

THE EXPANSION OF U.S PRIVATE CREDIT MARKETS POST 2008:  
IMPLICATIONS FOR SOCIOECONOMIC DEMOGRAPHICS  
SINCE THE GREAT FINANCIAL CRISIS

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By

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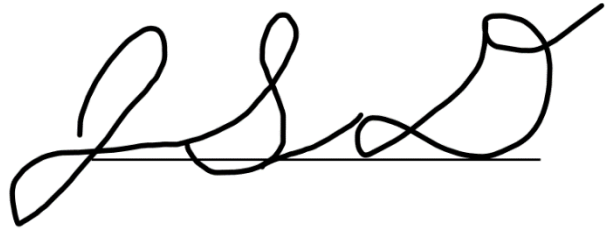
Economics Major

**Abstract**

*Private credit* is an alternative asset that attracts investors with uncorrelated returns to the stock market and high yields. Private credit funds fundraise capital and lend it to small businesses and individuals with tailored term sheets. These loans are bundled into a fund and allow investors to invest in them; these funds do not trade publicly. Key characteristics of private credit include floating interest rates and illiquidity. This paper examines the relationship between private credit growth since the 2008 Great Financial Crisis and different races and wealth percentiles' access to non-predatory private non-bank direct lending. Key empirical findings demonstrate that, for certain races and wealth percentiles, the growth in private debt fundraising since 2008 did affect their ability to obtain private loans. For Black individuals, growth in private debt provided more access to private loans, home mortgages, and other types of loans and advances and decreased access to private consumer credit. For Hispanic persons, growth in private credit ties to easier access to obtaining depository institutional loans. For Whites and other "Other" races, growth in private credit did not affect their ability to access private forms of lending. For the five varying wealth percentiles analyzed, the top half of the top 1%, the bottom half of the 1%, and the next 40% were all affected by growth in private credit fundraising. The top half of the top 1% saw increased access to consumer credit with private debt growth. The bottom half of the 1% experienced decreased access to consumer credit. Lastly, the next 40% saw a decrease in private loans as liabilities and an increase in private loans as assets.

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AID ON THIS ASSIGNMENT

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## ACKNOWLEDGEMENT

I would like to thank my wonderful thesis advisor, Lora Louise Broady, for her unwavering support and knowledgeable understanding of complex research and writing processes. While my thesis topic was unique and complicated, she recognized my genuine interest, roping herself into the depths of this paper. Additionally, she ensured I understood what the purpose of each section was and how to structure my writing most effectively. Thank you, Lora Louise; your dedication to me as an individual and academic made this piece possible.

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## **Introduction**

Private credit plastered Wall Street Journal headlines weekly in the last twelve months in the wake of recent bank failures. The credit boom caught the financial world's attention, whipping private banks, asset managers, and wealth management shops into a lending frenzy. A similar surge occurred during the aftermath of the Great Financial Crisis of 2008, marked with a step towards impartial lending (Brakebill, 2023). Private credit was established as an institutionalized asset before 2008, but the Great Financial Crisis flooded America with unprecedented access to private non-bank lending. On the institutional side credit managers earned double digit internal rate of returns in 2009 and 2010 (Brakebill, 2023). With banks treading water in the face of near financial ruin, a credit crunch swept first through Wall Street and then to the rest of the U.S. Office of the Comptroller of the Currency (OCC) regulations restricted large banks' mobility by “improving accountability and transparency in the financial system” (Dodd Frank, 2010). As a result, smaller financial firms moved into the once-thin space. More players in the credit arena yielded easier access for consumers to obtain loans. The geography of loans in the U.S. skews towards affluent individuals with the wherewithal and access to comprehend and harness private and public credit (Turner & Skidmore, 1999). Post 2008, private debt's rise shifted the lending sphere. Previously, one had to be a major bank client to access private debt; now, smaller shops welcome the less affluent client.

Credit is debt, and the opportunity to use and leverage debt is vital to any individual, firm, and economy. Debt fuels innovation. It is rare that a business, project, or forward movement in an economy exists without debt. Essential purposes for debt include mortgages, education, car loans, debt consolidation, medical expenses, business

ventures, and smaller everyday loans. The American economy hinges on debt. Debt is the gateway to a vibrant and ideal future if properly managed. There are two issuers of debt in the United States: the government and the private sector. Traditionally, the government provided most of the nation's mortgage, car, small business, and agriculture loans. The primary lenders in the private sector are large banks such as Bank of America, Citi Group, JPMorgan Chase, Wells Fargo, and U.S. Bank. These banks provide the same credit services as the U.S. government, typically with higher interest rates. Until the Great Financial Crisis in 2008, the two major players – the U.S. Government and the major banks – had a firm grasp on the lending landscape in the United States.

The 2008 Great Financial Crisis precipitated a marked expansion within the private credit sector. When big banks failed, and others did not have the liquidity to lend, smaller specialized firms entered the credit market. The smaller private equity and wealth management firms were also able to bypass OCC regulations, lubricating the debt desert. Although subject to less strict lending guidelines, the small lending arms of these firms could not engage in the same careless lending large banks did, thereby potentially contributing to a reduction in cases of loan discrimination compared to the prevailing circumstances before.

Loan discrimination is a prevalent systematic injustice ongoing in America. Private credit development in the United States may combat the predatory lending practices via the rigid structure of the American economy. If private lenders' loan-to-value ratios become bloated and they make ill-advised loans, they will fail, their investors will lose money, and lawsuits will follow. With private credit being a relatively new alternative asset class, research on its ability to challenge unjust economic norms



ingrained in the U.S. economy is needed. Each banking crisis draws more players into the private non-bank lending field, and as the first quarter of 2023 proved, bank failures can occur in swaths overnight. The average private debt fund size increased from \$876 million in 2022 to \$1.061 billion in Q1 of 2023 (PDI, 2023). 2018, the average fund size was almost half that of 2023 at \$551 million (PDI, 2023). Investors, funds, and consumers have adopted private non-bank lending into their portfolios and lives; now, academic research must follow.

The method I will use to test my hypothesis that the 2008 Great Financial Crisis ultimately aided in reducing lending discrimination by providing wider access to private credit is a quantitative study with data from The World Bank (WB), The International Monetary Fund (IMF), The United States Federal Reserve (Fed), and Private Debt Investor's (PDI, 2023) database. The Federal Reserve provides data on Distributed Financial Accounts (DFA) for various demographics. The IMF, W.B., and PDI supply data on private credit as a percent of US GDP each year, growth per year, and a breakdown of what type of loans were issued. Thank you to Private Debt Investor, for granting me free access to their premium trial enabling me admission to their unique insights, reports, and data.

First, I expect to illustrate that private credit grew during and after The Great Financial Crisis. Stemming from OCC regulations on major banks and a liquidity crisis, my work will depict specialized firms snatched the unique opening to enter debt market. With the addition of lenders in the debt sector – and a more privatized field – I expect to demonstrate that the influx of firms reshaped the debt landscape creating easier access to mortgages and other loans for marginalized individuals. My data will not be able to

conclude if marginalized individuals were subject to less predatory and discriminatory lending. More research is needed on private credit and predatory lending. “Lending discrimination research is inherently flawed since the publicly available data do not contain borrower characteristics such as credit scores, total debt-to-income ratios, loan-to-value ratios, or other factors that influence the lending decision” (Cyree & Winters, n.d.).

This study is organized as follows: The subsequent section gathers and examines pertinent literature. Following is an overview of the theory and methodology, which includes the model, data, limitations, hypotheses, and timeframe for this study. Details of the analysis and results are then explored. Lastly, the paper concludes with a summary of my results and conclusion.

## **Literature Review**

The literature examined in this chapter includes articles, research papers, and case studies. The focal point is on discrimination in U.S credit markets. The credit markets researched include car loans, mortgages, and other loans. The timeframe ranges from 1990 to 2023, with a spotlight on 2008, 2009, and 2010. Even with the robust research in credit discrimination, little investigation has been done on how The Great Financial Crisis affected access to credit across different socioeconomic and demographics. While the Great Financial Crisis increased U.S. private debt markets and ushered non-bank private lending into mainstream markets, it is unclear from the research if private credit decreased lending imbalances.

