Stakeholders' Aversion to Inequality and Bank Lending to Minorities*

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Abstract

We find that banks differ in their propensity to lend to minorities based on their stakeholders' aversion to inequality. Using mortgage application data collected under the Home Mortgage Disclosure Act, we document a large and persistent cross-sectional variation in banks' propensity to lend to minorities. Inequality-averse banks have a higher propensity to lend to borrowers in high-minority areas and, within census tracts, to non-white borrowers compared to other banks. This higher propensity (i) is not explained by selection of applicants, (ii) allows these banks to retain and attract their inequality-averse stakeholders, and (iii) does not predict worse ex-post loan performance.

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1 Introduction

Despite the tremendous growth in U.S. household net worth over the past several decades, prosperity has not been felt in certain areas and by certain demographic groups. In 2019, the median net worth of white households was $188,200, while the corresponding statistic for Black households was $24,100 (Bhutta et al., 2020). As of 2020, 19.5% of Black families lived in poverty compared with 10.1% of white families. Leflore county in the Mississippi Delta, where 75% of the population is Black, has a 42% poverty rate and $15,403 per capita annual income. Homeownership follows similar trends. As of 2022, the homeownership rate for white households was 75% compared with 45% for Black households, with this gap having barely changed in the last 50 years.[1]

One reason for this uneven economic development is the lower access to credit experienced by minorities and households residing in high-minority neighborhoods. These borrowers are more likely to be denied credit or discouraged from applying for credit compared with white borrowers, even after controlling for factors such as credit history (see, e.g., Munnell et al. (1996), Holmes and Horvitz (1994), Bayer et al. (2018)). Credit denial rate gaps have widened in the four decades after the 1977 Community Reinvestment Act, introduced to increase access to credit for underserved borrowers. African Americans were 82.9% more likely to be denied credit or being discouraged from applying for credit relative to white Americans between 1989 and 1995, compared to 95.8% from 1998 to 2004 (Weller, 2007).

Despite the large literature that documents discrimination in the mortgage market, very little is known about *supply-side* determinants of such discrimination. This is a surprising gap in the literature given that the uneven propensity to lend to minorities varies substantially in the cross-section of banks. We document a set of facts about banks' "approval gap", defined as the difference in the approval ratio between mortgage applications from minorities and those from non-minorities. Approval gaps are markedly different across banks and persistent

[1]Data on homeownership rates are from Treasury (2022). Data on poverty rates are from Census Bureau (2021). Data for Leflore county are from the article *"Fed Chief Says U.S. Economic Expansion Has Been Uneven"* published by the Wall Street Journal on February 12, 2019.

within banks over time, i.e., banks with high (low) approval gaps tend to maintain high (low) approval gaps over time. Anecdotal evidence also points to significant differences in credit approval gaps across banks. For example, Wells Fargo approved 47% of applications from Black homeowners and 72% from white homeowners during the mortgage refinancing boom of 2020, compared to national averages of 71% and 87%, respectively.[2] Crucially, the variation in approval gaps across banks is present even within the same geographical areas, suggesting that approval gaps might not be entirely explained by banks having access to different pools of borrowers.

In this paper, we find that banks' aversion to inequality is an important driver of banks' differential propensity to lend to minorities. Our main measure of banks' inequality aversion is based on the political orientation of the counties banks are exposed to due to their geographical footprint. For each bank-year, we calculate the deposit-weighted average of the percentage of votes cast to the Democratic candidate in the most recent presidential election in the counties where that bank has branch presence. Based on the large literature and survey evidence on political orientation and preference for redistribution, we assume that Democratic-leaning counties are more averse to inequality than Right-leaning counties. We also use an alternative measure of inequality aversion based on survey questions about the desired level of government assistance to minority households from the General Social Survey data (survey used, among others, in Luttmer (2001)).

We show that, within census tracts, more inequality-averse banks have smaller approval gaps compared to less inequality-averse banks. We show that this correlation (i) does not originate from higher credit quality minorities applying for mortgages with more inequality-averse banks, (ii) is robust to using various measures of inequality aversion, (iii) is not driven by banks' differential access to soft information, banks' differential mortgage lending expertise, or other bank characteristics correlated with banks' inequality aversion, and (iv) is not driven by changes in the bank borrower base. This correlation is instead consistent with

[2]See the article *"Wells Fargo Rejected Half Its Black Applicants in Mortgage Refinancing Boom"* published by Bloomberg on March 10, 2022.

a "stakeholders' discipline" channel, namely inequality-averse banks adjusting their lending decisions to attract and retain stakeholders such as depositors, borrowers, and executives.

Our analysis relates to recent anecdotal evidence on how stakeholders' social considerations affect banks. For example, increasingly concerned about discriminatory lending practices, retail and institutional depositors weigh banks' social footprint when they decide how to allocate their deposits. Following the tragic death of George Floyd, Netflix announced that it would permanently shift $100 million of its deposits to financial institutions that served Black communities. Around the same time, M&F bank, the second oldest Black-owned bank in the country, saw a 20% increase in deposits from both individuals and businesses. Homanen (2022) documents that banks that financed the controversial Dakota Access Pipeline experienced significant deposit outflows. More generally, a recent industry report notes that *"banks are also starting to feel pressure from their customers and from the public at large. Customers want to bank with a firm that reflects their views and beliefs; younger generations, in particular, are said to be choosing their bank based on their ESG credentials."*[3]

Our empirical analysis is structured in five parts. First, we show that more inequality-averse banks have smaller approval gaps compared to less inequality-averse banks. This correlation is not explained by applicants' selection *across* geographical areas such as more inequality-averse banks being located in areas of the country where the pool of minority borrowers is of higher credit quality. Specifically, we estimate the correlation between banks' inequality aversion and bank propensity to lend to minorities within census tracts, thus keeping the pool of potential applicants homogeneous across banks. Similarly, this correlation is not explained by selection *within* geographical areas such as more inequality-averse banks receiving, within the same geographical area, applications from higher credit quality minorities than less inequality-averse banks. Specifically, we show that, within census tracts, more

[3]Neflix's reallocation of deposits is documented in the New York Times article *"Netflix Moves $100 Million in Deposits to Bolster Black Banks"* published on June 30, 2020. The inflow of deposits at M&F bank is documented in the WBUR article *"Racial Justice Protests Prompt People To Move Their Money Into Black Banks"* published on July 16, 2020. The industry report is titled *"Embedding ESG into Banks' Strategies"* and was published by KPMG in July 2020.

inequality-averse banks do not receive applications from higher income minority borrowers compared with less inequality-averse banks.

Second, we show that the correlation between banks' inequality aversion and banks' propensity to lend to minorities is robust to using a survey-based measure of banks' inequality aversion from the General Social Survey, a nationally representative survey conducted since 1972. We build a variable capturing banks' racial inequality aversion based on respondents' degree of agreement with the statement *"we're spending too much money, too little money, or about the right amount of money on assistance to Black individuals."* We then calculate, for each bank-year, the weighted average of these responses, using the fraction of deposits the bank has in each county as weights.

Third, we rule out a set of explanations for the observed correlation, within census tracts, between banks' inequality aversion and approval gaps. Specifically, (i) this correlation is robust in the subsample of mortgage applications made to banks that have branches in counties where applicants reside, thus suggesting that our results are not driven by banks' differential access to soft information as a result of branch presence or the lack thereof; (ii) this correlation is not driven by banks' characteristics correlated with banks' inequality aversion, such as bank size and bank mortgage lending expertise; (iii) this correlation is not driven by changes in the borrower base that might simultaneously affect banks' inequality aversion and banks' propensity to lend to minorities—as, for example, banks that expand in new Democratic-leaning areas and that might simultaneously face higher credit quality minorities.

Fourth, we present evidence in support of the "stakeholders' discipline" channel. According to this channel, banks take into account stakeholders' inequality aversion in their lending decisions. Given that a large fraction of stakeholders are local, banks located in inequality-averse areas of the country are mechanically exposed to stakeholders that share similar values. These banks' higher propensity to lend to minorities helps them attract and retain stakeholders such as depositors, borrowers, executives, and employees. Consistent with this channel, we document a sizable drop in deposits, more pronounced in counties with high inequality aversion, for banks hit by a Department of Justice (DOJ) case for discriminatory lending, redlining, or, more generally, discrimination in their mortgage lending supply.

Fifth, we show that banks with larger *unexplained* approval gaps—gaps not explained by observable bank, borrower, loan characteristics, and census-tract year fixed effects—have worse real estate loan and overall ex-post performance. Specifically, larger *unexplained* approval gaps between white and non-white borrowers are associated with higher real estate loan charge-offs, higher nonperforming real estate loans, and lower net income to asset ratios. These effects, even if small in magnitude, suggest that the higher propensity to lend to minorities by inequality-averse banks is not a manifestation of costly "goodness", that is, extending negative NPV loans to risky minorities. These effects are instead consistent with inequality-averse banks alleviating the well-documented bank discrimination of minorities by inducing banks to reach some (positive NPV) applicants that would be otherwise rejected.

Related literature. Our paper contributes to the literature on discrimination in credit access by presenting a new channel explaining, at least in part, why banks differ in their propensity to lend to minorities. There is, by now, solid empirical evidence showing that minorities are discriminated in mortgage lending. In a seminal contribution, Munnell et al. (1996) uses mortgage application data in Boston in 1990 and documents that, after controlling for applicant characteristics and lender fixed effects, Black and Hispanic applicants are on average 8% more likely to be denied credit compared to white applicants. These results are confirmed by subsequent work documenting redlining against minority neighborhoods (Holmes and Horvitz, 1994; Ross and Tootell, 2004), higher probability of high-cost mortgages for African-American and Hispanic borrowers (Bayer et al., 2018), higher mortgage fees paid by minorities (Ambrose et al., 2021), and longer application turnaround times for Black borrowers (Wei and Zhao, 2022).[4] Recent papers suggest that discrimination in the mortgage market seems to have declined in recent sample periods, which is consistent with significant progress in fair lending over time. For example, Bhutta et al. (forthcoming) shows limited discrimination effects in the mortgage approval decisions in a sample of FHA-loans in

[4]The higher mortgage cost for minorities is also documented in Courchane and Nickerson (1997), Black et al. (2003), Ghent et al. (2014), Cheng et al. (2015), Reid et al. (2017), and Delis and Papadopoulos (2019).

the recent period 2018-2019; Bhutta and Hizmo (2021) studies prices charged by mortgage lenders in 2014 and 2015 and shows no significant difference in total mortgage prices paid by minorities and non-minorities: the higher interest rates paid by minorities are offset by fewer discount points.

A recent strand of this literature shows that automation might reduce disparities in credit access. Evidence from small business lending under the Paycheck Protection Program (PPP) suggests that minority applicants are more likely to borrow from "fintech" lenders and large banks than small and mid-sized banks (Howell et al., 2024; Chernenko and Scharfstein, 2024; Chernenko et al., 2023; Fei and Yang, 2021). Specifically, automation mitigates disparities in application (not approval) rates (Chernenko et al., 2023) by enabling smaller loans, broadening banks' reach, and removing human biases from decision-making (Howell et al., 2024). Our analysis also explains why some lenders might reduce disparities in credit access, but is based on a different economic channel supported by a large sample of mortgage applications over a 24-year period.

Our measure of bank inequality aversion, based on the political orientation of banks' local stakeholders, relates to the literature on political values and corporate socially responsible (CSR) investments. For example, Di Giuli and Kotstovetsky (2014) finds that firms with more Democratic executives and those headquartered in Democratic states have higher CSR ratings than other firms, and Hong and Kotstovetsky (2012) documents smaller portfolio holdings in socially irresponsible companies by more Democratic-leaning mutual fund managers. Our contribution adds to this literature in two ways. First, our analysis of mortgage credit provision to minorities—instead of investments in, among others, community activities, employee relations, and environmental records—explores an important, yet overlooked, aspect of socially responsible investing. Second, from an identification standpoint, our analysis covers loan-level outcomes over a long time series, thus allowing us to estimate the effect of *changes* in stakeholders' political orientation (inequality aversion) on *changes* in bank's mortgage-level approval decisions, controlling for loan and borrower level characteristics.

Finally, our evidence on deposit flows is consistent with recent studies on stakeholders' "voting with their feet" on ESG issues due to non-pecuniary motives. In the context of financial institutions, Homanen (2022) and Chen et al. (2023) document deposit outflows from

banks with environmental and social concerns, respectively. In the context of non-financial corporations, Pan et al. (2022) finds that shareholders that are more averse to inequality rebalance their portfolios away from firms with high CEO-worker pay ratios; Meier et al. (2023) documents higher product sales for brands owned by firms with higher environmental and social ratings, especially in counties with more Democratic leaning customers; Colonnelli et al. (2024) conduct a field experiment in Brazil and find that job seekers, especially those with more liberal political viewpoints, prefer companies with more positive environmental signals; Bonnefon et al. (2025) finds in an experimental setting that stock investors tend to align their investments with their moral preferences.

Outline. The remainder of the paper is organized as follows. Section 2 presents our data and a set of facts, including the large variation in mortgage approval gaps across banks. Section 3 shows that banks with smaller approval gaps tend to be more inequality averse. Section 4 rules out several channels that might drive this correlation. Section 5 shows that this correlation is consistent with a "stakeholders' discipline" channel. Section 6 concludes.

2 Facts from raw data

In this section, we illustrate our data and present a set of facts about bank-level variation in mortgage approval ratios, where these ratios are defined as the number of applications approved divided by the number of applications received. Section 2.1 explains our sample construction and discusses key summary statistics. Section 2.2 documents, using raw data, the large variation across banks in the mortgage "approval gap", namely the difference in the approval ratio for mortgage applications made by minority and non-minority borrowers.

2.1 The sample

Our core data set consists of 114.3 million loan applications received by 838 banks from 1995 to 2019. This sample is the result of combining various publicly available or commercially available data sets such as HMDA mortgage applications data, FDIC summary of deposits data, Federal Reserve Y-9C and CALL reports (Consolidated Reports of Condition and

Income) data, and BoardEx.

Sample construction. We construct our data in three steps. First, we begin with the 1,162 companies (identified by "CompanyID") classified as banks by Boardex from 1999 to 2018. We use tickers and annual report dates in BoardEx to link these CompanyID's to their PERMCOs from the Compustat/CRSP merged data. Using PERMCOs and annual report dates, we are able to match 673 CompanyID's to their regulatory identification numbers (RSSD9001) in the CRSP link table made publicly available by New York Fed. We identify RSSD9001's for 450 out of the remaining 489 CompanyID's from the National Information Center database using a combination of company name, annual report date, and headquarter information. Note that a bank which is delisted and remains on BoardEx takes on two different CompanyID's, but has a unique RSSD9001. Hence, we treat each RSSD9001 as a bank in our analysis. The 1,123 CompanyID's whose RSSD9001 information can be found are associated with 1,090 unique RSSD9001s.

Second, we match banks in this BoardEx sample to the publicly available "HMDA dataset", which provides information on mortgage applications collected under the Home Mortgage Disclosure Act.[5] We identify the RSSDIDs of the lending entity and its bank holding company using the variables *Entity* and *BHC*, respectively, in the "Avery file."[6] We link the RSSD9001 of each bank in our BoardEx sample to the RSSD9001 of the bank holding company in the HMDA data if there is such a match, and the RSSD9001 of the lending entity otherwise. We drop all financial institutions that are neither bank holding companies nor commercial banks and drop mortgages that are subsidized by the Federal

[5]The HMDA data set provides information on loan size, whether the loan was approved, whether the loan was sold (securitized) in the calendar year of origination, the geographical location of the property for which the loan was originated, as well as borrower characteristics. We exclude observations where the primary borrower's race is not reported. This data set covers all depository institutions that (i) have a home or branch office in a Metropolitan Statistical Area (MSA), (ii) have originated at least one first-lien home purchase loan on a one-to-four family dwelling in the past year, and (iii) have assets above a certain threshold. This threshold is $10 million before 1997, $11 million in 1997, and adjusted for annual percentage increase in CPI thereafter. For 2020, the threshold is $47 million.

[6]The "Avery file", constructed by Robert Avery from the Federal Reserve Board, is available at https://sites.google.com/site/neilbhutta/data.

Housing Authority, the Veterans Administration, and other government programs. We drop applications that are withdrawn, closed for incompleteness, loans that are purchased by the reporting banks, and applications made to banks that are acquired during the year.

Third, we determine banks' geographical footprint using FDIC summary of deposits data, available from 1994 onward. For bank holding companies, balance sheet and income statement variables come from the Y-9C regulatory reports for those filing Y9-C reports and aggregated (up to RSSD9348) from CALL reports for those that do not file Y9-C reports. For commercial banks, balance sheet and income statement variables come from CALL reports.

The final sample includes about 114.3 million loan applications made by 838 banks from 1995 to 2019. The start of the sample period is explained by the earliest availability of summary of deposits data (1994) and the use of lagged deposit data in our analysis. The end of the sample period is the year before the COVID-19 pandemic, a period characterized by various stimulus programs that affected deposit flows and lending practices.

