

# ECONOMIC COMMENTARY

## Racial Differences in Returns on Business Ownership

Jacob Hager, Barış Kaymak

In this *Commentary*, we document entrepreneurial income and investments for households of different racial backgrounds and provide estimates of investment yields. We find that an average Black household engaged in entrepreneurial activity has a higher rate of return on its business followed by Hispanic households and white households, a circumstance which makes low entrepreneurship rates among Black and Hispanic communities appear all the more puzzling.

Economic disparities across racial groups in the United States are well documented. Perhaps the most striking manifestation of these disparities is observed in net worth, that is, the balance of what a household owns and what it owes. Data from the 2019 wave of the Survey of Consumer Finances (SCF), which collects detailed information on households' finances, reveals that on average households that self-identify as white have roughly seven times the net worth of their counterparts that self-identify as Black and five times the net worth of their counterparts that self-identify as Hispanic.<sup>1</sup> While net worth is generally considered to be a function of a household's income, the magnitude of these racial wealth gaps presents a unique perplexity because they dwarf racial income gaps in comparison. According to the same survey, white households earned about twice the income of an average Black or Hispanic household in 2019, a large difference, certainly, but far smaller than average differences in net worth.

Economists have long sought to reconcile the relative sizes of income and wealth gaps across racial groups. A

household's net worth is a reflection of not only its income, but also a combination of its saving patterns out of income and the accumulated yields on those savings. A difference in either of these two elements could potentially lead to a wealth gap that surpasses the income gap. In their analysis of data from the Panel Study of Income Dynamics (PSID), which tracks households over time and collects information on their incomes, savings, and net worth, Gittleman and Wolff (2004) find significant differences in savings rates between Black and white households. That such a discrepancy exists is not altogether surprising since low-income households typically have lower savings rates out of income regardless of their racial background: paying for a family's basic needs, such as food and shelter, leaves little room for savings at low income levels. Indeed, Gittleman and Wolff (2004) find that the racial gaps in savings rates are almost entirely explained by differences in income levels. Using a model of household saving behavior, Aliprantis and Carroll (2019) further argue that closing income gaps would eventually close wealth gaps because higher incomes among racial minorities will raise their savings rates, as well.

Jacob Hager is a research analyst at the Federal Reserve Bank of Cleveland. Barış Kaymak is a senior research economist at the Federal Reserve Bank of Cleveland. The views authors express in *Economic Commentary* are theirs and not necessarily those of the Federal Reserve Bank of Cleveland or the Board of Governors of the Federal Reserve System or its staff. This work is licensed under a [Creative Commons Attribution-NonCommercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/). This paper and its data are subject to revision; please visit [clevelandfed.org](https://clevelandfed.org) for updates.



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Yet a substantial racial gap in net worth persists even among households with similar incomes, calling into question whether aligning income levels and savings rates will suffice to close the racial gap in net worth. These would not be sufficient to close this gap if there are also systematic differences in rates of return on savings across racial groups. Such differences could arise not only from differences in the types of assets households hold, such as common stocks versus banknotes, but also from differences in the yields for a given asset class. Research has, however, reached conflicting conclusions. On the one hand, white households typically invest a larger share of their net worth in higher-yield and, for the most part, riskier assets (Choudhury, 2002; Hanna et al., 2010). Estimates based on households' investment portfolios in combination with the economy-wide performances of those assets suggest that Black households earn lower rates of return on their net worth than do white households (Derenoncourt et al., 2022; Petach and Tavani, 2021). This finding appears plausible since the capacity to bear investment risk diminishes in tandem with a household's overall income level. On the other hand, however, trajectories of net worth among households tracked over time do not show a significant difference in rates of wealth appreciation between Black and white households (Gittleman and Wolff, 2004). If anything, Black households have a slight advantage in their wealth appreciation. These seemingly contradictory findings can only be reconciled if there are significant differences in yields within asset classes in favor of Black households.