### **What is Private Credit?**

Private credit, also identified as private debt or non-bank direct lending, is an alternative asset, meaning it has a low or negative correlation to the stock market. The greater the variance in the macroeconomic backdrop, the more attractive private credit becomes. Private debt can be “direct lending, project financing, mezzanine loans, distressed loans, and other credit opportunities” (Evalueserve, 2023). “Private” is labeled as non-government-owned, and credit means debt. If an individual or company wants capital, they can turn to a bank that will hold the loan or syndicate it to a group of investors (GSAM, 2022). The individual could also turn to a private lender who tailors the loan to them (GSAM, 2022). While private lenders still bundle the loans into a fund and allow investors to invest in them, these funds do not trade publicly. Key characteristics of private credit include floating interest rates and illiquidity. The loans are typically senior structured with high predictability of expected returns. Private credit

loans are almost always floating, meaning they rise and fall with market rates, protecting the investor. Additionally, private credit is regarded as an illiquid asset (Brakebill, 2023). The asset's illiquidity generates an 'illiquidity premium' where investors receive 50 – 300 extra basis points for their money being inaccessible for a certain period (Brakebill, 2023). As credit availability tightens owing to rising interest rates, inverted yields, bank distress, or other hazardous market indicators, private credit is expected to remain resilient to the macroeconomic situation and even outpace public debt and similar fixed-income assets (PDI, 2023). Roddick's *Global Guide to Private Credit* said this regarding the asset, "today most investors are no longer asking themselves whether they should be investing in private debt, but how they should be investing" (Roddick, 2016). Private credit's rise began in 2008 - becoming a sexy security institutions and investors clamored to add to their portfolio.

### **The Mainstreaming of Private Credit & The Great Financial Crisis of 2008**

Private credit's rise to a mainstream method of acquiring a loan is largely thanks to its value as an asset and, more importantly, one event: The 2008 Financial Crisis.

**Private credit's value as an asset:** The high yields that non-bank direct lending generally provides was the first step in people adding private debt into their portfolios. For an asset class to become institutionalized, the way private credit has, the asset must endure a long maturation period where the intricacies of the security's risk and return can be evaluated (Nesbitt, 2019). The yield for significant private debt funds, using the Cliff Water Direct Lending Fund as a proxy, is 11.15% (Nesbitt, 2019), with a 42% loan-to-value ratio (PDI, 2023). Investors and portfolio managers are drawn to private credit for its consistent returns and diversification. Private debt is an "alternative asset," meaning it

does not correlate with the stock market. Several primary factors led to private (non-bank) lending cracking into the debt space. The institutions grew large enough that they had the means to measure and monitor borrowers, mediate, and dampen “intra-claim conflicts,” and private lenders worked around embedded interest rate options (Kahan & Tuckman, 1993). Intra-claim conflicts arise during company liquidation, pitting senior and junior lenders against each other as they vie for repayment priority and dispute the allocation of proceeds. Private credit’s robustness and diversification in time may have propagated the asset across America, but the 2008 financial crisis gave the asset a permanent foothold.

**The Global Financial Crisis of 2008:** “The private debt market has grown more than six-fold since the Global Financial Crisis of 2007-2008” (GSAM, 2022). The financial system of checks and balances failed in 2008. Large banks like Goldman Sachs and Lehman Brothers capitalized on the utter lack of banking regulations, preying on Americans. Institutional failure in the financial system, which is transmitted from one institution to multiple institutions and eventually produces a negative external spillover risk to the real economy (Hart & Zingales, 2009). Major banks conducting predatory lending practices to subprime borrowers with zero fail-safes, and then packaging these loans and shoving them down investors’ throats led to the GFC and opened the door for private credit. Once the dust settled and OCC regulations restricted bank lending, private equity firms, wealth management shops, and other asset managers stepped into the private credit sector. The distinction between these spun-out private credit shops and big banks is that large banks participated in predatory lending practices because they knew they would be bailed out, private credit firms are not extended the same luxury. Instead,

private lenders take extreme measures in credit evaluation and loan to value ratios, ensuring a default risk of 1% or less on average for each portfolio (PDI, 2023). Major corporations and investors still turn to public debt as their first choice, but others prefer the unique lender borrower relationship private credit provides (Denis & Mihov, 2003).

Minorities, on average, have lower credit quality than privileged groups (Ross & Yinger, 1999). Individuals with lower credit ratings often turn to private lending to acquire loans. Generally, firms and individuals with the highest credit ratings borrow from the government, those in the middle borrow from large banks, and firms and people with low credit quality borrow from non-bank private lenders (Denis & Mihov, 2003). “Non-bank private debt thus uniquely accommodates the financing needs of firms with low credit quality” (Denis & Mihov, 2003). One reason minority populations gravitate towards private debt is that private lenders do not adhere to time-consuming public securities issuance processes (Denis & Mihov, 2003). Most private credit is governed under SEC Rule 144A. SEC Rule 144A streamlines the lending process by allowing firms to market directly to institutional investors, reducing cost and time. SEC Rule 144A also ensures safeguards against predatory lending are in place. Private debt firms also create proprietary credit evaluation models, decreasing time and illiquidity risk. The profitability of a business helps determine that firm's source of financing. Profitable companies look to public debt as their first choice of funding, and less lucrative firms turn to non-bank private lending. (Denis & Mihov, 2003). Research in discrimination from (Margery & Skidmore, 1999) supports Denis and Mihov's study.

## **Lending Discrimination**

Research in credit discrimination flooded the field after two events: The Home Mortgage Disclosure ACT (HMDA), enacted in 1975, and researchers at the Federal Reserve Bank of Boston providing in-depth credit data complementing the HMDA (Ross & Yinger, 1999). The public data from the HMDA revealed that “Black's loan rejection rate was 2.07 times the rate for whites in 1991 and 2.05 times the rate for Whites in 1997” for traditional government and bank credit (Ross & Yinger, 1999). The data from the Fed in Boston bared that Black and Hispanic applicants were “80% more likely to be rejected after controlling for the characteristics of the loan, of the property and its neighborhood, and of the applicant compared to White applicants” (Munnell et al. 1996). Private credit may decrease the likelihood of predatory lending since private firms convey clear term sheets to balance the naivety of some borrowers: “inexperienced borrowers underestimate their likelihood of borrowing, while more experienced borrowers predict correctly” (Allcott et al., 2022). The inflow of credit is available to a wide array of debt-seekers. While the private debt firms' credit evaluation is typically more robust than the U.S. government or large banks, there is no substitute for experience when handling loans (Allcott et al., 2022). Private lenders instead tailor loans and connect with their borrowers to decrease the likelihood of default. Private lenders dish out a smaller amount of loan and typically focus on one project. For example, private lenders may only lend to one real estate development, allowing them to have employees on the ground overseeing their money be put to use.

Scholars have cited various reasons for lending discrimination. At the forefront is prejudice or taste-based discrimination (Turner & Skidmore, 1999). Lenders claim racial,

gender and other biases are antithetical to their business model, using the phrase it is not the skin color that matters but the color of the customer's money (Turner & Skidmore, 1999). Assuming all lenders are perfectly rational is impossible. Mortgage Lending Discrimination (Turner & Skidmore, 1999) states, “it is possible for prejudice to persist among profit-motivated businesses, due to market imperfections, information barriers, and the large number of people who participate in a loan approval decision.” Moreover, there is evidence that proposes inequalities in loan approval rates amongst Black and White individuals narrow as the rate of minorities in charge of evaluating credit increases (Kim & Squires, 1988). Economic discrimination is also widespread in U.S. credit markets. Rather than focusing on the individual requesting a loan, lenders focus on their perceived bias toward minorities. For instance, minorities may have fewer wealthy friends and family available to help cover payments should they encounter economic hardship (Turner & Skidmore, 1999). While investors knew about the tilt from public to private lending courtesy of the GFC, academics have done little to evaluate the effects of the rise of private credit on lending imbalances across race, gender, and wealth percentile.