Banks' inequality aversion. We measure banks' inequality aversion using banks' geographical footprint matched with county-level political orientation. A county with a more Democratic-leaning population is assumed to be more averse to inequality. This assumption is based on a large body of survey evidence. For example, the following results emerge from the Survey of U.S. adults conducted on September 16–29, 2019, by the Pew Research Center: (i) 61% of Democrats say that reducing economic inequality should be a top priority for the government compared to 20% of Republicans; (ii) 78% of Democrats say there is currently too much economic inequality in the U.S. compared to 41% of Republicans (Pew Research Center Report, 2020). For each bank-year, we collect the percentage of votes cast to the Democratic candidate in the most recent presidential election.[7] A bank inequality aversion is the deposit-weighted average of these percentages. The variable takes a higher value if most of the bank geographical footprint is from more Democratic counties. As discussed later in

[7]This data is from the MIT Election Data and Science Lab (from 2000 onward) and Dave Leip's Atlas of U.S. Presidential Elections (before 2000) for every county in which a bank has branches.

the paper, we complement this measure with a measure of bank racial inequality aversion using General Social Survey (GSS) survey data.[8]

Some of our tests use measures of bank executives' inequality aversion based on their contributions to political candidates. In particular, we source political contribution data from the Federal Election Commission website matched with executives' identities from BoardEx. The Federal Election Commission website provides data on individual contributions to federal candidates and political parties starting from 1979. Such information includes the contributor's name, employer, zip code, contribution amount, and candidate political party. We use executives' names and employment history in BoardEx to find their contributions.

Summary statistics. Table 1 shows summary statistics for the full sample, reporting application-level variables in Panel A and bank-year level variables in Panel B. The variable definitions are available in Appendix A. Panel A shows that 74% of all applications are approved and that the average applicant income (in 2012 dollars) is $110,523. We define a loan application (i) as being approved (Approved=1) if the loan is originated or if the application is approved but not accepted and (ii) as being denied (Approved=0) if the application is denied by the bank. In terms of demographics, 17% of applicants are non-white, 10% are Hispanic, 7% are based in high-minority census tracts, and 15% are based in CRA census tracts. High-minority tracts are defined as tracts where 75% or more of the population is minority according Census Bureau's classification.[9]

Panel B shows summary statistics for bank stakeholders' inequality aversion variables and standard balance sheet, income statement, and governance variables. The average CEO has served about 6.5 years at the bank as CEO and is about 57 years old. The average board has

[8]The GSS is a nationally representative survey of adults in the U.S. conducted since 1972 with the goal of *"monitoring and explaining trends in opinions, attitudes, and behaviors."* The GSS data is publicly available at `https://gss.norc.org/`. This data has been used, among many others, in Luttmer (2001).

[9]Minority population is defined as (i) total Hispanic population and (ii) non-Hispanic population minus non-Hispanic white population. A CRA census tract is defined according to the Community Reinvestment Act as one where the tract's median family income is less than 80% of the Metropolitan Statistical Area (MSA)/Metropolitan Division (MD)'s median family income. Data variables used to categorize census tracts as high minority or CRA are from the Census Bureau.

	N	Mean	Median	S.D.	p25	p75
Panel A. Application-level variables						
Non-White	96,300,000	0.17	0.00	0.38	0.00	0.00
Hispanic	60,400,000	0.10	0.00	0.30	0.00	0.00
High-Minority Tracts	114,000,000	0.07	0.00	0.26	0.00	0.00
CRA Tract	114,000,000	0.15	0.00	0.36	0.00	0.00
Approved	114,000,000	0.74	1.00	0.44	0.00	1.00
Co-Applicant	114,000,000	0.70	1.00	0.46	0.00	1.00
Applicant Income	109,000,000	110.52	77.49	1198.45	49.55	121.95
DTI Ratio	109,000,000	1.96	1.68	5.88	0.81	2.65
Jumbo	114,000,000	0.07	0.00	0.25	0.00	0.00
Refinancing	114,000,000	0.57	1.00	0.49	0.00	1.00
Home Improvement	114,000,000	0.13	0.00	0.34	0.00	0.00
Panel B. Bank-year level variables						
Inequality Aversion	12,185	0.48	0.47	0.12	0.40	0.56
Racial Inequality Aversion	12,191	1.92	1.94	0.12	1.83	2.00
CEO Experience	6,138	6.48	4.90	5.88	1.90	9.10
CEO Age	5,867	57.15	57.00	6.87	53.00	62.00
Number of Independent Directors	6,306	8.29	8.00	3.34	6.00	10.00
Number of Directors	6,306	11.35	11.00	3.35	9.00	13.00
Female CEO	6,138	0.03	0.00	0.18	0.00	0.00
Assets	12,433	17,204	896	136,841	436	2,643
Log Assets	12,433	7.13	6.80	1.63	6.08	7.88
Deposits/Assets	12,433	0.79	0.81	0.09	0.75	0.85
Cost of Deposits	12,433	0.02	0.02	0.01	0.01	0.03
Liquid Assets/Assets	12,433	0.25	0.24	0.12	0.16	0.32
Tier 1 Capital/Assets	11,765	0.09	0.09	0.03	0.08	0.10
C&I Loans/Assets	12,397	0.11	0.09	0.07	0.06	0.14
Mortgage Loans/Assets	12,433	0.50	0.50	0.15	0.40	0.60
Net Income/Assets	12,433	0.01	0.01	0.01	0.01	0.01
Unused Commitments/Assets	12,390	0.16	0.14	0.26	0.10	0.19
Letters of Credit/Assets	12,433	0.01	0.00	0.02	0.00	0.01
Nonperforming Loans/Loans	12,433	0.01	0.01	0.02	0.00	0.02
CEO Inequality Aversion	6,143	0.37	0.50	0.31	0.00	0.50
Independent Directors Inequality Aversion	6,043	0.45	0.45	0.12	0.38	0.51

Table 1: Summary statistics. This table shows summary statistics for our full sample. Panel A shows summary statistics for our application-level variables. Panel B shows summary statistics for our bank-year level variables. Co-Applicant is an indicator variable equal to one if there is a co-applicant, Applicant Income is expressed in 2012 dollars, DTI Ratio is the loan amount divided by borrower income, Jumbo is an indicator equal to one if the loan amount exceeds the limit set by the Federal Housing Finance Agency, Refinancing is an indicator equal to one if the loan purpose is refinancing, Home Improvement is an indicator equal to one if the loan is for home improvement purposes, and CEO Experience is the number of years the CEO serves as CEO of the bank. Variable definitions are available in Appendix A.

	Non-White	White	Mean Test
Panel A. Application-level variables			
N	16,500,000	79,800,000	
Hispanic	0.06	0.10	***
High-Minority Tract	0.26	0.03	***
CRA Tract	0.29	0.12	***
Approved	0.65	0.78	***
Co-Applicant	0.63	0.70	***
Applicant Income	95.82	112.29	***
DTI Ratio	2.11	1.95	***
Jumbo	0.07	0.06	***
Refinancing	0.52	0.57	***
Home Improvement	0.17	0.12	***

	High-Minority Tract	Low-Minority Tract	Mean Test
Panel B. Application-level variables			
N	8,439,175	106,000,000	
Non-White	0.61	0.14	***
Hispanic	0.35	0.08	***
CRA Tract	0.64	0.12	***
Approved	0.58	0.75	***
Co-Applicant	0.54	0.71	***
Applicant Income	80.71	112.96	***
DTI Ratio	2.17	1.94	***
Jumbo	0.05	0.07	***
Refinancing	0.56	0.57	***
Home Improvement	0.21	0.13	***

Table 2: Summary statistics, minority vs. non-minority groups. This table shows sample means of application-level variables for the subsample of white vs. non-white applicants (Panel A) and the subsample of applicants in high-minority tracts vs. low-minority tracts (Panel B). Co-Applicant is an indicator variable equal to one if there is a co-applicant, Applicant Income is expressed in 2012 dollars, DTI Ratio is the loan amount divided by borrower income, Jumbo is an indicator equal to one if the loan amount exceeds the limit set by the Federal Housing Finance Agency, Refinancing is an indicator equal to one if the loan purpose is refinancing, and Home Improvement is an indicator equal to one if the loan is for home improvement purposes. Variable definitions are available in Appendix A. The last column shows significance for a mean difference test, where ***, **, and * denote statistical significance at the 1%, 5% and 10% levels, respectively.

11 directors, 8 of whom are independent, and 3% of the bank-year observations are associated with a female CEO. The average bank has approximately $17 billion in assets expressed in 2012 dollars. Table C.1 shows sample means for the subsamples of more inequality-averse and less inequality-averse banks, defined based on whether the bank has an above (below) median inequality aversion. More inequality-averse banks have a larger share of minority applicants compared with less inequality-averse banks. Their applicants also have higher income and higher DTI ratios. These observations reinforce the need to control for the endogeneity of

banks' borrower pools and, more in general, the endogeneity of bank-borrower matches.

Table 2 shows sample means for the subsample of white and non-white applicants (Panel A) and applicants from high-minority and low-minority (Panel B) tracts. Throughout the rest of the paper, we mostly use these two demographic cuts to capture "minority" and "non-minority" groups. The table shows that non-white applicants are more likely to reside in high-minority and CRA tracts, are less likely to have their application approved, have a lower income, and a higher DTI ratio compared with white applicants. Panel B documents similar patterns for applicants in high-minority tracts compared with applicants in low-minority tracts. Table C.3 shows the same comparison of sample means further differentiating between more inequality-averse banks and less inequality-averse banks.

2.2 Facts about bank-level approval gaps

We now present two facts about bank-level variation in approval gaps. We show that these approval gaps are substantial, persistent, heterogeneous across banks, and strongly correlated with measures of bank inequality aversion in the cross-section of banks.

Fact 1: Substantial and persistent variation in approval gaps across banks. Figure 1 and Figure 2 document the substantial variation, across banks, in approval gaps for non-white vs. white applicants (left panels) and applicants in high-minority tracts vs. applicants in low-minority tracts (right panels). For illustrative purposes, Figure 1 focuses on the most recent (2015–19) period for the top-10 banks by number of applications received. The figure shows mean approval ratios for minority borrowers (blue bars) and non-minority borrowers (red bars) by bank, where banks are ordered on the x-axis based on the number of applications received. Note that all top-10 banks (collectively receiving 62% of applications in 2015–19) have positive approval gaps with substantial cross-sectional variation. Figure B.1 shows the same bar charts for the period 2010–14.

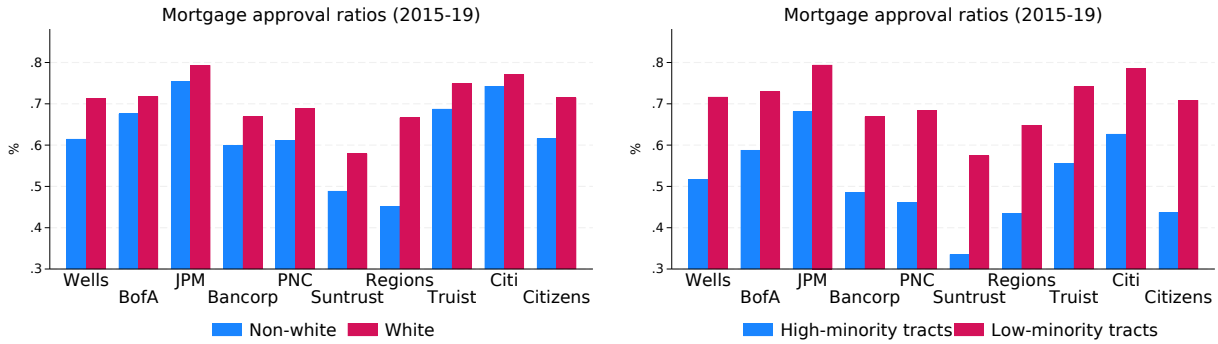


Figure 1: Approval ratios across top-10 banks, 2015–19. This figure shows mortgage approval rates for the top-10 banks by number of applications received in the period 2015–19. Banks are ranked on the x-axis based on the number of applications received. The blue bars indicate approval rates for non-white applicants (left panel) and applicants in high-minority tracts (right panel). The red bars indicate approval rates for white applicants (left panel) and applicants in low-minority tracts (right panel).

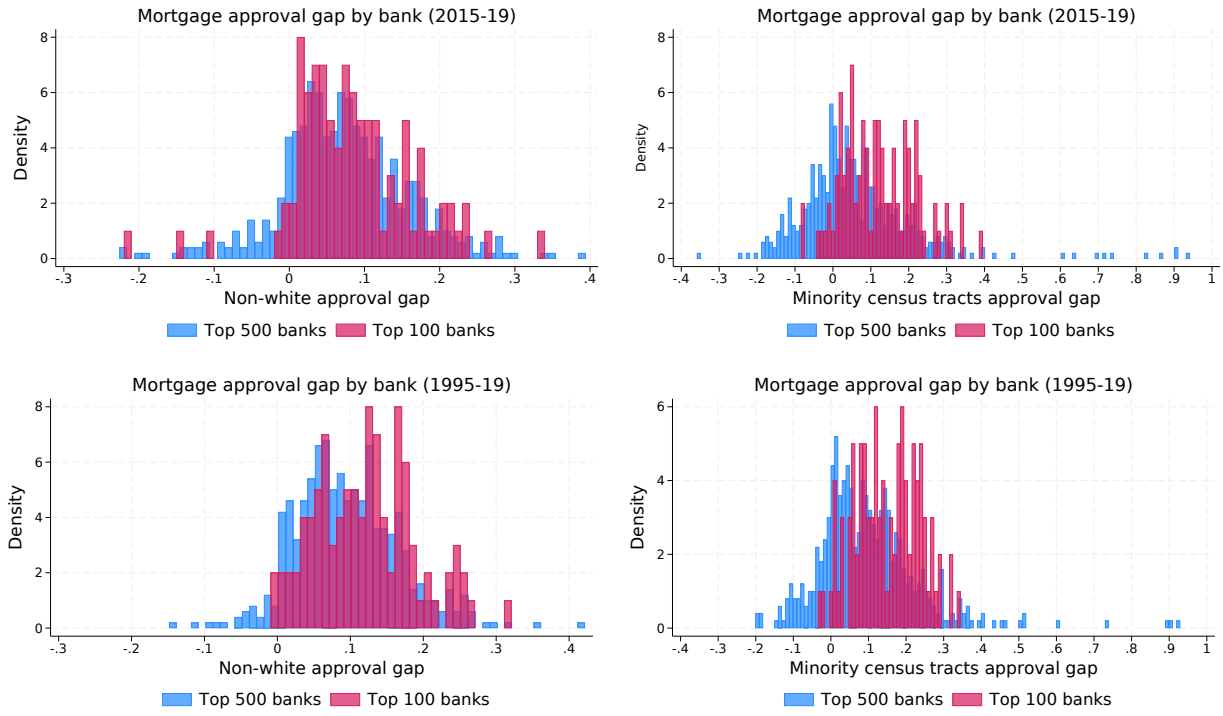


Figure 2: Distribution of approval gaps across banks. This figure shows the distribution of approval gaps across the top-100 banks (red bars) and top-500 banks (blue bars) by number of mortgage applications received. The top panel shows the distributions for the period 2015–19. The bottom panel shows the distributions for the full period (1995–2019). The figures on the left show the distribution of approval gaps between non-white and white applicants. The figures on the right show the distribution of approval gaps between applicants in high-minority tracts and applicants in low-minority tracts.

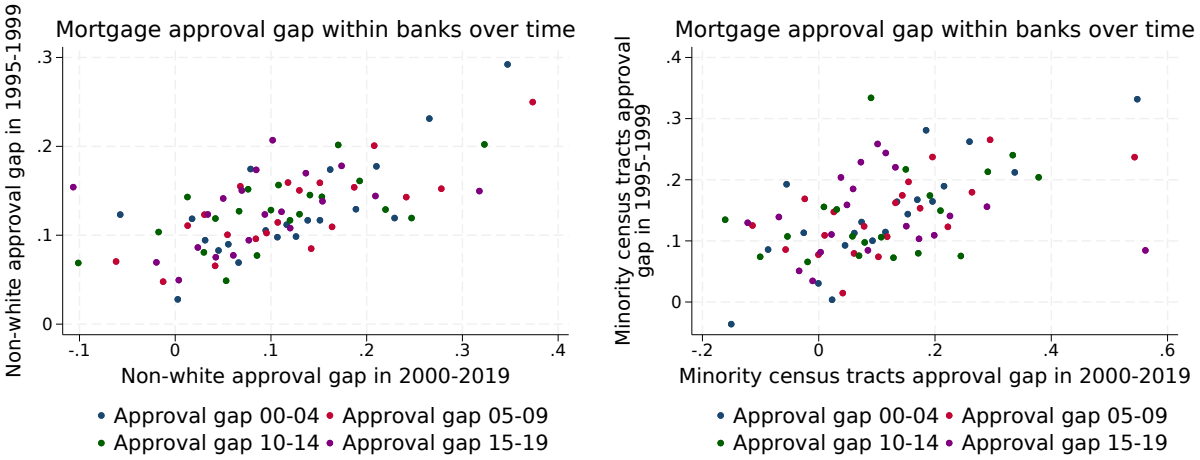


Figure 3: Persistence of bank-level approval gaps. This bin scatter plot shows the persistence through time of bank-level approval gaps for non-white vs. white applicants (left figure) and applicants in high-minority vs. low-minority tracts (right). In each figure, the y-axis shows approval gaps for the period 1995–99 and the x-axis shows approval gaps for the four periods (2000–04, 2005–09, 2010–14, 2015–19) indicated in the legend.

Figure 2 shows density plots for the approval gaps for the top-100 (red bars) and top-500 (blue bars) banks by number of applications received in the period 2015–19 (top panels) and 1995–2019 (bottom panels). This figure confirms, in a much larger sample, that approval gaps tend to be positive and largely heterogeneous across banks.

Figure 3 shows that approval gaps are persistent in time, i.e., banks with high (low) approval gaps tend to maintain high (low) approval gaps over time. The two bin scatter plots show the persistence of approval gaps for non-white vs. white applicants (left figure) and applicants in high-minority vs. low-minority tracts (right figure). Each data point shows approval gaps in the period 1995–99 (y-axis) and approval gaps in the period indicated in the legend (x-axis). The data points are spread throughout the graph and cluster mostly around the 45-degree line, confirming the substantial cross-sectional variation and indicating that approval gaps are persistent through time.