One type of investment activity that potentially contains a great deal of variance in terms of yield is entrepreneurship. Unlike public equity, which is constantly traded in a common marketplace, private businesses are subject to greater financial hurdles when entrepreneurs wish to expand their businesses or to liquidate their assets. These hurdles can lead to sustained differences in rates of return if, for instance, profitable businesses have difficulty securing timely credit to scale up operations to take advantage of their high margins. If such obstacles affect racial groups differently, then a systematic gap in rates of return across racial groups might emerge.

Estimates of the returns on entrepreneurial investment are also relevant for programs aimed at incentivizing innovation. There is considerable public policy effort in the United States aimed at fostering entrepreneurial activity, such as targeted tax credits for new businesses, subsidies for research and development, and subsidized loans to help new entrepreneurs meet startup capital requirements. Identifying the potential for innovation and entrepreneurship among racial minority groups is important for those policies that strive to create a more inclusive ecosystem for innovation.

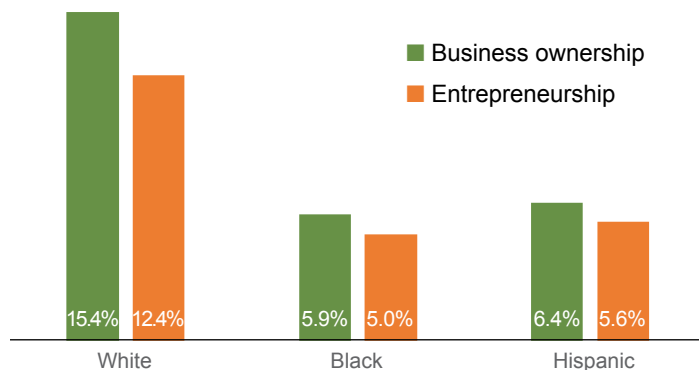
This *Commentary* establishes some stylized facts on the rates of return on entrepreneurial investment by racial background, discusses the role of entrepreneurship in the racial wealth gap, and identifies questions that warrant further research. In what follows, we document the racial differences in returns on business investment and entrepreneurial activity. We find that Black entrepreneurial households have, on average, a higher rate of return on their businesses, followed by Hispanic households and white households. This makes low entrepreneurship rates among Black and Hispanic communities all the more puzzling. We conclude by discussing potential caveats and possible interpretations of gaps in rates of return on entrepreneurship across racial groups.

## Business Ownership, Entrepreneurship, and Racial Background

Business ownership is considered a viable pathway to higher echelons of net worth. Roughly three out of four of the wealthiest 1 percent of households hold some form of private equity, compared to one in eight households in the total population.

Figure 1 shows the rates of business ownership and entrepreneurship for the three major racial groups reported in the SCF, non-Hispanic white, non-Hispanic Black, and Hispanic. The green columns report the fraction of households in each racial category that hold some form of equity stake in any private business or farm.<sup>2</sup> A stake includes passive investments, wherein the household owns shares in a business but is not directly involved in its operations, and active investments, wherein the household owns the business, in part or in full, and actively partakes in its operations. We label the latter activity as entrepreneurship and show involvement therein separately with the orange columns.

**Figure 1: Business Ownership and Entrepreneurship among Racial Groups**



Source: Authors' calculations from the Survey of Consumer Finances 2004–2019

Notes: Green columns show the fraction of households that own a business (or a farm). Orange columns show business owners who are also actively involved in business or farm operations ("entrepreneurs"). Households labeled as "white" or "Black" comprise non-Hispanic white or Black households, respectively.

The business ownership rate among Black individuals is 5.9 percent, that is, 5 percent who are entrepreneurs and 0.9 percent who are passive investors. A similar pattern is seen among Hispanics who have business ownership and entrepreneurship rates of 6.4 percent and 5.6 percent, respectively. These rates are much lower than among white households, 15.4 percent of which are invested in a private business in some form and 12.4 percent of which are entrepreneurs.

These numbers indicate that most business ownership is entrepreneurial in nature. Passive investments in private businesses are rare and mostly secondary in nature, especially among Black and Hispanic households. These numbers in comparison also show that Black and Hispanic households continue to remain underrepresented among business owners and entrepreneurs.