### **Private Credit & Access to Debt**

In 2022, the Fed stated its concerns on the private credit market, “the sector remains opaque, and it is difficult to assess the default risk in private credit portfolios” (Federal Reserve, 2022). However, private debt's lack of transparency has not deterred researchers from conducting due diligence. A 2010 study by the U.S. Department of Commerce Minority Business Development Agency (MBDA) revealed that 7.2% of the capital used in minority business starts came from private credit. On average, only 1% of the capital can be attributed to a government loan. 54.1% of the capital came from



personal savings, and 9.3% from family. Post 2008, small businesses were 7.2 times more likely to get a loan from a private credit firm than government agencies (Fairlie & Robb, 2010). Government resources were strapped and inaccessible in 2008, 2009, and 2010. In 2005, the Small Business Loan Association (SBA) gave \$13.98 million in loans; in 2008, the SBA gave \$11.71 million (Fairlie & Robb, 2010); the market was ripe for an alternative lending source.

The precise question of whether private credit expansion affected different demographics' access to loans has not been studied. Mortgage Lending Discrimination by Turner & Skidmore, 1999, and Kim & Squires's 1988 study on loan discrimination provide a clear outline of minorities' bank and exposure and usage of public, bank, and private debt. Ross & Yinger's 2004 "The Color of Credit" presents further research on credit discrimination, sourcing data from the HMDA, the most robust dataset in the field. Research in non-bank direct lending's growth is less robust than credit discrimination. Denis & Mihov's 2003 study on private credit's growth after Sec Rule 144A was passed establishes a solid backdrop. Nesbitt's "*Private debt: Opportunities in corporate direct lending*" - coupled with the Private Debt Institute's research also led the field. The intersection of credit discrimination and private credit growth is uncharted. The methodology used for this study will analyze loans to various races, genders, and wealth percentiles against private credit as % of America's GDP. This study will analyze and highlight a gaping hole at the junction of private credit and loan discrimination focusing on access to private debt.

## **Theory & Methodology**

### **Data Overview**

The data analyzed in this study comes from The United States Federal Reserve (Fed) and Private Debt Investor (PDI, 2023). The data from the Fed contains loans in trillions of dollars owned by different demographics. The demographics include White, Black, Hispanic, and others. The data begins in the first quarter of 1989 and ends in the first quarter of 2023. The debt corresponding to each race includes home mortgages, loans, and other loans. The next set of demographics details different wealth percentiles and pairs them with their home mortgages, loans, and other loans owned in trillions. The categories include the top half of the 1%, the remaining 1%, the next 9%, the next 40%, and the remaining 50%. The time frame is the same as the racial demographics. The Private Debt Investor has provided data on private debt fundraising since 2008. Private debt fundraising is the ideal benchmark to measure private debt growth. When a firm wants to open a private credit fund, they fundraise billions of dollars. The money is then loaned to various small or large businesses, people, or groups with tailored term sheets. When the fund opens, investors can invest in the fund, but it is not publicly traded. Hence, private debt fundraising is the ideal watermark to measure private debt growth since it includes all parties involved, measuring the overall appetite of the private debt market. Moreover, private credit fundraising is not linked to indicators like GDP, preserving the purity of the data.

The data from The Federal Reserve and Private Debt Investor was molded. Distributed Financial Accounts (DFA) data from The Fed was converted into years to align with the private debt data. The four different races and five different wealth

percentiles were then coded into numbers 1-9. The data was then blocked off into nine different sections, each corresponding to a specific race of wealth percentile. These nine blocks were used to run the micro regressions ex. Private credit growth on White (1). The data was formatted vertically for the macro regressions as one block rather than nine horizontal blocks. Dummy variables were coded for the vertical macro regressions to eliminate collinearity issues. Each data point from the private debt investor was multiplied by a billion, and each data point from the Fed's data was multiplied by a trillion. The data was then moved into STATA, where the macro (vertical) and micro (horizontal) regression could be run.

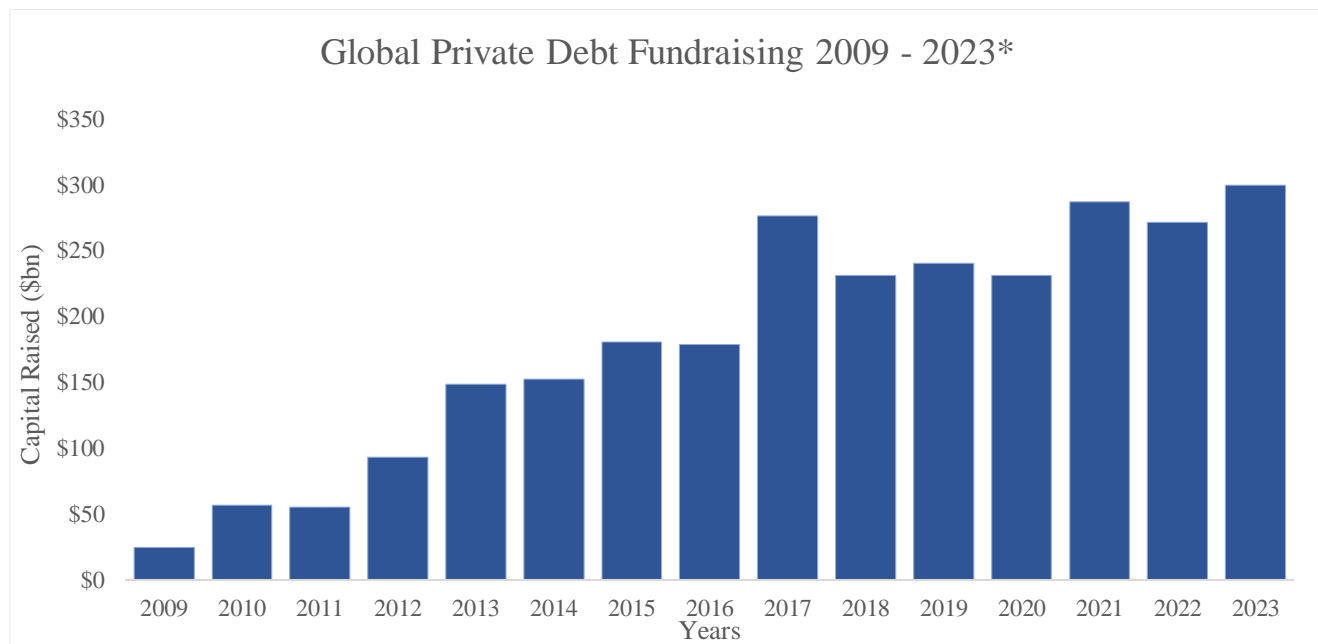
### **Summary Of Variables**

The number of mortgages, consumer loans, and other loans attached to the different demographics are the dependent variables. The independent variables are growth in private credit, race, and wealth percentile. Race is divided into White, Black, Hispanic, and other wealth percentiles is broken down to the top half of the 1%, bottom half of the 1%, next 9%, next 40%, bottom 50%. The data was downloaded into excel where it was checked over before transferring to STATA 18. A Dickey-Fuller test was done to test for a unit root. The variables are listed in Table 1.

