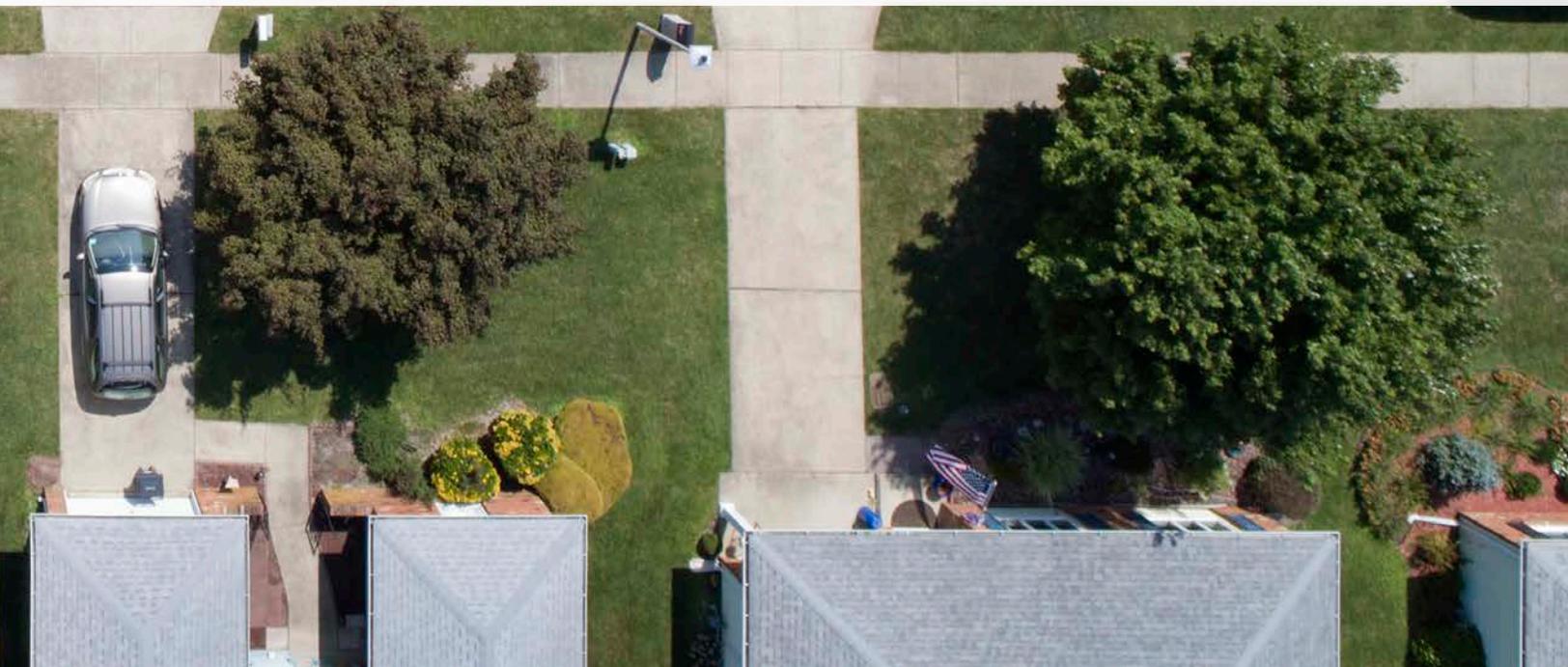


Housing finance reform: Addressing a growing divide

Barclays examines how United States housing finance policies affect homeownership rates, finding that affordability targets can provide an effective counterbalance to rising income inequality.





Foreword

More than a decade after the mortgage-focused government-sponsored enterprises (GSEs) Fannie Mae and Freddie Mac were placed under conservatorship during the 2008 Financial Crisis, the debate about the appropriate role of the government in the housing market continues.

13 October 2020

Despite a raft of housing policies including subsidies, taxes and mortgage guarantees, the US has similar homeownership levels to other developed countries that do not offer such support. Critics of the current policies cite this as evidence that government intervention accomplishes little except create distortions in the housing market, and argue for a sharply reduced role for government going forward.

Yet an important structural difference between the US and other developed economies is the high, and rising, level of income inequality in the US. Our analysis indicates that rising inequality exerts significant downwards pressure on homeownership. However, the 1992 GSE Act, which introduced affordable housing goals for Fannie Mae and Freddie Mac, dramatically reduced the drag on homeownership associated with higher income inequality. Our data also finds that most of this benefit accrued to states with the highest concentration of Black residents.

We draw several lessons from these results. First, the government can positively influence housing outcomes. Second, the distinct effect of the GSE affordability targets suggests that other forms of support, such as the FHA, may not be sufficient for low income and minority borrowers in their current form.

From a housing policy perspective, this does not translate into support for the status quo. Many interventions in the housing market should be reviewed and may be unnecessary, and we cannot ignore the lessons from the financial crisis and resulting bailouts. But as we consider options for reform now, amidst both a pandemic that is likely to further raise inequality, and a heightened awareness for racial and social justice reforms, we believe that low income and minority populations face risks to homeownership through any reform of housing finance that cannot be ignored.

I hope you find our analysis enlightening.



Jeffrey Meli
Global Head of Research



Housing reform: Time to reassess US government support for home buying?

More than a decade after the mortgage-focused government-sponsored enterprises (GSEs) Fannie Mae and Freddie Mac were placed under conservatorship, the debate about the appropriate role of the government in the housing market continues.

The US plays a much larger role in housing finance than governments in other developed countries. Given that the homeownership rate in the US is similar to that in other developed countries, some people believe that the complex raft of subsidies, regulations and tax breaks only incentivises households to buy larger and more expensive homes.

However, we think this argument is too simplistic. In this Impact Series report, our Research analysts investigate the correlation between income inequality and homeownership over the past 30 years. Our findings include:

- Higher income inequality is strongly associated with lower homeownership, implying that the increase in inequality has exerted significant downwards pressure on US homeownership.
- The negative impact of income inequality on homeownership fell 40%- 60% after the 1992 GSE Act, which required the Secretary of the Department of Housing and Urban Development to establish affordable housing goals for Fannie Mae and Freddie Mac. We conclude that these targets (and likely other efforts to improve access to mortgage financing for low income borrowers) helped the US maintain high home ownership despite rising income inequality.
- The negative effects of income inequality on homeownership accrue disproportionately to Black residents. The negative effect of income inequality on homeownership is 2.4 times higher in the states with the highest Black populations than in states with the lowest Black populations, and these same states benefited the most from the introduction of affordability targets.

In the following pages we discuss our findings in more detail.

The US plays a much larger role in housing finance than governments in other developed countries through a complex raft of subsidies, regulations and tax breaks.



Reforming the US government’s role in housing finance

A debate about the future of housing finance in the US has been ongoing at least since the GSEs were put into conservatorship at the height of the financial crisis. A major flashpoint is the role of the government in housing finance. Lawmakers’ positions span from eliminating or dramatically reducing government support for housing, to maintaining the current patchwork of explicit and implicit subsidies and interventions, to explicitly increasing support for low- and middle-income homebuyers, whether through the GSEs or through other means, like the FHA. With COVID-19 raising both hardship for individuals and families and the strain on government finances, these differences are likely to become more stark going forward.

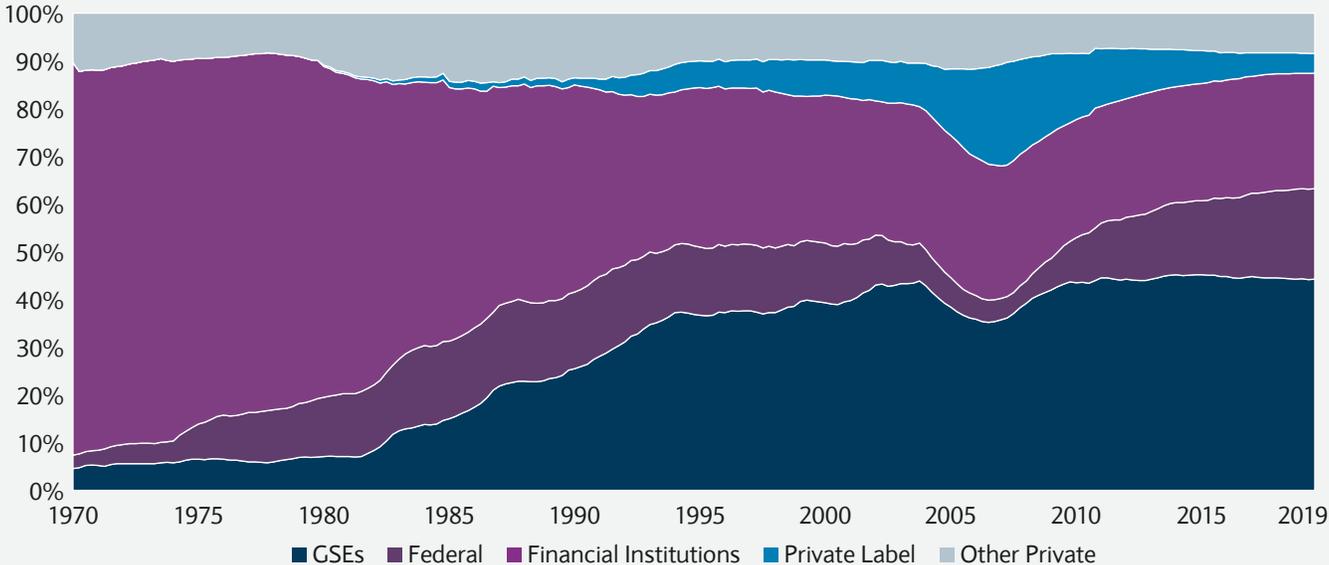
The US government’s role in housing finance

The US government is heavily involved in many aspects of housing finance, holding a two-thirds share of all mortgage credit risk in the country.

Its involvement includes a complex mix of both implicit and explicit subsidies, regulations and taxes. The overarching goal of these interventions is to support homeownership by increasing access to mortgage credit for more borrowers, and by reducing the rate that borrowers pay compared to the private market.

FIGURE 1

Share of single-family mortgage debt outstanding by mortgage holder



Source: Federal Reserve, Mortgage Debt Outstanding (Table 1.54), Data Q1 1970 – Q3 2019



Supporting homeownership is desirable, in theory, because homeownership allows households to accumulate wealth, save for retirement and build financial security. Moreover, research generally agrees that higher homeownership leads to positive externalities such as higher educational achievement, improved health and lower crime rates. Of course, there are counterexamples. For example, during the financial crisis the decline in housing prices may have constrained the mobility of homeowners with negative equity, restricting their ability to take advantage of economic opportunities.

