amounts financed. These findings suggest that dealers may use certain borrower or loan characteristics as a way to identify people who would be vulnerable targets for increased rate markups.

Our linear regression shows that loans to consumers with low FICO scores or financing with finance companies targeting subprime borrowers will most likely have larger rate markups. Lowering FICO score almost 50 points in our model results in an increase of 3.44 percentage points to the interest rate due to markup. In addition, loans from finance companies which have a greater focus on serving subprime borrowers may see an extra 5.04 percentage points added to their interest rate.

**Figure 4: Change in Amount of Rate Markup Given Changes in Loan Conditions**



Figures are based on results from regression models using auto ABS data. The change in each category is assuming the increase of one standard deviation in the independent variable. Note that the markup increase of each variable does not have a cumulative effect if multiple conditions exist on one loan.

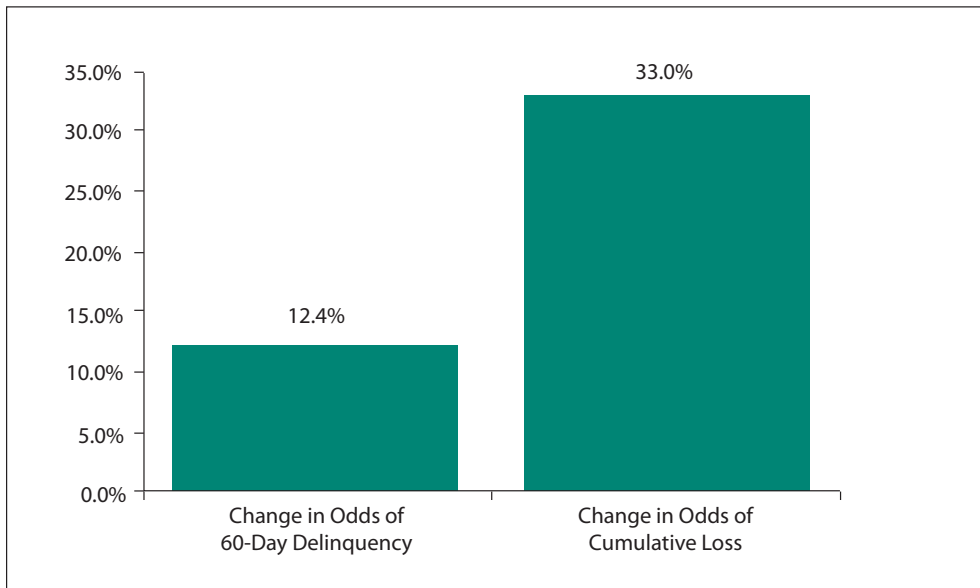
The impact of FICO scores on subjective rate markups is important considering that an interest rate is normally the result of a risk-based decision determined by objective measures. The FICO score variable's correlation with subjective markups implies that risk scoring can be used to indicate other things outside of risk-based pricing.

For example, FICO scores can also mark which consumers are more vulnerable targets for dealer opportunism. Dealers are aware that low-FICO consumers have fewer options to secure financing, and less likely to negotiate or continue to shop once they receive an approval for financing.<sup>18</sup> In these cases, FICO scores are not used to measure risk of loss, but to identify opportunities for higher profit—a more subjective behavior. Using FICO for something other than risk-based decision making suggests a market where there are starkly different pricing decisions depending on your financial savvy rather than actual risk.

**FINDING 3: Rate markups are a strong driver of default and repossession among subprime borrowers.** Finance companies have a stronger presence in the subprime arena than do banks and captive lenders. The average FICO score for finance companies in our dataset was 664, as compared to 736 for banks and 731 for captives. Knowing that subprime borrowers are likely to have higher rate markups, it was important to explore the impact of rate markup on loan performance as well.

In the subprime finance company cohort, rate markup is a strong driver of default and repossession whereas it is not significant for non-finance company pools. In finance company pools, a markup increase of 4.55% (one standard deviation) will increase the odds of 60-day delinquency 12.4% and cumulative loss 33%.

**Figure 5: Increase in Odds of Default Due to Rate Markups for Subprime Finance Companies**



Odds ratios based on coefficients from linear regression models using auto ABS data. Changes in odds are based on an increase of one standard deviation of rate markup for finance companies (4.55%). Regression model for non-finance companies produced results that were not significant.