**Table 1: Variables**

Dependent Variables	Independent Variables
# of mortgages	Private credit growth
# of consumer loans	Races: White, Black, Hispanic, Other
# of other loans	Wealth percentiles: top half of the 1%, bottom half of the 1%, next 9%, next 40%, bottom 50%

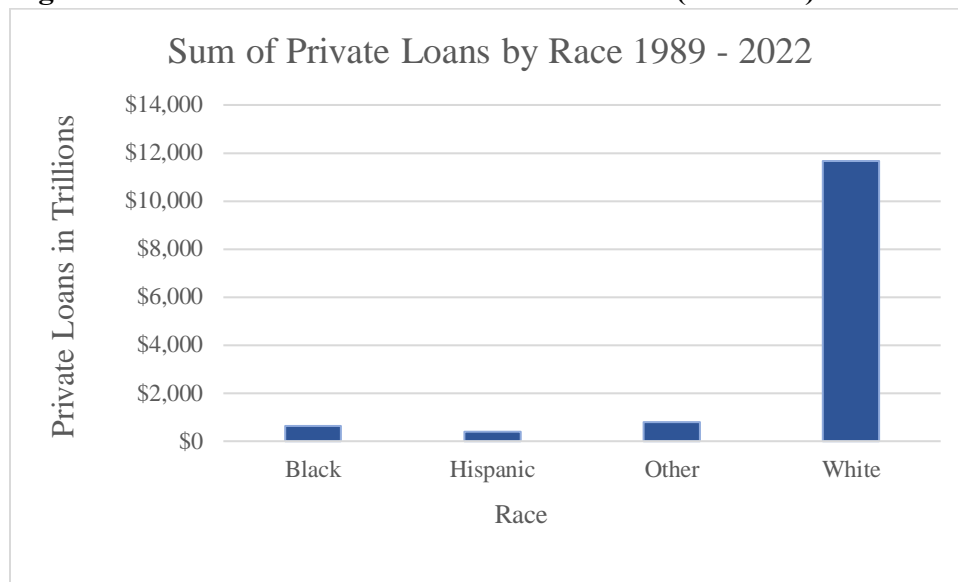
**Figure 1: Private Credit Growth**



Axios. (2023, September 26). Private Debt Fundraising 2023 Report. Axios. <https://www.axios.com/2023/09/26/private-debt-fundraising-2023-report>

Figure 1 depicts private credit fundraising since 2009. The x-axis portrays years, and the y-axis represents capital raised in billions. Only \$24.5 billion was fundraised by firms to open private credit funds in 2009; that number is slated to jump to \$300 billion by Q4, 2023. The years following the Great Financial Crisis, 2011, 2012, and 2013, have the steepest increase in private debt fundraising, showcasing how the crisis acted as a springboard.

**Figure 2: Different Races Access to Private Debt (Summed)**



Federal Reserve. (2023). Distributional Financial Account Overview. Federal Reserve. <https://www.federalreserve.gov/releases/z1/dataviz/dfa/index.html>

Figure 2 outlines the share of the private credit market attained by race since 1989. The y-axis depicts loans given to each race in trillions of dollars. The x-axis includes Black, Hispanic, White, and other. Black individuals have access to 5.3% of the private debt market share as compared to Whites, Hispanics 3.4% and other 6.8%. The hypotheses for this study are as follows.

(H0): Private credit's market growth has no significant impact on credit access disparities among racial and wealth percentile groups.

(H1): The post-2008 Great Financial Crisis era witnessed a notable expansion of private credit markets, resulting in enhanced credit accessibility for non-Caucasian individuals, thereby underscoring the profound socioeconomic ramifications of this development.

(H2): The post-2008 Great Financial Crisis era witnessed a notable expansion of private credit markets, resulting in enhanced credit accessibility individuals in lower wealth percentiles.

## Model

A paper by Gu et al. studying if the private debt sector grows with the public debt sector and vice versa in China assisted in constructing the model for this paper. Their model included the debt-to-GDP ratio of the “private sector, inflation, and output” and is as follows (Gu et al, 2020):  $X_t = (levPri_t, Inflation_t, Y_t, i_t)$  where “ $levPri_t$  is the debt-to-GDP ratio of the private sector, which is the target variable;  $inflation_t$  is the inflation rate;  $y_t$  is the real GDP; and  $i_t$  is real investment. All variables are logged” (Gu et al, 2020).

Parts to build the model were also pulled from my econometrics paper which analyzed housing prices in Colorado Springs in relation to the nearest Walmart.

$$\begin{aligned} \log(P_{iwyw}) = & \alpha_{wyw} + \sum \gamma X_i + \vartheta \log(\omega SD - O)_{iym} + \log(\beta_0 D_{iw}^1) + (\beta_1 D_{iw}^1) \\ & * \log(\omega SD - O)_{iym} + \varepsilon_{iwyw} \end{aligned}$$

Housing prices fluctuated based on how many feet they were from the nearest Walmart which relates to loans access changing based on expansions in the private credit sector.

The model is defined as:

$$\begin{aligned} (PD) = & \alpha_{ry} + \gamma X_{wy} + \beta_0 WH + \beta_1 B + \beta_2 H + \beta_3 O \\ & + (\beta_4 5 + \beta_5 6 + \beta_6 7 + \beta_7 8 + \beta_8 9) + \varepsilon_{iyw} \end{aligned}$$

**Table 2: Calculation of Explanatory Variables**

Predictor	Measure	Notes/Transformation Applied
PD	Private Debt Fundraising	None
R	Race	Black, White, Hispanic, Other
Y	Year	Year
W	Wealth percentile	top 1%, bottom 1%, next 9%, next 40%, bottom 50%
WH	White	
B	Black	None
H	Hispanic	Square root on first term squared on second to produce varying results
O	Other races	None
5	Top half of the 1%	None
6	Bottom half of the 1%	None
7	Next 9%	None
8	Next 40%	None
9	Next 50%	None
$\varepsilon_{ijym}$	Random error term	None

## **Results and Analysis**

The micro and macro regressions for this model generated varying results. On a macro level, growth in private credit since 2008 – measured by non-bank direct lending fundraising – had no effect different races access to private debt securities, loans (assets), other loans and advances (assets), mortgages, loans (liabilities), home mortgages, consumer credit, depository institutional loans, and other loan and advances (liabilities). When running the model separately for Black, White, Hispanic, and “other” individuals, Black and Hispanic persons yielded statistically significant results, whereas White and “other” did not. Wealth percentile on a macro level did deliver statically significant results; `wealthpercentile_dummy`, loans (assets), and other loans and advances (assets) were all significant. `Wealthpercentile_dummy`, with a p-value of 0.01, is significant to the 99th confidence interval percentile, meaning what wealth percentile a person aligns with is statically significant for their access to various forms of private debt when global private debt fundraising increases. Each wealth percentile – the top half of the 1%, the bottom half of the 1%, the following 9%, the next 40%, and the last 50% all produced differing significant results for each dependent variable, respectively. Below are the macro-level regressions for race and wealth percentile.



**Table 3: Macro Race Regression**

Source	SS	df	MS	Number of obs	=	60
Model	1.5525e+23	10	1.5525e+22	F(10, 49)	=	2.44
Residual	3.1136e+23	49	6.3543e+21	Prob > F	=	0.0187
				R-squared	=	0.3327
				Adj R-squared	=	0.1965
Total	4.6662e+23	59	7.9087e+21	Root MSE	=	8.0e+10

GlobalprivateDebtFundraising	Coefficient	Std. err.	t	P> t	[95% conf. interval]	
race_dummy	8.77e+09	1.19e+11	0.07	0.942	-2.31e+11	2.48e+11
Debtsecurities	.0019106	.0040927	0.47	0.643	-.006314	.0101353
LoansAssets	-.0803019	.0492744	-1.63	0.110	-.1793225	.0187187
OtherloansandadvancesAssets	.0716075	.0421745	1.70	0.096	-.0131454	.1563604
Mortgages	.0102181	.0061069	1.67	0.101	-.0020542	.0224903
LoansLiabilities	-5.76e-15	2.55e-15	-2.26	0.028	-1.09e-14	-6.39e-16
Homemortgages	.012685	.0039439	3.22	0.002	.0047595	.0206106
Consumercredit	-.0191918	.0043621	-4.40	0.000	-.0279577	-.0104259
Depositoryinstitutionsloansn	.0027711	.0019701	1.41	0.166	-.0011879	.0067301
OtherloansandadvancesLiabil	-.0025527	.0017951	-1.42	0.161	-.0061602	.0010547
_cons	3.33e+11	1.06e+11	3.14	0.003	1.20e+11	5.47e+11

Source: Author's Calculations

**Table 4: Macro Wealth Percentile Regression**

Source	SS	df	MS	Number of obs	=	60
Model	2.1734e+23	10	2.1734e+22	F(10, 49)	=	4.27
Residual	2.4927e+23	49	5.0872e+21	Prob > F	=	0.0003
				R-squared	=	0.4658
				Adj R-squared	=	0.3568
Total	4.6662e+23	59	7.9087e+21	Root MSE	=	7.1e+10