For the purposes of this study, we take the benefits of homeownership as given, and focus on questions of efficacy – whether or not the government’s intervention into the US housing market system actually accomplishes its stated goals.

Freddie Mac and Fannie Mae, the two government-sponsored enterprises (GSEs), play a central role in this framework. They were established to improve efficiency of capital markets and to encourage the flow of funds from suppliers of capital to the housing market. The GSEs provide a guarantee that limits the exposure of investors to default losses. By acquiring mortgage loans from lending institutions, the GSEs transfer prepayment and interest rate risk from originators to investors of mortgage-backed securities (MBS), while the GSEs retain the credit risk.

Initially, the GSEs’ footprint was relatively low – their market share hovered around 5% of total single-family mortgage debt during the 1970s. The rapid growth of the GSEs began in the 1980s, when banking regulators started to tighten

capital requirements for banks and thrifts. Since the capital requirements for the GSEs remained well below those of other financial institutions, the GSEs had a competitive edge over other financial institutions in holding mortgage risk, which further incentivised financial institutions to sell their mortgage originations to the GSEs. Furthermore, the congressional charters conferred to the GSEs gave rise to the perception of an implicit government guarantee. In September 2008, following severe default-related losses, the two GSEs were bailed out by the federal government and were placed under conservatorship.

Other initiatives to help support homeownership include:

- The Federal Housing Administration, the Department of Veteran Affairs and the Rural Housing Service offer mortgage support to low-to-moderate income borrowers.
- The Government National Mortgage Association, or Ginnie Mae, guarantees securities insured by the Federal Housing Administration, Department of Veteran Affairs and Department of Housing and Urban Development – the only MBS backed by the US government’s explicit “full faith and credit” guarantee.
- A sizeable portion of the government’s spending on housing is via tax code subsidies for homeowners. This includes the non-taxation of imputed rent – the rent homeowners would otherwise have paid. This has been reduced somewhat through various provisions of the recent Tax Cut and Jobs Act.

Affordability targets: A landmark intervention

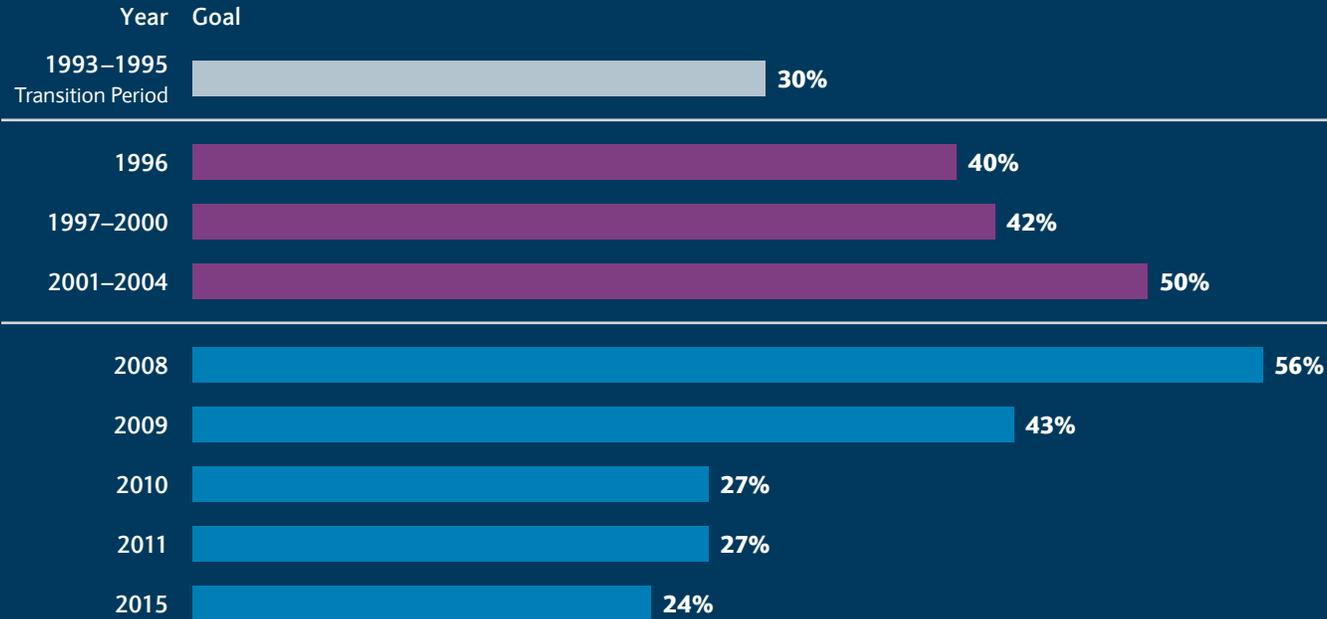
One of the most important housing policy initiatives is the 1992 GSE Act, which required the Department of Housing and Urban Development to establish quantitative goals for mortgages purchased by Fannie Mae and Freddie Mac. Previously, the GSEs had only been required to buy mortgages that institutional investors would buy, which raised concerns that the GSEs were not adequately facilitating affordable housing for low- and moderate-income households.

The act codified “an affirmative obligation to facilitate the financing of affordable housing for low- and moderate-income families in a manner consistent with their overall public purposes, while maintaining a strong financial condition and a reasonable economic return”. Low- and moderate-income borrowers are defined as borrowers with incomes below the median income for the metropolitan area where they live.

Affordability targets were introduced, initially requiring that 30% or more of Fannie and Freddie’s loan purchases be related to “affordable housing”. This means that of all the loans the GSEs bought, 30% had to be made to people at or below the median income in the communities where they lived. The targets were gradually increased, reaching 56% in 2008, but following the financial crisis – when the government bailed out the GSEs – were incrementally reduced, reaching 24% in 2015.

According to performance reports, both GSEs have been consistently close to housing targets. Although the GSEs remain under conservatorship, they continue to have an obligation to support a stable and affordable market for residential mortgage financing.

FIGURE 2
GSE affordable housing goals



Source: HUD Reports (1996-2008), FHFA Annual Performance Reports (2009-2015)



Arguments in favour of reducing the government’s role in housing finance

At face value, several data points suggest that the housing subsidy infrastructure in the US creates distortions without a material improvement in homeownership. Here we list six:

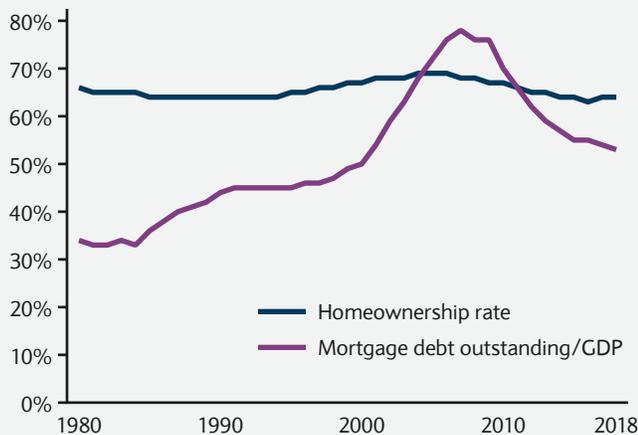
- 1. Taxpayer bailout:** The size and systemic importance of the CSEs forced the Federal government to provide support to them during the 2008 Financial Crisis, at significant cost to the US taxpayer. Many proponents of reform advocate for a system that better protects taxpayers, by eliminating any implicit government support for the market, and ensuring that the government is appropriately compensated for any explicit support it does provide.
- 2. Higher debt, little growth in homeownership:** The growth of the CSEs and other Federal-related agencies correlated with an increase in single-family mortgage debt outstanding as a percentage of gross domestic product. However, there

has been little, if any, increase in homeownership rates. In 1980, the homeownership rate stood at 66%; it increased to 69% during the housing bubble and fell back to 64% at the end of 2018. Higher mortgage debt without an increase in homeownership (except for the obvious bubble years preceding the crisis) means that borrowers took advantage of any reduction in rates to either put less money down or buy a more expensive house.

- 3. US homeownership levels are comparable to those of other developed countries:** Germany has a lower homeownership rate, which can be attributed to the tax system, which discourages homeownership, and a strong social rental system, which protects the rights of renters. Higher ownership rates in southern Europe mostly reflect cultural values and weak support for rental housing.

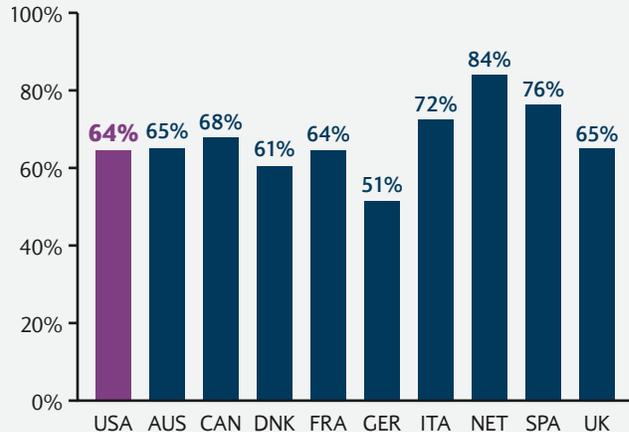
These similarities in homeownership rates across countries are striking, because no other government in the sample has such an outsized role in the housing market as the US.

