FIVE EVILS: MULTIDIMENSIONAL POVERTY AND RACE IN AMERICA

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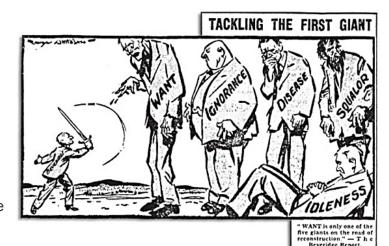




Introduction

In 1942, at the height of the Second World War, the British academic and former civil servant William Beveridge issued a report titled *Social Insurance and Allied Services* (1942). Already preparing for peace, Beveridge identified "Five Giant Evils" that needed to be confronted and defeated once the war was won. These five evils were "squalor, ignorance, want, idleness, and disease." Beveridge believed that all five had to be addressed through concerted government action, with improved housing ("squalor"), universal secondary education ("ignorance"), income transfers to the poor ("want"), full employment ("idleness"), and a national health service ("disease").

Sales of the full Beveridge report broke 100,000 within a month. When a more accessible summary was produced, a further 600,000 copies were distributed. Beveridge, a soft-spoken academic, became a household name. His plan became the animating vision for postwar British society. Although a Liberal, 1 Beveridge helped prepare the ground for the Labour Party's victory in 1945 and the resulting creation of the National Health Service, universal school system, and



social insurance schemes for the unemployed and elderly.

Beveridge's report was not only about poverty in the narrow sense of lack of income, or "want," but also about poverty and disadvantage as broader concepts. He understood, in other words, that disadvantage is *multidimensional*.

This insight remains a useful one. There is a continuing, mostly facile debate over whether the U.S. won or lost the War on Poverty declared by President Lyndon B. Johnson more than five decades ago. But among its other problems, this argument is often restricted to a narrow, income-based conception of what it means to be poor. Of course poverty is about a lack of money. But it is not *only* about that. This is one reason many other labels are used: disadvantaged, vulnerable, at-risk, low-skilled, economically insecure, socially excluded, and so on. Poverty as a lived experience is often characterized not just by low income, but by ill health, insecurity, discomfort, isolation, and lack of agency.² In practice, of course, the various dimensions of poverty often go together. A lack of paid work almost always means a low income, which can induce stress that leads to health problems, make accessing health care more difficult, and so on.

Many politicians, in different ways, argue for a more equal society. But as famously asked by Amartya Sen (1979), the real question is: "Equality of What?" There are hundreds of ways in which equality (or inequality) can be defined, specified, and measured. One way to judge inequality in a society is by assessing the degree to which certain social and economic hardships overlap with each other. "A society of equals is a society in which disadvantages do not cluster, a society where there is no clear answer to the question of who is the worst off," argue Jonathan Wolff and Avner de-Shalit (2013) in their book *Disadvantage*. "To achieve this, governments need to give special attention to the way patterns of disadvantage form and persist, and to take steps to break up such clusters."

To the extent that different dimensions of poverty or disadvantage can be "de-clustered," their overall impact is blunted and society can be considered more equal—even if the level of inequality on the individual dimensions is unchanged. A person who is income-poor but who graduated high school, lives in an economically mixed neighborhood, and has a job and health insurance is less disadvantaged—less "poor" in multidimensional terms—than someone with the same low income but with no job, no diploma, no health insurance, and a home in a very poor neighborhood.

In this paper we take up Wolff and de-Shalit's challenge and examine the clustering of five dimensions of poverty, roughly based on Beveridge's five evils: low household income, limited education, lack of health insurance, concentrated spatial poverty, and unemployment. We'll pay particular attention to differences by race. In an upcoming paper, we will focus on geographical patterns.

Our hope is that a richer, multidimensional formulation of the problems of poverty and disadvantage, and in particular the way disadvantages cluster together for certain people or groups, or in particular places, can help to inform policy.

The main thrust of policy will be—and should be—to try and reduce the number of people who are disadvantaged on each of these and other dimensions. Our point is simply that it is important to consider ways to *de-cluster* as well as to *reduce* disadvantage. These goals are perfectly compatible. Policy ought to aim at lowering the proportion of people who face disadvantage X and the proportion of people who face disadvantage Y. But it should also aim at lowering the correlation between X and Y.

The clustering of disadvantage and multidimensional poverty

There have been previous efforts by other scholars to examine multidimensional poverty, including the creation of a neighborhood-based Child Opportunity Index³ (Acevedo-Garcia et al. 2014), and a

handful of other specific attempts to construct a multidimensional poverty measure in the U.S. (see Appendix A for a table showing the dimensions, specific indicators, and data sources used in five previous studies).

Koohi-Kamali and Liu (2014), who restrict their analysis to Pennsylvania, find high rates of multidimensional poverty among black and Hispanic single mother households. Wagle (2008) differentiates between three broad categories of poverty: what he labels "economic wellbeing poor," "capability poor," and "social inclusion poor." He finds that the risk of being "deeply poor" (i.e. disadvantaged on at least two of the three) or "abject poor" (all three) is much greater for black, Hispanic, and Native American respondents. As he concludes:

The multidimensional approach...does not just assess poverty status. It assesses the state of human well-being by focusing on 'what one has,' 'how much prospect one has,' and 'how much advantaged or disadvantaged one is in society.'