GlobalprivateDebtFundraising	Coefficient	Std. err.	t	P> t	[95% conf. interval]	
wealthpercentile_dummy	-1.08e+11	3.10e+10	-3.49	0.001	-1.71e+11	-4.61e+10
Debtsecurities	.0005215	.003638	0.14	0.887	-.0067894	.0078323
LoansAssets	-.102211	.0445322	-2.30	0.026	-.1917017	-.0127203
OtherloansandadvancesAssets	.0927853	.038219	2.43	0.019	.0159813	.1695892
Mortgages	.0126485	.0055073	2.30	0.026	.0015811	.0237159
LoansLiabilities	-3.23e-15	2.38e-15	-1.35	0.182	-8.02e-15	1.56e-15
Homemortgages	.0152704	.0036003	4.24	0.000	.0080353	.0225054
Consumercredit	-.0207256	.003877	-5.35	0.000	-.0285168	-.0129344
Depositoryinstitutionsloansn	.0002533	.0019032	0.13	0.895	-.0035713	.0040779
OtherloansandadvancesLiabil	-.0012991	.0016454	-0.79	0.434	-.0046056	.0020075
_cons	3.86e+11	4.53e+10	8.51	0.000	2.94e+11	4.77e+11

Source: Author's Calculations

The macro race regression where wealth percentile is excluded to highlight race's overall results disproves (H1) and proves **(H0): Private credit's market growth has no significant impact on credit access disparities among racial and wealth percentile groups.** The macro race regression where race is excluded to showcase wealth percentile's results disproves (H0) and proves **(H2): The post-2008 Great Financial**

**Crisis era witnessed a notable expansion of private credit markets, resulting in enhanced credit accessibility individuals in lower wealth percentiles.** The micro regressions analyzing each specific race and wealth percentile concur and differ from these conclusions contingent to the dependent variable.

The regression analyzing if White individuals received more access to non-predatory private lending is also insignificant. An R squared value of 96.86% suggests the model explains all but 3.14% of the variance attached to the dependent variables; though, no types of private lending were significant at the 95% confidence interval. Once again, the error term is significant.

**Table 5: White Regression**

Source	SS	df	MS	Number of obs	=	15
Model	1.1299e+23	9	1.2555e+22	F(9, 5)	=	17.14
Residual	3.6614e+21	5	7.3228e+20	Prob > F	=	0.0030
				R-squared	=	0.9686
				Adj R-squared	=	0.9121
Total	1.1665e+23	14	8.3324e+21	Root MSE	=	2.7e+10

GlobalprivateDebtFundraising	Coefficient	Std. err.	t	P> t	[95% conf. interval]	
Debtsecurities	.003646	.0052762	0.69	0.520	-.0099169	.0172089
LoansAssets	.0066698	.059374	0.11	0.915	-.1459561	.1592956
OtherloansandadvancesAssets	-.0004166	.059827	-0.01	0.995	-.1542068	.1533735
Mortgages	-.0042549	.0065458	-0.65	0.544	-.0210813	.0125716
LoansLiabilities	.0224013	.0264335	0.85	0.435	-.0455481	.0903507
Homemortgages	-.0209291	.0206477	-1.01	0.357	-.0740057	.0321475
Consumercredit	-.0120233	.0099075	-1.21	0.279	-.0374915	.0134449
Depositoryinstitutionsloansn	.0014251	.002197	0.65	0.545	-.0042224	.0070727
OtherloansandadvancesLiabil	.0001938	.003005	0.06	0.951	-.0075309	.0079185
_cons	3.26e+11	3.99e+10	8.17	0.000	2.24e+11	4.29e+11

Source: Author's Calculations

When the dependent variables measured Black individuals access to the same different types of non-predatory private lending as White individuals – from 2009 to 2023 – parts of the model were significant. The model justifies 97.77% of the variance in the dependent variables. The dependent variables that are significant for Black people are loans (liabilities), home mortgages, consumer credit, and other loans and advances (liabilities). Loans (liabilities), home mortgages, consumer credit, and other loans and

advances (liabilities) had P-values of 1% and consumer credit was significant at 98%.

The coefficients attached to each illustrate how private credit growth affects these types of debt for black individuals. A one billion dollar increase in private credit fundraising is associate with a \$375 thousand increase in loans (liabilities), a \$253.8 billion increase home mortgages loans, a \$97 billion decrease in consumer credit, and a \$55.6 billion increase in other loans and advances.

**Table 6: Black Regression**

Source	SS	df	MS	Number of obs	=	15
Model	<b>1.1405e+23</b>	<b>9</b>	<b>1.2672e+22</b>	F(9, 5)	=	<b>24.32</b>
Residual	<b>2.6057e+21</b>	<b>5</b>	<b>5.2114e+20</b>	Prob > F	=	<b>0.0013</b>
				R-squared	=	<b>0.9777</b>
				Adj R-squared	=	<b>0.9375</b>
Total	<b>1.1665e+23</b>	<b>14</b>	<b>8.3324e+21</b>	Root MSE	=	<b>2.3e+10</b>

Globalpriv~g	Coefficient	Std. err.	t	P> t	[95% conf. interval]	
S	<b>.0107709</b>	<b>.0075789</b>	<b>1.42</b>	<b>0.215</b>	<b>-.0087113</b>	<b>.0302531</b>
T	<b>-.2737876</b>	<b>.1246575</b>	<b>-2.20</b>	<b>0.079</b>	<b>-.5942299</b>	<b>.0466548</b>
U	<b>.2538019</b>	<b>.1118408</b>	<b>2.27</b>	<b>0.073</b>	<b>-.0336939</b>	<b>.5412978</b>
V	<b>.0143831</b>	<b>.0214076</b>	<b>0.67</b>	<b>0.531</b>	<b>-.0406469</b>	<b>.0694131</b>
LoansL	<b>3.65e-13</b>	<b>5.49e-14</b>	<b>6.65</b>	<b>0.001</b>	<b>2.24e-13</b>	<b>5.06e-13</b>
X	<b>0</b>	(omitted)				
Y	<b>-.2538378</b>	<b>.0352357</b>	<b>-7.20</b>	<b>0.001</b>	<b>-.344414</b>	<b>-.1632616</b>
Z	<b>-.0997128</b>	<b>.0170616</b>	<b>-5.84</b>	<b>0.002</b>	<b>-.143571</b>	<b>-.0558546</b>
AA	<b>-.0090474</b>	<b>.0040138</b>	<b>-2.25</b>	<b>0.074</b>	<b>-.0193654</b>	<b>.0012705</b>
AB	<b>.0556104</b>	<b>.0138501</b>	<b>4.02</b>	<b>0.010</b>	<b>.0200075</b>	<b>.0912134</b>
_cons	<b>3.10e+11</b>	<b>3.14e+10</b>	<b>9.88</b>	<b>0.000</b>	<b>2.30e+11</b>	<b>3.91e+11</b>

Source: Author's Calculations

The regression analyzing if Hispanic individuals received more access to non-predatory private lending is significant with an R squared value of 96.47%; however, depository institutional loans is the only significant dependent variable. A one billion dollar increase in global private debt fundraising in linked to a \$12 billion increase in depository institution loans amongst Hispanic individuals.

**Table 7: Hispanic Regression**

Source	SS	df	MS	Number of obs	=	15
Model	1.1254e+23	9	1.2504e+22	F(9, 5)	=	15.18
Residual	4.1182e+21	5	8.2364e+20	Prob > F	=	0.0040
				R-squared	=	0.9647
				Adj R-squared	=	0.9012
Total	1.1665e+23	14	8.3324e+21	Root MSE	=	2.9e+10

Globalpriv~g	Coefficient	Std. err.	t	P> t	[95% conf. interval]	
AF	.294996	.1952209	1.51	0.191	-.2068352	.7968273
AG	-.146935	.0855497	-1.72	0.147	-.3668476	.0729775
AH	.1276668	.0785831	1.62	0.165	-.0743375	.3296711
AI	.0179672	.0109994	1.63	0.163	-.0103076	.0462419
AJ	-.3096838	.181456	-1.71	0.149	-.7761314	.1567638
AK	.2618835	.1535913	1.71	0.149	-.1329354	.6567024
AL	.0089569	.0225926	0.40	0.708	-.0491193	.0670331
AM	.0126109	.0030902	4.08	0.010	.0046673	.0205545
AN	-.0486385	.0253127	-1.92	0.113	-.1137068	.0164298
_cons	3.20e+11	4.13e+10	7.74	0.001	2.14e+11	4.26e+11

Source: Author's Calculations

The regression investigating if other races received more access to non-predatory private lending methods as private debt grew from 2008 to 2023 is significant with an R squared value of 96.47%; though, unlike Hispanic and Black individuals, no dependent variables were significant. The only significant term is the error variable. Other races did not benefit, nor were they harmed from private debt's growth post the 2008 great financial crisis.

