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COMMENT BY

ERIK HURST   What are the aggregate gains from creating equal opportunities across racial and ethnic groups in the United States? That is the question this paper tackles. This is an extremely difficult question to answer. The answer depends both on what is causing labor market differences across groups and on how a reference group can be defined to perform various counterfactuals.

A SIMPLE ILLUSTRATIVE EXAMPLE   To set the stage, consider two groups, A and B, with members of each group comprising half of the total population. Suppose further that members of group A in a given period earn, on average, $75,000 a year while members in group B earn, on average, $25,000 per year in that period. What are the gains to this fictional economy of equating the average incomes of individuals in groups A and B?

One counterfactual would be to do the following. First, we could assume that there are some labor market barriers in this economy causing group B

to earn $50,000 less than they are currently earning. Specifically, one could assume that current average earnings of group A are the correct counterfactual as to what an undistorted economy for group B would look like. Further assuming that there are no real resource costs associated with equating incomes across groups, this counterfactual would imply that this fictitious economy could increase aggregate production by 50 percent if it was able to equate incomes across groups.

Another counterfactual is that group A is gaining due to labor market frictions at the expense of group B. Suppose, then, that in this counterfactual removing the labor market barriers increases the average income of group B members to $50,000 per year but simultaneously lowers the average income of group A members to $50,000 per year. In this case, equality is achieved but at a level of average income lower than what group A is currently earning. Again assuming that there are no real resource costs associated with equating incomes across groups, this counterfactual finds that there would be no aggregate gains associated with equating incomes across groups. The gains associated with improving the incomes of group B would come at the expense of reducing the incomes of group A. Assuming both groups are the same suggests that relative incomes should be the same, but more assumptions are needed to pin down the level of income.

The assumption of no real resource costs associated with equating incomes across groups is also important. Suppose we refer to group A as college-educated and group B as high school–educated. In this case, expenditures would potentially be needed to provide group B members with the additional human capital to make them as productive in the labor market as group A. A full counterfactual of the benefits to the aggregate economy from equating outcomes needs to take a stance on such resource costs.

In this paper, the goal is to think about the groups in terms of race or ethnicity. Group A is white individuals, with the other groups being Black, Hispanic, and other (including Asian and Pacific Islander). The paper assumes—and I concur—that in a world with no current or past barriers, the labor market outcomes across racial and ethnic groups should be similar. However, current and past discrimination almost certainly has resulted in different groups having different levels of human capital. As a result, it may cost large amounts of aggregate resources to equate labor market outcomes across groups. Additionally, it is likely that in this context group A has benefited from current and past discrimination toward the other groups. This implies the current average income of white individuals may not be the correct counterfactual for equating labor market opportunities across racial and ethnic groups. It is hard, therefore, to compute the aggregate

Table 1. 2017–2019 Raw Data

Group	Share of sample	Average ACS labor income (incl. zeros)	Group-specific GDP (in trillions)
Non-Hispanic white	0.62	$46,426	$4.9
Non-Hispanic Black	0.12	$29,163	$0.6
Hispanic	0.17	$28,891	$0.8
Other	0.09	$47,103	$0.7
Total ACS labor income			$7.0

Sources: IPUMS USA and the American Community Survey (ACS).

Note: The sample includes all individuals age 25–64 (inclusive). All dollar values are in current dollars. The last column measures the total labor income in each group as measured by the ACS during this period and is computed as the multiple of column 2, column 3, and 170 million individuals, with the latter number being the approximate BLS estimate of the aggregate population of individuals age 25–64 during this time period.

gains to equating labor market outcomes across groups without taking a stand on both the appropriate benchmark and the cost of equating incomes across groups.

The analysis in this paper follows the first potential counterfactual I highlighted above. The paper just asks the simple question of what would aggregate labor market income be if Black and Hispanic individuals earned the same average income as whites. To illustrate the key findings of the paper and to provide an additional counterfactual, I will use my own data from the pooled 2017–2019 American Community Survey (ACS) and the 1990 US Census. I downloaded these data directly from the IPUMS USA data set.[1] I restricted the sample to include all individuals (regardless of group quarters status) between the age of 25 and 64 (inclusive). I prefer the census and ACS data because they try to capture individuals residing in group quarters. As a result, my analysis differs very slightly from the findings in the paper using the Current Population Survey.

2017–2019 COUNTERFACTUALS Table 1 shows the raw data on share of the population and average income for different racial and ethnic groups from the pooled 2017–2019 ACS (columns 2 and 3). I define the racial groups analogously to how they are defined in the paper (with the "Other" group including primarily Asians and Pacific Islanders). The total size of the US population age 25–64 during this period, according to the US Bureau of Labor Statistics (BLS), was roughly 170 million individuals.[2]

1. IPUMS USA, "U.S. Census Data for Social, Economic, and Health Research," https://usa.ipums.org/usa/.

2. See US Census Bureau, "2019 Population Estimates by Age, Sex, Race, and Hispanic Origin," https://www.census.gov/newsroom/press-kits/2020/population-estimates-detailed.html.

Table 2. 2017–2019 Counterfactual

Group	Share of sample	Average ACS labor income (incl. zeros)	Group-specific GDP (in trillions)
Non-Hispanic white	0.62	$46,426	$4.9
Non-Hispanic Black	0.12	$46,426	$0.9
Hispanic	0.17	$46,426	$1.3
Other	0.09	$47,103	$0.7
Total ACS labor income			$7.9

Source: Author's calculations.
Note: Table shows the simple counterfactual performed in the paper by equating the average labor incomes of Black and Hispanic individuals to that of white individuals.