Fact 2: Inequality-averse banks tend to have smaller approval gaps. Figure 4 shows that, *within* census tracts, banks with smaller approval gaps tend to have stakeholders that are more averse to inequality. The figure is a binscatter plot run with tract-year fixed effects, thus effectively showing the correlation between stakeholders' inequality aversion and approval gaps *within* census tracts. The left figures focus on the approval gaps for non-white

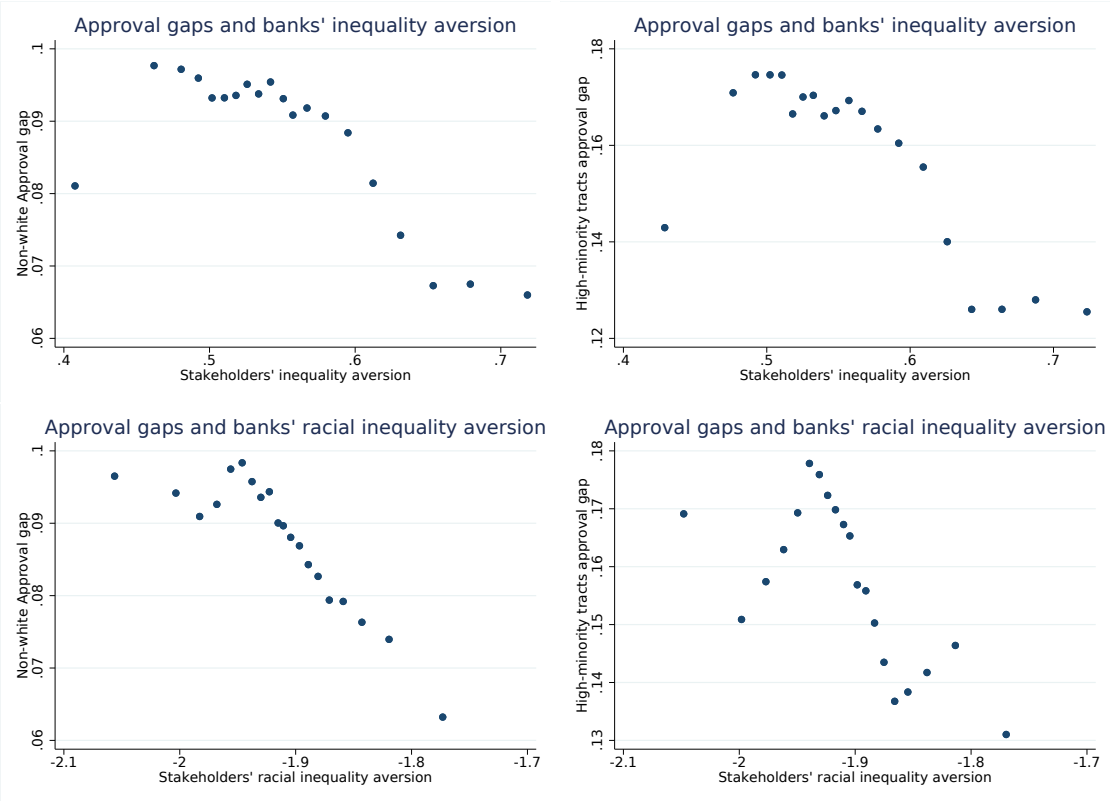


Figure 4: Approval gaps and bank stakeholders' aversion to inequality. This figure shows binscatter plots of approval gaps (y-axes) and measures of bank stakeholders' aversion to inequality (x-axis), controlling for tract-year fixed effects. The figures on the left focus on the approval gaps for non-white vs. white borrowers. The figures on the right focus on approval gaps for applicants in high-minority tracts vs. applicants in low-minority tracts. The measure of inequality aversion in the top two figures is the weighted average percentage of votes cast for the Democratic presidential candidate in the most recent election in counties where a bank has deposits. The weights are fractions of deposits the bank has in those counties. The measure of racial inequality aversion in the bottom two figures is defined as (one minus) the deposit-weighted values of responses to the statement *"We're spending too much money, too little money, or about the right amount of money on assistance to Black individuals?"*, coded as *"1 is too little, 2 is about right, 3 is too much"* from GSS survey data.

vs. white applicants. The right figures focus on approval gaps for applicants in high-minority vs. low-minority tracts. The top two figures show a markedly negative correlation between banks' approval gaps and the inequality aversion of their stakeholders.

The bottom two figures use a measure of *racial* inequality aversion constructed using publicly available data from the GSS. We use a survey question that asks whether *"we're spending too much money, too little money, or about the right amount of money on assistance to Black individuals."* Survey respondents can choose one of these three options, which are coded with the numbers 1, 2, and 3, respectively. We observe each response and the "region"

of the survey respondent, where the U.S. is partitioned into eight regions.[10] We then calculate, for each bank, the weighted average of these responses, using the fraction of deposits the bank has in each region as weights. We multiply this number by -1 to obtain the inequality aversion on the x-axis of the figure. Taken together, the four panels in the figure document the negative correlation between stakeholders' inequality aversion and approval gaps.

3 Inequality aversion and bank lending

The second fact documented in the previous section shows, using raw data, that banks with smaller approval gaps tend to have more inequality-averse stakeholders compared to banks with larger approval gaps. In Section 3.1, we (i) show that this correlation is not driven by selection of applicants, i.e., it is not driven by high credit quality minority borrowers applying more to banks with more inequality-averse stakeholders than banks with less inequality-averse stakeholders (or low credit quality minority borrowers applying more to banks with less inequality-averse stakeholders than banks with more inequality-averse stakeholders). In Section 3.2, we show that this correlation is robust to using a survey-based measure of bank stakeholders' inequality aversion.

3.1 Borrower selection

There are two main selection concerns in our analysis. First, selection *across* geographical areas. In this possibility, banks with stakeholders more averse to inequality are located in areas of the country where the pool of minority borrowers is of higher credit quality compared with the pool of minority borrowers in areas where less inequality-averse banks are located.[11] Second, selection *within* geographical areas. In this possibility, even within

[10] This coarse geographical partition explains why our preferred measure of bank inequality aversion is based on county-level voting data. The eight GSS regions are (i) New England, (ii) Rhode Island Middle Atlantic, (iii) Pennsylvania East North Central, (iv) Michigan, Ohio West North Central, (v) Kansas South Atlantic, (vi) Mississippi West South Central Louisiana, (vii) Texas Mountain, and (viii) New Mexico Pacific.

[11] This concern is, in part, justified. For example, Table C.3 shows that, on average, white applicants have an income 17% higher than non-white applicants for more inequality-averse banks, while this difference is

the same area (e.g., census tract or county), banks with more inequality-averse stakeholders receive applications from higher credit quality minority borrowers than banks with less inequality-averse stakeholders. We now present two empirical tests suggesting that these two selection concerns are not first order in our setting.

Selection across geographical areas. First, we tackle selection *across* geographical areas. To this end, we run the following specification:

$$\begin{aligned}\text{Approved}_l = \alpha + \beta_1 \text{Minority}_l \times \text{Inequality Aversion}_{by} \\ + \beta_2 \text{Minority}_l + \beta_3 \text{Inequality Aversion}_{by} + \boldsymbol{\delta}\mathbf{X}_{by-1} + \boldsymbol{\gamma}\mathbf{Z}_l + \nu_{ty} + \eta_b + \epsilon_l\end{aligned} \tag{1}$$

where l is a loan application, b is a bank, t is a census tract, and y is a year. The dependent variable Approved_l is a dummy equal to one if loan l is originated (or if the application is approved but not accepted) and equal to zero if the application is denied. Given the large number of fixed effects, we estimate the specification using Ordinary Least Squares (and do so throughout our paper) despite the binary nature of our dependent variable.[12] Minority_l is a dummy equal to one if applicant l is minority (e.g., she is non-white or residing in a high-minority census tract) and $\text{Inequality Aversion}_{by}$ is the weighted average percentage of votes cast for the Democratic presidential candidate in the most recent election in counties where bank b has deposits.

We saturate the regression specification with several control variables and fixed effects. In terms of fixed effects, in the most stringent specification, we include (i) census tract-year fixed effects (ν_{ty}) to effectively compare applicants in the same tract applying in the same year to banks with different degrees of inequality aversion and (ii) bank fixed effects (η_b) to capture how much *changes* in bank aversion to inequality affect banks' approval ratios. Note that tract-year fixed effects address the concerns about selection across geographical areas. In terms of control variables, we include (i) lagged bank-level controls (both lagged

27% for less inequality-averse banks.

[12] Probit and Tobit estimations would result in an incidental parameter problem.

Panel A	Approved$_l$			
Inequality Aversion$_{by}$ × Non-White$_l$	0.195***	0.191***	0.176***	0.174***
	(0.054)	(0.058)	(0.040)	(0.041)
Inequality Aversion$_{by}$	−0.739***	−0.604***	−0.297***	−0.174**
	(0.220)	(0.135)	(0.083)	(0.087)
Non-White$_l$	−0.193***	−0.189***	−0.176***	−0.174***
	(0.031)	(0.034)	(0.024)	(0.025)
Observations	92,014,981	89,583,068	67,262,528	67,262,526
R-squared	0.163	0.174	0.142	0.148

Panel B	Approved$_l$			
Inequality Aversion$_{by}$ × High-Minority Tract$_{ty}$	0.217***	0.221***	0.219***	0.195***
	(0.076)	(0.054)	(0.036)	(0.035)
Inequality Aversion$_{by}$	−0.720***	−0.586***	−0.284***	−0.155*
	(0.219)	(0.131)	(0.081)	(0.082)
Observations	91,747,125	89,364,553	67,162,494	67,162,492
R-squared	0.163	0.174	0.142	0.148

Fixed Effects				
Tract-Year (ν_{ty})	✓	✓	✓	✓
Bank (η_b)				✓
Control Variables				
Loan and Borrower Characteristics ($\mathbf{Z}_l$)	✓	✓	✓	✓
Bank Characteristics ($\mathbf{X}_{by-1}$)		✓	✓	✓
Executives Characteristics ($\mathbf{X}_{by-1}$)			✓	✓

Table 3: Bank stakeholders' inequality aversion and lending. This table shows estimation results from specification (1). The dependent variable is Approved$_l$, a dummy equal to one if loan l is originated (or if the application is approved but not accepted) and equal to zero if the application is denied. Minority$_l$ is Non-White$_l$ (dummy variable equal to one if applicant l is non-white according to HMDA classification) in Panel A and High-Minority Tract$_{ty}$ (dummy variable equal to one if applicant l is based in a census tract where 75% or more of the population is minority, according to Census Bureau's classification) in Panel B. The loan and borrower characteristics are a dummy equal to one for a non-white applicant, a dummy equal to one for a female applicant, a dummy equal to one for the presence of a co-applicant, natural log of applicant income expressed in thousands of 2012 dollars, debt-to-income ratio (loan amount divided by borrower income), a dummy equal to one for a jumbo loan, a dummy equal to one for refinancing loans, and a dummy equal to one for loans taken for home improvements. The (lagged) bank characteristics are the natural log of banks' total assets (in million dollars as of 2012), deposits-to-assets ratio, interest on deposits divided by total assets, liquid assets divided by total assets, tier 1 capital divided by total assets, C&I loans divided by total assets, loans secured by real estate divided by total assets, net income divided by total assets, unused commitments divided by total assets, letters of credit divided by total assets, and nonperforming loans divided by total loans. The executives characteristics are the number of years the CEO has been acting as CEO of the bank, CEO age, numbers of independent directors, numbers of directors, and a dummy equal to one for a female CEO. The sample runs annually from 1995 to 2019 for regressions without executive and board control variables and from 1999 to 2019 for those with executive and board controls. See Appendix A for variable definitions. Standard errors are double clustered at the bank and tract levels and are reported in parentheses. ***, **, and * denote significance at the 1%, 5% and 10% levels, respectively.

bank characteristics and executives characteristics in the vector $\mathbf{X}_{by-1}$) and (ii) loan and borrower characteristics (vector $\mathbf{Z}_l$). The coefficient β_2 captures the approval gap, i.e., the difference in the probability of loan approval for minority vs. non-minority borrowers. The main coefficient of interest β_1 measures the effect of bank stakeholders' inequality aversion on the approval gap. We double cluster standard errors at the bank and tract levels to allow for correlation across banks within a tract and across tracts for a particular bank.

Table 3 shows the estimation results. In Panel A, the estimated negative β_2 coefficient indicates that non-white applicants are less likely to have their loan applications approved compared with white applicants. The estimated β_1 coefficient indicates that the approval gap is smaller in banks with more inequality-averse stakeholders. In the first three columns, we progressively include, as control variables, loan and borrower characteristics, bank characteristics, and executives characteristics. The estimated β_1 coefficient is stable across specifications.

In the fourth column, we include bank fixed effects to control for the possibility that stakeholders' inequality aversion might be correlated with time-invariant bank characteristics which might affect banks' propensity to lend. This estimation result shows that, within banks, positive *changes* in bank inequality aversion are associated with decreasing approval gaps. The magnitudes are large. According to the most conservative specification, a one standard deviation increase in our measure of inequality aversion reduces the approval gap by 2.1%, which is 16.1% of the unconditional gap of 12.9%.[13]

Panel B shows the results from estimating (1) with High-Minority Tract$_{ty}$ (dummy equal to one if applicant l is based in a high-minority tract t in year y) as the variable capturing whether an applicant is a minority applicant. Consistent with Panel A, we find that banks with more inequality-averse stakeholders have a smaller (high- vs. low-minority tract) approval gap compared with banks with less inequality-averse stakeholders. A one standard deviation increase in our measure of inequality aversion reduces this approval gap by 2.3%, which is

[13]It is worth noting that the coefficient β_3 is negative, suggesting that more inequality-averse banks may have stricter overall lending standards than less inequality-averse banks. While this result is interesting and may deserve further investigation, it goes beyond the scope of this paper.

Panel A	Income_l			
$\text{Inequality Aversion}_{by} \times \text{Non-White}_l$	6.691	7.445	4.631	8.377*
	(5.097)	(5.526)	(4.989)	(4.921)
$\text{Inequality Aversion}_{by}$	−37.005***	−11.289	12.709	−34.287**
	(9.263)	(14.672)	(19.113)	(13.516)
Non-White_l	−10.554***	−10.823***	−8.912***	−10.860***
	(2.817)	(3.101)	(0.000)	(2.972)
Observations	92,032,235	89,600,208	67,279,024	67,279,022
R-squared	0.056	0.056	0.052	0.052

Panel B	Income_l			
$\text{Inequality Aversion}_{by} \times \text{High-Minority Tract}_{ty}$	−10.827	−8.765	−15.096**	−13.358*
	(7.687)	(6.766)	(6.629)	(6.864)
$\text{Inequality Aversion}_{by}$	−35.219***	−9.526	14.429	−31.022**
	(8.859)	(14.327)	(18.894)	(13.481)
Observations	91,764,350	89,381,664	67,178,962	67,178,960
R-squared	0.056	0.056	0.052	0.052

Fixed Effects				
Tract-Year (ν_{ty})	✓	✓	✓	✓
Bank (η_b)				✓
Control Variables				
Loan Characteristics ($\mathbf{Z}_l$)	✓	✓	✓	✓
Bank Characteristics ($\mathbf{X}_{by-1}$)		✓	✓	✓
Executives Characteristics ($\mathbf{X}_{by-1}$)			✓	✓

Table 4: Bank stakeholders' inequality aversion and applicant income. This table shows estimation results from specification (1). The dependent variable is Income_l, defined as the applicant income expressed in thousands of 2012 dollars. Minority_l is Non-White_l (dummy variable equal to one if applicant l is non-white according to HMDA classification) in Panel A and $\text{High-Minority Tract}_{ty}$ (dummy variable equal to one if applicant l is based in a census tract where 75% or more of the population is minority, according to Census Bureau's classification) in Panel B. The loan and borrower characteristics are a dummy equal to one for a non-white applicant, a dummy equal to one for a female applicant, a dummy equal to one for the presence of a co-applicant, debt-to-income ratio (loan amount divided by borrower income), a dummy equal to one for a jumbo loan, a dummy equal to one for refinancing loans, and a dummy equal to one for loans taken for home improvements. The (lagged) bank characteristics are the natural log of banks' total assets (in million dollars as of 2012), deposits-to-assets ratio, interest on deposits divided by total assets, liquid assets divided by total assets, tier 1 capital divided by total assets, C&I loans divided by total assets, loans secured by real estate divided by total assets, net income divided by total assets, unused commitments divided by total assets, letters of credit divided by total assets, and nonperforming loans divided by total loans. The executives characteristics are the number of years the CEO has been acting as CEO of the bank, CEO age, numbers of independent directors, numbers of directors, and a dummy equal to one for a female CEO. The sample runs annually from 1995 to 2019 for regressions without executive and board control variables and from 1999 to 2019 for those with executive and board controls. See Appendix A for variable definitions. Standard errors are double clustered at the bank and tract levels and are reported in parentheses. ***, **, and * denote significance at the 1%, 5% and 10% levels, respectively.

13.7% of the unconditional gap of 17%.[14]

The Appendix provides a set of additional tests. Table C.4 shows that our results are robust to using county-time, instead of census tract-time, fixed effects—addressing the concern that census tracts might be too small to meaningfully estimate our baseline specification. Table C.2 shows that the effect of inequality aversion on the approval gap between high-minority vs. low-minority tracts is separate from the effect of inequality aversion on the approval gap between non-white vs. white borrowers. In particular, coefficients on Inequality Aversion$_{by}$ $\times$ Non-White$_{l}$ and Inequality Aversion$_{by}$ $\times$ High-Minority Tract$_{ty}$ are both positive and statistically significant when both interaction variables are included in the same regressions.