**Table 8: Other Races Regression**

Source	SS	df	MS	Number of obs	=	15
Model	1.1175e+23	9	1.2417e+22	F(9, 5)	=	12.67
Residual	4.8993e+21	5	9.7987e+20	Prob > F	=	0.0061
				R-squared	=	0.9580
				Adj R-squared	=	0.8824
Total	1.1665e+23	14	8.3324e+21	Root MSE	=	3.1e+10

Globalpriv~g	Coefficient	Std. err.	t	P> t	[95% conf. interval]	
AR	-.0035274	.007158	-0.49	0.643	-.0219275	.0148728
AS	.0268917	.094598	0.28	0.788	-.2162802	.2700635
AT	-.0202774	.080239	-0.25	0.811	-.2265383	.1859834
AU	.0002343	.0123295	0.02	0.986	-.0314597	.0319282
AV	.0093851	.0952269	0.10	0.925	-.2354034	.2541736
AW	-.0112328	.0718542	-0.16	0.882	-.1959398	.1734741
AX	-.0018445	.0286445	-0.06	0.951	-.0754776	.0717887
AY	.0000941	.0073887	0.01	0.990	-.0188992	.0190873
AZ	-.0055565	.0058979	-0.94	0.389	-.0207176	.0096046
_cons	3.24e+11	4.59e+10	7.06	0.001	2.06e+11	4.42e+11

Source: Author's Calculations

The regressions isolating Hispanic and Black peoples disproved (H0) and proved (H1): The post-2008 Great Financial Crisis era witnessed a notable expansion of private credit markets, resulting in enhanced credit accessibility for non-Caucasian individuals, thereby underscoring the profound socioeconomic ramifications of this development. The inverse is true for White and Other race whose regressions verified (H0): Private credit's market growth has no significant impact on credit access disparities among racial and wealth percentile and refuted (H1). Regressions sequestering the five wealth percentiles yield different results.

93.17% of the variance in the dependent variables for individuals in the top half of the 1% can be explained by the model, making the overall regression insignificant. With a p-value of 0.01 loans (liabilities) are significant. A one billion dollar increase in global private credit results in a \$337.4 billion increase in loans (liabilities).

**Table 9: Top Half of the 1% Regression**

Source	SS	df	MS	Number of obs	=	15
Model	1.0868e+23	7	1.5526e+22	F(7, 7)	=	13.63
Residual	7.9714e+21	7	1.1388e+21	Prob > F	=	0.0014
				R-squared	=	0.9317
				Adj R-squared	=	0.8633
Total	1.1665e+23	14	8.3324e+21	Root MSE	=	3.4e+10

Globalpriv~g	Coefficient	Std. err.	t	P> t	[95% conf. interval]	
R	.0050606	.0142967	0.35	0.734	-.0287456	.0388669
S	-.0004778	.0134579	-0.04	0.973	-.0323007	.0313452
T	-.0045365	.0017942	-2.53	0.039	-.0087791	-.000294
Liabilities	-.0167787	.1006813	-0.17	0.872	-.2548522	.2212947
V	0	(omitted)				
W	-.3442609	.1849245	-1.86	0.105	-.7815378	.0930161
X	.3374836	.0958974	3.52	0.010	.1107222	.564245
Y	-.0065247	.0039188	-1.66	0.140	-.0157912	.0027418
_cons	3.32e+11	4.60e+10	7.21	0.000	2.23e+11	4.40e+11

Source: Author's Calculations

The regression for individuals in the bottom half of the 1% is significant with an R-squared value of 98.87%. 98.87% is the highest portion of the variance in the dependent variables explained by the model. Meaning, individuals in the bottom half of the 1% experienced the greatest reaction to private debt growing from 2008 to 2023. Of the eight variables regressed, only consumer credit was significant at the 95% confidence level. However, if run at 90%, three variables would be significant. A billion dollar increase in private credit fundraising decreased the consumer credit for people in the bottom half of the 1% by \$30.9 billion.

**Table 10: Bottom Half of 1% Regression**

Source	SS	df	MS	Number of obs	=	15
Model	<b>1.1534e+23</b>	<b>8</b>	<b>1.4417e+22</b>	F(8, 6)	=	<b>65.77</b>
Residual	<b>1.3153e+21</b>	<b>6</b>	<b>2.1921e+20</b>	Prob > F	=	<b>0.0000</b>
				R-squared	=	<b>0.9887</b>
				Adj R-squared	=	<b>0.9737</b>
Total	<b>1.1665e+23</b>	<b>14</b>	<b>8.3324e+21</b>	Root MSE	=	<b>1.5e+10</b>

Globalpriv~g	Coefficient	Std. err.	t	P> t	[95% conf. interval]	
BO	<b>-.0003578</b>	<b>.0001993</b>	<b>-1.79</b>	<b>0.123</b>	<b>-.0008455</b>	<b>.0001299</b>
BP	<b>-.0000878</b>	<b>.0002389</b>	<b>-0.37</b>	<b>0.726</b>	<b>-.0006724</b>	<b>.0004968</b>
BQ	<b>-.0012495</b>	<b>.0005249</b>	<b>-2.38</b>	<b>0.055</b>	<b>-.0025339</b>	<b>.000035</b>
BR	<b>-.0618089</b>	<b>.0603148</b>	<b>-1.02</b>	<b>0.345</b>	<b>-.2093938</b>	<b>.0857761</b>
BS	<b>.100168</b>	<b>.0535827</b>	<b>1.87</b>	<b>0.111</b>	<b>-.0309443</b>	<b>.2312802</b>
BT	<b>-.0176535</b>	<b>.0168523</b>	<b>-1.05</b>	<b>0.335</b>	<b>-.0588895</b>	<b>.0235826</b>
BU	<b>-.0309263</b>	<b>.0080842</b>	<b>-3.83</b>	<b>0.009</b>	<b>-.0507075</b>	<b>-.011145</b>
BV	<b>-.0016943</b>	<b>.0007529</b>	<b>-2.25</b>	<b>0.065</b>	<b>-.0035365</b>	<b>.0001479</b>
_cons	<b>3.22e+11</b>	<b>2.03e+10</b>	<b>15.82</b>	<b>0.000</b>	<b>2.72e+11</b>	<b>3.72e+11</b>

Source: Author's Calculations

The regression focusing on people in the next 9% (90<sup>th</sup>-99<sup>th</sup> wealth percentile) was significant with an R-squared on 96.49%. However, with a 95% confidence interval none of the eight dependent variables were significant.