Stratifying the 2008 cohort by subprime finance companies and non-finance companies allows us to see if rate markups operate differently toward defaults given borrowers of different credit tiers. Previous research has found evidence that interest rates are a greater predictor of auto loan defaults than FICO score.<sup>19</sup> So given how a rate markup naturally inflates interest rate, it is not surprising that markups have a more pronounced impact for subprime groups that are already assigned higher rates due to risk.

Also, using a cohort of loans limited to 2008 provides loan data that all performed within the same macroeconomic environment. Factors such as rising unemployment and bankruptcies during the recession would have an obvious effect on a borrower's ability to repay an auto loan. However, limiting the time frame to within the same environment makes economic factors more of a constant across all pools. With that said, a rate markup's influence on loan performance where economic factors are constant implies that the economy is not the solely to blame for poor loan performance. This is significant considering industry claims that the economy is solely to blame for poor loan performance, and that dealers are more victims than contributors. While we acknowledge that previous research has found positive correlations between unemployment and auto loan defaults, the findings do not control for influences industry practices might have on defaults.<sup>20</sup> **Therefore, we can assert that even in a down economy, industry practices such as rate markups can have a role in the repossession problem.**

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## V. DISCUSSION AND RECOMMENDATIONS

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For most American households, car ownership is not a luxury, but a prerequisite to opportunity. Any industry practice—particularly those that are not transparent to customers—that creates a marked increase in delinquency and loss must be evaluated to determine if the costs to all parties outweigh the benefits it produces. If rate markup compensation made to dealers for their "good service" actually drives consumers into distress, then we must question the value of such a service.

In addition to positive correlations between rate markups and subprime borrowers, we also find that longer loan terms have a similar relationship with markups. Longer loan terms correlating with higher rate markups implies that stretching terms are necessary to artificially keep monthly payments more affordable on loans with higher rates. Interest rate markups, purchasing additional add-ons, yo-yo sales and rolling in negative equity all can inflate a deal's total cost. Extending the loan term several months can mask costs by lowering monthly payments, but does not remedy the underlying problem of an overly expensive loan.

Also, used car purchases having higher rate markups may be an indication of dealers trying to make up for decreasing profit margins in new vehicles sales. During the recession, more consumers gravitated toward less expensive used cars. Between 2006 and 2009, used vehicle sales decreased 16.7% whereas new sales fell 36.1%.<sup>21</sup> At the same time, used vehicle sales typically have greater profit margins than new cars, especially in terms of profit realized at the F&I office. F&I profit margin on used sales is 8.58% as compared to 3.01% for new cars.<sup>22</sup> As a result, higher rate markups on used vehicles could signify an emphasis dealers have to recover profits lost from a decline in sales.

### Class Action Litigation and Rate Markup Caps

Interest rate markups give dealers more authority for discretionary pricing, but unfortunately allow the potential for discriminatory outcomes. In the past decade, eleven major lenders that participate

in indirect financing have settled class action lawsuits alleging racial discrimination in how markups were assigned to their loans. Loan-level data showed that African-Americans and Latinos disproportionately received interest rate markups more frequently and to a greater degree than their similarly-situated white counterparts.<sup>23</sup>

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For each lender, the lawsuits resulted in some degree of self-imposed interest rate markup cap to remedy the discrimination.<sup>24</sup> It was determined that markup caps between 2 and 3 percentage points were enough to dampen the appearance of racial bias. However, while rate markup caps may have addressed disparate impact for extreme cases, it still left the opportunity for wide discretion in assigning rate markups for all consumers. Note that the average rate markup in 2009 stood at 2.47 percentage points, slightly below the typical markup cap. Even with caps at that level, markups were able to garner \$25.8 billion from consumers.

Still, even with a typical 2.5% markup cap on 60-month loans, the average new car deal will create over \$1,700 in additional interest payments—a figure which increases for consumers with poor credit. For a family on a tight budget, extending the debt burden an extra \$1,700 could be a determining factor for the sustainability of that loan.

**Figure 6: Example of Potential Extra Interest Payments Due to Rate Markup**

	New Cars	Used Cars
Amount Financed	\$24,500	\$17,500
APR Consumer Qualified For	4.0%	8.0%
APR + 2.5% Rate Markup	6.5%	10.5%
Loan Term in Months	60	60
<b>Potential Extra Interest Payments Resulting from Rate Markup</b>	<b>\$1,690</b>	<b>\$1,278</b>

Note that the average markup amount in Figure 2 is \$714 per vehicle, notably more conservative than the totals in this example. This is largely due to the fact that the average amount includes loans that do not have a rate markup, which brings down the average.