Selection within geographical areas Second, we tackle selection *within* geographical areas. To this end, we run specification (1) using applicant income (measured in 2012 dollars) as a dependent variable. The estimation results in Table 4 show that banks with more inequality-averse stakeholders do not receive applications from systematically higher income minority borrowers compared with banks with less inequality-averse stakeholders. This finding is consistent with the non-parametric evidence in Figure B.3 that shows a near-zero correlation between income and approval gaps in the full sample of tracts as well as in the subsample of shared census tracts (i.e., census tracts with at least one applicant per bank every year).

3.2 Survey-based measure of inequality aversion

We now show that the correlation, across banks, between approval gaps and bank stakeholders' inequality aversion is robust to using an alternative, GSS survey-based, measure of inequality aversion introduced at the end of Section 2.2. Our Racial Inequality Aversion$_{by}$ dummy takes a value of one if the weighted average of the GSS survey response, using the fraction of deposits the bank has in each region as weights, is below the median, where the median is

[14] Figure B.2 shows that the approval gaps of the top-3 banks in the full sample of tracts are similar to those in *shared* tracts, i.e., census tracts with at least one applicant per bank every year—providing non-parametric evidence further suggesting that selection *across* geographical areas is not a first-order concern in our setting.

	Approved$_l$			
Racial Inequality Aversion$_{by}$ × Non-White$_l$	0.009***	0.007*		
	(0.003)	(0.004)		
Racial Inequality Aversion$_{by}$ × High-Minority Tract$_{ty}$			0.018***	0.016***
			(0.004)	(0.004)
Racial Inequality Aversion$_{by}$	0.011***	0.007**	0.011***	0.007**
	(0.004)	(0.004)	(0.004)	(0.004)
Non-White$_l$	−0.081***	−0.080***		
	(0.003)	(0.002)		
Observations	67,262,528	67,262,526	67,162,494	67,162,492
R-squared	0.142	0.148	0.141	0.148
Fixed Effects				
Tract-Year (ν_{ty})	✓	✓	✓	✓
Bank (η_b)		✓		✓
Control Variables				
Loan and Borrower Characteristics ($\mathbf{Z}_l$)	✓	✓	✓	✓
Bank Characteristics ($\mathbf{X}_{by-1}$)	✓	✓	✓	✓
Executives Characteristics ($\mathbf{X}_{by-1}$)	✓	✓	✓	✓

Table 5: Bank stakeholders' racial inequality aversion and lending, survey-based measure of inequality aversion. This table shows estimation results from specification (1). The dependent variable is Approved$_l$, a dummy equal to one if loan l is originated (or if the application is approved but not accepted) and equal to zero if the application is denied. Non-White$_l$ is dummy variable equal to one if applicant l is non-white according to HMDA classification. High-Minority Tract$_{ty}$ is a dummy variable equal to one if applicant l is based in a census tract where 75% or more of the population is minority, according to Census Bureau's classification. Racial Inequality Aversion$_{by}$ is a dummy variable equal to one if a bank has above median racial inequality-averse stakeholders based on the survey-based (GSS survey) variable *natrace*. This variable is based on the question *"Are we spending too much, too little, or about the right amount on improving the conditions of Black individuals?"*, with possible responses "Too much" (3), "Too little (1)", and "About the right amount (2)." The responses are collected at annual frequency and averaged across nine census divisions (using the fraction of deposits the bank has in each region as weights). The loan and borrower characteristics are a dummy equal to one for a non-white applicant, a dummy equal to one for a female applicant, a dummy equal to one for the presence of a co-applicant, natural log of applicant income expressed in thousands of 2012 dollars, debt-to-income ratio (loan amount divided by borrower income), a dummy equal to one for a jumbo loan, a dummy equal to one for refinancing loans, and a dummy equal to one for loans taken for home improvements. The (lagged) bank characteristics are the natural log of banks' total assets (in million dollars as of 2012), deposits-to-assets ratio, interest on deposits divided by total assets, liquid assets divided by total assets, tier 1 capital divided by total assets, C&I loans divided by total assets, loans secured by real estate divided by total assets, net income divided by total assets, unused commitments divided by total assets, letters of credit divided by total assets, and nonperforming loans divided by total loans. The executives characteristics are the number of years the CEO has been acting as CEO of the bank, CEO age, numbers of independent directors, numbers of directors, and a dummy equal to one for a female CEO. The sample runs annually from 1999 to 2019. See Appendix A for variable definitions. Standard errors double clustered at the bank and tract levels and are reported in parentheses. ***, **, and * denote significance at the 1%, 5% and 10% levels, respectively.

calculated each year in the cross-section of banks.

Table 5 shows the estimation results using this survey-based variable in our specification (1), specifically the two most stringent specifications. Minority applicants are defined as non-white applicants in the first two columns and as applicants in high-minority tracts in the last two columns. The estimation results confirm, using survey data, that banks with more inequality-averse stakeholders have a higher propensity to lend to minority borrowers compared with banks with less inequality-averse stakeholders.

4 Ruling out a few potential explanations

In the previous section, we have shown that the correlation between bank stakeholders' inequality aversion and bank-level approval gaps (i) is not driven by selection of applicants and (ii) is robust to using a survey-based measure of inequality aversion. We now rule out a set of potential explanations before discussing, in Section 5, the "stakeholders' discipline" channel that, we argue, drives this correlation.

In particular, we rule out three alternative explanations driving this correlation. Section 4.1 shows that this correlation is not driven by banks' differential access to soft information. Section 4.2 shows that this correlation is not driven by banks' differential mortgage lending expertise nor other banks' characteristics correlated with stakeholders' inequality aversion. Section 4.3 shows that this correlation is not driven by changes in the bank borrower base—as, for example, banks that expand in new areas might simultaneously increase their share of Democratic-leaning depositors and access more high credit quality minority applicants.

4.1 Banks' differential access to soft information

We now show that our results are not driven by the lender-borrower distance that might affect banks' access to, or production of, soft information within a census tract.

Broeckner (1990), Petersen and Rajan (2002), Boot and Thakor (2000), and Dell'Ariccia and Marquez (2004), among others, show that physical branches give banks greater *access* to soft information on low-quality hard-information borrowers (likely to be defined as minorities in our context) in the surrounding neighborhood, allowing these banks to "cream-skim"

the best borrowers. By doing so, lenders would likely lower the credit quality of the low-quality hard-information borrower pool for competing lenders without branches in the same area.[15] Similarly, Agarwal and Hauswald (2010) shows that physical proximity facilitates the *production* of soft information and Mayer (2024) finds that mortgage approval rates decline with the distance from borrowers to the lenders' nearest branch, especially for low-income borrowers. In our context, the association between inequality aversion and approval gaps might thus result from more inequality-averse banks operating in close proximity to minority borrowers collecting more soft information and subsequently granting more credit to these borrowers.

We conduct two tests to address these identification concerns. In the first test, we estimate our baseline specification (1), saturated with all control variables, in the subsample of mortgage applications made to banks that have branches in counties where applicants reside. The results are presented in Table 6. The first two columns and the last two columns focus on the approval gap between non-white and white applicants and between applicants in high-minority tracts and applicants in low-minority tracts, respectively. The correlation between bank stakeholders' inequality aversion and approval gaps is robust in this subsample where banks arguably have similar access to soft information on borrowers.[16]

In the second test, we measure lender-borrower proximity using the bank's share of branches in the borrower's county of residence. We control for the effects of this proximity on approval gaps in our baseline specification (1), again saturated with all control variables. The estimation results in Table 7 show that the effects of bank stakeholders' inequality aversion on approval gaps (white vs. non-white borrowers in the first two columns; high-minority vs. low-minority tracts in the last two columns) are qualitatively unchanged after controlling for effects of proximity on these gaps.

[15] In other words, lower quality borrowers might apply to banks without branches after being denied or getting less attractive offers from banks with branches. If banks with more inequality-averse stakeholders have more branches in areas with more minority borrowers, the correlation between approval gaps and bank stakeholders' inequality aversion might arise from "cream-skimming."

[16] Table C.5 shows that our results are also robust in both subsamples of banks with a high propensity and low propensity to securitize.

	Approved$_l$			
Inequality Aversion$_{by}$ × Non-White$_l$	0.227***	0.206***		
	(0.039)	(0.044)		
Inequality Aversion$_{by}$ × High-Minority Tract$_{ty}$			0.217***	0.177***
			(0.060)	(0.054)
Inequality Aversion$_{by}$	−0.205***	−0.155	−0.189***	−0.134
	(0.072)	(0.113)	(0.070)	(0.102)
Non-White$_l$	−0.204***	−0.191***		
	(0.024)	(0.026)		
Observations	43,960,044	43,960,042	43,905,696	43,905,694
R-squared	0.157	0.162	0.157	0.162
Fixed Effects				
Tract-Year (ν_{ty})	✓	✓	✓	✓
Bank (η_b)		✓		✓
Control Variables				
Loan and Borrower Characteristics ($\mathbf{Z}_l$)	✓	✓	✓	✓
Bank Characteristics ($\mathbf{X}_{by-1}$)	✓	✓	✓	✓
Executives Characteristics ($\mathbf{X}_{by-1}$)	✓	✓	✓	✓

Table 6: Bank stakeholders' inequality aversion and lending in the sample of banks with branches in counties where applicants reside. This table shows estimation results from specification (1) run in the subsample of applications made to banks that have branches in counties where the applicants reside. The dependent variable is Approved$_l$, a dummy equal to one if loan l is originated (or if the application is approved but not accepted) and equal to zero if the application is denied. Non-White$_l$ is a dummy variable equal to one if applicant l is non-white according to HMDA classification. High-Minority Tract$_{ty}$ is a dummy variable equal to one if applicant l is based in a census tract where 75% or more of the population is minority, according to Census Bureau's classification. The loan and borrower characteristics are a dummy equal to one for a non-white applicant, a dummy equal to one for a female applicant, a dummy equal to one for the presence of a co-applicant, applicant income expressed in thousands of 2012 dollars, debt-to-income ratio (loan amount divided by borrower income), a dummy equal to one for a jumbo loan, a dummy equal to one for refinancing loans, and a dummy equal to one for loans taken for home improvements. The (lagged) bank characteristics are the natural log of banks' total assets (in million dollars as of 2012), deposits-to-assets ratio, interest on deposits divided by total assets, liquid assets divided by total assets, tier 1 capital divided by total assets, C&I loans divided by total assets, loans secured by real estate divided by total assets, net income divided by total assets, unused commitments divided by total assets, letters of credit divided by total assets, and nonperforming loans divided by total loans. The executives characteristics are the number of years the CEO has been acting as CEO of the bank, CEO age, numbers of independent directors, numbers of directors, and a dummy equal to one for a female CEO. The sample runs annually from 1999 to 2019. See Appendix A for variable definitions. Standard errors are double clustered at the bank and tract levels and are reported in parentheses. ***, **, and * denote significance at the 1%, 5% and 10% levels, respectively.

	Approved$_l$			
Inequality Aversion$_{by}$ × Non-White$_l$	0.157***	0.154***		
	(0.041)	(0.039)		
Branch Share$_{bcy}$ × Non-White$_l$	−0.074	−0.086*		
	(0.046)	(0.047)		
Inequality Aversion$_{by}$ × High-Minority Tract$_{ty}$			0.187***	0.164***
			(0.035)	(0.023)
Branch share$_{cy}$ × High-Minority Tract$_{ty}$			−0.134***	−0.151***
			(0.039)	(0.041)
Inequality Aversion$_{by}$	−0.277***	−0.167*	−0.263***	−0.149*
	(0.083)	(0.086)	(0.082)	(0.081)
Branch Share$_{bcy}$	0.104***	0.082***	0.101***	0.079***
	(0.02)	(0.039)	(0.019)	(0.019)
Non-White$_l$	−0.16***	−0.157***		
	(0.026)	(0.024)		
Observations	67,251,542	67,251,540	67,151,560	67,151,558
R-squared	0.1257	0.1484	0.1423	0.148
Fixed Effects				
Tract-Year (ν_{ty})	✓	✓	✓	✓
Bank (η_b)		✓		✓
Control Variables				
Loan and Borrower Characteristics ($\mathbf{Z}_l$)	✓	✓	✓	✓
Bank Characteristics ($\mathbf{X}_{by-1}$)	✓	✓	✓	✓
Executives Characteristics ($\mathbf{X}_{by-1}$)	✓	✓	✓	✓

Table 7: Bank stakeholders' inequality aversion and lending: Controlling for lender-borrower proximity. This table shows estimation results from specification (1), controlling for effects of lender-borrower proximity. The dependent variable is Approved$_l$, a dummy equal to one if loan l is originated (or if the application is approved but not accepted) and equal to zero if the application is denied. Non-White$_l$ is a dummy variable equal to one if applicant l is non-white according to HMDA classification. High-Minority Tract$_{ty}$ is a dummy variable equal to one if applicant l is based in a census tract where 75% or more of the population is minority, according to Census Bureau's classification. For each bank b and in each county c, borrower proximity (Branch Share$_{bcy}$) is the number of bank b's branches divided by the total number of branches for all banks in the county where the applicant resides. The loan and borrower characteristics are a dummy equal to one for a non-white applicant, a dummy equal to one for a female applicant, a dummy equal to one for the presence of a co-applicant, applicant income expressed in thousands of 2012 dollars, debt-to-income ratio (loan amount divided by borrower income), a dummy equal to one for a jumbo loan, a dummy equal to one for refinancing loans, and a dummy equal to one for loans taken for home improvements. The (lagged) bank characteristics are the natural log of banks' total assets (in million dollars as of 2012), deposits-to-assets ratio, interest on deposits divided by total assets, liquid assets divided by total assets, tier 1 capital divided by total assets, C&I loans divided by total assets, loans secured by real estate divided by total assets, net income divided by total assets, unused commitments divided by total assets, letters of credit divided by total assets, and nonperforming loans divided by total loans. The executives characteristics are the number of years the CEO has been acting as CEO of the bank, CEO age, numbers of independent directors, numbers of directors, and a dummy equal to one for a female CEO. The sample runs annually from 1999 to 2019. See Appendix A for variable definitions. Standard errors are double clustered at the bank and tract levels and are reported in parentheses. ***, **, and * denote significance at the 1%, 5% and 10% levels, respectively

4.2 Banks' characteristics correlated with inequality aversion

We now address the potential concern that our results might be driven by banks' differential mortgage lending expertise or other bank characteristics correlated with stakeholders' inequality aversion. Table C.1 shows some examples of such correlations. In particular, more inequality-averse banks are larger, have less deposits, engage in more C&I lending, have more unused credit commitments, are more likely to have a female CEO, have more inequality-averse executives (as measured by their campaign contributions) compared with less inequality-averse banks.

While several economic channels might drive a potential omitted variable bias, the literature has discussed at least four mechanisms relevant for our analysis. First, Howell et al. (2024) shows that larger banks tend to use more automation in the application and approval process, potentially reducing taste-based discrimination. Second, Blanchard et al. (2008) finds that discrimination in small business loans only arises for banks that have lending not as their primary activity, thus unlikely to use formal underwriting models. Third, Di Giuli and Kotstovetsky (2014) shows that firms with Democratic-leaning executives have higher Corporate Social Responsibility (CSR) scores than firms with Republican-leaning executives. Fourth, more inequality-averse banks might operate in more competitive markets where reduced economic rents can result in less discrimination (Becker, 1957).

To test the importance of these channels, we augment our baseline specification (1) with a set of bank-level and county-level characteristics *interacted* with either the Non-White$_l$ dummy or the High-Minority Tract$_{ty}$ dummy. Driven by both theory and the differences in observables documented in Table C.1, these variables are Log(Assets)$_{by}$, Mortgage Loans/Assets$_{by}$, Deposits/Assets$_{by}$, a Female CEO$_{by}$ dummy, CEO Inequality Aversion$_{by}$, Independent Directors Inequality Aversion$_{by}$, and Competition$_{cy}$.[17] Table 8 and Table 9 show that the

[17] Competition$_{cy}$ is a proxy for the level of deposit and loan competition in county c in year y, calculated as the Herfindal-Hirschman index of deposits at the county-level. CEO Inequality Aversion$_{by}$ and Independent Directors Inequality Aversion$_{by}$ are defined as CEO's and independent directors' total campaign contribution to Democrats divided by total campaign contribution to Republicans between 1979 and 2018, respectively. If a CEO does not make any political contributions, the measure is set to 0.5. If a bank has more than one CEO, this variable is the average political orientation across the bank's CEOs.