**Table 11: Next 9% Regression**

Source	SS	df	MS	Number of obs	=	15
Model	<b>1.1256e+23</b>	<b>8</b>	<b>1.4069e+22</b>	F(8, 6)	=	<b>20.60</b>
Residual	<b>4.0988e+21</b>	<b>6</b>	<b>6.8313e+20</b>	Prob > F	=	<b>0.0008</b>
				R-squared	=	<b>0.9649</b>
				Adj R-squared	=	<b>0.9180</b>
Total	<b>1.1665e+23</b>	<b>14</b>	<b>8.3324e+21</b>	Root MSE	=	<b>2.6e+10</b>

Globalpriv~g	Coefficient	Std. err.	t	P> t	[95% conf. interval]	
BZ	<b>-.0116536</b>	<b>.0357339</b>	<b>-0.33</b>	<b>0.755</b>	<b>-.0990912</b>	<b>.075784</b>
CA	<b>.0072196</b>	<b>.0298512</b>	<b>0.24</b>	<b>0.817</b>	<b>-.0658237</b>	<b>.0802629</b>
CB	<b>.002111</b>	<b>.005883</b>	<b>0.36</b>	<b>0.732</b>	<b>-.0122842</b>	<b>.0165061</b>
CC	<b>.1051629</b>	<b>.1105975</b>	<b>0.95</b>	<b>0.378</b>	<b>-.1654593</b>	<b>.3757852</b>
CD	<b>-.1752691</b>	<b>.1101283</b>	<b>-1.59</b>	<b>0.163</b>	<b>-.4447433</b>	<b>.0942052</b>
CE	<b>.0473623</b>	<b>.031766</b>	<b>1.49</b>	<b>0.187</b>	<b>-.0303662</b>	<b>.1250908</b>
CF	<b>.0152547</b>	<b>.0275228</b>	<b>0.55</b>	<b>0.599</b>	<b>-.0520912</b>	<b>.0826006</b>
CG	<b>.0058708</b>	<b>.00388</b>	<b>1.51</b>	<b>0.181</b>	<b>-.0036232</b>	<b>.0153647</b>
_cons	<b>3.10e+11</b>	<b>3.58e+10</b>	<b>8.67</b>	<b>0.000</b>	<b>2.23e+11</b>	<b>3.98e+11</b>

Source: Author's Calculations

When running the data for the next 40% (50<sup>th</sup> – 90<sup>th</sup> wealth percentile), the model is significant with an R-squared value of 96.96%. Two dependent variables are significant: loans (assets) and other loans and advances (assets). Loans (assets) are significant at the 98th percentile and other loans and advances (assets) are significant at the 97.1 percentile. A billion dollar increase in global private debt fundraising equates to a \$28.33 billion decrease in loans (assets) and a \$23.12 billion increase in other loans and advances (assets).

**Table 12: Next 40% Regression**

Source	SS	df	MS	Number of obs	=	15
Model	<b>1.1310e+23</b>	<b>8</b>	<b>1.4138e+22</b>	F(8, 6)	=	<b>23.90</b>
Residual	<b>3.5499e+21</b>	<b>6</b>	<b>5.9165e+20</b>	Prob > F	=	<b>0.0005</b>
				R-squared	=	<b>0.9696</b>
				Adj R-squared	=	<b>0.9290</b>
Total	<b>1.1665e+23</b>	<b>14</b>	<b>8.3324e+21</b>	Root MSE	=	<b>2.4e+10</b>

Globalpriv~g	Coefficient	Std. err.	t	P> t	[95% conf. interval]	
CK	<b>-.0283307</b>	<b>.0090029</b>	<b>-3.15</b>	<b>0.020</b>	<b>-.0503601</b>	<b>-.0063014</b>
CL	<b>.0231237</b>	<b>.0081123</b>	<b>2.85</b>	<b>0.029</b>	<b>.0032736</b>	<b>.0429737</b>
CM	<b>.0019806</b>	<b>.0009367</b>	<b>2.11</b>	<b>0.079</b>	<b>-.0003115</b>	<b>.0042728</b>
CN	<b>-.3429938</b>	<b>.1871504</b>	<b>-1.83</b>	<b>0.117</b>	<b>-.8009344</b>	<b>.1149468</b>
CO	<b>.3727324</b>	<b>.202872</b>	<b>1.84</b>	<b>0.116</b>	<b>-.1236774</b>	<b>.8691422</b>
CP	<b>-.0151411</b>	<b>.0233109</b>	<b>-0.65</b>	<b>0.540</b>	<b>-.072181</b>	<b>.0418987</b>
CQ	<b>-.0161871</b>	<b>.0151682</b>	<b>-1.07</b>	<b>0.327</b>	<b>-.0533023</b>	<b>.0209282</b>
CR	<b>.0006918</b>	<b>.0012013</b>	<b>0.58</b>	<b>0.586</b>	<b>-.0022477</b>	<b>.0036313</b>
_cons	<b>3.08e+11</b>	<b>3.12e+10</b>	<b>9.86</b>	<b>0.000</b>	<b>2.31e+11</b>	<b>3.84e+11</b>

Source: Author's Calculations

The regression for the final wealth percentile (0-49<sup>th</sup> percentile) was insignificant with an R-squared of 36.06%. Due to collinearity issues only four of the eight dependent variables ran. Loans (assets), other loans and advances (assets), mortgages, and liabilities were all insignificant.



**Table 13: Last 50% Regression**

Source	SS	df	MS	Number of obs	=	15
Model	4.2070e+22	4	1.0517e+22	F(4, 10)	=	1.41
Residual	7.4584e+22	10	7.4584e+21	Prob > F	=	0.2995
				R-squared	=	0.3606
				Adj R-squared	=	0.1049
Total	1.1665e+23	14	8.3324e+21	Root MSE	=	8.6e+10

Globalpriv~g	Coefficient	Std. err.	t	P> t	[95% conf. interval]	
CW	-1.50e-14	6.97e-14	-0.21	0.834	-1.70e-13	1.40e-13
CX	4.54e-15	3.65e-14	0.12	0.903	-7.68e-14	8.59e-14
CY	-3.61e-15	2.16e-14	-0.17	0.871	-5.18e-14	4.45e-14
CZ	4.97e-16	6.94e-15	0.07	0.944	-1.50e-14	1.60e-14

Source: Author's Calculations

**Table 14: Summary of Race**

	White (P-Values)	Significant	Coefficient	Black (P-Values)	Significant	Coefficient
<b>Dependent Variables</b>						
Debt Securities	0.52			0.215		
Loans (Assets)	0.915			0.079		
Other Loan and Advances (Assets)	0.995			0.073		
Mortgages	0.544			0.531		
Loans (Liabilities)	0.435			0.001 *		3.65E-13
Home Mortgages	0.357					
Consumer Credit	0.297			0.002 *		-0.2538
Depository Institutional Loans	0.545			0.074 *		-0.9971
Other Loans and Advances (Liabilities)	0.951			0.01 *		0.5561
	<b>Hispanic (P-Values)</b>	<b>Significant</b>	<b>Coefficient</b>	<b>Other (P-Values)</b>	<b>Significant</b>	<b>Coefficient</b>
<b>Dependent Variables</b>						
Debt Securities	0.191			0.643		
Loans (Assets)	0.147			0.788		
Other Loan and Advances (Assets)	0.165			0.811		
Mortgages	0.163			0.986		
Loans (Liabilities)	0.149			0.925		
Home Mortgages	0.149			0.882		
Consumer Credit	0.708			0.951		
Depository Institutional Loans	0.01 *		0.0126	0.99		
Other Loans and Advances (Liabilities)	0.113			0.389		

Source: Author's Calculations

**Table 15: Summary of Wealth Percentiles**

	Top 1% (P-Values)	Significant	Coefficient	Bottom 1% (P-Values)	Significant	Coefficient
<b>Dependent Variables</b>						
Loans (Assets)	0.734			0.123		
Other Loan and Advances (Assets)	0.973			0.726		
Mortgages	0.039			0.055		
Liabilities	0.872			0.345		
Loans (Liabilities)				0.111		
Home Mortgages	0.105			0.335		
Consumer Credit	0.01 *		0.3374	0.009 *		-0.0309
Other Loans and Advances (Liabilities)	0.14			0.065		
	Next 9% (P-Values)	Significant	Coefficient	Next 40% (P-Values)	Significant	Coefficient
<b>Dependent Variables</b>						
Loans (Assets)	0.755			0.02 *		-0.0283
Other Loan and Advances (Assets)	0.817			0.029 *		0.0231
Mortgages	0.732			0.079		
Liabilities	0.378			0.117		
Loans (Liabilities)	0.163			0.116		
Home Mortgages	0.187			0.54		
Consumer Credit	0.559			0.327		
Other Loans and Advances (Liabilities)	0.181			0.586		
	Last 50% (P-Values)	Significant	Coefficient			
<b>Dependent Variables</b>						
Loans (Assets)	0.834					
Other Loan and Advances (Assets)	0.903					
Mortgages	0.871					
Liabilities	0.944					

Source: Author's Calculations

This study faced several limitations, which are essential to discuss. Firstly, in private credit, firms typically loan to businesses rather than people. A firm will open a private credit fund, fundraise the capital to start the fund, and invest in unique business ventures like financing an apartment complex or loaning money to companies that build riverboats. As this study depicted, there is still lending to individuals; however, it mostly takes the form of small business loans. What this means for our study is that private credit growth, though inextricably linked with private loans, does not capture the entire force of capital behind private lending to people. Another limitation is the lack of literature surrounding this topic. The methodology this paper uses examines the intersection of private loans and private credit. Methodologies were pulled from aspects of lending discrimination studies and private debt studies and blended. The final limitation is collinearity within the model. The collinearity was erased for each dependent

variable via data manipulation except for three dependent variables attached to the 50 – 99th wealth percentile. The collinearity could not be erased, causing the omission of home mortgages, consumer credit, and other loans and advances (liabilities). It is important to note that for both the race and wealth results, data was acquired during the pandemic, causing the dependent variables to vary from their mean over 2020 and 2021.