Even if markup caps effectively reduce racial disparities, the caps were only instituted on a temporary basis, all of which expired by early 2010. This merits attention to see if racially discriminatory practices will re-emerge now that rate markups could again run unbridled.



**Figure 7: Captive Lender Rate Markup Caps and Expiration Dates**

Lender	Date of Approval	Term of Settlement Restrictions	Rate Markup Cap
Nissan Motor Acceptance Corporation	3/27/2003	5 Years	3% cap; 2% for loans 64 months or less
General Motors Acceptance Corporation	3/29/2004	3 Years	2.5% for loans 60 months or less; 2% for loans over 60 months
WFS Financial Inc.	11/15/2004	3 Years	2.5% for loans 60 months or less; 2% for loans over 60 months
American Honda Finance Corporation	1/21/2005	5 Years	2.25% for loans 60 months or less; 2% for loans over 60 months
B1	1/24/2005	3 Years	2.5% for loans 60 months or less; 2% for loans 61 to 71 months; 1.75% for loans over 71 months
Bank of America	1/24/2005	3 Years	2.25% for loans 60 months or less; 2% for loans over 60 months
1Star	1/24/2005	3 Years	2.5% for loans 60 months or less; 2% for loans 61 to 71 months; 1.75% for loans over 71 months
Ford Motor Credit	6/1/2006	3 Years	2.5% on loans 60 months or less; 2% on loans 61 to 72 months; 1.5% on loans over 72 months
Daimler/Chrysler Services	10/21/2005	3 Years	Varies depending on number of firm offers of credit, but capped at 2.5%
Toyota Motor Credit Corp.	11/16/2006	3 Years	2.5% on loans 60 months or less; 2% on loans 61 to 71 months; 1.75% on loans over 71 months
Primus	2/26/2007	3 Years	2.5% on loans 60 months or less; 2% on loans 60 to 72 months; 1.5% on loans over 73 months

Source: National Consumer Law Center, List compiled by Stuart Rossman and John Van Alst.

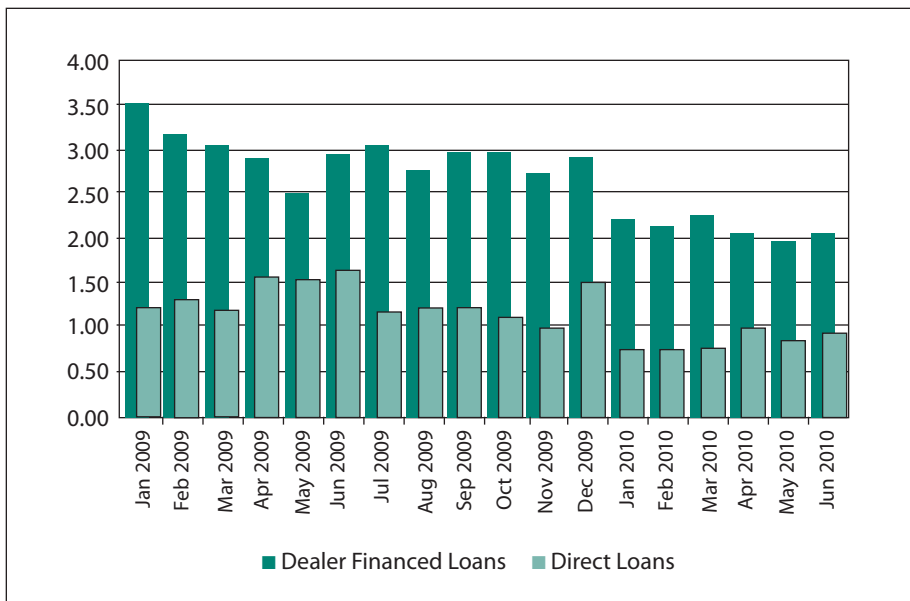


## Disparities in Auto Repossessions

Even with the prevalence of markup caps and other promotional incentives that would lower interest rates, it is conspicuous that repossession rates for dealer-financed loans consistently outpace those of their direct lending counterparts. If we consider an interest rate to be a product of a risk-based pricing decision, then the lower rates that dealerships provide should presumably translate to lower delinquency rates compared to their peers. The fact that this is not the case implies that there are other factors that influence price, delinquency and repossession.