FIGURE 3
US housing trends



Source: Federal Reserve, Mortgage Debt Outstanding (Table 1.54), Data 1980 –2018. Mortgage Debt Outstanding normalized by GDP

FIGURE 4
International homeownership levels



Source: ABS (Australia), CHMC (Canada), Census Bureau (USA), EMF (Europe), Statistics Bureau Japan. Data: 2018 (or most recent available)

FIGURE 5

Government housing market support in other countries

Country	Government mortgage insurer	Government security guarantees	Government sponsored enterprises
USA	FHA	GNMA	Fannie Mae & Freddie Mac
Australia	X	X	X
Canada	CMHC	CMHC	X
Denmark	X	X	X
Germany	X	X	X
Japan	X	JHF	X
Korea	X	X	Korean Housing Finance Corp.
Netherlands	NHG	X	X
Spain	X	X	X
UK	X	X	X

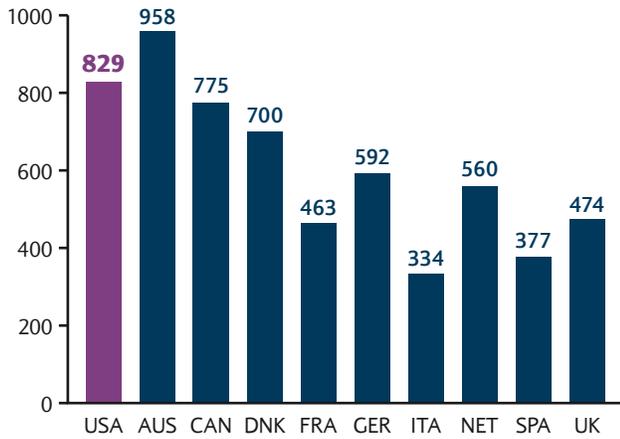
Source: Mortgage Bankers' Association (MBA)

4. Some subsidies disproportionately benefit middle and high-income households: Government support such as tax relief for mortgage interest payments can incentivise middle to high earners to buy larger and more expensive homes. Evidence shows that the average US homeowner today owns a considerably larger home than a few decades ago. According to American Housing Survey 2017, average floor space for single-family homes has increased by nearly 40%, from 2,200 ft² in the 1980s to 3,000 ft² in 2010s. Moreover, US home sizes are considerably above the international average

5. Subsidies could distort house prices: Given a limited housing supply, standard macroeconomic theory predicts that subsidies to residential real estate are capitalised into higher prices. If prices increase for everyone, but the subsidy is received by a much smaller number of households or by households whose ability to purchase a home is not meaningfully improved by the subsidy, then in the extreme case subsidising the housing market could ultimately make homeownership less affordable.

FIGURE 6

Average floor space per person, ft²



Source: CommSec, RBA, UN, US Census

6. The unique 30-year mortgage is seldom used: One reason often given to support government involvement in housing finance is that US homeowners benefit from a 30-year mortgage – something that doesn't happen on a large scale elsewhere in the world. But we believe that the benefits of the 30-year mortgage to the US homeowner are greatly overstated. Mortgage rates have come down sharply in recent decades, incentivising borrowers to refinance every 3-4 years. Further, US mortgages are not portable, meaning they are paid off when a homeowner moves. Most US borrowers never stay in a mortgage for a decade, let alone 30 years.



An alternative hypothesis – a buffer against income inequality

It is essential to understand how the housing market will react to any changes in the status quo. Some statistics suggest that the structure of housing finance in the US does little more than encourage better-off households to purchase larger and more expensive houses:

- Homeownership rates in the US are similar to those in other developed countries that have little or no support from the public sector.
- At the same time, the US ranks well above most other developed countries in terms of the average house size per occupant.

These are two outcomes one would expect if subsidies had little effect on who bought homes – those who could afford a home simply bought larger, more expensive houses. The principal effect of the government's involvement could be to increase home prices to reflect the value of cheap financing and subsidies, without raising rates of owner occupancy. If true, the case for reducing the government's role in housing finance would be quite strong.

We believe the question of government support for housing finance is more nuanced. Structural economic differences complicate any comparison of home ownership rates across countries. In particular, income inequality is higher in the US than in other developed countries, and we document an inverse relationship between income inequality and homeownership.

It is our view that income inequality is an underappreciated channel affecting housing market outcomes.

The gap between rich and poor is growing

Income inequality in the US has been steadily increasing over the past several decades, with top earners greatly outpacing the rest of the population.

The share of income earned by the top 10% has increased from 37% in 1984 to 47% in 2015, whereas the share earned by the bottom 10% has decreased from 0.7% in 1984 to only 0.23% in 2015. Moreover, the income share of the bottom 40% of earners (i.e. between the 10th and 50th percentiles) also decreased, from 15% in 1984 to 11% in 2015. Figure 7 below reveals the crucial point that the pattern of rising income inequality was not solely driven by changes in the tails, but affected the entire income distribution.

Income inequality is also considerably more pronounced in the US than in other developed countries. In the UK and Japan, the top 10% earn about 10 times more than the bottom 10%. In the US, this ratio is as high as 18.8 times. In fact, income inequality in the US is comparable to the levels we observe in developing countries such as Mexico and Turkey, despite the US having higher income per capita.

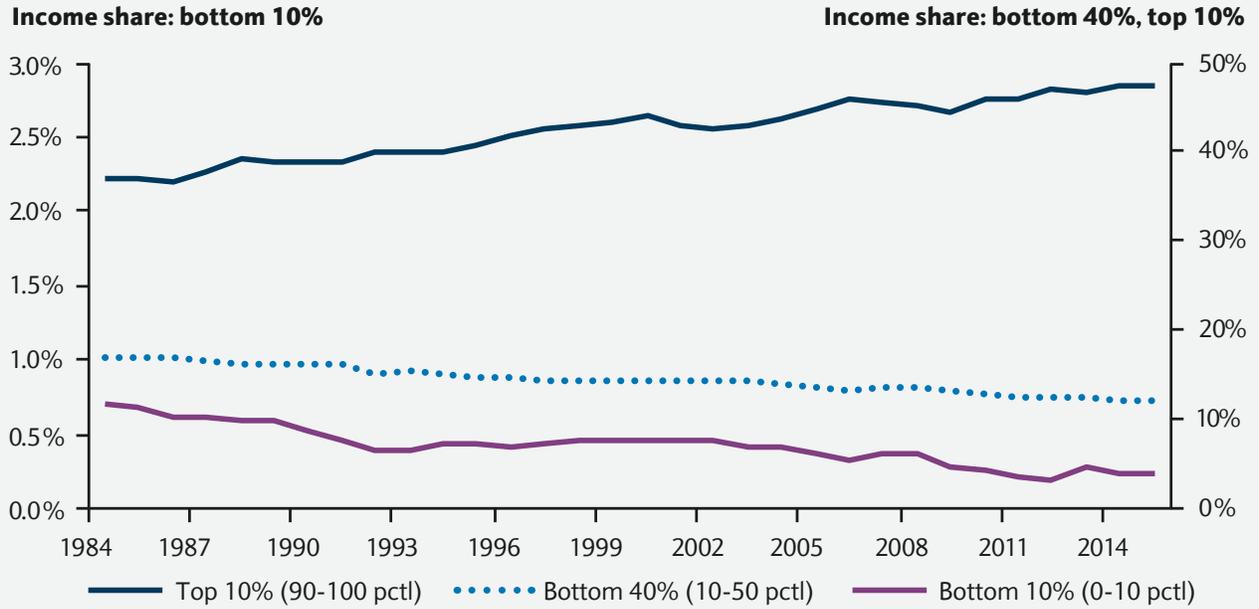
In addition, in the US, homeownership increases with income. The homeownership rate for households with low income (below \$25,000) is 46%, a figure that may in fact be bolstered by the presence in this group of retirees and other people who have purchased homes when earning higher incomes. The rate is nearly two times higher for households at the top of the income distribution (above \$132,000) at 84%.

Although it stands to reason that lower-income households would spend less on housing, it is less clear why they are more likely to consume housing via the rental market. One possibility is that income is a proxy for wealth, and that



FIGURE 7

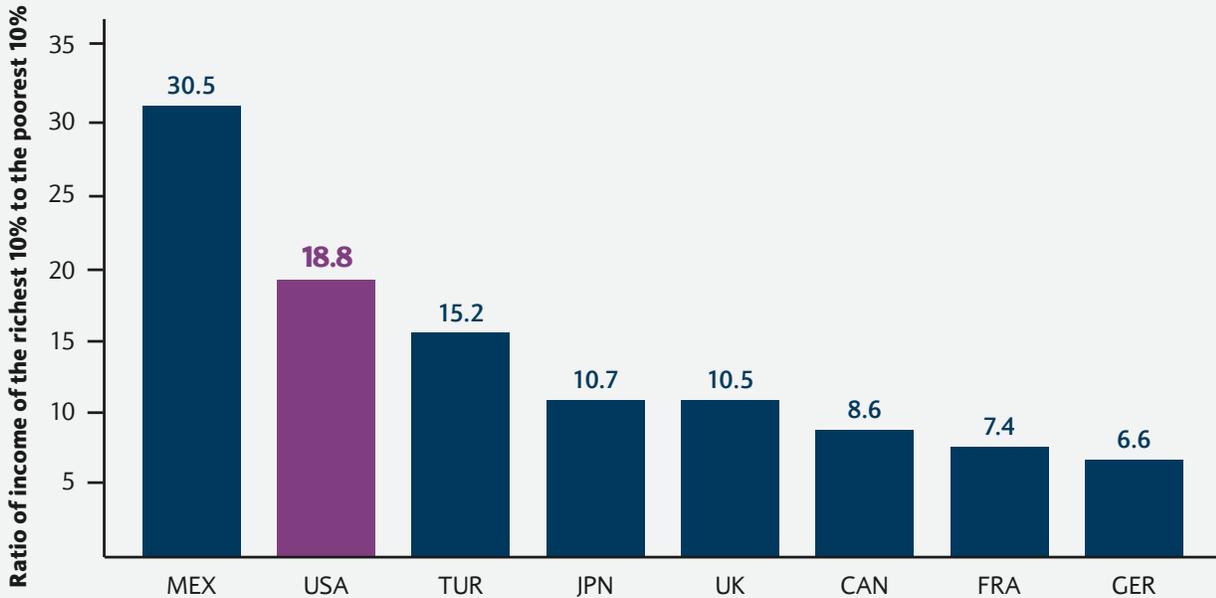
Rising income inequality



Source: Barclays Research, World Inequality Database (WID)

FIGURE 8

Income inequality around the world



Source: OECD Income Distribution Database, Data 2013-2015

Note: The chart shows the share of all income received by the top 10 %, divided by the share of income received by the bottom 10% for each country (S90/S10)

