Discussion of “Persistent Racial Wealth Gaps” by Job Boerma and Loukas Karabarbounis

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This paper is an insightful and important social-scientific analysis of both the legacy of slavery on wealth accumulation and the efficacy of policies designed to close this gap. The paper uses a state-of-the-art, general-equilibrium model of the type previously used to study wealth inequality over time and across generations to study the racial wealth gap. At the broadest level, I read the paper as a cautionary tale.

In the model, all agents, Black and White, choose how much to invest in a high-risk, high-return activity and, if they end up with enough wealth, leave bequests to their heirs. But all households in the model, have to learn about the return to the high-risk opportunity. The key assumption is that all agents update optimally but based only on their own dynasty’s past experiences. Because slavery and economic discrimination prohibit learning about high-return activities and investments, Black agents, in the model’s version of the present, start with a prior belief that the probability of success in these high-risk opportunities is low.

As a result, even a transfer of wealth from White agents to Black agents that completely equalizes average wealth – an extreme policy relative to almost any historical precedent – fails to equalize economic outcomes by race. Over time, Black agents, having not been allowed to learn the probability of success in the high-risk, high-return activity, invest less in the high-risk, high-return activity than White agents and so leave lower bequests to their heirs. Thus the racial wealth gap re-emerges even as the ‘belief gap’ closes. This is the cautionary tale: treating the current symptom directly – wealth inequality – without treating other residual inequalities of slavery may not
succeed in closing the wealth gap prospectively. In the paper, the residual inequality is the information gap about the high returns that comes from (restricted) past experience. And address-ing this inequality as well – the belief gap – through a policy that subsidizes the returns to investing in the high-risk, high-return activity for Black agents, is a policy that can permanently eliminate the Black-White wealth gap.

In the remainder of my discussion, I briefly review the model, emphasizing the assumption that people’s learning over-weights their own dynasty’s past experiences. This assumption implies that beliefs are a state variable that differs by race and that propagates the damaging effects of slavery and discrimination. Second, I discuss how important it is to measure well and address what I just called ‘other residual inequalities’ from slavery and discrimination and present an example. There are two important high-return investments in which there are large racial gaps that appear at first pass consistent with racial differences in beliefs. But are they? One cannot randomly assign race or beliefs to infer their roles, however one can investigate the correlates of differences in investment behavior besides race. And I will argue that for these two investment opportunities, a majority of the gaps in investment behavior are driven by differences in actual returns some of which appear to be driven by liquidity shocks rather than racial differences in beliefs independently. That is, in these cases, there is little evidence that racial differences in behavior or beliefs are inconsistent with reality in the present. Liquidity shocks – that is, lack of wealth itself – appear to cause most of the racial gap in these investments. Does it also cause differences in the paper’s central example, entrepreneurship? If so, then these gaps would be eliminated by reparations alone because they would close the investment behavior gap and the ex post return gap. In sum, while this paper raises an important warning – that beliefs based on own experiences may propagate inequality – the evidence that I discuss suggests that reparations would be more effective than in this model.

1 Key model components and findings

The core of the model is a relatively standard, heterogeneous agent, overlapping generations model with uninsurable, idiosyncratic risk and in which bequests are a luxury good. There are two types of agents, Black and White, that are identical in terms of preferences but are treated unequally. The
(lifetime) wage is stochastic with race-specific (serially correlated across generations) distributions based on historical data. Each generation chooses what fraction of its time to devote to working and earning its wage and what fraction to devote to a high-risk, high-return activity. Each generation also chooses what fraction of its wealth to invest in a safe asset and what fraction to invest in a high-risk, high-return investment. These fractions must be the same—labor time must be allocated in equal proportion to wealth—so that the activity is most analogous to entrepreneurship. The model is solved with either exogenous or endogenous aggregate (average) asset returns, and in each case, returns on the high-risk activity decline over time as more agents accumulate wealth.