Dealers have asserted that the rise in auto repossessions, which peaked at 2 million units in 2008<sup>25</sup>, is mainly caused by larger economic factors outside the dealership's control. Naturally, the rise in unemployment and bankruptcies will have an impact in a consumer's ability to maintain his or her auto loan. However, given that direct lenders operate in the same macroeconomic environment, this does not entirely explain why repossession rates for dealer financing have been nearly double the rates of direct auto lending in recent history.

**Figure 8: Direct vs. Dealer-Financed Repossession Rates (Repos per 1,000 Loans)**



Source: American Bankers Association Consumer Credit Delinquency Bulletin.  
Figures are seasonally adjusted.

Repossessions could, again, be the product of economic factors outside of the auto industry's control, or it could also be attributed to underwriting and other practices imbedded within the auto finance business model. Our findings using a cohort of 2008 ABS data restricts all loan performance to within the same macroeconomic environment. The fact that rate markups are still a significant driver of delinquency and loss with this dataset implies that industry practices also have a strong influence on loan performance.

## Parallels with Mortgage Yield Spread Premiums

In the mortgage industry, Federal regulators have similarly recognized the destructive nature of yield spread premiums. The mortgage yield spread premium is a practice that operates much like rate markups on auto loans, as it involved rate-based compensation that rewarded mortgage brokers for steering consumers into more expensive loans. Broker compensation based on inflated pricing led to the kinds of risky mortgage loans that contributed to the foreclosure crisis.

The Federal Reserve recognized that discretionary pricing—where the seller of financing prices loans based on their discretion rather than actual risk—is inappropriate, lacked transparency and added additional cost to mortgages. As a result, the Federal Reserve recently approved a rule prohibiting lenders from financing broker compensation based on discretionary pricing.<sup>26</sup>

As with mortgage foreclosures, auto loan defaults can be the product of loans that are not affordable over the full life of the loan, or made unnecessarily expensive by the professionals that sell them. If this parallel holds true for the auto industry, then regulators must also consider a similar policy change to protect consumers.

## Policy Recommendations

**Based on the severity and dangers of interest rate markups shown in our findings, CRL recommends completely divorcing dealer compensation from the interest rate of all vehicle financing.**

The reverse competition created by rate markups only drives up pricing and contributes to the odds of default and repossession. Therefore, we support substantive policy change to rein in the practice. According to J. Robert Hunter of the Consumer Federation of America, “Weak price regulation in a reverse competition market is a prescription for excessively high prices for consumers. Reliance on market forces to protect consumers where reverse competition dominates does not work.”<sup>27</sup> Car dealers certainly should receive compensation for the time spent on financing deals. However, we believe a safer and better system uses compensation based on the service itself, and not on the ability of the dealer to get a buyer to unwittingly pay a higher interest rate.

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***A safer and better system uses compensation based on the service itself, and not on the ability of the dealer to get a buyer to unwittingly pay a higher interest rate.***

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One alternative is to compensate dealers for financing using a flat fee for all loans. The fee would be fully disclosed and included in the amount financed. In fact, the flat fee approach has already been adopted by some auto lenders that have a minimum amount they will compensate dealers.

The flat fee alternative comes with several benefits, including a greater level of consistency—addressing concerns of fairness and disparate impact that brought about the lawsuits of years past. It would also allow for improved transparency, as F&I staff should be able to freely disclose the fee and its purpose to consumers. Removing dealer compensation from the interest rate also cancels the problems of reverse competition and rate steering that drive prices toward the higher end of what consumers can bear.

As an added benefit, flat fees can help to even the playing field for smaller community banks and credit unions priced out of the dealer financing market because they either cannot fund costly rate markups in their auto loans or refuse to do so in an effort to maintain consumer-friendly practices. Such a step would create more financing options in an environment where available credit has been constricted in recent years.

Any fee must also be fully disclosed and explained. In order for a consumer to truly understand the relative costs and merits of dealer financing, the consumer must be informed of the different costs associated with the transaction. Car buyers should also be allowed to decide whether they are paying a fair price for the service that car dealers are providing, as with any other service.

Overall, the practice of rate markups and its relationship to delinquency and loss deserves attention on a federal level. The merits of any product or practice that inherently leads to default must be questioned, especially when it opens potential for violation of Unfair and Deceptive Acts and Practice (UDAP) standards. The Federal Trade Commission, state Attorneys General, and the newly formed Consumer Financial Protection Bureau can and should examine these dynamics from both the dealer and lender perspectives.