	Approved$_l$						
Non-White$_l$ × Inequality Aversion$_{by}$	0.195***	0.262***	0.115**	0.173***	0.223***	0.153***	0.168***
	(0.044)	(0.036)	(0.046)	(0.042)	(0.050)	(0.041)	(0.042)
Non-White$_l$ × Log(Assets)$_{by-1}$	−0.002						
	(0.001)						
Non-White$_l$ × Mortgage Loans/Assets$_{by-1}$		0.079***					
		(0.029)					
Non-White$_l$ × Deposits/Assets$_{by-1}$			−0.060**				
			(0.030)				
Non-White$_l$ × Female CEO$_{by-1}$				0.004			
				(0.023)			
Non-White$_l$ × CEO Ineq Aversion$_{by-1}$					−0.020*		
					(0.012)		
Non-White$_l$ × IndepDir Ineq Aversion$_{by-1}$						0.030	
						(0.035)	
Non-White$_l$ × Competition$_{cy}$							−0.106***
							(0.011)
Observations	67,262,526	67,262,526	67,262,526	67,262,526	67,262,526	65,064,532	67,251,540
R-squared	0.148	0.148	0.148	0.148	0.148	0.151	0.148
Fixed Effects							
Tract-Year (ν_{ty})	✓	✓	✓	✓	✓	✓	✓
Bank (η_b)	✓	✓	✓	✓	✓	✓	✓
Control Variables							
Loan Characteristics ($\mathbf{Z}_l$)	✓	✓	✓	✓	✓	✓	✓
Bank Characteristics ($\mathbf{X}_{by-1}$)	✓	✓	✓	✓	✓	✓	✓
CEO Characteristics ($\mathbf{X}_{by-1}$)	✓	✓	✓	✓	✓	✓	✓

Table 8: Bank stakeholders' inequality aversion and lending to non-white applicants, robustness with respect to bank characteristics. This table shows estimation results from specification (1). The dependent variable is Approved$_l$, a dummy equal to one if loan l is originated (or if the application is approved but not accepted) and equal to zero if the application is denied. Non-White$_l$ is a dummy variable equal to one if applicant l is non-white according to HMDA classification. The uninteracted terms are estimated but not shown in this table for brevity. The loan and borrower characteristics are a dummy equal to one for a non-white applicant, a dummy equal to one for a female applicant, a dummy equal to one for the presence of a co-applicant, applicant income expressed in thousands of 2012 dollars, debt-to-income ratio (loan amount divided by borrower income), a dummy equal to one for a jumbo loan, a dummy equal to one for refinancing loans, and a dummy equal to one for loans taken for home improvements. The (lagged) bank characteristics are the natural log of banks' total assets (in million dollars as of 2012), deposits-to-assets ratio, interest on deposits divided by total assets, liquid assets divided by total assets, tier 1 capital divided by total assets, C&I loans divided by total assets, loans secured by real estate divided by total assets, net income divided by total assets, unused commitments divided by total assets, letters of credit divided by total assets, and nonperforming loans divided by total loans. The executives characteristics are the number of years the CEO has been acting as CEO of the bank, CEO age, numbers of independent directors, numbers of directors, and a dummy equal to one for a female CEO. The county characteristic Competition$_{cy}$ is the deposit HHI of that county. The sample runs annually from 1999 to 2019. See Appendix A for variable definitions. Standard errors are double clustered at the bank and tract levels and are reported in parentheses. ***, **, and * denote significance at the 1%, 5% and 10% levels, respectively.

	Approved$_l$						
High-Minority Tract$_{ty}$ × Inequality Aversion$_{by}$	0.263***	0.271***	0.090*	0.190***	0.184***	0.166***	0.227***
	(0.027)	(0.028)	(0.049)	(0.031)	(0.047)	(0.035)	0.058
High-Minority Tract$_{ty}$ × Log(Assets)$_{by-1}$	−0.008***						
	(0.002)						
High-Minority Tract$_{ty}$ × Mortgage Loans/Assets$_{by-1}$		0.062**					
		(0.032)					
High-Minority Tract$_{ty}$ × Deposits/Assets$_{by-1}$			−0.098**				
			(0.043)				
High-Minority Tract$_{ty}$ × Female CEO$_{by-1}$				0.030			
				(0.022)			
High-Minority Tract$_{ty}$ × CEO Ineq Aversion$_{by-1}$					0.007		
					(0.012)		
High-Minority Tract$_{ty}$ × IndepDir Ineq Aversion$_{by-1}$						0.047	
						(0.049)	
High-Minority Tract$_{ty}$ × Competition$_{cy}$							−0.059
							(0.03)
Observations	67,162,492	67,162,492	67,162,492	67,162,492	67,162,266	64,971,713	67,171,329
R-squared	0.148	0.148	0.148	0.148	0.148	0.151	0.106
Fixed Effects							
Tract-Year (ν_{ty})	✓	✓	✓	✓	✓	✓	✓
Bank (η_b)	✓	✓	✓	✓	✓	✓	✓
Control Variables							
Loan Characteristics ($\mathbf{Z}_l$)	✓	✓	✓	✓	✓	✓	✓
Bank Characteristics ($\mathbf{X}_{by-1}$)	✓	✓	✓	✓	✓	✓	✓
Executives Characteristics ($\mathbf{X}_{by-1}$)	✓	✓	✓	✓	✓	✓	✓

Table 9: Bank stakeholders' inequality aversion and lending to applicants in high-minority tracts, robustness with respect to bank characteristics. This table shows estimation results from specification (1). The dependent variable is Approved$_l$, a dummy equal to one if loan l is originated (or if the application is approved but not accepted) and equal to zero if the application is denied. High-Minority Tract$_{ty}$ is a dummy variable equal to one if applicant l is based in a census tract where 75% or more of the population is minority, according to Census Bureau's classification. The loan and borrower characteristics are a dummy equal to one for a non-white applicant, a dummy equal to one for a female applicant, a dummy equal to one for the presence of a co-applicant, applicant income expressed in thousands of 2012 dollars, debt-to-income ratio (loan amount divided by borrower income), a dummy equal to one for a jumbo loan, a dummy equal to one for refinancing loans, and a dummy equal to one for loans taken for home improvements. The (lagged) bank characteristics are the natural log of banks' total assets (in million dollars as of 2012), deposits-to-assets ratio, interest on deposits divided by total assets, liquid assets divided by total assets, tier 1 capital divided by total assets, C&I loans divided by total assets, loans secured by real estate divided by total assets, net income divided by total assets, unused commitments divided by total assets, letters of credit divided by total assets, and nonperforming loans divided by total loans. The executives characteristics are the number of years the CEO has been acting as CEO of the bank, CEO age, numbers of independent directors, numbers of directors, and a dummy equal to one for a female CEO. The county characteristic Competition$_{cy}$ is the deposit HHI of that county. The sample runs annually from 1999 to 2019. See Appendix A for variable definitions. Standard errors are double clustered at the bank and tract levels and are reported in parentheses. ***, **, and * denote significance at the 1%, 5% and 10% levels, respectively.

correlation between bank stakeholders' inequality aversion and bank propensity to lend to non-white borrowers and borrowers in high-minority tracts, respectively, is robust to the inclusion of—and therefore does not seem to be driven by—this set of bank-level and county-level characteristics.

4.3 Changes in borrower base

We now show that our results are not driven by changes in the borrower base that might simultaneously affect banks' inequality aversion and their propensity to lend to minorities. Suppose, for example, a bank opens several new branches in Democratic-leaning states. This geographical expansion would mechanically increase the bank inequality aversion and might even increase its pool of high credit quality minority borrowers. This change in the borrower base might drive the correlation between bank inequality aversion and bank propensity to lend to minorities for reasons other than bank inequality aversion as, for example, the bank might develop more expertise in serving a minority clientele.

To test whether our results are robust to this alternative explanation, we analyze the effects of changes in bank stakeholders' inequality aversion that are independent of changes in the bank's borrower pool. To this end, we examine how the approval gaps between minority and non-minority applicants are affected by changes in the political leaning of banks' *existing* stakeholders around presidential elections. We measure a bank's existing stakeholder base using banks' deposit footprint three years before an election. Specifically, we run the following two specifications:

$$\Delta\text{Approval Gap}_{bte}^{\text{NonWhite-White}} = \alpha + \beta_1 \Delta\text{Inequality Aversion}_{be} + \gamma \mathbf{X}_{be} + \nu_{te} + \epsilon_{bte} \tag{2.1}$$

$$\begin{aligned} \Delta\text{Approval Ratio}_{bte} = {} & \alpha + \beta_1 \Delta\text{Inequality Aversion}_{be} \times \text{High-Minority Tract}_{te} \\ & + \gamma_1 \Delta\text{Inequality Aversion}_{be} + \gamma_2 \text{High-Minority Tract}_{te} \\ & + \gamma_3 \mathbf{X}_{be} + \nu_{te} + \epsilon_{bte} \end{aligned} \tag{2.2}$$

where b is a bank, t is a census tract, and e is an election. The first specification analyzes approval gaps between non-white and white applicants. The second specification analyzes approval gaps between applicants in high-minority and low-minority tracts. The first depen-

dent variable, ΔApproval $\text{Gap}_{bte}^{\text{NonWhite-White}}$, is the post-election vs. pre-election change in the unexplained approval gap between non-white and white applicants for bank b in census tract t around election e, where the unexplained approval gap is the unexplained approval ratio for non-white minus the same ratio for white applicants. The second dependent variable, $\Delta\text{Approval Ratio}_{bte}$, is the post-election vs. pre-election change in the *unexplained* approval ratio for bank b in census tract t around election e.

Unexplained approval ratios are the ratios that are not explained by observable characteristics except from inequality aversion. Specifically, the unexplained probability of loan approval for any application l is the residual of following regression, run separately for non-white and white applicants, and for applicants from high-minority and low-minority census tracts:

$$\text{Approved}_l = \alpha + \delta \mathbf{X}_{by-1} + \gamma \mathbf{Z}_l + \nu_{ty} + \eta_b + \epsilon_l,$$

where $\mathbf{Z}_l$ is a vector of borrower and loan characteristics, excluding the Non-White_l dummy for regressions focusing on non-white and white applicants, respectively. The unexplained approval probability for a particular type of applicants (e.g., non-white, white, high-minority tract, low-minority tract) for a bank over a period of time is simply the average residual for that bank for that type of applicants during that time period.

The variable $\text{Inequality Aversion}_{be}$ is defined as follows. The election year is set as year 0. The pre-election years are years -2 and -1 and the post-election years are years 0 and $+1$.[18] For each election and each county where a bank has deposits in year -3, we compute the change in the fraction of votes cast for the Democratic presidential candidate from election $e-1$ to election e. We then use deposit information at the bank-county level in year -3 to compute the independent variable $\Delta\text{Inequality Aversion}_{be}$, which is the deposit-weighted measure of these changes. In sum, this variable measures changes in *existing* stakeholders' political orientation, rather than changes in bank's geographical footprint. The coefficient β_1 captures how these changes affect the approval gaps.

[18] We keep bank-tract-election observations where the average yearly number of applications is at least 10.

	ΔApproval Gap$_{bte}^{NonWhite\text{-}White}$	ΔApproval Ratio$_{bte}$
ΔInequality Aversion$_{be}$	0.242**	−0.587***
	(0.104)	(0.154)
ΔInequality Aversion$_{be}$ × High-Minority Tract$_{ty}$		0.726**
		(0.317)
High-Minority Tract$_{ty}$		−0.191***
		(0.0605)
Bank Controls ($\mathbf{X}_{be}$)	✓	✓
Tract-Election FEs (ν_{te})	✓	✓
Specification	(2.1)	(2.2)
Observations	302,016	615,793
R-squared	0.193	0.174

Table 10: Bank stakeholders' inequality aversion and lending, holding borrower constant. This table shows estimation results from specification (2.1) and (2.2) in the first and second column, respectively. The first dependent variable is the post-election vs. pre-election change in the *unexplained* non-white vs.white approval gap for bank b in census tract t around election e. The second dependent variable is the post-election vs. pre-election change in the *unexplained* approval ratio for bank b in census tract t around election e. The variable ΔInequality Aversion$_{be}$ is the deposit-weighted change from pre-election years to post-election years in the fraction of votes cast for the Democractic presidential candidate from election $e-1$ to election e, where (i) pre-election years are years -2 and -1 and post-election years are years 0 and $+1$ and (ii) the the weights are bank's deposits in these counties in year -3. We exclude bank-tract-elections where the average number of applications per year is fewer than 10, and winsorize the dependent variables at the 2^{nd} and 98^{th} percentiles. Bank control variables are defined in Appendix A. Standard errors are clustered at the bank and tract level and are reported in parentheses. ***, **, and * denote statistical significance at the 1%, 5% and 10% levels, respectively.

Finally, $\mathbf{X}_{be}$ are bank b's characteristics measured one year before an election e. As in previous analyses, tract-election year fixed effects allow us to compare changes in approval gaps for borrowers within the same census tract between banks whose existing stakeholders lean more Democratic and banks whose existing stakeholders lean more Republican. We double cluster standard errors at the bank and tract level.

Table 10 shows the estimation results. The first column refers to specification (2.1). The second column refers to specification (2.2). The table shows that the estimated coefficient of interest, β_1, is positive and statistically significant, confirming our main results that banks whose stakeholders lean more Democratic increase their approval rate for non-white relative to white borrowers, and for borrowers from high-minority tracts relative to borrowers in low-minority tracts, in a setting where changes in stakeholder political orientation is independent of changes in a bank's borrower base. In terms of economic magnitude, banks with a one standard deviation higher value of ΔInequality Aversion$_{by}$ are associated with (i) a 0.75 percentage point higher change in the non-white vs. white approval gap, compared

to a mean change in the non-white vs. white approval gap of -0.078%, and (ii) a 2.39 percentage point higher high-minority vs. low-minority approval gap, compared to a mean gap of -0.25%.

5 Mechanism

We have documented that banks with smaller approval gaps tend to have more inequality-averse stakeholders and that this correlation is not driven by selection of applicants. We have also ruled out a set of potential explanation for this correlation.

In this section, we show evidence in support of a "stakeholders' discipline" channel that explains this correlation. According to this channel, banks take into account stakeholders' inequality aversion in their overall decision-making, including their lending decisions. Hence, banks with more inequality-averse stakeholders have, at the margin, a higher propensity to lend to minorities compared with banks with less inequality-averse stakeholders. This way, inequality-averse banks attract and retain stakeholders such as depositors, borrowers, employees, and executives. Given that a sizable share of stakeholders are local (e.g., depositors and borrowers), the strength of stakeholders' discipline is largely driven by banks' geographical footprint. Banks located in inequality-averse areas of the country are mechanically exposed to stakeholders that share similar values.

We now provide evidence in support of the "stakeholders' discipline" channel. Section 5.1 shows that inequality-averse stakeholders respond to perceived deterioration of banks' propensity to lend to minority borrowers. Section 5.2 shows that a higher propensity to lend to minority borrowers leads, if anything, to a slightly better ex-post performance and discusses how the stakeholders' discipline channel might alleviate lending discrimination.

5.1 Deposit flows

We now show that depositors react to events signaling the deterioration of banks' propensity to lend to minorities. Specifically, we hand collect cases filed against banks by the DOJ for potential breaches of the Equal Credit Opportunity Act, which include discriminatory

	ΔDeposit$_{bcy,y+1}$			
DOJ Case$_{by}$	−0.026***	0.007	−0.031***	0.008
	(0.008)	(0.016)	(0.007)	(0.015)
DOJ Case$_{by}$ × High Inequality Aversion$_{cy}$				−0.039**
				(0.015)
Sample counties	Full sample	Low Inequality Aversion	High Inequality Aversion	Full sample
Fixed Effects				
County-Year (ν_{cy})	✓	✓	✓	✓
Bank (η_b)	✓	✓	✓	✓
Observations	7,408	2,021	5,357	7,380
R-squared	0.427	0.438	0.424	0.425

Table 11: Bank deposit flows and DOJ Housing and Civil Enforcements. This table shows estimation results from specification (3). The dependent variable is the percentage change in deposits from year y to year $y+1$, winsorized at 99 percent level. DOJ Case$_{by}$ is a dummy equal to one in the year of the DOJ case and in the following year and equal to zero in the two years before the DOJ case. The one exception is the case (closed on December 28, 2011) United States v. Countrywide Financial Corporation (C.D. Cal.). For this case, we set the variable DOJ Case$_{by}$ to be equal to one in 2012 and 2013 and equal to zero in 2010 and 2011. In the first column, the specification is estimated in the full sample of counties. In the second and third columns, the specification is estimated in the subsample of counties with low inequality aversion and high inequality aversion, respectively. A county has high (low) inequality aversion based on whether it has above (below) percent of votes to the Democratic candidate in the most recent presidential election. In the fourth column, the specification is estimated in the full sample of counties, with the addition of the interaction variable formed between DOJ Case$_{by}$ and an indicator variable High Inequality Aversion$_{cy}$. High Inequality Aversion$_{cy}$ is equal to one if county c has above median percent of votes to the Democratic candidate in the most recent presidential election by year y, and 0 otherwise. See Appendix A for variable definitions. See Table D.1 for a list of DOJ cases. Standard errors are clustered at the bank-level and are reported in parentheses. ***, **, and * denote significance at the 1%, 5% and 10% levels, respectively.

pricing, redlining, and discrimination in the loan approval process.[19] Table D.1 shows the details about the 17 cases filed against our sample banks from October 1995 (first case in our sample period) to September 2020 (most recent case).

We estimate the following specification:

$$\Delta\text{Deposit}_{bcy,y+1} = \alpha + \beta\text{DOJ Case}_{by} + \nu_{cy} + \eta_b + \epsilon_{bcy} \tag{3}$$

[19]The Equal Credit Opportunity Act *"prohibits creditors from discriminating against credit applicants on the basis of race, color, religion, national origin, sex, marital status, age, because an applicant receives income from a public assistance program, or because an applicant has in good faith exercised any right under the Consumer Credit Protection Act."* These cases are publicly available at `www.justice.gov`.

where the unit of observation is bank b, county c, and year y. The dependent variable is the percentage change in deposits from year y to year $y+1$. The main independent variable DOJ Case_{by} is a dummy equal to one in the year of the DOJ case and in the following year and equal to zero in the two years before the DOJ case.[20] The specification also includes bank fixed effects and county-year fixed effects to compare deposit flows in the same county and in the same year for banks affected and banks not affected by a DOJ case.

Table 11 shows the estimation results. The first column documents that, following a DOJ case, banks tend to lose deposits. Specifically, banks' deposit growth drops by about 2.6 percentage points following a DOJ case, compared to a median growth of 3.8 percent. The second and third columns are run in subsamples of counties with a low (below median) and high (above median) inequality aversion, respectively. We find that the reduction in deposits is driven by counties with high inequality aversion. The fourth column, run in the full sample, confirms this interpretation using an interaction specification, where the High Inequality Aversion_{cy} dummy is equal to one for counties with above median inequality aversion (the uninteracted term High Inequality Aversion_{cy} is absorbed by the county-year fixed effects).