In terms of beliefs, all agents know all model parameters except the probability of success of the risky activity/investment. Agents update this probability based on their own dynasty’s individual experience. This assumption is critical for propagating wealth inequality. The assumption of rational expectations would make reparations completely effective (conditional on equalizing all other factors as assumed in the model experiments). Given its importance, is this a good assumption? The paper shows that its main results still hold when agents can learn also from the others as long as they still overweight their own experiences. And there is a large (cited) literature that individuals overweight their own experiences in forming their beliefs. In particular, Malmendier and Nagel (2011, 2016) show that individual past experiences shape investment behaviors. My reading is that this evidence is sufficiently convincing that we absolutely should consider whether policies that are effective under rational expectations are robust to the alternative assumption that learning occurs as the authors posit. Before implementing the authors’ suggested policy however, I would also want to consider whether there are teaching or information interventions that might make reparations fully effective. I suggest one such possibility when discussing the findings below.

In sum, in the model, wealth inequality is propagated across generations by lower Black wages, higher White bequest, and each generations’ choices about how much to consume and how much of savings and labor effort to invest in the high-risk, high return activity.

The model is parameterized so as to fit to the past evolution of Black-White wealth gaps given historical expropriation of Black earnings by White

1See Malmendier and Wachter (forthcoming).
households during slavery (1780-1860) and Black exclusion from high-risk, high-return investments and lower earnings (as in earning data) in the pre-civil rights era. The model is simulated into the future and various policies considered under the assumption that the economic opportunities of Black and White households are equalized going forward given their inherited wealth; that is, both types of agents have equal access to high-risk, high-return investment options and equal wage distributions. There are two main lessons from the model.

First, even under the extreme assumption of equal opportunities in the future, the model implies that, absent policy interventions, the Black-White wealth gap is extraordinarily persistent. In the model, this occurs in part because convergence of wealth distributions is slow even in standard models. Convergence is further slowed in this model because Black agents make safer, lower return portfolio choices both because they have less wealth (and bequests are a luxury good) and because past discrimination has blocked Black agents from learning about the high-risk, high-return investment activity.

This finding echoes Derenoncourt, Kim, Kuhn, Schularick (2022): which finds the same result in a much simpler model without any differences in portfolio choices or returns by race. The is an important and under-appreciated point: wealth distributions are very slow moving over time. Even under optimal behavior and no discrimination, Black-White wealth distributions will take many, many generations to converge. We do not need to look for further explanations for the continued race gap in economic situation. The fact that we have persistent large wealth gaps does not itself imply ongoing discrimination or failures of Black households to take advantage of opportunities. Standard economic models imply that the impact of past slavery and discrimination on relative wealth will fade only very slowly, even if we could eliminate all discrimination and wage gaps today, which we of course we have not. Anything remotely close to equalization in any of our lifetimes requires policy interventions (broadly defined).

The second, and more novel finding of the paper is where I read the paper as a cautionary tale. In the model, equalizing wealth by race through reparations causes only a temporary elimination of the wealth gap by race. Primarily because Black agents have not learned about the high probability of success in the high-return investment, they invest less in the high-risk high-return activity than White agents. These different choices lead to lower returns by Black agents than White agents, and so Black agents accumulate relatively less wealth. And the wealth gap opens up again. The point: even in
the model where we can eliminate disparate racial treatment going forward, wealth reparations are not enough.

Give that the central problem for reparations is the initial racial gap in beliefs about returns to the risky activity, a more effective policy subsidizes these returns for Black agents and speeds learning. The paper shows this point with a nice experiment, so that there is a policy route to equalizing wealth distributions. Nicely, in the experiment the subsidy does not change the learning technology. But, as I noted above, it might be possible to provide information — contracts, promises, etc. — along with reparations so that behavior changes more than just through learning about underlying returns. For example, I conjecture that in the model, a policy that promised an after-subsidy distribution of return equal to that believed by white agents could cost nothing ex post and would make reparations fully effective under both rational expectations and the learning model assumed by the paper (as long as one allows fully credible version of my policy).

One reaction to the paper might be concerns that slavery and lack of civil rights has caused other differences between Black and White households besides belief differences. This paper shows that the efficacy of policies to equalize the distribution of outcomes are critically dependent on how people update beliefs about the returns to the high-risk, high-return activities and investments. Should we be worried about beliefs about other opportunities from which Black households have not had equal access? What about other ‘residual inequalities’ caused by slavery and discrimination?

2 How is the past persistent? Liquidity and investment choices

I will begin by characterizing two entire fields with a complete lack of nuance. First, economics studies human behavior from the starting point that people are ex ante identical and behave differently due to different economic circumstances. As examples, in the classic Becker models of taste-based discrimination and statistical discrimination, Black and White agents are economically similar except for differential treatment. Empirically, economics has also focused on both inputs — access to schooling, loans, jobs — and outputs — wage differentials, skill gaps, wealth gaps — that are more measurable.