## Rates of Return on Business Investment

Households in the SCF are asked to detail their annual incomes and their sources. The incomes drawn from private businesses (including farms), in particular, are reported separately from other sources. Combining this information with the reported values of their business net worth allows for a direct measure of yields on private equity. The primary advantage of this approach is that it gives a rate of return for each household.

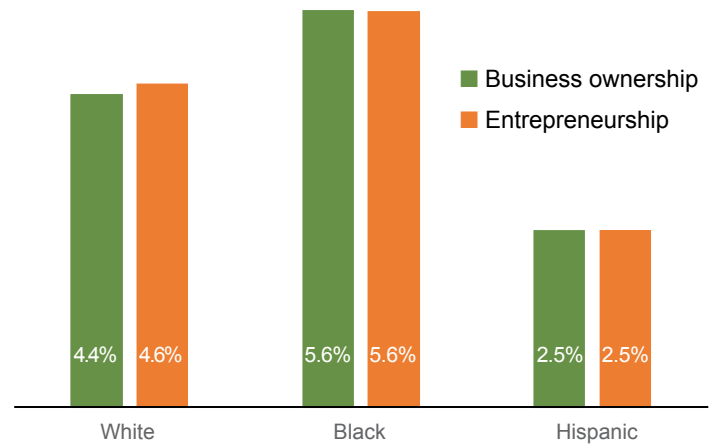
An important challenge a researcher has to face in this endeavor is posed by entrepreneurs, who own and actively work for their business, because it is not always obvious whether the income drawn reflects compensation for their labor or for their capital investment or both. For most business formations, the Internal Revenue Service requires that entrepreneurs report salary income commensurate with their involvement in the business separately from their business profits. Indeed, most entrepreneurial households do report salaries. However, for some businesses, such as those with sole proprietorship, there is no such legal requirement. Among the households in our sample, 2.6 percent report active business income but do not report any salary. Following the procedures in Kaymak et al. (2020), we allocate 75 percent of business income to entrepreneurial labor and the remaining 25 percent to return on capital for households that report income from an actively managed business but do not report salary income.

Figure 2 shows the ratio of business income to net worth for different racial groups. Once again, the green columns to the left show the return on all business investment regardless of whether the members of the household are actively involved or not. The average yield (weighted by equity invested in the business) is 4.6 percent for white households, 5.6 percent for Black households, and 2.5 percent for Hispanic households. Orange columns to the right show the corresponding ratios for entrepreneurial investment alone. Patterns of the returns to investment among entrepreneurs are generally comparable to that of overall business investment. Black households have slightly higher average returns than white households, which have higher rates of return than Hispanic households.

Overall, the rates of return implied by reported income are too low relative to the returns on public equity during this period. The S&P 500 index, for instance, had an annualized return of 6.7 percent, exceeding the returns documented above. Since investment in private business is typically riskier and less liquid than commonly traded stocks, and since most entrepreneurial households do not diversify, one would expect higher returns on private equity investment in compensation.

Note, however, that the yields in Figure 2 only reflect income drawn from the business. Part of the business proceeds that are reinvested inside the business are not included in these yields. The reinvested portion of the profits, also known as “retained earnings,” raises the value of the business, and that gain in

Figure 2: Business Income to Business Equity Ratio



Source: Authors' calculations from the Survey of Consumer Finances 2004–2019

Notes: Figure shows the ratio of a household's business income to its equity. Entrepreneurs are business owners who are actively involved in the operation of the business. Households labeled as “white” or “Black” comprise non-Hispanic white or Black households, respectively.

valuation should be considered part of the return on business equity in principle. Considering investments within the business could affect our comparison of yields between racial groups if there are systematic differences in patterns of retained earnings across these groups.

Appreciation of business value shows in income only when a household sells shares of its business, a situation which happens infrequently. The proceeds from the sale are reported as (realized) capital gain and reflects the cumulative accumulation of business value since the establishment or the acquisition of the business. Since most entrepreneurs retain their businesses year over year, however, the appreciation of business value, or accrued capital gain, does not show in income statistics.