### Consumer Recommendations

If possible, a consumer should consider seeking a quote and preapproval for financing from a bank or credit union before entering the dealership. A preapproval keeps the consumer from having to negotiate rates and terms with the F&I department, and at the very least provides a point of comparison if the dealer wants to propose a second loan offer. Repossession rates show that loans financed directly with an external lender are more likely to be sustainable throughout the life of the loan.

**Consumers who choose to finance through an auto dealer should know that nearly every element of a loan deal is negotiable, including the interest rate.** In dealing with a dealer's F&I department, consumers armed with as much information as possible are in a stronger position to negotiate. The internet provides a host of information and advice on car values and going rates on financing that will make it easier to negotiate a more affordable deal. Consumers should not be afraid to ask their dealers any question necessary for them to fully understand what their purchase entails. Also, checking their credit scores online will help consumers gauge what rates they should legitimately qualify for.

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## APPENDICES

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### APPENDIX 1: Other Potentially Abusive Dealership Practices

#### Loan Packing:

Outside of the sale of the car itself, F&I staff may routinely market a litany of add-on products. Products such as vehicle service contracts, GAP insurance<sup>28</sup>, credit life and disability insurance, theft deterrents, and vehicle upgrades and accessories are often sold as packages that are explained in terms of their impact on the monthly payment rather than the overall cost of the car. Marketing add-on products based on their monthly payment versus its overall cost makes expensive products seem less so and are effective in drawing the consumer's attention away from the total cost of the deal. In addition, the prices of add-on products are significantly marked up from their wholesale cost. Service contracts in particular, typically the most commonly sold product, can be marked up at by at least 100% or more<sup>29</sup>, and cost consumers on average \$1,790 per sale.<sup>30</sup> Third-party lenders may develop their own add-on products, and create incentives for dealers to pack them into financing.<sup>31</sup> In more egregious cases, the purchase of some add-on products is falsely represented as mandatory to approve the deal or to approve a low rate.<sup>32</sup> With more pressure on F&I departments to realize profit, dealers have incentive to increase the sales of add-on products.

#### Yo-Yo Sales:

Dealers will engage in a practice referred to as “spot delivery” or “conditional sales” deals, where the dealer gives the consumer the keys to the vehicle before financing is actually finalized. In these transactions, a conditional sale agreement is signed explaining that if the dealer cannot secure a third-party financier, then the consumer will have to return the vehicle. Allowing the customer to take the vehicle without finalized financing effectively keeps the consumer from continuing to shop around with competitors.

The “yo-yo” deal occurs when the customer is called back to the dealership. In a typical case, the consumer believes the financing is nearly final for a particular interest rate. However, after shopping the deal to third party lenders, the dealer finds that the interest rate promised is either not actually available or does not produce a desired level of profit.

At this point, the customer is presented with a new financing agreement that is usually more expensive than the original deal. If the customer balks at the new terms, the dealer may claim that the customer's trade-in has been sold at auction and/or is unwilling to refund the down payment. This pressures the consumer in signing the more expensive deal. Prior research has shown that low-income borrowers are much more subject to yo-yo sales, and eventually higher rates.<sup>33</sup>

#### Rolling Negative Equity:

“Underwater” consumers owing more on their car than what it is worth are often tempted to roll in their current car's unpaid loan or lease into the financing of a new car. Currently, 28.9% of consumers<sup>34</sup> have on average \$4,250 of negative equity in their trade-in<sup>35</sup>, putting them in a weaker negotiating position with the dealer. A dealer may promise to pay off the trade-in while only rolling that balance into the new car loan.<sup>36</sup> Dealers have several methods to roll negative equity into the financing of a new deal while still keeping monthly payments manageable, including increasing the length of the loan term, adjusting the interest rate and sticker price, or using the manufacturer's rebate to pay off the trade-in. Creating low payments are key considering prior study has found that consumers tend to be “myopic” with their car purchases, preferring loans with lower monthly payments even if it means higher total costs.<sup>37</sup> If the consumer is unaware of what costs are included in their payment, they may drive away with one car while essentially paying for two. Meanwhile, the dealer can potentially see a windfall from the resale of a trade-in they acquired for next to nothing.