5.2 No negative effect on bank performance

Having shown that stakeholders' inequality aversion shapes banks' approval gaps, we next explore how these gaps relate to bank performance. Results so far suggest (i) that these gaps do not seem to be driven by observable differences in borrower characteristics or in borrower bases across banks and (ii) that these gaps might capture the possibility of banks treating applicants differently based on their minority status. Nonetheless, *unobservable* differences in credit quality might drive these gaps. On the one hand, smaller gaps might reflect a higher propensity to lend to riskier minorities, suggesting that the desire for equality could lead

[20] One case was closed on December 28, 2011 (United States v. Countrywide Financial Corporation (C.D. Cal.)). For this case, we set the variable DOJ Case_{by} to be equal to one in 2012 and 2013 and equal to zero in 2010 and 2011.

worse bank performance consistent with existing evidence of "goodness being costly" (Hong et al., 2012; Di Giuli and Kotstovetsky, 2014). On the other hand, smaller gaps might reflect inequality-averse banks specializing in lending to minorities potentially alleviating existing discrimination.

We run an empirical test based on the following specification:

$$\begin{aligned}\text{Loan Performance}_{by} = \alpha &+ \sum_{\tau}^{3} \beta_{1\tau} \text{Approval Gap}_{by-\tau}^{\text{NonWhite}} \\ &+ \sum_{\tau}^{3} \beta_{2\tau} \text{Approval Gap}_{by-\tau}^{\text{HighMinTract}} + \gamma \mathbf{X}_{by-1} + \nu_y + \eta_b + \epsilon_{by}\end{aligned} \tag{4}$$

where the dependent variable is bank b's performance in year y. We use two measures of performance directly related to real estate loans, namely Real Estate Nonperforming Loan Ratio_{by} (nonperforming real estate loans divided by lagged real estate loans) and Real Estate Charge-Offs Ratio_{by} (charge-offs minus recoveries on real estate loans divided by lagged real estate loans). We also use a more general bank performance measure, only partially influenced by real estate loan performance, namely Net $\text{Income/Assets}_{by}$ (net income to lagged assets ratio). Finally, the specification also includes year and bank fixed effects. We cluster standard errors at the bank-level.

The main explanatory variables are (i) three lags of the variables Approval $\text{Gap}_{by}^{NonWhite}$, which measures the *unexplained* white vs. non-white approval gap and (ii) three lags of the variable Approval $\text{Gap}_{by}^{HighMinTract}$, which measures the *unexplained* approval gap between applicants in low- vs. high-minority tracts. $\mathbf{X}_{by-1}$ is a vector of control variables for bank b measured in year $y-1$. The *unexplained* white vs. non-white approval gap, measured at the bank-year level, is the average probability of approving an application from white applicants controlling for observable characteristics minus the corresponding average for non-white applicants. Similarly, the *unexplained* low-minority vs. high-minority approval gap calculated for each bank b in year t is the average unexplained probability of approving applications from low-minority tracts minus the corresponding average for applications from high-minority tracts. The *unexplained* probability of approval for any application from a particular type of borrowers (i.e. non-white, white, high minority tract, low minority tract)

	Real Estate NPL_{by}	Real Estate Charge-Off_{by}	Net Income/$Assets_{by}$
$ApprGap^{NonWhite}_{y-1}$	0.558**	0.249***	−0.219**
	(0.259)	(0.082)	(0.094)
$ApprGap^{NonWhite}_{y-2}$	0.150	0.096	−0.08
	(0.247)	(0.079)	(0.1)
$ApprGap^{NonWhite}_{y-3}$	0.159	0.093	−0.065
	(0.207)	(0.088)	(0.078)
$ApprGap^{HighMinTract}_{y-1}$	0.028	−0.016	0.053
	(0.136)	(0.045)	(0.041)
$ApprGap^{HighMinTract}_{y-2}$	−0.185	−0.048	−0.064
	(0.130)	(0.049)	(0.049)
$ApprGap^{HighMinTract}_{y-3}$	−0.109	−0.054	−0.001
	(0.134)	(0.043)	(0.036)
Bank Controls ($\mathbf{X}_{by-1}$)	✓	✓	✓
Fixed Effects			
Year (ν_y)	✓	✓	✓
Bank (η_b)	✓	✓	✓
Observations	2,573	2,573	2,573
R-squared	0.815	0.796	0.739

Table 12: Bank unexplained approval gaps and loan performance. This table shows estimation results from specification (4). The dependent variables are measured in year y. The dependent variable in the first column is nonperforming real estate loans divided by lagged real estate loans. The dependent variable in the second column is charge-offs minus recoveries on real estate loans divided by lag real estate loans. The dependent variable in the third column is the net income to asset ratio. We multiply all dependent variables by 100 for readability. The independent variables include three lags of the bank's *unexplained* approval gaps between non-white and white borrowers and between borrowers in high-minority and low-minority census tracts. The (lagged) bank characteristics are the natural log of banks' total assets (in million dollars as of 2012), deposits-to-assets ratio, interest on deposits divided by total assets, liquid assets divided by total assets, tier 1 capital divided by total assets, C&I loans divided by total assets, loans secured by real estate divided by total assets, net income divided by total assets, unused commitments divided by total assets, letters of credit divided by total assets, and nonperforming loans divided by total loans. The sample runs annually from 2002 to 2019 (to accommodate the three lags of approval gaps as independent variables). See Appendix A for variable definitions. All dependent variables are winsorized at the 5^{th} and 95^{th} percentiles, to limit effects of outliers in performance especially during the Global Financial Crisis. Standard errors are clustered at the bank-level and are reported in parentheses. ***, **, and * denote significance at the 1%, 5% and 10% levels, respectively.

is described in Section 4.3.

Table 12 shows the estimation results. Overall, we find no evidence consistent with a weaker real estate loan performance or overall bank performance for banks with higher unexplained approval gaps, indicating that smaller gaps do not proxy for higher propensity to lend to non-deserving minority borrowers. If anything, banks with larger unexplained approval gaps between white and non-white applicants have slightly worse performance: they exhibit higher nonperforming real estate ratios and real estate charge-off ratios, and have

lower net income to assets ratio. These effects are small in magnitude. A one standard deviation increase in the first lag of the white vs. non-white unexplained approval gap is associated with (i) a 0.047% increase in the real estate nonperforming loans ratio, compared to a mean ratio of 1.9%; (ii) a 0.021% increase in the real estate charge-off ratio, compared to a mean real estate charge-off ratio of 0.39%; and (iii) a 0.02% decrease in net income to assets ratio, compared to a mean net income to assets ratio of 0.77%.

In sum, our results suggest that the inequality aversion of bank stakeholders might help alleviate lending discrimination based on race and neighborhood characteristics, without negatively impacting bank performance. In other words, according to this explanation, some minority applicants are granted a mortgage because inequality-averse stakeholders induce the bank to lend to them. While being positive NPV, these mortgages are not made by banks with less inequality-averse stakeholders. This result is, in a way, related to the literature on bank specialization as banks specialize in different segments of the mortgage market, with more inequality-averse banks specializing in lending to minority borrowers compared with banks with less inequality-averse stakeholders.

6 Conclusion

Our analysis documents a large and persistent cross-sectional variation in banks' propensity to lend to minorities. Banks' approval gaps, defined as the difference in approval ratios between mortgage applications from minorities and non-minorities, vary substantially across banks, even within the same geographical areas. We show that banks with more inequality-averse stakeholders have smaller approval gaps compared to banks with less inequality-averse stakeholders. This correlation is not explained by applicants' selection but is instead consistent with a "stakeholders' discipline" channel. According to this channel, banks take into account stakeholders' inequality aversion in their lending decisions. This way, these banks attract and retain their stakeholders, such as depositors, borrowers, and employees. Finally, we show that a higher propensity to lend to minorities does not lead to worse ex-post performance, suggesting that the stakeholders' discipline channel might drive banks' specialization and/or alleviate lending discrimination.

Our paper opens up several avenues for future research. Our measure of inequality aversion is based on the inequality aversion of local stakeholders. But stakeholders include borrowers, lenders, executives, employees, among others. Understanding which of these stakeholders is more important in disciplining the banks, and through which channels, is an important question for future research. Similarly, one implication of our analysis is that credit access for minorities might differ across geographical areas based on which banks are serving specific areas. Again, understanding this mechanism and its equilibrium effects is another interesting avenue for future research.

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Appendix

This appendix is structured as follows. Appendix A presents the variable definitions. Appendix B presents additional figures. Appendix C presents additional tables. Appendix D presents a list of cases by the DOJ against our sample banks.

A Variable definition

This section presents the definitions of the main variables used in our empirical analysis. As per the subscripts, l is a loan application, b is a bank, t is a census tract, and y is a year.

Variables proxying for minority applicants' characteristics

- **Non-White**$_l$. This variable is a dummy variable equal to one if the borrower's race code is 1 (American Indian or Alaska Native), 2 (Asian), 3 (Black or African American), or 4 (Native Hawaiian or other Pacific Islander) according to HMDA classification; and 0 if the borrower's race code is 5 (White).

- **High-Minority Tract**$_{ty}$. This variable is a dummy variable equal to one if the borrower comes from a census tract where 75% or more of the population is minority, according Census Bureau's classification. The minority population is defined as (i) total Hispanic population and (ii) non-Hispanic population minus non-Hispanic white alone population. Data variables used to categorize census tracts as high minority or CRA are from the Census Bureau.

- **CRA Tract**$_{ty}$. This variable is a dummy variable equal to one if the tract's median family income is <80% of the Metropolitan Statistical Area/Metropolitan Division (MD)'s median family income.

- **Hispanic**$_l$. This variable is a dummy variable equal to one if the borrower's ethnicity code is 1 (Hispanic or Latino) in 2017 and every year before 2017 and if the borrower's ethnicity code is either 1 (Hispanic or Latino), 11 (Mexican), 12 (Puerto Rican), 13 (Cuban), 14 (Other Hispanic or Latino) from 2018 onward.

Inequality aversion variables

- **Inequality Aversion**$_{by}$. Calculated at the bank-year level, this variable is the weighted average percentage of votes cast for the Democratic candidate in the most recent

presidential election in counties where a bank has deposits. The weights are fractions of deposits the bank has in those counties.

- **Racial Inequality Aversion**$_{by}$. This variable is constructed using a GSS survey question that asks whether *"we're spending too much money, too little money, or about the right amount of money on assistance to Black individuals."* Survey respondents can choose one of these three options, which are coded with the numbers 1, 2, and 3, respectively. We observe each response and the "region" of the survey respondent, where the U.S. is partitioned in eight regions ((i) New England, (ii) Rhode Island Middle Atlantic, (iii) Pennsylvania East North Central, (iv) Michigan, Ohio West North Central, (v) Kansas South Atlantic, (vi) Mississippi West South Central Louisiana, (vii) Texas Mountain, and (viii) New Mexico Pacific). We then calculate, for each bank, the weighted average of these responses, using the fraction of deposits the bank has in each region as weights. Our dummy then takes a value of one if the bank GSS response is below the median, where the median is calculated each year in the cross-section of banks.

Loan and borrower characteristics

- **Female**$_{l}$. This variable is a dummy variable equal to one if the borrower is female, and 0 otherwise.

- **Co-Applicant**$_{l}$. This variable is a dummy variable equal to one if there is a co-applicant for the loan, and 0 otherwise.

- **Debt to Income Ratio**$_{l}$. This variable is the loan amount divided by applicant income.

- **Log of Applicant Income**$_{l}$. This variable is the natural log of applicant income. Applicant income is expressed as 2012 thousand dollars.

- **Jumbo**$_{l}$. This variable is a dummy variable equal to one if the loan amount exceeds the conforming loan limits. We use the Federal Housing Finance Agency (FHFA)'s conforming loan limits for one-unit properties. Prior to 2019, we apply nation-wide loan limits which were $187,450 in 1990 and increasing to $417,500 in 2006–08. This algorithm follows Bayer et al. (2018).

- **Refinancing**$_{l}$. This variable is a dummy variable equal to one if the loan is a refinancing.

- **Home Improvement**$_{l}$. This variable is a dummy variable equal to one if the loan is for loan improvement purposes.

Bank Characteristics

- **Log Assets**$_{by}$: Natural log of bank's total assets. Bank assets are in millions of 2012 dollars.

- **Deposits/Assets**$_{by}$. Total deposits divided by total assets.

- **Cost of Deposits**$_{by}$. Interest on deposits divided by total deposits.

- **Liquid Assets/Assets**$_{by}$. Liquid assets divided by total assets. Liquid Assets is the sum of cash, Federal Funds sold and securities excluding MBS/ABS securities.

- **Tier 1 Capital/Assets**$_{by}$. Bank's tier 1 capital divided by total assets.

- **C&I Loans/Assets**$_{by}$. Bank's total consumer and industrial (C&I) loans, divided by total assets.

- **Mortgage Loans/Assets**$_{by}$. Bank's total loans secured by real estate divided by total assets.

- **Net Income/Assets**$_{by}$. Bank's net income divided by total assets.

- **Unused Commitments/Assets**$_{by}$. Total unused commitments divided by total assets.

- **Letters of Credit/Assets**$_{by}$. Letters of credit divided by total assets, computed from CALL reports. Letters of credit is the sum of financial standby letters of credit and foreign office guarantees, performance standby letters of credit, and commercial and similar letters of credit.

- **Nonperforming Loans/Loans**$_{by}$. Total loans and lease financing receivables that are past due 90 days or more and still accruing, plus total loans and lease financing that are nonaccrual, divided by total loans.

Bank executives' characteristics

- **CEO Experience**$_{by}$. This variable is the number of years the CEO has been acting as CEO of the bank. If there are more than one CEO, this is the average across the CEOs.

- **CEO Age**$_{by}$. This variable is the age of the CEO. If there are more than one CEO, this is the average across the CEOs.

- **Number of Independent Directors**$_{by}$. This variable is the number of independent directors on the board.

- **Number of Directors**$_{by}$. This variable is the number of directors on the board.

- **Female CEO**$_{by}$. This variable is a dummy variable equal to one if the bank's CEO is female, 0 otherwise. If there are more than 1 CEO, it is equal to one if at least one CEO is female.

- **CEO Contribution**$_{by}$. This variable is the political orientation of the bank CEO for a particular bank-year. It is calculated as the CEO's total campaign contributions to Democrats, divided by her total campaign contributions to Republicans between 1979 and 2018. If a CEO does not make any political contributions, the measure is set to 0.5. If a bank has more than one CEO, this variable is the average political orientation across the bank's CEOs. If no contribution is found, the measure is set to 0.5. If there are multiple executives for a particular title, we take the average measure across these executives.

- **Independent Director Contribution**$_{by}$**.** This variable is the average political orientation of the bank independent directors for a particular bank-year. Political orientation for each independent director is measured in the same way as the one used for the CEO.

B Additional Figures

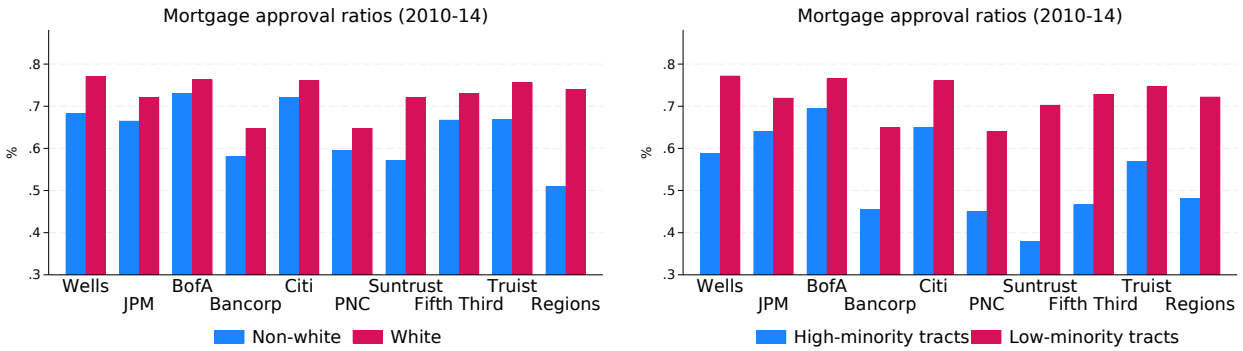


Figure B.1: Approval ratios across top-10 banks, 2010–14. This figure shows mortgage approval rates for the top-10 banks by number of applications received in the period from 2010–14. Banks are ranked on the x-axis based on the number of applications received. The blue bars indicate approval rates for non-white applicants (left panel) and applicants in high-minority tracts (right panel). The red bars indicate approval rates for white applicants (left panel) and applicants in low-minority tracts (right panel).