FIGURE 9

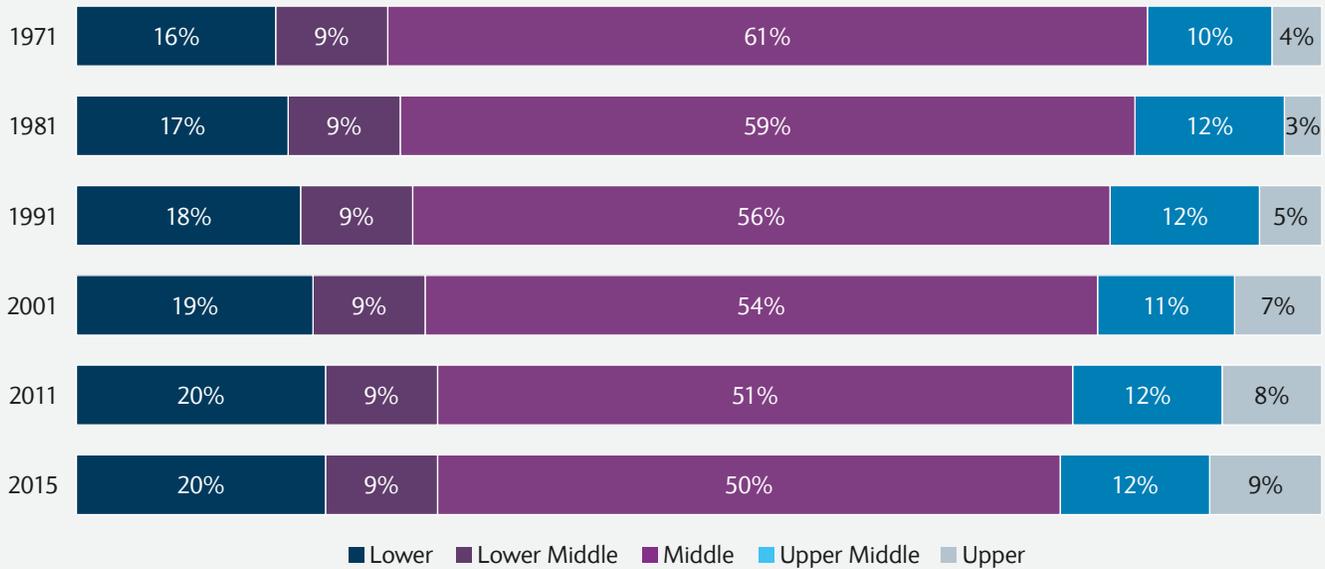
Homeownership rate across the income distribution



Source: Census Bureau, Current Population Survey, 2019 Annual Social and Economic Supplement
 Note: Low income is defined as the first quintile and high income as the fifth quintile of the income distribution, per the Census Bureau/Tax Policy Centre, 2018

FIGURE 10

Share of households by income class



Source: Census Bureau, Current Population Survey, 2019 Annual Social and Economic Supplements
 Note: Income classes are roughly based on the following cutoffs: Lower (\$0-\$29,999), Lower Middle (\$30,000-\$49,999), Middle (\$50,000-\$99,999), Upper Middle (\$100,000-\$349,999) and Upper (\$350,000 +)

lower-income households are less likely to have the necessary savings to make a sizable down payment. Alternatively, lower-income households may tend to have more volatile income streams. This could raise the attractiveness of the rental market, where the consequences of missed or delayed payments are less severe.

Over time, the middle-income class has also shrunk, increasing both the lower- and upper-income classes. These patterns, in combination with the decreasing income shares of the lower and middle-income class, indicate that the constraints on homeownership have become more binding over time.

Seeing government subsidies through a different lens

Based on these findings, the right question may not be why the US has similar homeownership to other developed countries, despite substantial public support. Instead, given elevated (and rising) income inequality, how has the US managed to maintain similar levels of homeownership to other developed countries?

A possible role of support for the housing market is to offset the negative impact of income inequality by improving access to mortgage credit for borrowers towards the bottom and middle of the income distribution. This would imply that, without government support in the US housing market,

the homeownership rate would be lower, and would have dropped as income inequality rose. The net macroeconomic effect on homeownership is a combination of the uplift from subsidies and the drag from income inequality. In this case the government's role could be considered a success if it did function as an offset.

Income inequality across states

To test this hypothesis, we constructed a panel dataset of all 50 US states. Our sample includes homeownership rates and income inequality for each state over a time period from 1984 to 2015 at an annual frequency. Our measure of income inequality is based on the Gini Coefficient, which reflects the statistical dispersion of income and is measured on a scale between 0 and 1. Higher values of the coefficient signify higher income inequality, with a Gini of 0 representing complete equality and a Gini of 1 complete inequality.

We first measured income inequality across US states in 1984, and compared the data with that of 2015. There is considerable heterogeneity across states, but the most and least unequal states are substantially different in the two years. For example, in 1984 South Dakota (Gini coefficient = 0.62) was the most unequal state, and New Hampshire (Gini coefficient = 0.47) the least unequal. In 2015 the most unequal state was New York (Gini coefficient = 0.71) and least unequal was West Virginia (Gini coefficient = 0.54).

Given elevated and rising income inequality, how has the US managed to maintain similar levels of homeownership to other developed countries with considerably lower income inequality?

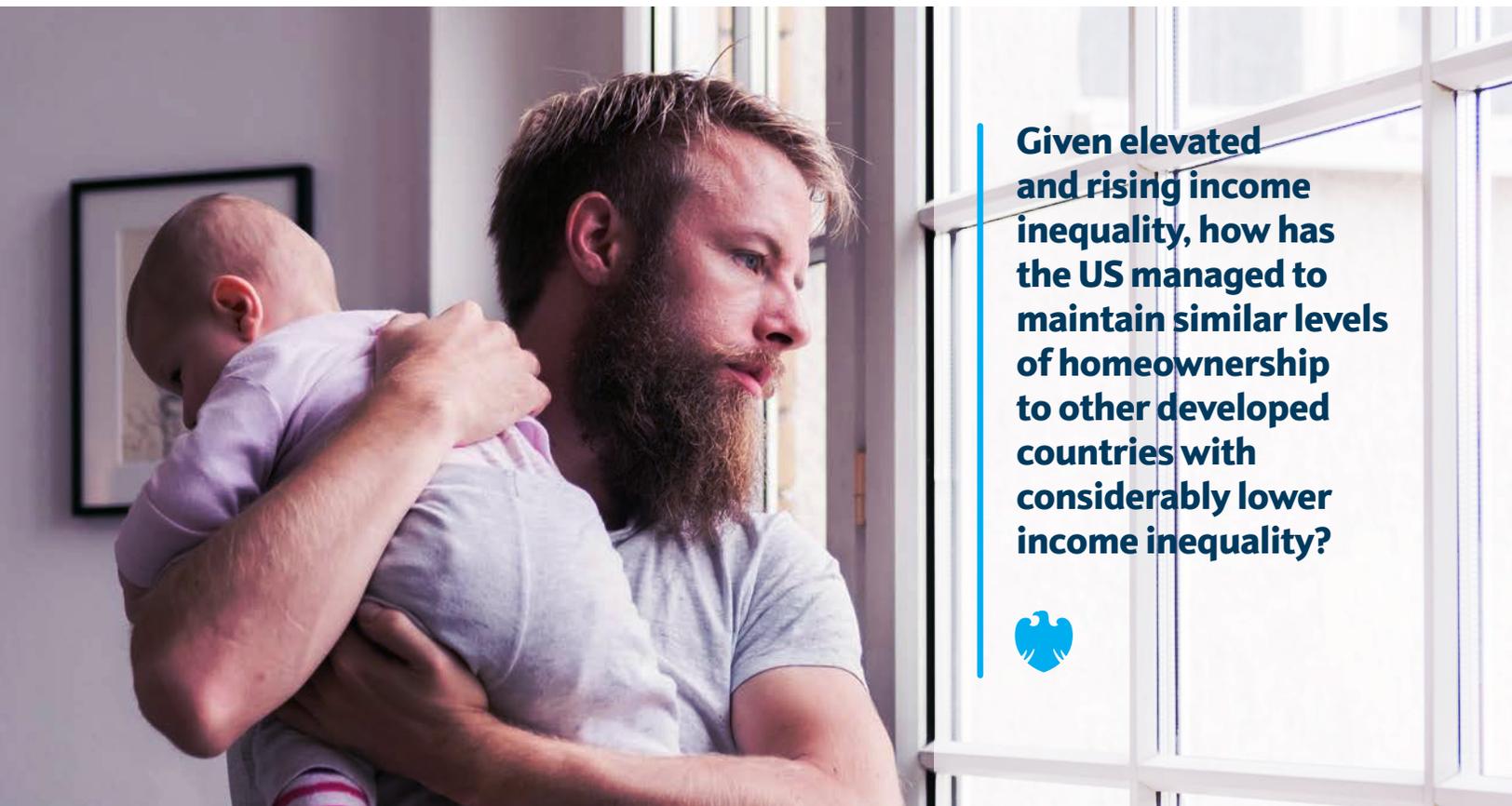
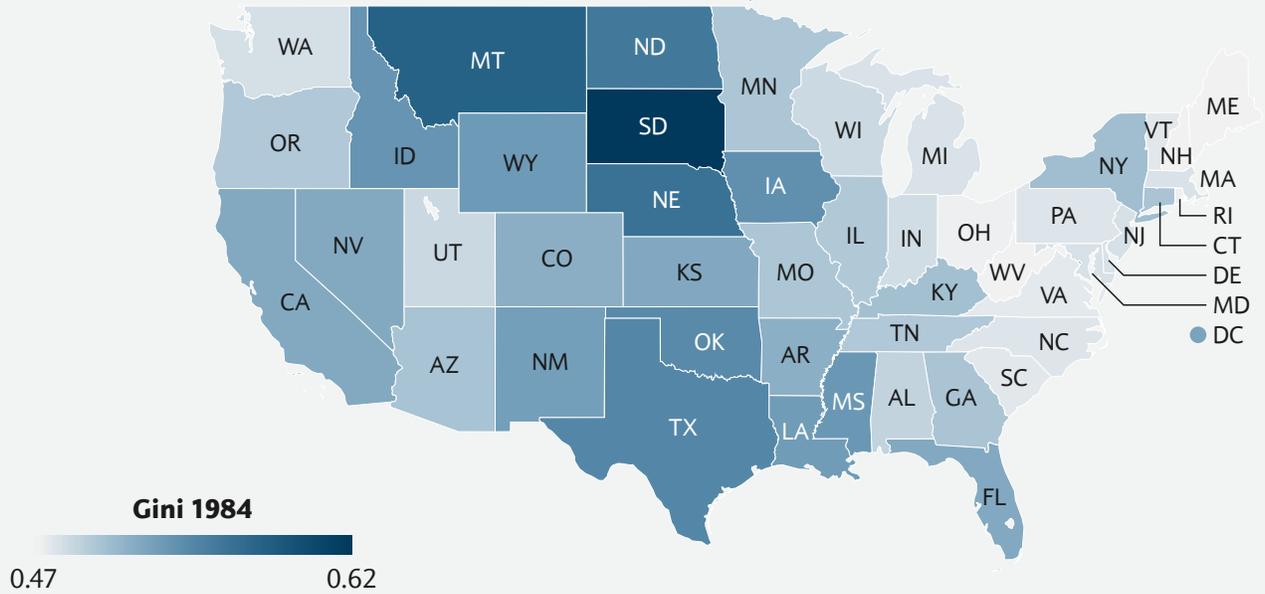