Column 3 reports the average income earned last year (inclusive of zeros) for all individuals within each of the four racial and ethnic groups. All income is in current dollars. The last column is the multiple of the second column times the third column times 170 million for each group. The last column therefore measures the total aggregate labor income captured within the ACS data for each group. According to the ACS data, total labor income for 25- to 64-year-olds during this time period is roughly $7 trillion.

The main counterfactual in the paper is to assume that Black and Hispanic individuals earn the same average income as whites. Table 2 shows this main counterfactual using the ACS data set. Again, my numbers differ slightly than those in the paper because I am using the ACS data as opposed to the CPS. In particular, under this counterfactual, aggregate labor income (as measured by the ACS) would increase by about $0.9 trillion if Black and Hispanic individuals earned the same average income as white individuals. This represents a 12 percent gain in aggregate labor income.

1990 COUNTERFACTUAL Table 3 shows the raw data on share of the population and average income for different racial and ethnic groups from the 1990 US Census. This table has the same sample restrictions and layout as table 1 discussed above. According to the BLS, the total US population of 25- to 64-year-olds in 1990 was roughly 128 million. As seen from the table, total labor income measured in the US Census for this age group during this time period is roughly $4.6 trillion.

Notice that, relative to table 1, table 3 shows that two things have changed between 1990 and the 2017–2019 period. First, the relative size of the groups has changed over time. Currently, Hispanics are a larger share of the population than they were in 1990. Second, the income levels across groups have changed. The main counterfactual in the paper using their 1990 data equates the income of other groups to those of white individuals in 1990. The counterfactual is shown here in table 4. According to the census

Table 3. 1990 Raw Data

Group	Share of sample	Average ACS labor income (incl. zeros)	Group-specific GDP (in trillions)
Non-Hispanic white	0.77	$38,548	$3.8
Non-Hispanic Black	0.11	$26,617	$0.4
Hispanic	0.08	$25,144	$0.3
Other	0.04	$33,925	$0.2
Total ACS labor income			$4.6

Sources: IPUMS USA and the 1990 census.

Note: Raw data are from the 1990 census; the sample includes all individuals age 25–64 (inclusive). All dollar values are in current dollars. The last column measures the total labor income in each group as measured by the census during this period and is computed as the multiple of column 2, column 3, and 128 million individuals, the approximate BLS estimate of the aggregate population size of individuals age 25–64 during this time period.

Table 4. 1990 Counterfactual 1

Group	Share of sample	Average ACS labor income (incl. zeros)	Group-specific GDP (in trillions)
Non-Hispanic white	0.77	$38,548	$3.8
Non-Hispanic Black	0.11	$38,548	$0.5
Hispanic	0.08	$38,548	$0.4
Other	0.04	$38,548	$0.2
Total ACS labor income			$4.9

Source: Author's calculations.

Note: Table shows the simple counterfactual performed in the paper by equating the average labor incomes of Black and Hispanic individuals to that of white individuals.

data, equating income across groups would have increased aggregate labor income by about 7 percent (from $4.6 trillion to $4.9 trillion).

The paper concludes that the gains from equating income across groups have been rising over time. The reason, they argue, is that the 12 percent gains in 2017–2019 are larger than the 7 percent gains in 1990. However, it is worth stressing that the reason that their estimated gains are rising over time is only because population shares are shifting over time. In table 5, I perform one additional counterfactual not in the paper where I set the population weights in table 3 to those observed in 2017–2019 (as seen in table 1). This lowers imputed 1990 aggregate income to $4.4 trillion. If population shares were the same as they were in 2017–2019, equating incomes across groups in 1990 increases aggregate labor income by 12 percent (from $4.4 to $4.9 trillion); the 12 percent increase is identical to what is found in the more recent period.

CONCLUSION AND DISCUSSION My takeaways from the paper are twofold. First, the authors claim that current aggregate labor income would increase

Table 5. 1990 Counterfactual 2

Group	Share of sample	Average ACS labor income (incl. zeros)	Group-specific GDP (in trillions)
Non-Hispanic white	0.62	$38,548	$3.1
Non-Hispanic Black	0.12	$26,617	$0.4
Hispanic	0.17	$25,144	$0.5
Other	0.09	$33,925	$0.4
Total ACS labor income			$4.4

Source: Author's calculations.

Note: Table shows the simple counterfactual of assuming that the 1990 population shares were the same as the population shares in 2017–2019.

by about $1 trillion per year (or by 12 percent) if we equated the average incomes of Black and Hispanic individuals to the average income levels of whites individuals. Second, the authors claim that the aggregate gains have been increasing over time. But the increasing gains are solely the result of group population shares shifting over time, as I document in table 5. The income gaps across groups have been relatively constant since 1990. However, the share of Hispanic workers has been rising relative to White workers over this period. It is not that the differences in relative income are growing over time, it is just that the share of the population groups with lower income is rising.

With respect to the first takeaway, I return to my simple illustrative example at the start of my comments. The aggregate income gains from equating incomes across groups hinges critically on whether the current incomes of white individuals are a good counterfactual for Black and Hispanic individuals if group-specific barriers were removed and on how one thinks about the costs of removing such barriers. I am not sure if the counterfactual that the authors focus on is the correct one. As a result, I am not sure how seriously we should take their numbers.

Having said that, I do think that barriers to the allocation of talent across racial and ethnic groups have aggregate consequences. I believe it is good for the economics profession to have more work done exploring how large those aggregate consequences might be.

GENERAL DISCUSSION   In response to the comment by Erik Hurst, Laurence Meyer argued that as the proportion of unskilled workers in the economy declines and that of skilled workers increases, the relative price of the products produced by each group will change accordingly. Low-skilled workers are likely to see their wages rise, and vice versa,