## APPENDIX 2: Relationship Between Loan Characteristics and Rate Markup: Regression Coefficients and Standard Error

	Dependent Variable: Estimated Rate Markup
Avg Amount Financed (in thousands of dollars)	-0.665* (0.246)
% Used Sales in Pool (in percentage points)	0.096*** (0.015)
Finance Company (dummy variable)	5.037*** (1.118)
Markup Cap Present (dummy variable)	-3.04* (1.429)
Weighted Avg FICO	-0.073*** (0.006)
Weighted Avg Term (in months)	0.733*** (0.122)

Note: First term refers to the regression coefficient and term in parenthesis is the standard error.

\*\*\* Significant at 0.1% level

\*\* Significant at 1% level

\* Significant at 5% Level

## APPENDIX 3: Relationship Between Subprime Loan Pools and Loan Performance: Regression Coefficients and Standard Error

Lender Type	Dependent Variable: 60-Day Delinquency Rate	Dependent Variable: Cumulative Loss Rate
Subprime Finance Companies	0.026** (0.007)	0.063** (0.017)
Non-Finance Companies	0.019 (0.046)	0.089 (0.044)

Note: First term refers to the regression coefficient and term in parenthesis is the standard error.

\*\*\* Significant at 0.1% level

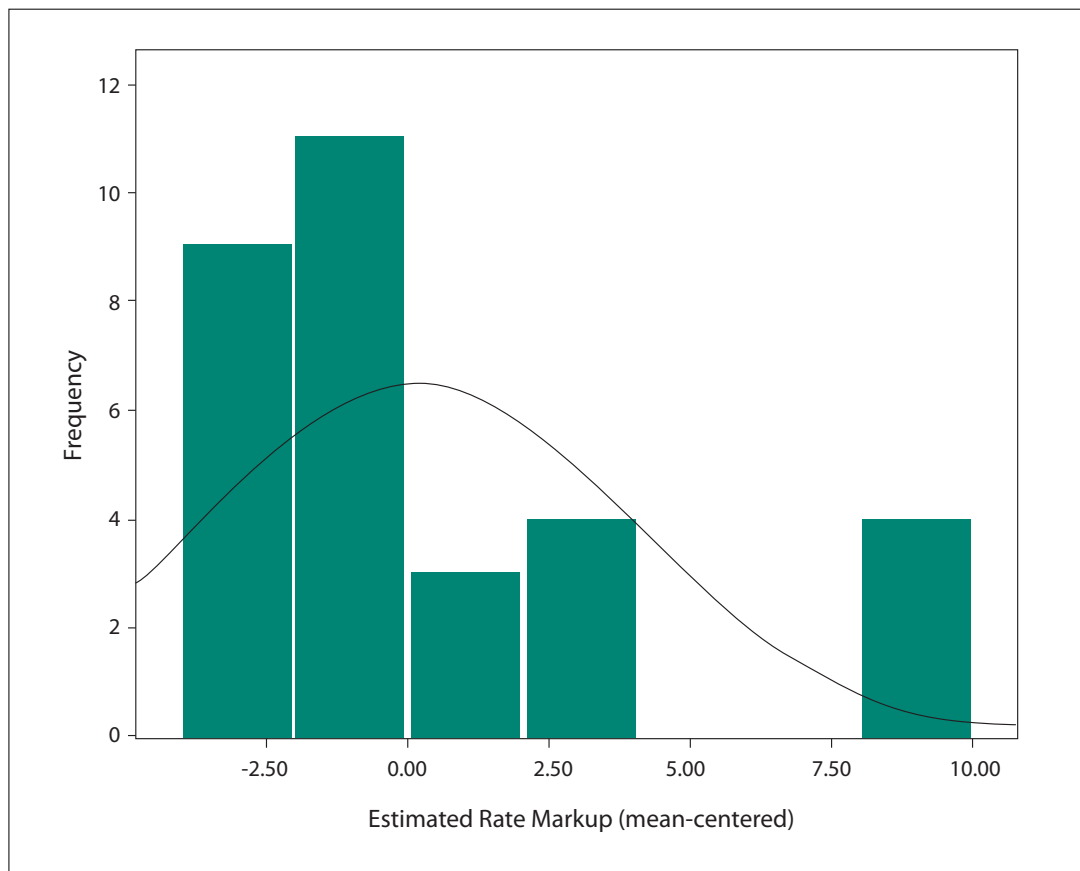
\*\* Significant at 1% level

\* Significant at 5% Level

## APPENDIX 4: Descriptive Statistics of Regression Model Variables

	N	Minimum	Maximum	Mean	Std. Deviation
Avg Amount Financed (in '000s)	32	13.3	29.9	17.963	3.3428
% Used Sales in Pool	32	.00	98.54	37.4659	29.59771
Weighted Avg Term	32	54.4	72.0	63.791	4.1819
Weighted Avg FICO	32	601.0	768.6	709.278	47.2281
Weighted Avg APR	32	3.96	16.82	7.6644	3.83681
Estimated Rate Markup	31	-1.19	11.63	2.6232	3.81817
60-Day Delinquency Rate	30	.11	2.29	.6983	.52720
Cumulative Loss %	30	.43	13.82	3.4113	3.22835
Valid N (listwise)	30				