Fortunately, SCF collects information on a household's cost basis, that is, the cumulative value of its investments in its actively managed businesses. The difference between the value of a household's business and its cost basis is the cumulative capital gain associated with the business. The advantage of this information over reported capital gain income is that it includes not just realized but also accrued capital gain. Next, we explore whether there are systematic differences in capital gains that could overturn the patterns in rates of return by racial group.

Table 1 shows the gains from appreciation of business value. The first column reports the current value of the household's share of the business relative to its cost basis. Cumulative gains are large because they represent gains that are compounded over several years. In particular, they are not comparable to the annual returns reported in Figure 2.

Across racial groups, capital gains from actively managed businesses are somewhat larger for white and Hispanic households. On average, white entrepreneurs' businesses have grown in value 3.4 fold, whereas Hispanic entrepreneurs' businesses have grown 3.7 fold. Black entrepreneurs' businesses appear to fare somewhat lower at 3.0 fold. At first, these seemingly small differences in value gains suggest that entrepreneurs of different racial backgrounds retain similar shares of their proceeds in their businesses and enjoy similar business value growth. This conclusion stands in contrast to racial patterns in savings rates out of income that are reported elsewhere.

However, a closer look at how long entrepreneurs have held their businesses reveals a more nuanced comparison. The second column shows the average tenure, that is, years passed since the business was established or acquired by the household. On average, white entrepreneurial households have held their businesses for 13 years, whereas Black and Hispanic entrepreneurial households have operated theirs for nine and 10 years, respectively. Accounting for the longer time span for white entrepreneurs depicts a slightly different picture. In the third column, we report the average annualized yield for each of the racial groups. On an annual basis, the average rate of appreciation is 10 percent for white households, whereas it is 14 percent for Black households and 15 percent for Hispanic households. These rates are substantially higher than those reported in Figure 2.

Overall, the rates of return on business investment appear to be high, particularly among Black entrepreneurial households: combining the income yields in Figure 2 with accrued capital gains reported in Table 1 gives a rate of return for Black households of around 20 percent on an annual basis. The corresponding rate is about 17 percent among Hispanic households and 15 percent among white households (see Figure 3). Differences of a few percentage points can be significant when compounded over years. An asset with a 20 percent annual return outperforms an asset with a 15 percent annual return by 53 percent over 10 years and doubles it in 16 years.

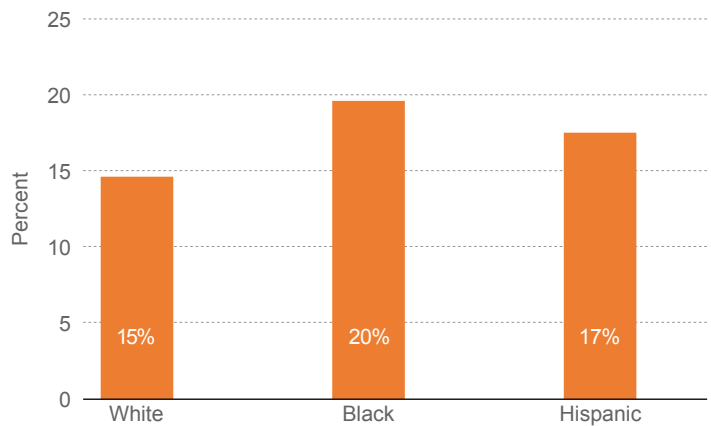
**Table 1: Appreciation of Business Value**

	Value/cost	Tenure	Annualized yield
White	3.4	13	10%
Black	3.0	9	14%
Hispanic	3.7	10	15%

Source: Authors calculations based on the 2004–2019 waves of the Survey of Consumer Finances.

Notes: First column shows the value of a household's business relative to its cost basis. Tenure is the average number of years since the business was established or acquired. Households labeled as "white" or "Black" comprise non-Hispanic white or Black households, respectively.

**Figure 3: Total Return on Entrepreneurial Investment**



Source: Authors' calculations from the Survey of Consumer Finances 2004–2019

Note: Households labeled as "white" or "Black" comprise non-Hispanic white or Black households, respectively.