FIGURE 11

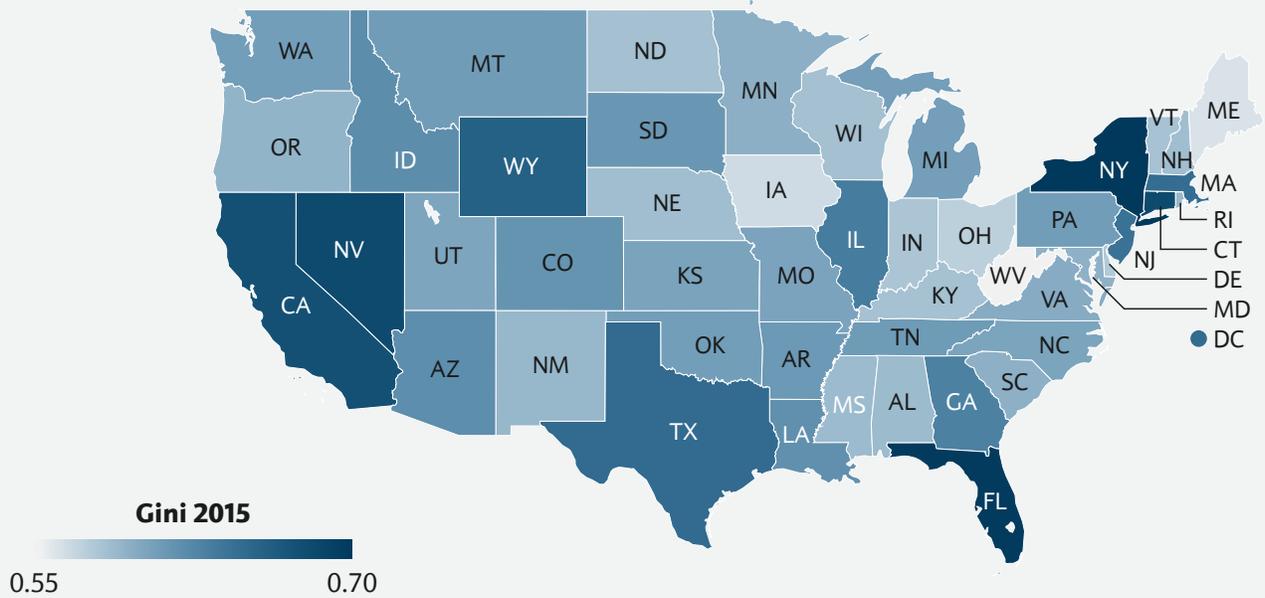
Income inequality across US states in 1984



Source: Frank-Sommeiller-Price Series (1984-2015)

FIGURE 12

Income inequality across US states in 2015



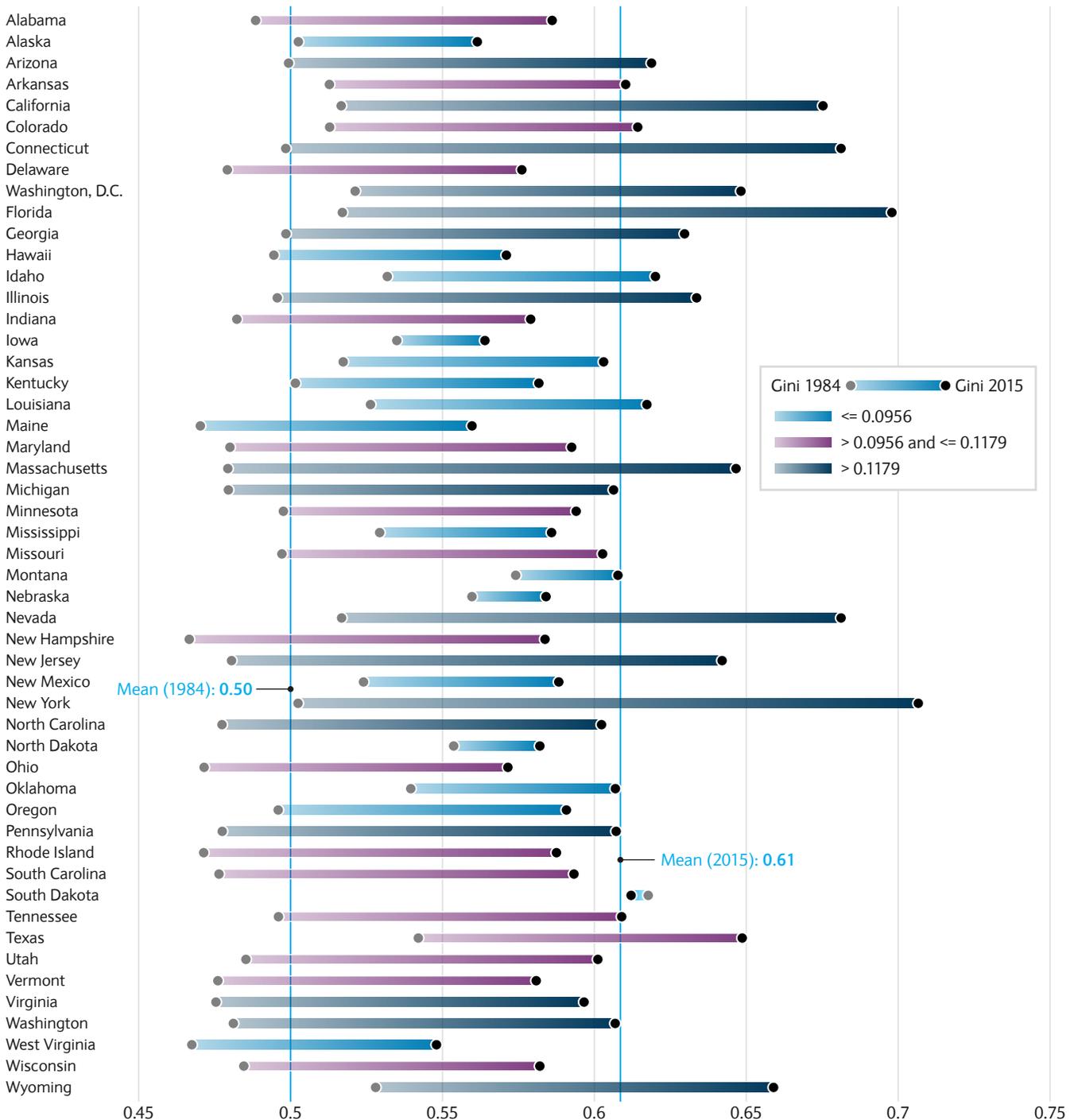
Source: Frank-Sommeiller-Price Series (1984-2015)

In measuring income inequality over time, we identify two important trends. First, it appears that states were closer together at the beginning of our sample in 1984 and grew further apart over time. Second, although the absolute level of income inequality has increased over time, different states

have been on different paths. States such as California, Florida and New York have become increasingly unequal, whereas others (Nebraska, Iowa and Montana) have changed little over the last few decades.

FIGURE 13

US states' income inequality over time, 1984-2015



Source: Frank-Sommeiller-Price Series (1984-2015)

Studying the impact of affordability targets

The 1992 GSE Act provides us with a setting to study the impact of introducing affordable housing goals on homeownership rates in an environment of increasing income inequality. To do so, we split our sample into two sub-samples: a pre-policy sample (1984-1995), which includes the transition period 1992-95, and a post-policy sample (1996-2015).

We evaluate the effect in a panel regression framework controlling for an extensive range of socio-economic and demographic differences across states as well as for factors on a national level, such as changing interest rates and credit conditions. The advantage of this approach is that it allows us to clearly disentangle the effect of income inequality on homeownership from the effect of other factors potentially correlated with income inequality.

Across states and over time, homeownership rates and income inequality are significantly negatively correlated; an increase in income inequality is associated with a decrease in homeownership. Comparing the results for the pre- and post-policy sample reveals an interesting relationship. Prior to the introduction of the GSEs' mandate, a 1 percentage point increase in income inequality decreases homeownership levels by 0.39 percentage points. These estimates are in sharp contrast to the ones we compute on the post-policy sample,

where a 1 percentage point increase in the Gini coefficient correlates with only a 0.13 percentage point decrease in homeownership. In other words, the negative impact of income inequality is substantially (although not entirely) compensated for by higher involvement of the GSEs in the mortgage market.

Our analysis shows that, after the introduction of affordability targets in 1992, the negative impact of income inequality on homeownership was 40 - 60% lower.

The level of affordability targets matters

Our baseline specification does not consider differences in the level of housing goals. Focusing on the post-1996 period, we use these data to evaluate in greater depth the joint effect of increasing income inequality and increasing GSE involvement.

In summary, we find that higher affordability targets mitigate the negative effects of income inequality on homeownership. Depending on the level of the target, the effect of a 1 percentage point increase in Gini on homeownership ranges between -0.14 pp and -0.051 pp. Although our model predicts that higher housing goals cannot fully compensate for the drag of income inequality on homeownership, the result still highlights the positive overall effect of higher housing goals for the GSEs.