The unique findings presented in this paper elicit further thought regarding the future and current state of the intersection between private credit and private lending practices. While Black and Hispanic individuals made strides in obtaining some forms of private debt, their access to private debt decreased in other areas. Moreover, individuals in the top half of the top 1% were the only wealth percentile group that experienced solely positive gains. Commencing with race, it is crucial to consider why White and “Other” races received no detriment or benefit in terms of access to safe debt. One reason could be that they already had access to debt, so the growth in private lending did not affect them. Another explanation is that Black and Hispanic races leveraged private debt systems more than White and “Other” races. Though unlikely, a final reason may be rooted in predatory lending. Lenders may see an opportunity to lend at unfair rates or unfavorable terms to Black and Hispanic individuals. This is unlikely in private credit because private credit shops do not get bailed out by the government like big banks, meaning they would have to absorb the potential losses. One fact is clear for Black individuals: private credit growth helped them obtain easier access to debt as their loans (liabilities) and other loans and advances (liabilities) increased. The flip side is that their credit and depository institutional loans decreased. These findings prove that Black persons turned to private credit as a source of debt, migrating from the institutional

method. The adverse effects on their credit score are likely because credit companies value paying off institutional debt more than private debt. For Hispanic persons, depository institutional loans increased. A likely scenario is that with capital injection into debt markets, institutional lenders lost clients and had an excess of money to lend, opening the door for previously marginalized clients. The wealth percentile results also prompt discussion.

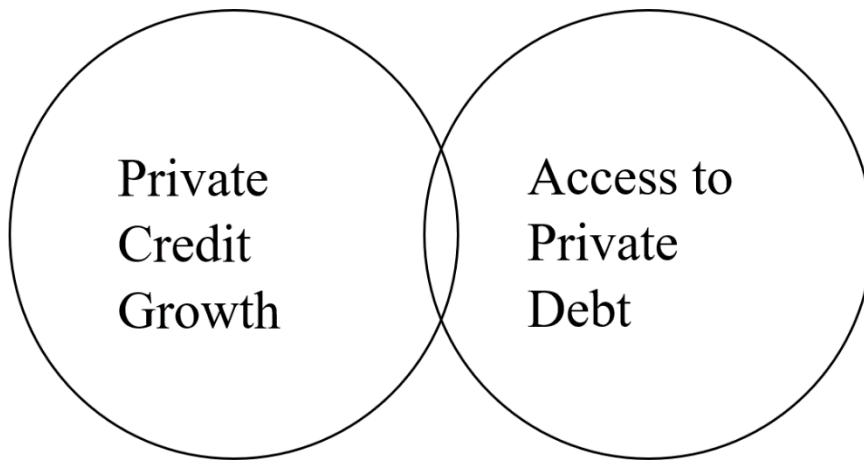
Three of the five wealth percentiles elicited a response to private credit growth. The top half of the top 1% experienced increased consumer credit. It is probable that private credit companies doled out lines of credit to the elite, increasing their consumer credit. The financially privileged tend to benefit from most monetary innovations, and private credit growth is no different. For the bottom half of the 1%, they experienced a decrease in consumer credit. The top half of the 1%'s credit increased by more than tenfold, and the bottom half's of the 1%'s credit decreased, meaning it is plausible that the ultra-wealthy netted the entire consumer credit gains, decreasing the credit availability for the bottom half of the 1%. For individuals in the next 40% (90th – 50th percentile), loans (assets) decreased, and other loans and liabilities increased. Their respective responses almost offset each other. These numbers illustrate that asset-based loans, where the lender uses the borrower's assets as collateral, decreased in utility with the rise of private credit. The borrowers are less likely to agree to put up their assets as collateral on the loan because the emergence of private credit allows them to get a typical loan without leveraging their assets. This ties in with the second finding. Loans as liabilities increased because private credit growth increased access to loans – especially

for Americans in the 90th – 50th wealth percentile. Further research in this emerging field is vital.

### **Conclusion**

This paper contributed to the sparse literature covering the intersection of private debt growth and lending imbalances (Figure 3). There exists a deep reservoir of academic literature on debt discrimination and alternative asset classes like private debt, but the junction of the two is rarely discussed. The 2008 Global Financial Crisis spurred private debt's entry into mainstream financial markets. It is in times of turmoil that investments yielding substantial, uncorrelated returns gain popularity. The Great Financial crisis of 2008 highlighted the usefulness of private credit to a portfolio. The COVID-19 crisis also shocked markets, pushing firms to open new private credit funds and increase private credit fundraising. The jolt of private credit opportunities from the pandemic opened the door further for retail and institutional investors to harbor their money in private debt funds. These new private credit funds, backed by significant increases in private credit fundraising, were tasked with lending the money to private companies and people. In the lending sphere, predatory lending and neglecting to provide a loan to someone based on their race or wealth percentile occurs. This paper examined if individuals receiving private loans were subjected to those same lending imbalances. As more investors, individuals, and firms realize the utility of alternative asset classes, it is imperative to investigate how the growth in these asset classes contributes to societal issues like lending discrimination.

**Figure 3: Research Intersection**



My findings demonstrate that, for certain races and wealth percentiles, the growth in private debt fundraising since 2008 does affect their ability to obtain private loans. Black and Hispanic individuals felt the greatest impact from growth in private debt. For black individuals, the growth in private debt provided more access to private loans, home mortgages, and other types of loans and advances and decreased access to private consumer credit. For Hispanic persons, growth in private credit is tied to easier access to obtaining depository institutional loans. For Whites and other “Other” races, growth in private credit did not affect their ability to access private forms of lending. For the five varying wealth percentiles analyzed, the top half of the top 1%, the bottom half of the 1%, and the next 40% were all affected by growth in private credit fundraising. The top half of the 1% saw increased access to consumer credit with private debt growth. The bottom half of the 1% experienced a decrease in access to consumer credit. Lastly, the next 40% saw a decrease in private loans as liabilities and an increase in private loans as assets. There were no significant findings for the 99 – 90th percentile and 50 – 1 percentile.

These findings bridge the gap between research on lending disparities and private debt growth. Previously, there was a plethora of academic literature attacking lending discrimination rooted in racial and wealth biases. The mainstreaming of private debt as an asset class garnered due to its practicality and media coverage has also been extensively studied. This study married the two fields, exposing the positives and negatives of lending biases as private credit grows. While the data is not released, the 2023 banking crisis once again illuminated why private credit is such a value asset class, prompting firms to emphasize private credit fundraising with more vigor than in 2008 or during the pandemic. Private credit is now a conventional addition to most portfolios and will continue to grow. Lending discrimination will still exist in the future and has the potential to become exacerbated beyond repair. The next negative shock to America's stock market is around the corner, and with it, private credit will be one of the few victors. Further research is needed to understand how future growth in private credit helps or harms different demographics. The results in this paper suggest that Black and Hispanic individuals benefited from growth in private credit, but those in the top wealth percentiles captured the greatest benefits.

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