## APPENDIX 5: Frequency Histogram of Estimated Rate Markup



## APPENDIX 6: Data and Methodology Limitations

Working with aggregated pool-level data instead of loan-level data presents several challenges in analysis. Although we do not anticipate any issues with data distribution in any particular pool, to some degree we do have to use assumptions of the variance within each pool. Consequently, we are forced to use mean values of different variables drawn from each pool, which is a broad representation of what the data is on the loan level.

Using pool level data also does not allow for a large sample size, which would give more flexibility for a multiple regression analysis. A more robust dataset would also help protect against any issues of multicollinearity between certain variables.

Ultimately, the challenges of working with data only reported in the aggregate illustrates the need for more readily available auto loan data as a matter of public policy. Loan level data availability, as like what we have with the Home Mortgage Disclosure Act, adds a layer of transparency necessary to help preserve fairness and consumer protection.

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## ENDNOTES

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- 1 Federal Reserve Board, *Changes in U.S. Family Finances from 2004-2007: Evidence from the Survey of Consumer Finances*, Feb 2009. Approximately 87.0% of families in the U.S. owned at least one vehicle in 2007.
- 2 CNW Marketing Research, *Personal Use Repossessions of Total Sales*, (Document 243).
- 3 Public Policy Polling survey administered Jan 15-18, 2010. Findings state that 79% of 494 surveyed respondents, all located in two North Carolina counties, were not aware that dealers have the ability to markup interest rates.
- 4 *Most Consumers Do Not Know the APR on Their Auto Loans*, Subprime Auto Finance News, Sep 16, 2008. According to findings from a 2008 Capital One Financial Corp survey, 61% of consumers with auto loans do not know the interest rate they are paying.
- 5 David N. Robertson, *Seven Deadly Sins of F&I*, Association of F&I Professionals, Feb 5, 2009. <http://www.afip.com/seven-deadly-sins.htm>
- 6 Mark A. Cohen, *Imperfect Competition in Auto Lending: Subjective Markup, Racial Disparity, and Class Action Litigation*, Vanderbilt University, Dec 2006.
- 7 Quote by Jesse Toprak, Executive Director of Industry Analysis at Edmunds.com. Article by Justina Ly, *Pressure Cooker*, F&I Management and Technology Magazine, Jun 2009.
- 8 F&I Management and Technology Magazine Benchmarking Study, Oct 2010. The median profit per retail unit for new and used sales combined was \$876.
- 9 See Appendix 2 for further details on loan packing, yo-yo deals and rolling negative equity.
- 10 *Title Insurance Cost and Competition*, Testimony of J. Robert Hunter, Consumer Federation of America Director of Insurance, Before the House Committee on Financial Services Subcommittee on Housing and Community Opportunity. Apr 26, 2006.
- 11 David N. Robertson, *Seven Deadly Sins of F&I*, Association of F&I Professionals, Feb 5, 2009. <http://www.afip.com/seven-deadly-sins.htm>
- 12 Public Policy Polling survey administered Jan 15-18, 2010. Findings state that 79% of 494 surveyed respondents, all located in two North Carolina counties, were not aware that dealers have the ability to markup interest rates.
- 13 *Most Consumers Do Not Know the APR on Their Auto Loans*, Subprime Auto Finance News, Sep 16, 2008. According to findings from a 2008 Capital One Financial Corp survey, 61% of consumers with auto loans do not know the interest rate they are paying.
- 14 Delvin Davis and Joshua M. Frank, *Car Trouble: Predatory Auto Loans Burden North Carolina Consumers*, Center for Responsible Lending, Apr 2009, p4.
- 15 CNW Marketing Research, *Sales, Values Historic Data on Auto Market*, (Document 270).
- 16 National Automotive Finance Association 2010 Automotive Financing Survey. Data compiled by BenchMark Consulting International.
- 17 CNW Marketing Research, *Time Spent at a Dealership* (Document 2). Figures used are from 2008, and only includes consumers who actually purchase a vehicle.
- 18 William C. Apgar and Allegra Calder, *The Dual Mortgage Market: The Persistence of Discrimination in Mortgage Lending*, published in *The Geography of Opportunity: Race and Housing Choice in Metropolitan America*, 2005
- 19 Jessica Jones, *Default Rates on Auto Loans*, Stephen F. Austin State University Economics Department, 2010.
- 20 Erkan Erturk and Joseph F. Sheidan, *Investigating U.S. Auto Loan Credit Performance During Economic Downturns, 1925-2010*, Standard & Poors, Dec 15, 2010.
- 21 CNW Marketing Research, *Sales, Values Historic Data on Auto Market*, (Document 270).