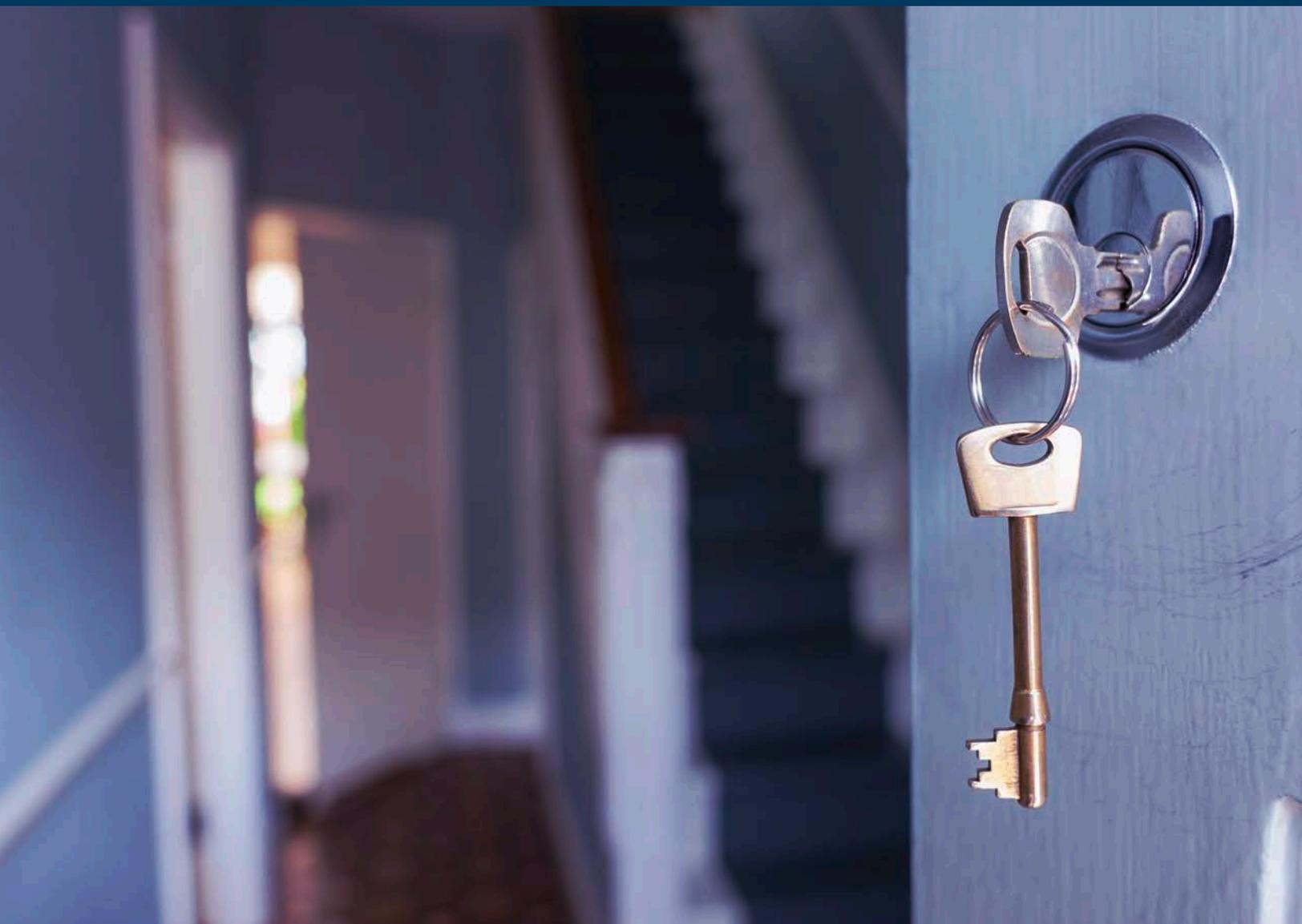
Across states and over time, homeownership rates and income inequality are significantly negatively correlated; an increase in income inequality is associated with a decrease in homeownership.



Key takeaways on income inequality, affordability targets and homeownership

Our findings support the view that government support for housing finance can offset heightened income inequality. Our main takeaways are:

- Over time and across US states, income inequality and homeownership are significantly negatively correlated.
- However, the impact of income inequality decreases as much as 60% after the introduction of the Affordable Housing Policy. Prior to the policy change, a unit increase in income inequality decreases homeownership rates by between 0.36 percentage points and 0.39 pp. After the policy change, a unit increase in income inequality decreases homeownership by only 0.13pp-0.20 pp.
- Without affordability targets, our model predicts between 0.60pp and 1.09pp lower homeownership rate due to the negative impact of income inequality.



Income inequality and housing: A divide by race

Racial disparities in US homeownership have existed for decades. In light of the current social climate in the US, and its likely effect on the debate about housing finance reform, we examine whether the relationships between homeownership, income inequality and the affordability targets vary by race, and particularly if they are stronger for the Black population.

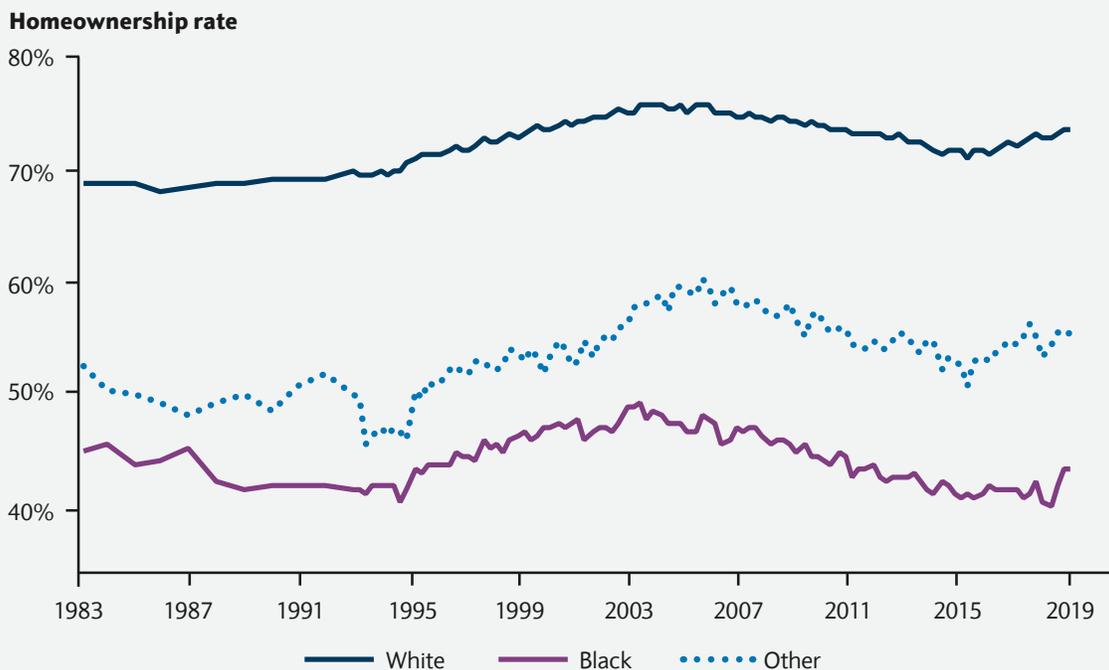
According to the American Community Survey, the homeownership rate for white households has hovered around 70%, whereas the rate for Black households is persistently lower at about 45%. Since the Great Recession,

the gap has increased, and is now at 30 percentage points, wider than it was before the passage of the Fair Housing Act of 1968, which made race-based discrimination in housing illegal.

At the same time, the goal of the GSE affordability targets is to promote homeownership among underrepresented and underserved groups, including minorities. Although we do not have individual level data to test if the targets actually met those goals, we can look at the state level to test if the policy had a differential impact on states with a larger Black population.

FIGURE 14

Homeownership by race



Source: Census Bureau – Current Population Survey (2019)

Note: Other refers to homeownership for Hispanic, Asian and Native American. Data for 1994-2020 is quarterly, data for 1983-1993 is annual. The annual data come from the March demographic supplement of the Current Population Survey. For the quarterly data, the source is the corresponding three monthly Current Population Surveys/Housing Vacancy Surveys.

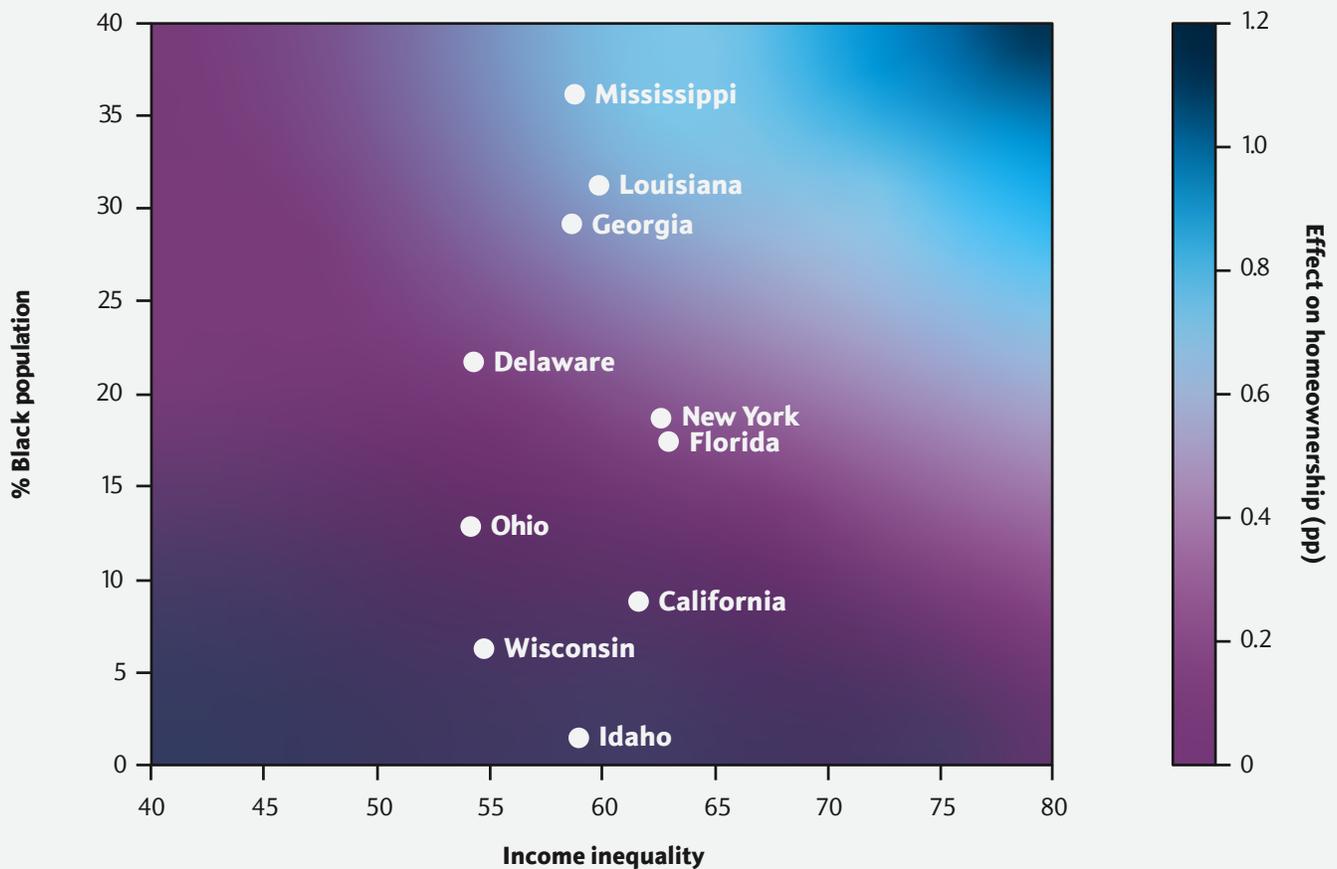
The economic magnitude of higher affordability targets

In order to test what effect higher affordability targets have on the drag income equality places on homeownership, we applied two targets – at 20% and at 40% – along a fine grid of income inequality and Black population, holding all other control variables fixed. The heat map clearly shows that while increasing the targets produces a positive effect across the entire grid, the largest benefits to homeownership accrue to the states with higher Black populations.