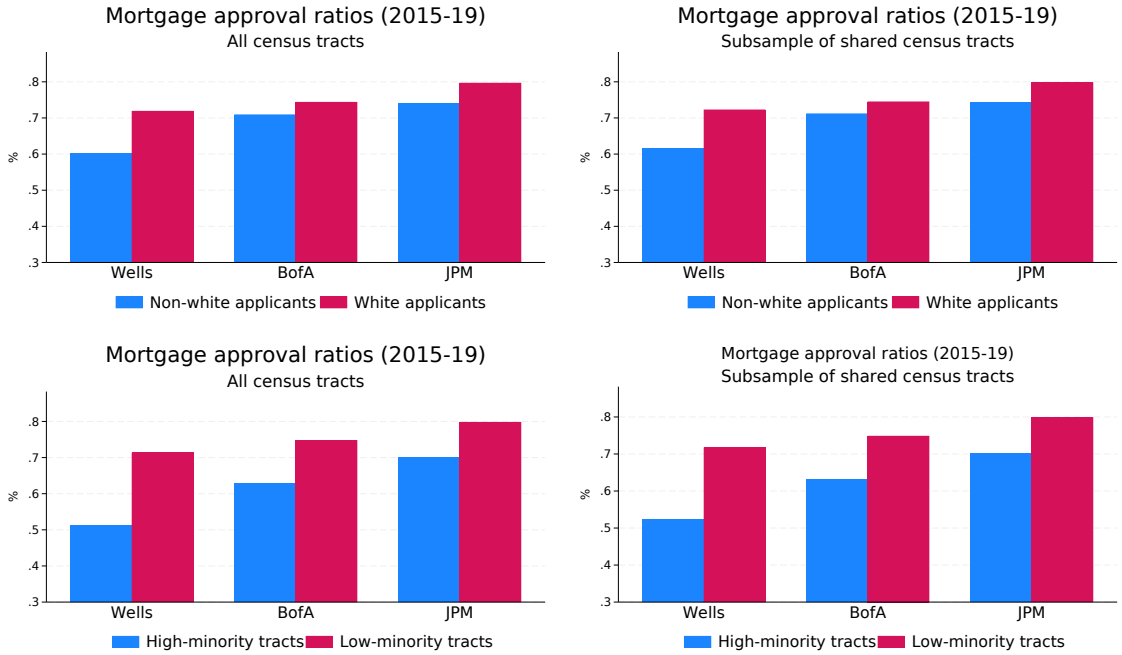


Figure B.2: Approval ratios across top-3 banks, 2015–19, shared census tracts. This figure shows mortgage approval ratios for the top-3 banks by number of applications received in the period from 2015 to 2019. The top figures show approval ratios for non-white (blue bars) vs. white applicants (red bars). The bottom figures show approval ratios for applicants in high-minority tracts (blue bars) vs. applicants in low-minority tracts (red bars). The left figures show approval ratios in the full sample of census tracts. The right figures show approval ratios in the subsample of census tracts with at least one application per bank every year in 2015–19. Banks are ranked on the x-axis based on the number of applications received.



Figure B.3: Approval gaps and income gaps. This figure shows the correlation between the mortgage approval gaps and income gaps (defined as the difference in mean income between non-minority and minority borrowers in 2012 dollars) for all banks that receive mortgage application in at least 500 or more census tracts during the entire sample period (143 unique banks). Given that there are no census tracts in which all 143 of these banks received an application, we narrow the criterion of shared census tracts to those in which 70% (or 100) of the 143 banks receive an application from. The top figures show the correlation between the income gap and the approval ratio gap for non-white vs. white applicants. The bottom figures show the correlation between the income gap and the approval gap for applicants in high-minority vs. low-minority tracts. The left figures show the correlation in the full sample of census tracts. The right figures show the correlation in the sub-sample of census tracts in which at least 70% of the 143 banks received an application between 1995 to 2019. The figure covers 822 shared tracts in the analysis of non-white vs. white applicants and 898 shared tracts in the analysis of high-minority vs. low-minority tracts.

C Additional Tables

	Less inequality-averse banks	More inequality-averse banks	Mean test
Panel A. Application-level variables			
Non-White	0.11	0.18	***
Hispanic	0.04	0.11	***
High-Minority Tracts	0.04	0.08	***
CRA Tract	0.13	0.16	***
Approved	0.81	0.73	***
Co-Applicant	0.74	0.69	***
Applicant Income	99.70	112.27	***
DTI Ratio	1.64	2.01	***
Jumbo	0.04	0.07	***
Refinancing	0.47	0.59	***
Home Improvement	0.18	0.13	***
Panel B. Bank-year level variables			
Inequality Aversion	0.40	0.57	***
Racial Inequality Aversion	1.93	1.89	**
CEO Experience	6.28	5.80	
CEO Age	56.74	57.45	
Number of Independent Directors	7.28	7.28	
Number of Directors	10.89	10.91	
Female CEO	0.02	0.05	***
Assets	2,742	22,669.0	***
Log Assets	6.73	7.25	***
Deposits/Assets	0.81	0.78	***
Cost of Deposits	0.02	0.02	
Liquid Assets/Assets	0.24	0.24	
Tier 1 Capital/Assets	0.09	0.10	
C&I loans/Assets	0.10	0.11	**
Mortgage Loans/Assets	0.52	0.51	
Net Income/Assets	0.01	0.01	
Unused Commitments/Assets	0.15	0.19	*
Letters of Credit/Assets	0.01	0.01	***
Nonperforming Loans/Loans	0.01	0.01	
CEO Inequality Aversion	0.33	0.43	***
Independent Directors Inequality Aversion	0.43	0.49	***

Table C.1: Summary statistics, by more inequality-averse and less inequality-averse banks. This table shows sample means for the subsample of more inequality-averse and less inequality-averse banks, defined based on whether they have an above (below) median Inequality Aversion$_{by}$, where medians are calculated each year in the cross-section of banks. Panel A shows summary statistics for our application-level variables. Panel B shows summary statistics for our bank-year level variables. Co-Applicant$_l$ is an indicator variable equal to one if there is a co-applicant, Applicant Income$_l$ is expressed in 2012 dollars, DTI Ratio$_l$ is the loan amount divided by borrower income, Jumbo$_l$ is an indicator equal to one if the loan amount exceeds the limit set by the Federal Housing Finance Agency, Refinancing$_l$ is an indicator equal to one if the loan purpose is refinancing, Home Improvement$_l$ is an indicator equal to one if the loan is for home improvement purposes, and CEO Experience$_l$ is the number of years the CEO serves as CEO of the bank. Variable definitions are available in Appendix A.

	Approved$_l$			
Inequality Aversion$_{by}$ × Non-White$_l$	0.172***	0.166***	0.147***	0.150***
	(0.049)	(0.055)	(0.039)	(0.041)
Inequality Aversion$_{by}$	−0.744***	−0.609***	−0.303***	−0.183**
	(0.219)	(0.136)	(0.082)	(0.087)
Non-White$_l$	−0.180***	−0.175***	−0.160***	−0.161***
	(0.029)	(0.032)	(0.024)	(0.024)
Inequality Aversion$_{by}$ × High-Minority Tract$_{ty}$	0.134**	0.143***	0.154***	0.131***
	(0.065)	(0.038)	(0.031)	(0.030)
Observations	91,747,125	89,364,553	67,162,494	67,162,492
R-squared	0.163	0.1743	0.1422	0.148
Fixed Effects				
Tract-Year (ν_{ty})	✓	✓	✓	✓
Bank (η_b)				✓
Control Variables				
Loan and Borrower Characteristics ($\mathbf{Z}_l$)	✓	✓	✓	✓
Bank Characteristics ($\mathbf{X}_{by-1}$)		✓	✓	✓
Executives Characteristics ($\mathbf{X}_{by-1}$)			✓	✓

Table C.2: Bank stakeholders' inequality aversion and lending: Simultaneous inclusion of both minority attributes This table shows estimation results from specification (1). The dependent variable is Approved$_l$, a dummy equal to one if loan l is originated (or if the application is approved but not accepted) and equal to zero if the application is denied. Minority$_l$ variables include Non-White$_l$ (dummy variable equal to one if applicant l is non-white according to HMDA classification) and High-Minority Tract$_{ty}$ (dummy variable equal to one if applicant l is based in a census tract where 75% or more of the population is minority, according to Census Bureau's classification) in Panel B. The loan and borrower characteristics are a dummy equal to one for a non-white applicant, a dummy equal to one for a female applicant, a dummy equal to one for the presence of a co-applicant, applicant income expressed in thousands of 2012 dollars, debt-to-income ratio (loan amount divided by borrower income), a dummy equal to one for a jumbo loan, a dummy equal to one for refinancing loans, and a dummy equal to one for loans taken for home improvements. The (lagged) bank characteristics are the natural log of banks' total assets (in million dollars as of 2012), deposits-to-assets ratio, interest on deposits divided by total assets, liquid assets divided by total assets, tier 1 capital divided by total assets, C&I loans divided by total assets, loans secured by real estate divided by total assets, net income divided by total assets, unused commitments divided by total assets, letters of credit divided by total assets, and nonperforming loans divided by total loans. The executives characteristics are the number of years the CEO has been acting as CEO of the bank, CEO age, numbers of independent directors, numbers of directors, and a dummy equal to one for a female CEO. The sample runs annually from 1999 to 2019. See Appendix A for variable definitions. Standard errors are double clustered at the bank and tract levels and are reported in parentheses. ***, **, and * denote significance at the 1%, 5% and 10% levels, respectively.

	Non-white	**White**	**Non-white**	**White**
Panel A. Application-level variables	More inequality-averse banks		Less inequality-averse banks	
N	14,900,000	66,700,000	1,500,392	12,600,000
Hispanic	0.06	0.11	0.03	0.04
High-Minority Tracts	0.26	0.04	0.20	0.01
CRA Tract	0.29	0.12	0.30	0.11
Approved	0.65	0.76	0.65	0.84
Co-Applicant	0.62	0.69	0.71	0.75
Applicant Income	97.56	114.41	79.62	101.07
DTI Ratio	2.17	2.01	1.54	1.67
Jumbo	0.07	0.07	0.03	0.04
Refinancing	0.54	0.59	0.38	0.48
Home Improvement	0.15	0.12	0.26	0.16

	High-min. tract	**Low-min. tract**	**High-min. tract**	**Low-min. tract**
Panel B. Application-level variables	More inequality-averse banks		Less inequality-averse banks	
N	7,826,239	89,700,000	551,497	15,100,000
Non-White	0.61	0.15	0.64	0.09
Hispanic	0.36	0.08	0.24	0.04
CRA Tract	0.63	0.12	0.75	0.11
Approved	0.58	0.74	0.60	0.82
Co-Applicant	0.53	0.70	0.59	0.75
Applicant Income	81.32	115.01	72.90	100.76
DTI Ratio	2.22	1.99	1.39	1.65
Jumbo	0.05	0.07	0.02	0.04
Refinancing	0.58	0.59	0.40	0.47
Home Improvement	0.20	0.12	0.32	0.17

Table C.3: Summary statistics, minority vs. non-minority groups, by bank inequality aversion. This table shows sample means of application-level variables for the subsample of white vs. non-white applicants (Panel A) and applicants in high-minority tracts vs. applicants in low-minority tracts (Panel B). Each panels further compares the subsample of more inequality-averse and less inequality-averse banks, defined based on whether they have an above (below) median *Deposit d%* share, where medians are calculated each year in the cross-section of banks. $Co-applicant$ is an indicator variable equal to one if there is a co-applicant, *Applicant income* is expressed in 2012 dollars, *Debt to income ratio* is the loan amount divided by borrower income, *Jumbo* is an indicator equal to one if the loan amount exceeds the limit set by the Federal Housing Finance Agency, *Refinancing* is an indicator equal to one if the loan purpose is refinancing, and *Home improvement* is an indicator equal to one if the loan is for home improvement purposes. Variable definitions are available in Appendix A. The last column shows significance for a mean difference test, where ***, **, and * denote statistical significance at the 1%, 5% and 10% levels, respectively.

Panel A	Approved$_l$			
Inequality Aversion$_{by}$ × Non-White$_l$	0.215***	0.204***	0.191***	0.193***
	(0.066)	(0.069)	(0.046)	(0.049)
Inequality Aversion$_{by}$	−0.728***	−0.567***	−0.255***	−0.184*
	(0.203)	(0.134)	(0.089)	(0.099)
Non-White$_l$	−0.219***	−0.211***	−0.200***	−0.202***
	(0.038)	(0.037)	(0.026)	(0.028)
Observations	92,043,394	89,620,595	67,283,849	67,283,847
R-squared	0.120	0.134	0.101	0.108

Panel B	Approved$_l$			
Inequality Aversion$_{by}$ × High-Minority Tract$_{ty}$	0.299***	0.237***	0.246***	0.225***
	(0.067)	(0.060)	(0.043)	(0.045)
Inequality Aversion$_{by}$	−0.702***	−0.543***	−0.234***	−0.158*
	(0.206)	(0.131)	(0.090)	(0.093)
High-Minority Tract$_{ty}$	−0.185***	−0.193***	−0.205***	−0.195***
	(0.041)	(0.033)	(0.024)	(0.025)
Observations	91,770,425	89,397,703	67,182,335	67,182,333
R-squared	0.121	0.135	0.102	0.109

Fixed Effects				
County-Year (ν_{cy})	✓	✓	✓	✓
Bank (η_b)				✓
Control Variables				
Loan and Borrower Characteristics ($\mathbf{Z}_l$)	✓	✓	✓	✓
Bank Characteristics ($\mathbf{X}_{by-1}$)		✓	✓	✓
Executives Characteristics ($\mathbf{X}_{by-1}$)			✓	✓

Table C.4: Bank stakeholders' inequality aversion and lending, county-year fixed effects. This table shows estimation results from specification (1). The dependent variable is Approved$_l$, a dummy equal to one if loan l is originated (or if the application is approved but not accepted) and equal to zero if the application is denied. Minority$_l$ is Non-White$_l$ (dummy variable equal to one if applicant l is non-white according to HMDA classification) in Panel A and High-Minority Tract$_{ty}$ (dummy variable equal to one if applicant l is based in a census tract where 75% or more of the population is minority, according to Census Bureau's classification) in Panel B. The loan and borrower characteristics are a dummy equal to one for a non-white applicant, a dummy equal to one for a female applicant, a dummy equal to one for the presence of a co-applicant, applicant income expressed in thousands of 2012 dollars, debt-to-income ratio (loan amount divided by borrower income), a dummy equal to one for a jumbo loan, a dummy equal to one for refinancing loans, and a dummy equal to one for loans taken for home improvements. The (lagged) bank characteristics are the natural log of banks' total assets (in million dollars as of 2012), deposits-to-assets ratio, interest on deposits divided by total assets, liquid assets divided by total assets, tier 1 capital divided by total assets, C&I loans divided by total assets, loans secured by real estate divided by total assets, net income divided by total assets, unused commitments divided by total assets, letters of credit divided by total assets, and nonperforming loans divided by total loans. The executives characteristics are the number of years the CEO has been acting as CEO of the bank, CEO age, numbers of independent directors, numbers of directors, and a dummy equal to one for a female CEO. The sample runs annually from 1999 to 2019. See Appendix A for variable definitions. Standard errors are double clustered at the bank and tract levels and are reported in parentheses. ***, **, and * denote significance at the 1%, 5% and 10% levels, respectively.

Panel A	Approved$_l$			
Inequality Aversion$_{by}$ × Non-White$_l$	0.154***	0.154***	0.296***	0.284***
	(0.039)	(0.039)	(0.055)	(0.060)
Inequality Aversion$_{by}$	−0.245**	0.065	−0.334***	−0.667***
	(0.103)	(0.088)	(0.062)	(0.085)
Non-White$_l$	−0.162***	−0.161***	−0.251***	−0.244***
	(0.023)	(0.023)	(0.032)	(0.034)
Sample Banks	High propensity to securitize		Low propensity to securitize	
Observations	56,686,652	56,686,651	10,331,351	10,331,349
R-squared	0.147	0.153	0.210	0.216

Panel B	Approved$_l$			
Inequality Aversion$_{by}$ × High-Minority Tract$_{ty}$	0.209***	0.182***	0.396***	0.321***
	(0.036)	(0.028)	(0.046)	(0.071)
Inequality Aversion$_{by}$	−0.233**	0.080	−0.309***	−0.629***
	(0.102)	(0.085)	(0.062)	(0.085)
Non-White$_l$	−0.162***	−0.161***	−0.251***	−0.244***
	(0.023)	(0.023)	(0.032)	(0.034)
Sample Mortgages	High propensity to securitize		Low propensity to securitize	
Observations	56,616,353	56,616,352	10,302,357	10,302,355
R-squared	0.147	0.153	0.209	0.216

Fixed Effects				
Tract-Year (ν_{by})	✓	✓	✓	✓
Bank (η_b)		✓		✓
Control Variables				
Loan and Borrower Characteristics ($\mathbf{Z}_l$)	✓	✓	✓	✓
Bank Characteristics ($\mathbf{X}_{by-1}$)	✓	✓	✓	✓
Executives Characteristics ($\mathbf{X}_{by-1}$)	✓	✓	✓	✓

Table C.5: Bank stakeholders' inequality aversion and lending, robustness with respect to securitization. This table shows estimation results from specification (1). The dependent variable is Approved$_l$, a dummy equal to one if loan l is originated (or if the application is approved but not accepted) and equal to zero if the application is denied. Non-White$_l$ is a dummy variable equal to one if applicant l is non-white according to HMDA classification. High-Minority Tract$_{ty}$ is a dummy variable equal to one if applicant l is based in a census tract where 75% or more of the population is minority, according to Census Bureau's classification. In each panel, the first two columns are run in the subsample of banks with a high propensity to securitize and the last two columns are run in the subsample of banks with a low propensity to securitize. The former (latter) group is defined as banks with above (below) median securitization activity, where the median is calculated every year in the cross-section of banks. The securitization activity is based on the share of mortgages securitized in the year of origination. The loan and borrower characteristics are a dummy equal to one for a non-white applicant, a dummy equal to one for a female applicant, a dummy equal to one for the presence of a co-applicant, applicant income expressed in 2012 dollars, debt-to-income ratio (loan amount divided by borrower income), a dummy equal to one for a jumbo loan, a dummy equal to one for refinancing loans, and a dummy equal to one for loans taken for home improvements. The (lagged) bank characteristics are the natural log of banks' total assets (in million dollars as of 2012), deposits-to-assets ratio, interest on deposits divided by total assets, liquid assets divided by total assets, tier 1 capital divided by total assets, C&I loans divided by total assets, loans secured by real estate divided by total assets, net income divided by total assets, unused commitments divided by total assets, letters of credit divided by total assets, and nonperforming loans divided by total loans. The executives characteristics are the number of years the CEO has been acting as CEO of the bank, CEO age, numbers of independent directors, numbers of directors, and a dummy equal to one for a female CEO. The sample runs annually from 1999 to 2019. See Appendix A for variable definitions. Standard errors are double clustered at the bank and tract levels and are reported in parentheses. ***, **, and * denote significance at the 1%, 5% and 10% levels, respectively.