- 22 CNW Marketing Research, *Profit Margins by Department - National, Personal Use Vehicles Only*, (Document 925). Figures are for June 2009.
- 23 Mark A. Cohen, *Imperfect Competition in Auto Lending: Subjective Markup, Racial Disparity, and Class Action Litigation*, Vanderbilt University, Dec 2006.
- 24 Mark A. Cohen, *Imperfect Competition in Auto Lending: Subjective Markup, Racial Disparity, and Class Action Litigation*, Vanderbilt University, Dec 2006.
- 25 CNW Marketing Research, *Personal Use Repossessions of Total Sales*, (Document 243).
- 26 Federal Reserve System Federal Register, Rules and Regulations, Vol 75, No 185, Sept 24, 2010, pp58509-58538.
- 27 *Title Insurance Cost and Competition*, Testimony of J. Robert Hunter, Consumer Federation of America Director of Insurance, Before the House Committee on Financial Services Subcommittee on Housing and Community Opportunity. Apr 26, 2006, p15.
- 28 “GAP” insurance refers to Guaranteed Automobile Protection. If a car with negative equity is stolen or wrecked to the point of total loss, conventional insurance may only cover the value of the car at the time of the incident. Consumers would still be left with the remaining balance on the car loan. GAP insurance would reimburse the consumer up to a certain amount in order to cover the deficit.
- 29 Quote by Phil Reed, editor at Edmunds.com. Interview by Lucy Lazarony, *Beware of the extended warranty add-on*, Bankrate.com, Jan 11, 2005.
- 30 Justina Ly, *Pressure Cooker*, F&I Management and Technology Magazine, Jun 2009.
- 31 John D. Stoll, *Cut from GM, GMAC Uses New Strength To Expand*, *Wall Street Journal*, Sep 24, 2009. GMAC created a goal to boost revenue by giving cash incentives to dealers who use an increasing amount of GMAC add-on products, including car loans, service contracts and insurance. Likewise, many GMAC loan officers’ compensation was changed from a salary to commission-based pay.
- 32 *Attorney General Hardy Myers Announces Settlement With Salem Car Dealership Ending Sales Practices of ‘Packing’*, Oregon Department of Justice press release, Aug 20, 2008.
- 33 Delvin Davis and Joshua M. Frank, *Car Trouble: Predatory Auto Loans Burden North Carolina Consumers*, Center for Responsible Lending, April 2009, p5. A quarter of all consumers with incomes \$25,000 or less have experienced a yo-yo, translating to a 5 percentage point increase in their interest rate.
- 34 CNW Marketing Research, *Equity Impact on Acquiring a New Vehicle*, (Document 200).
- 35 Richard Apicella and George Halloran, *The Rising Repossession Tide*, Benchmark Consulting International, Apr 2008.
- 36 Dana Howard, *Drivers Left on the Hook After Car Dealers Fail to Pay Off Trade-Ins*, ABC News 10-KXTV, Sacramento, CA, 2008.
- 37 Srabana Dasgupta, S. Siddarth and Jorge Silva-Risso, *To Lease or Buy? A Structural Model of a Consumer’s Vehicle and Contract Choice Decisions*, American Marketing Association, *Journal of Marketing Research*, Vol XLIV, Aug 2007.



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## ***About the Center for Responsible Lending***

The Center for Responsible Lending is a nonprofit, nonpartisan research and policy organization dedicated to protecting homeownership and family wealth by working to eliminate abusive financial practices. CRL is affiliated with Self-Help, one of the nation's largest community development financial institutions.

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