For states with large Black populations, such as Mississippi, Louisiana and Georgia, increasing the targets reduces the negative impact of income inequality on homeownership the most (between 0.80 pp and 1.1 percentage points). On the other hand, for states with low Black populations and low income inequality such as Wisconsin and Idaho, the improvement is limited (between 0.30 pp and 0.40 pp). For states with high income inequality but relatively low Black populations (e.g. New York or Florida), the predicted uplift is between 0.50 pp and 0.80 pp.

FIGURE 16

Benefit from the affordability targets by Gini and % Black population



Source: Barclays Research

NNote: Model predictions for GSE affordability target going from 20% to 40%. Gini and % Black Population for the select US states are evaluated at the mean over the period 1996-2015

An additional reality check: county-level data

One potential limitation of our model is that it cannot address intrastate differences in the level of income inequality or Black population. For example, as of 2018, 41% of the population of the State of Mississippi is Black. However, on a county level this number ranges from as low as 2.5% to as high as 87.5%.

Using the Census Bureau’s American Community Survey 2018 (ACS-5 year estimates), which contains detailed economic data available on a county level, collected over a 5-year period from 2014 to 2018, we extracted data on Gini coefficients,

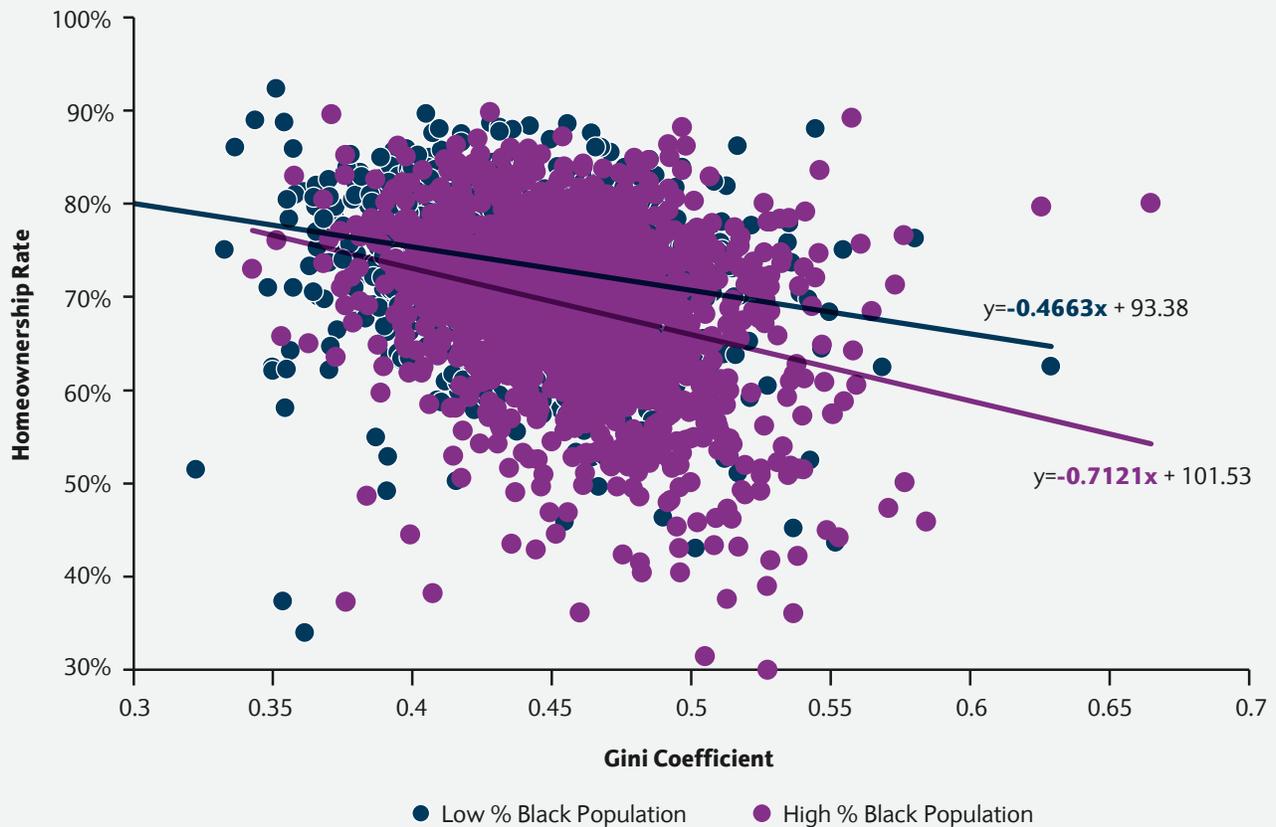
homeownership levels and Black populations for 3,142 US counties. This level of detail allows us to get a very granular picture of the US housing market which, however, sacrifices estimate precision to some degree.

We find that for all counties, higher income inequality is associated with lower homeownership – and again this is more pronounced for states with higher Black populations.¹

¹ We wish to stress that although our analysis focuses on the Black population, it does not imply that these residents are the only negatively impacted minority when it comes to housing outcomes.

FIGURE 17

County-level data – Black populations



Source: US Census Bureau, American Community Survey 2018 (5-year estimates)

Note: Counties with lower (higher) Black population than the mean are classified as Low (High) % Black Population

COVID-19, housing instability and the Black population

Although racial and economic disparities in homeownership existed long before the COVID-19 pandemic, the US Census Bureau's Household Pulse Survey shows that the economic fallout from the pandemic is widening these divides even further.

People of colour have been hit the hardest by stay-at-home orders and social distancing measures implemented to slow down the spread of the COVID-19 virus. This is mainly due to the fact that minorities are generally overrepresented in low-wage jobs and jobs that cannot be done at home. Layoffs related to COVID-19 for people of colour and minorities are more likely to bring about housing instability, since they tend to be more financially vulnerable and have lower savings to draw from during economic downturns.

The Pulse Survey is administered weekly nationwide by text and email, and produces between 100,000 to 150,000 responses every week. The survey reveals substantial differences in the ability to pay mortgages between Black and white households. For example, at the end of June, 30% of Black homeowners reported that they missed a mortgage payment, compared to only 10% of white homeowners.

These disparities are consistent throughout survey weeks and suggest that the housing policy response to the COVID-19 crisis should consider race-conscious interventions in order to achieve a faster and more inclusive recovery.

Key takeaways on race, income inequality and homeownership

We find strong evidence for disproportionate effects by race:

- The negative effect of income inequality on homeownership is 2.4 times higher for states with the highest percentage of Black populations than for states with the lowest Black populations.
- States with the highest Black populations benefited considerably more from affordability targets.

Policy implications

The link between income inequality and homeownership probably depends on two factors. First, it requires that there be constraints on households with lower incomes that keep them from owning homes, as opposed to simply owning less expensive homes.

Second, it requires that the rise in inequality includes an increase in the proportion of the population at the lowest absolute incomes, rather than just an increase in the highest incomes. We know that the second factor is satisfied in the US; the proportion of households with absolute incomes that qualify as “middle class” has shrunk, with both the lowest and the highest absolute incomes gaining share.

Although our results provide strong evidence that they exist, we don't fully understand the constraints that bind on lower-income households. That said, the affordability targets would not be effective unless access to mortgage credit played a role. Low-income households have lower FICO scores, and are correspondingly more likely to become delinquent. They also tend to make lower down payments. These factors increase the risk profile of loans to these borrowers, and could create a gap between rates that are affordable and

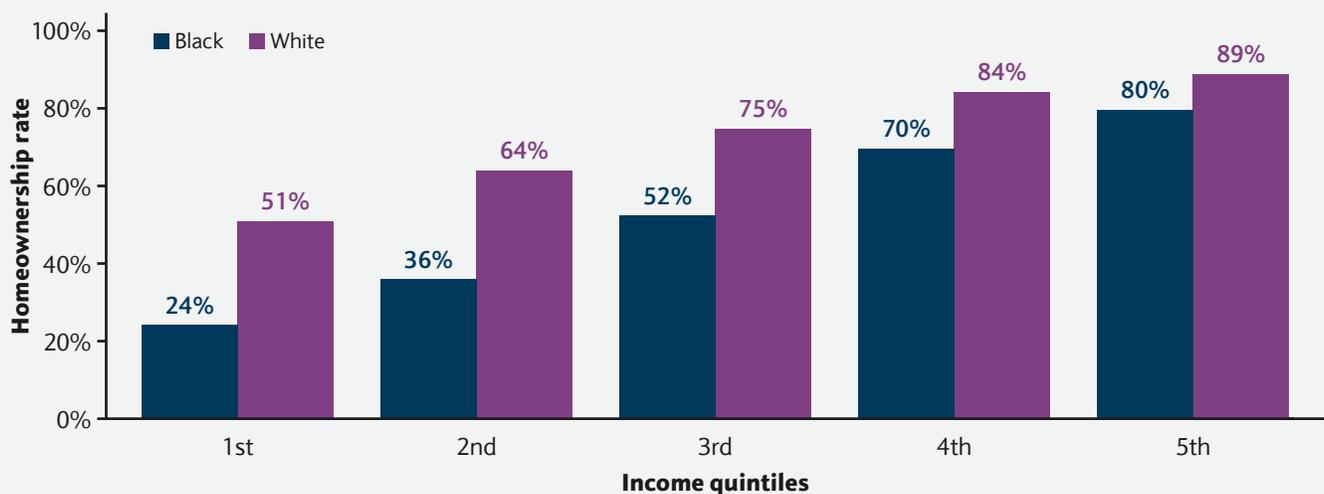
rates that generate a fair market return, which translates into constrained access to credit.