In contrast, sociology studies the way in which group experiences shape
culture, and culture shapes individual behavior and group outcomes. There is a substantial amount of work in sociology about the way in which Black American culture in part derives from the shared experiences of slavery and lack of equal rights. I am very much not an expert in this literature (or at least my familiarity with it is out of date), but this line of argument often implies that increasing wealth alone does not address completely the problems caused by past discrimination and persistently low wealth. Sociological approaches instead often recommend a richer and broader array of policy interventions that address directly other ills associated with low wealth.

While this paper sits in the economics tradition, in that Black and White agents in the model are identical except for their experience, the inequality in the treatment of Black and White agents in the slavery and pre-civil rights era is propagated over generations not only through wealth handed down from generation to generation but also through beliefs about the returns to different types of working and investing. I laud the warning provided by the paper, but (in part as an economist) I am skeptical of any model in which slavery and discrimination persistently change behavior (beliefs are part of the specification of preferences). In my role as discussant, I want to propose a different channel that seems to propagate a racial investment gap in high-return assets and may be addressed by simple reparations.

Let me first emphasize how careful this paper is about evidence and how rigorous it is in its analysis. As I noted above, there is a substantial literature documenting that people over-weight their own past experiences in updating their beliefs, and that this behavior occurs in this exact domain, in risk-taking in investment choices. The model is fit to historical data. The paper provides survey evidence on a racial belief gap.

But there is also evidence in two important areas of wealth accumulation that a lot of the racial gap in investment in high-return investments is driven by lack of wealth rather than racial differences in beliefs.

Consider first evidence from Choukhmane, Colmenares, O’Dea, Rothbaum, and Schmidt (2022) on retirement saving. Saving into an employer-sponsored retirement plan is a high-return investment that White households invest much more in than Black households. It is a high return investment because contributions to employer-sponsored retirement saving plans are both tax-advantaged and typically subsidized by the employer. In eighty percent of plans, employers match employee contributions and the most common matching rate is 50% up to 6% of income. These subsidies are roughly the equivalent of an additional 4% per annum risk-free return above and beyond
the actual returns on the funds that the employee invests in.

Choukhmane, et al (2022) shows that on average Black workers contribute 1.4 percent less of their income to retirement plans than White workers, a large racial investment gap in a high-return activity. This difference would cumulate into White households having 30% more defined contribution retirement wealth than Black households at retirement even if incomes were equalized. Comparing workers at the same firms – and thus with the same match rates and so forth – and at the same ages, earning similar incomes, and in the same occupations, this gap declines to 0.9% of income, still quite different.

But this measured gap can be cut in more than a third by controlling for rough proxies for lack of liquidity, spousal income, home ownership, and parental income. That is, the racial gap in investment rates for similar workers is more than a third explained by a just a few factors related to other sources of income and wealth. A plausible interpretation of this finding is that Black households are less able to take advantage of illiquid, high-return saving opportunities due to lower family earnings and wealth and so a higher need for liquidity.


A similar conclusion follows from Kermani Wong (2022), which shows that ex post annual returns on houses are 3.7% lower for Black than White households, implying a 16.5% lower return on equity investment (accounting for leverage) for Black households relative to White households. This huge gap does not appear to be driven by beliefs, despite quite differential treatment of Black and White homeowners historically. Instead, this gap is almost entirely accounted for by the higher propensity of Black homeowners to have distressed sales. Excluding distressed sales lowers the racial gap in (un-levered) returns from 3.7% to 0.1%.

In sum, much of the observed racial gaps in investment in at least these two central channels of wealth accumulation, retirement saving and housing, are in a correlational sense explained by proximate measures of low liquidity and actual low liquidity as indicated by distressed sales respectively. Low liquidity would be directly addressed by reparations. This evidence does not imply that a belief gap plays no role in these domains. But this evidence does raise the question of whether a greater propensity to suffer low liquidity might account for both some of the survey evidence on beliefs presented
by this paper and a larger share of the wealth gap than implied by this model. These two domains are not the central example of the paper which is entrepreneurship, but we also know that liquidity and wealth are important determinants of entrepreneurship. So in sum, these two examples are cautionary tales for this paper’s cautionary tale.

References