D DOJ discriminatory lending cases

Case	Summary	Date
United States v. JPMorgan Chase Bank, N.A. (S.D.N.Y.)	On January 20, 2017, the court entered a consent order in United States v. JPMorgan Chase Bank, N.A. (S.D.N.Y.). The complaint, which was filed on January 18, 2017, by the United States Attorney's Office alleged that the defendant violated the Fair Housing Act and the Equal Credit Opportunity Act when African American and Hispanic borrowers paid higher rates and fees for wholesale mortgage loans than similarly situated white borrowers. The consent order includes monetary relief of $53 million which includes a civil penalty of $55,000.	1/18/2017
United States v. Huntington Mortgage Company (N.D. Ohio)	In our complaint we claimed that the bank charged African Americans higher up-front fees on home mortgages, known as overages. Under the agreement that we signed on October 18, 1995, with Huntington, the company agreed to create a $420,000 fund to compensate victims and change its policies to ensure uniform pricing.	10/18/1995
Consumer Financial Protection Bureau and United States v. National City Bank (W.D. Pa.)	On January 9, 2014, the court entered a consent order in Consumer Financial Protection Bureau & United States v. National City Bank (W.D. Pa.), an Equal Credit Opportunity Act and Fair Housing Act case that resulted from a joint investigation by the Division and the CFPB. PNC Bank is the successor in interest to National City Bank. The complaint, which was filed on December 23, 2013, alleged a pattern or practice of discrimination on the basis of race and national origin in residential mortgage lending. The consent order requires PNC Bank to pay $35 million to African-American and Hispanic victims of National City Bank's discriminatory conduct.	1/9/2014
United States v. Old Kent Financial Corporation and Old Kent Bank (E.D. Mich.)	On May 19, 2004, the U.S. simultaneously filed and a complaint and settlement agreement in U.S. v. Old Kent Financial Corporation and Old Kent Bank (E.D. Mich.), a Fair Housing Act and Equal Credit Opportunity Act case. The complaint alleges that Old Kent Financial Corporation and Old Kent Bank of Detroit unlawfully avoided making business and residential loans in predominantly African-American neighborhoods, a practice commonly referred to as redlining. The complaint alleges that Old Kent intentionally refused to issue loans and open branches in Detroit because of the city's African-American population. Specifically, the complaint alleges that while Old Kent served largely white suburbs, it opened a branch in Detroit only after the Justice Department opened its investigation. The complaint also alleges that of the 15,473 small business and residential real estate related loans Old Kent made between 1996 and 2000 in the Detroit metropolitan area, only 335, or 2.2%, were made in majority African-American neighborhoods. The complaint further alleges that while capturing most of the greater Detroit area, Old Kent defined its Community Reinvestment Act service-area to exclude certain majority African-American areas. The enforceable settlement agreement requires the defendants to provide three million dollars for a loan subsidy program to provide Detroit businesses and residents small business loans and residential real estate-related loan products on favorable terms; open three new full-service branches in Detroit; advertise its products so as to generate loan applications from qualified businesses and residents in Detroit; invest $200,000 to develop and implement consumer education programs for residents and small businesses in Detroit; and, relocate its team of business banking lenders responsible for developing business in Detroit, the "Detroit Business Group Team," to the city of Detroit by the end of 2004.	5/19/2004
United States v. Fifth Third Bank (S.D. Ohio)	On September 28, 2015, the United States filed a complaint and consent order in United States v. Fifth Third Bank (S.D. Ohio), alleging that the bank engaged in a pattern or practice of discrimination on the basis of race and national origin in its indirect auto lending business in violation of the Equal Credit and Opportunity Act (ECOA). The consent order includes $18 million in restitution for harmed African American and Hispanic borrowers, and requires the bank to change the way it prices its loans by limiting dealer markup to 125 basis points (or 1.25%) for loans of 60 months or less, and to 100 basis points (or 1%) for loans greater than 60 months. This matter was investigated and settled jointly with the Consumer Financial Protection Bureau. The court entered the consent order on October 1, 2015.	10/1/2015
United States v. Fifth Third Mortgage (M.D. Ga.)	On August 11, 2014, the court entered a consent order in United States v. Fifth Third Mortgage Co.(M.D. Ga.). The complaint, filed on August 7, 2014, alleges that Fifth Third Mortgage Company and Cranbrook Mortgage Corporation violated the FHA and the ECOA by requiring recipients of disability income to provide a letter from a doctor to substantiate their income, and that Fifth Third Mortgage Company engaged in a pattern or practice of discrimination. The consent order provides for a $1.5 million fund to compensate victims who had been asked to provide medical documentation to prove the income they received from Social Security Disability Insurance. The bank also agreed to other injunctive relief, including employee training and the implementation of new policies.	8/11/2014

Table D.1. Continues on next page. See the end of the table for the caption.

Case	Summary	Date
United States v. Countrywide Financial Corporation (C.D. Cal.)	On December 28, 2011, the court entered a consent order in United States v. Countrywide Financial Corporation (C.D. Cal.). The complaint and consent order, both filed on December 21, 2011 against Countrywide Financial Corporation and its subsidiaries Countrywide Home Loans and Countrywide Bank, alleged that between 2004 and 2008, Countrywide engaged in a nationwide pattern or practice of discrimination in its residential lending activities in violation of both the Fair Housing Act and the Equal Credit Opportunity Act. The alleged violations by Countrywide include: (a) discrimination against African-American and Hispanic borrowers in the pricing of retail home loans; (b) discrimination against African-American and Hispanic borrowers in the pricing of wholesale home loans; (c) discrimination against African-American and Hispanic wholesale borrowers by placing them in subprime loan products when it placed white wholesale borrowers with similar credit qualifications in prime loan products; and (d) discrimination on the basis of marital status by following policies and practices that encouraged the non-applicant spouse of a married borrower applying for credit in his/her own name to execute documents transferring his/her rights in the property securing the loan to the applicant spouse. The consent order includes the establishment of a $335 million Settlement Fund to compensate victims of Countrywide's discrimination, which is being administered by an independent Administrator, Rust Consulting, Inc., and injunctive relief to prevent the recurrence of the alleged unlawful lending practices in the event Countrywide re-enters the residential mortgage lending business.	12/28/2011
United Stats v. Bank of America N.A. (E.D. N.Y.)	On July 23, 2020 the United States filed a complaint and proposed order in United States v. Bank of America (E.D.N.Y.). The complaint alleges that Bank of America discriminated on the basis of disability, in violation of the FHA, through implementation of a policy that prohibited the issuance of mortgage loans to adults who had legal guardians or conservators. The requires the bank to maintain new policies that permit loans to adults with guardians or conservators, to ensure that employees are trained on the new policies, and to pay damages of $4,000 for each loan application that was denied as a result of the bank's prior unlawful policy. The court approved the entry of the settlement agreement and order on September 11, 2020	9/11/2020
United States v. Bank of America N.A., d/b/a Bank of America Home Loans (W.D.N.C. 2012)	On September 13, 2012, the United States filed a complaint and consent order in United States v. Bank of America, N.A., d/b/a Banlk of America Home Loans (W.D.N.C.). The complaint, based on a HUD election referral, alleges that Bank of America discriminated on the basis of disability and receipt of public assistance in underwriting and originating loans, by requiring loan applicants who receive Social Security Disability Insurance (SSDI) income to provide a letter from their doctor as part of the loan application. The consent order requires the Bank to maintain revised policies, conduct employee training and pay compensation to victims. Bank of America will pay $1,000, $2,500 or $5,000 to eligible mortgage loan applicants who were asked to provide a letter from their doctor to document the income they received from SSDI. Applicants who were asked to provide more detailed medical information to document their income may be paid more than those who were asked to have a doctor verify their source of income. In addition, the HUD complainants who initiated this suit received a total of $125,000. The consent order was entered on October 10, 2012, and later amended on December 6, 2012.	10/10/2012
United States v. Compass Bank (N.D. Ala.)	On February 21, 2007, the court entered the consent order in United States v. Compass Bank (N.D. Ala.), resolving claims that Compass Bank violated the Equal Credit Opportunity Act by engaging in a pattern of discrimination on the basis of marital status in thousands of automobile loans that it made through hundreds of different car dealerships in the South and Southwest between May 2001 and May 2003. Specifically, the complaint, which was filed on January 12, 2007, alleged that the bank charged non-spousal co-applicants higher interest rates than similarly-situated married co-applicants. To remedy the alleged discrimination, Compass Bank will pay up to $1.75 million to compensate several thousand non-spousal co-applicants whom the United States alleges were charged higher rates as a result of their marital status. This case resulted from a referral by the Federal Reserve Board.	2/21/2007

Table D.1. Continues on next page. See the end of the table for the caption.

Case	Summary	Date
United States v. Wells Fargo Bank, NA (D.D.C.)	On December 19, 2012, the Division notified the court in United States v. Wells Fargo Bank (D.D.C.) that the bank will provide $59.3 million in compensation to African-American and Hispanic retail subprime borrowers. Under the consent order, entered on September 21, 2012, Wells Fargo agreed to undertake an internal review to determine whether there were African-American and/or Hispanic borrowers who received subprime Wells Fargo loans from the bank's retail channel who might have qualified for prime loans from the retail channel. The consent order provided that any borrowers identified pursuant to the review would be compensated in an amount commensurate with the amounts paid to borrowers who received subprime loans from the bank's wholesale division. As a result of its review, Wells Fargo identified nearly 4,000 retail subprime borrowers who are eligible for compensation. With the additional compensation to retail subprime borrowers, the Division's settlement with Wells Fargo totals $234.3 million. The complaint, filed on July 12, 2012, alleged that Wells Fargo engaged in a pattern or practice of discrimination against qualified African-American and Hispanic borrowers in its mortgage lending from 2004 through 2009. The complaint alleged that Wells Fargo discriminated by steering approximately 4,000 African-American and Hispanic wholesale borrowers, as well as additional retail borrowers, into subprime mortgages when non-Hispanic white borrowers with similar credit profiles received prime loans. All the borrowers who were allegedly discriminated against were qualified for Wells Fargo mortgage loans according to Well Fargo's own underwriting criteria. The United States also alleged that, between 2004 and 2009, Wells Fargo discriminated by charging approximately 30,000 African-American and Hispanic wholesale borrowers higher fees and rates than non-Hispanic white borrowers because of their race or national origin rather than the borrowers' credit worthiness or other objective criteria related to borrower risk. The consent order provided $125 million in compensation for wholesale borrowers who were allegedly steered into subprime mortgages or who allegedly paid higher fees and rates than white borrowers because of their race or national origin. Wells Fargo was also required to pay $50 million in direct down payment assistance to borrowers in communities around the country where the Department identified large numbers of discrimination victims and which were hard hit by the housing crisis.	9/21/2012
United States v. SunTrust Mortgage, Inc. (E.D. Va.)	On September 14, 2012, the court entered a consent order resolving United States v. SunTrust Mortgage, Inc. (E.D. Va.). The complaint, wich was filed simultaneoulsy with the consent order on May 31, 2012, alleged that from 2005 to 2009, SunTrust Mortgage discriminated against at least 20,000 African-American and Hispanic borrowers across the country by systematically charging higher discretionary broker fees and retail loan markups to those borrowers than to white borrowers in violation of the Fair Housing Act and Equal Credit Opportunity Act. The consent order provides for a $21 million settlement fund and for injunctive relief specifying that SunTrust Mortgage must maintain for at least three years specific improved pricing policies and fair lending monitoring that it has adopted since the conduct at issue in the complaint occurred. The case was referred to the Division by the Federal Reserve Board.	9/13/2012
United States v. Northern Trust Company (N.D. Ill.)	On June 1, 1995, the United States filed a complaint and consent decree in United States v. Northern Trust Company (N.D. Ill.) which allefed that the bank failed to make the same efforts to approve African American and Hispanic mortgage loan applicants as it did for white applicants, and it made special efforts to qualify white applicants while it did not make similar efforts for minority applicants. Under the consent decree the bank agreed to create a $700,000 fund to compensate victims and take a number of other corrective measures.	6/1/1995
United States v. Citizens Republic Bancorp, Inc. and Citizens Bank (E.D. Mich.)	On May 5, 2011, the United States filed a complaint in United States v. Citizens Republic Bancorp, Inc. and Citizens Bank (E.D. Mich.), a Fair Housing Act and Equal Credit Opportunity Act pattern or practice case that was referred by the Board of Governors of the Federal Reserve System. The complaint alleged that Citizens Republic Bancorp, Inc. (CRBC), as the successor to Republic Bank, and Citizens Bank failed to provide their home mortgage lending services to the residents of majority African-American neighborhoods on an equal basis as those services are provided to residents of predominantly white neighborhoods in the Detroit metropolitan area, a practice commonly known as "redlining." On May 24, 2011, the court declined to enter a proposed consent order, and on June 23, 2011, the United States and defendants filed a stipulated notice of dismissal based on the settlement agreement reached by the parties and attached to that notice. On June 28, 2011, the court dismissed the case. Under the settlement agreement, defendants will open a loan production office in an African-American neighborhood in the City of Detroit and hire two community lenders; and invest in the formerly redlined majority African-American areas of Wayne County by providing $1.5 million in a special financing program to increase the amount of credit the bank extends in those areas, by partnering with the City of Detroit to provide $1.625 million in matching grants of up to $5,000 to existing homeowners for exterior improvements, and by conducting $500,000 in advertising, marketing, and consumer financial education targeted to those areas.	6/23/2011

Table D.1. Continues on next page. See the end of the table for the caption.

Case	Summary	Date
United States v. First Merchants Bank (S.D. Ind.)	On August 12, 2019, the court approved the entry of settlement agreement and agreed order resolving United States v. First Merchants Bank (S.D. Ind.). On June 13, 2019, the United States filed the complaint and proposed settlement. The complaint alleged that from 2011 to at least 2017, First Merchants violated the Fair Housing Act and Equal Credit Opportunity Act on the basis of race by engaging in unlawful redlining in Indianapolis by intentionally avoiding predominantly African-American neighborhoods. The Department's complaint also alleges that First Merchants adopted a residential mortgage lending policy that had the effect of denying residents of predominantly African-American neighborhoods equal access to credit in violation of federal law. Under the settlement, the Bank will invest $1.12 million in a loan subsidy fund to increase credit opportunities to residents of predominantly African-American neighborhoods, and will devote $500,000 toward advertising, community outreach, and credit repair and education. First Merchants will also open a branch and loan production office to serve the banking and credit needs of residents in predominantly African-American neighborhoods in Indianapolis.	8/12/2019
United States v. C & F Corporation (E.D. Va.)	On October 4, 2011, the court entered a consent order in United States v. C&F Mortgage Corporation (E.D. Va.), a pattern or practice case under the Fair Housing Act and the Equal Credit Opportunity Act that was referred by the Federal Deposit Insurance Corporation. The complaint, filed on September 30, 2011, alleged that C&F charged greater interest rate markups (overages) and gave lesser discounts (underages) on home mortgage loans made to African-American and Hispanic borrowers by giving its employees wide discretion in overages and underages without having in place objective criteria for setting the overages and underages. The complaint alleged that this policy had a disparate impact on African-American and Hispanic borrowers. The consent order resolves the case by requiring C&F to develop uniform policies for all aspects of its loan pricing and to phase out the practice of charging overages to home mortgage borrowers. The settlement also requires the bank to pay $140,000 to black and Hispanic victims of discrimination, monitor its loans for potential disparities based on race or national origin, and provide equal credit opportunity training to its employees.	10/4/2011
United States and Consumer Financial Protection Bureau v. BancorpSouth Bank (N.D. Miss.)	On June 29, 2016, the United States filed a complaint and a consent order in United States and Consumer Financial Protection Bureau v. BancorpSouth Bank (N.D. Miss.). The joint complaint with the Consumer Financial Protection Bureau (CFPB) alleges that the bank failed to provide its home mortgage lending services to majority-minority neighborhoods on an equal basis as it provided those services to predominantly white neighborhoods, a practice commonly known as "redlining," throughout its major market areas in the Memphis Metropolitan Statistical Area; discriminated on the basis of race in the pricing and underwriting of mortgage loans originated by its Community Banking Department; and implemented a discriminatory loan policy or practice of denying applications from minorities more quickly than similarly-situated white applicants in its Mortgage Department, in violation of ECOA and FHA. The consent order requires the bank to amend its pricing and underwriting policies, establish a monitoring program, have employees undergo fair housing and fair lending training, extend credit offers to unlawfully denied applicants, and open a new full-service branch or Loan Processing Office (LPO) in a high-minority neighborhood, among other injunctive relief. The consent order also includes a $2.78 million settlement fund to remediate harmed borrowers for pricing and underwriting discrimination; a $4 million loan subsidy program to extend mortgage loans to qualified applicants in the Memphis MSA; at least $800,000 in advertising, outreach, and community partnerships; and a $3 million civil money penalty to the CFPB. The court entered the consent order on July 25, 2016.	7/25/2016

Table D.1: DOJ Equal Credit Opportunity Act cases. This table shows the list of cases by the DOJ against our sample banks for potential breaches of the Equal Credit Opportunity Act, which *"prohibits creditors from discriminating against credit applicants on the basis of race, color, religion, national origin, sex, marital status, age, because an applicant receives income from a public assistance program, or because an applicant has in good faith exercised any right under the Consumer Credit Protection Act."* These cases are publicly available at www.justice.gov.