Our analysis shows that these constraints could be even more binding for Black households. Since we only have state-level data (rather than individual data), we cannot rule out that lower-income borrowers of all races have lower homeownership in the states with high Black populations. It is also possible that outright racism is responsible for any heightened sensitivity of Black homeownership to income inequality (such as lenders being less willing to lend to Black residents than to white residents with the same income and wealth).

While that may play a role, we believe it is more likely that the experience of lower-income Black Americans is different from that of white Americans, in a way that is relevant to access to mortgage credit. Some possibilities may include different levels of inter-generational support, a greater likelihood of single-income households, and more volatile wages. Regardless, the effect is clear – although Black Americans have lower homeownership across all income quintiles, the gap between Black and white homeownership is far greater at lower incomes.

FIGURE 18

Homeownership rate by household income



Source: American Housing Survey (2017)

Note: Data for Black households is compared against data for white households only. Comparisons between other races/ethnicities are omitted for brevity

Policymakers face stark decisions

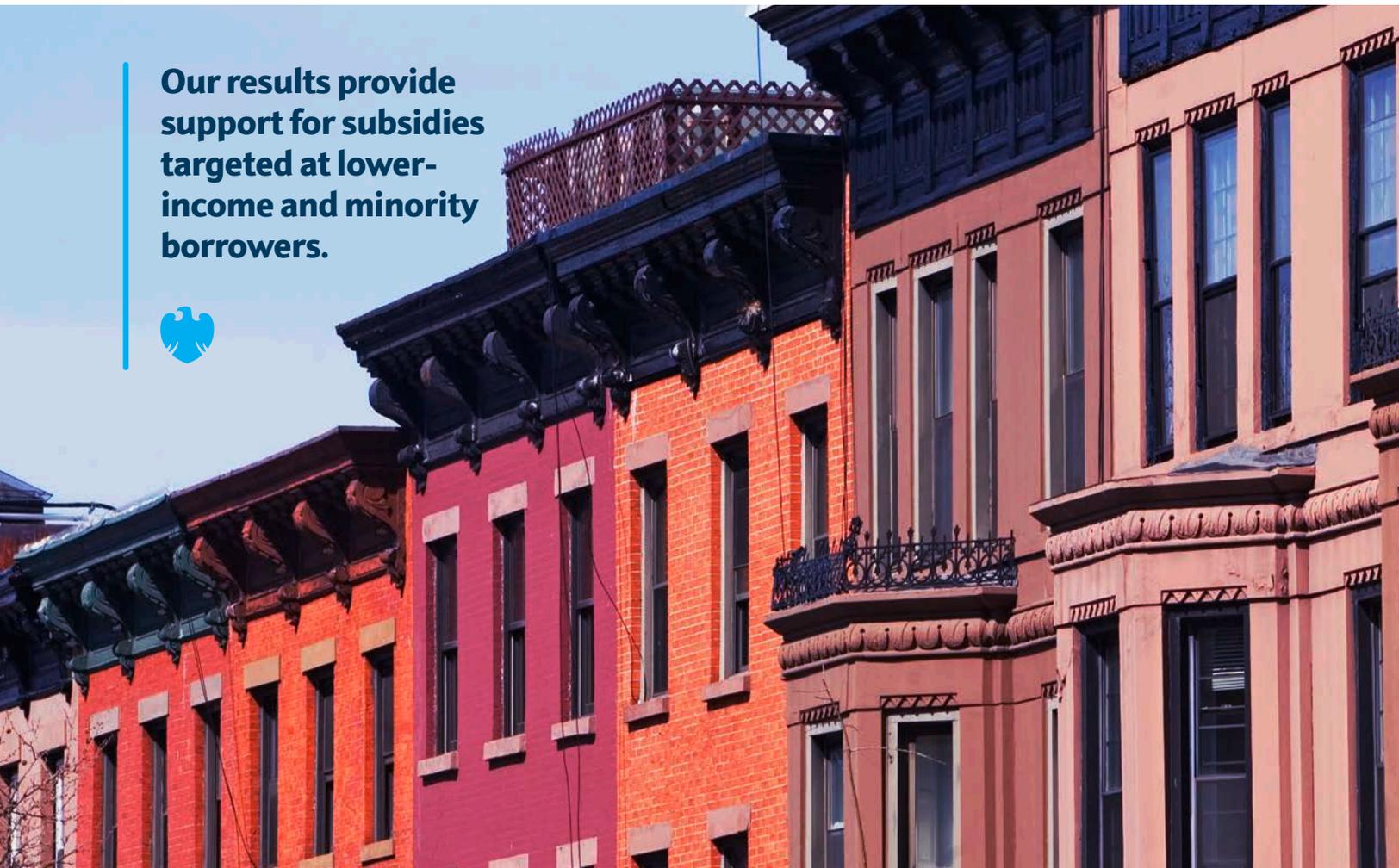
We emphasise that these results do not translate into support for the status quo. The current system is a patchwork of explicit and implicit subsidies, and it is likely that many of these do not contribute meaningfully to homeownership. For example, the GSEs explicitly target below-market returns from lower-income borrowers and above-market returns from higher-income borrowers. Yet despite this cross-subsidisation model, high-income borrowers still participate in the GSE market – meaning they must get cheaper rates than they would in the private market.

One possible explanation is that the GSEs have a structural advantage over the private sector, possibly due to the government backstop, lower capital requirements, or their exemption from state taxes. As a result, both high-income and low-income borrowers are subsidised, although in absolute terms high-income borrowers receive a smaller proportion of the subsidy. In other words, the GSEs do not

seemingly depend on over-charging high-quality borrowers to finance their subsidies of lower-quality borrowers; instead, they appear to undercharge all borrowers, just at differential amounts. Given that high-quality borrowers almost surely would retain access to mortgage credit absent this support, at reasonable rates, it is difficult to justify retaining the support the GSEs provide them.

Instead, that a program as simple as the affordability targets was able to mitigate about half of the effect of inequality leads us to conclude that well-structured government intervention can address some of the constraints facing lower income households. It also indicates that other forms of support for these households – notably the FHA – are not sufficient. If they were, then the introduction of the affordability targets would not have such a distinct effect. Without additional support, the reform of housing finance may result in lower homeownership for lower income and minority households.

Our results provide support for subsidies targeted at lower-income and minority borrowers.

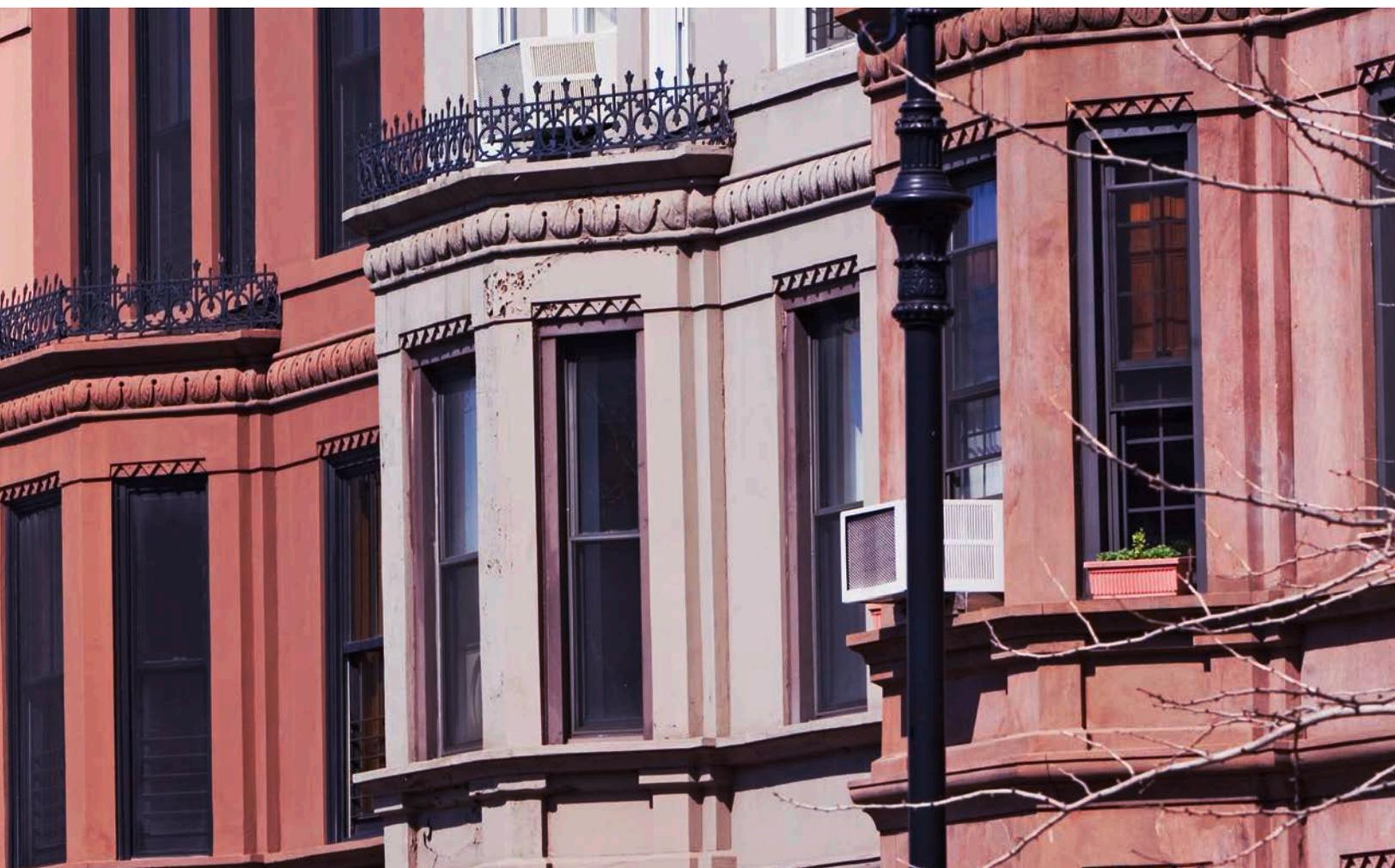


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