## Caveats and Comments

It is worth noting that our calculations are based on a household's own assessments of the value of its business and its reports of business income. Hurst et al. (2014) finds underreporting of income to be a common concern in survey data among the self-employed. Repeating their analysis specifically for the SCF, Kartashova (2014) cautions against potential overreporting of business valuation during the 2005–2010 period. It is unclear how this overreporting would affect differences in rates of return across racial groups since we do not know whether patterns of misreporting are more or less prevalent in any one racial group.

Consideration also has to be given to the tax treatment of the reported returns since the returns reflect yields before personal income taxes. It is difficult to ascertain what the effective tax rates would be and whether they would vary systematically across racial groups. Differences in tax rates could arise from differences in entrepreneurs' incomes from other sources, their local tax jurisdictions, the legal forms of their business organization, or in how they plan to liquidate their accrued capital gains in the future. By contrast, the returns are net of taxes paid directly by the business, such as corporate income taxes, because these are deducted from profits before entrepreneurs draw their incomes and because the reported value of a business should in principle reflect any current and future tax liabilities of the business.

Our estimates are also subject to survival bias, an optimistic depiction of reality caused by focusing on successful members of a group. Because SCF takes a series of snapshots of household finances, the observed entrepreneurs are those who have managed to keep their businesses afloat over the years. They represent the successful business ventures. A snapshot does not tell us how many business ventures might have been attempted and failed in the same time period. This omission could potentially overturn the racial comparisons above if failure rates are disproportionately high among Black or Hispanic households. Shorter average tenure of business ownership (see Table 1) is consistent with that hypothesis but is not conclusive since not all exits out of entrepreneurship are failures. In fact, an exit could represent a successful venture's acquisition by a larger corporation. Moskowitz and Vissing-Jørgensen (2002) estimate that just 15 percent of business terminations are actual failures. This estimate allows for an approximation of the size of the survival bias, assuming complete loss of equity in case of failure. The inverse of the years of tenure approximates the chances of termination for each group: one in nine for Black households, one in 10 for Hispanic households, and one in 13 for white households. Multiplying these odds by 15 percent offers approximate failure rates for each racial group. Combining the failure rates with the estimated rates of return gives the expected return on business investment that accounts for the possibility of failure and, therefore, corrects for survival bias. The resulting rates of return are 17.5 percent for Black households, 13.3 percent for white households, and 14.7 percent for Hispanic households, numbers suggesting that the racial gap in rates of return are not likely to be explained by differences in failure risk.

Our findings cast a more refined role for entrepreneurship in explaining racial gaps in net worth. On the one hand, Black households and, to some extent, Hispanic households seem to have higher yields on their investments. Given the lower rates of entrepreneurship in these communities, the discrepancy appears to be in gaps in entrepreneurial investments rather than the efficacy with which those investments are used.

Further research is essential to answer two intrinsically linked questions to better our understanding of the matter, namely, the following: What is the source of racial gaps in rates of return on business investment? And why are entrepreneurship rates much lower among Black and Hispanic households than among white households, especially considering that the primary alternative to self-employment is salaried employment and that Black and Hispanic workers have lower wages on average?

In finance, wherein investors freely trade assets, higher returns are typically considered compensation for risk. One avenue of research might be to look into differences in inherent risks associated with business ventures undertaken by different racial groups and balance that with differences in the capacity to bear such risks given racial gaps in income and net worth. Alternatively, differences in rates of return can result from misallocation of investment because of market imperfections such as barriers to entry or financial constraints in credit access. A second avenue could investigate whether financial impediments can help reconcile the racial differences in rates of entrepreneurship with those in rates of return documented here. Finally, cultural differences in investment preferences and attitudes toward risk are other potential areas for exploration on this topic.

## Endnotes

1. Households labeled as “white” or “Black” comprise non-Hispanic white or Black households, respectively, as classified in the SCF.
2. This definition includes only formal businesses. We also exclude businesses with no (market) equity value. These may include businesses for which an entrepreneur’s labor input is the only source of income for the business, for example, part-time consulting or certain freelance jobs that are organized as a formal business.

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