Dhongde and Haveman (2014) also found significant variations in multidimensional poverty by race; Asian residents suffered from multidimensional disadvantage most frequently, partly because the authors included indicators for "crowded housing" and "lack of English fluency."

Scholars studying multidimensional disadvantage lean heavily on the work of researchers in the human development field like Sabina Alkire and James Foster (2007). The multidimensional approach has been influential in a number of countries (OPHI 2014), but so far has received less attention in more advanced economies. This is unfortunate, since there is growing dissatisfaction with traditional, narrowly income-based measures in many nations, including the U.S. and the UK. There is a danger, however, of going too far the other way, and casting the net too wide. Interpreting a long list of indicators can be difficult.

Five dimensions of poverty

We attempt to steer a middle course between narrowness and complexity and adopt five dimensions of poverty using the 2014 American Community Survey Public Use Microdata Sample (ACS PUMS). Our dimensions and thresholds are as follows:

1. LOW HOUSEHOLD INCOME

While poverty is not just about income, income is still important (a lesson lost on the UK government, incidentally, but that's another story⁴). For our purposes, respondents are considered poor in terms of income if they are in a household below 150 percent of the federal poverty line (FPL). Why 150 percent of FPL rather than the FPL? Because the FPL is too low—in 2015, \$24,250 for a family of four.⁵ When it was set in the 1960s, the FPL was close to 50 percent of median

income. Today, because it has only been adjusted for inflation, it is closer to 30 percent of the median (Smeeding et al. 2011).

2. LIMITED EDUCATION

Lack of education inhibits life chances, earning opportunities, and economic security. In the modern labor market, for example, people without a high school diploma are typically at a sharp disadvantage. We therefore adopt this threshold for our analysis. We also include those with GEDs as disadvantaged, since these appear to be less valuable than traditional diplomas in the labor market (Heckman and Rubinstein 2001; Heckman, Humphries, and Kautz 2014).

3. NO HEALTH INSURANCE

Ideally, we would construct a measure of ill health as one of our dimensions of disadvantage. The ACS contains questions about disability status, such as blindness, deafness, self-care difficulty, and ambulatory difficulty.⁶ But we define a lack of health insurance, either public or private, as our third dimension of disadvantage. This is for two reasons. The first is that disability is potentially subjective; it could also omit other forms of ill health, like diabetes, asthma, hypertension, or high blood pressure. As a binary measure, health insurance coverage is also more similar to our other dimensions. And insurance status captures many aspects of health-related disadvantage that we want to capture. Lacking insurance exposes people to greater health and financial risks in the event of illness. Research also suggests that the uncertainty associated with uninsurance creates ongoing psychological stress for families.⁷

4. LOW-INCOME AREA

Living in a high-poverty area puts people at a disadvantage, above and beyond their own household's income-poverty status, because of local factors like the quality of schools, social capital, job connections, and crime.⁸ For the purpose of our multidimensional measure, we define disadvantage as living within a Public Use Microdata Area (PUMA)⁹ where poverty exceeds 20 percent (here using the standard FPL). PUMAs are statistical geographies created by the Census Bureau. Each contains roughly 100,000 people. In dense New York City, PUMAs are about the size of zip codes; in Dallas, PUMAs encompass three or four zip codes; fewer than 10 PUMAs cover all of sparsely-populated South Dakota.

5. UNEMPLOYMENT

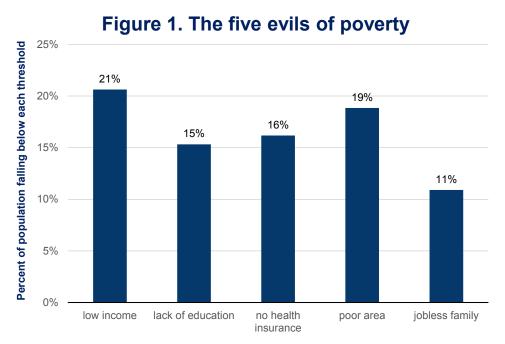
Employment brings advantages above and beyond current income, including the prospect of a higher income in the future and a sense of purpose and structure. Of course not all adults need to have a job—especially in a household with caring responsibilities—but it is better to be in a working family than a jobless family, even apart from the obvious economic implications. Our respondents are therefore considered disadvantaged if no one in their household between 25 and 61 is employed.

All our dimensions are captured at a particular point in time. What is therefore missing from our analysis is a measure of persistence. It is one thing to be temporarily low-income, or jobless, for example, but quite another to be in that position for many years. ¹⁰ We hope in future work to include time and persistence in our measures of multidimensional poverty.

How much multidimensional poverty?

Using one-year estimates from the American Community Survey data for 2014, we first calculate the percentage of people falling below each of these thresholds in the general adult population. Our sample consists of resident adults aged from 25 to 61 inclusive.¹¹ This group can reasonably be considered the prime working-age population, between the years typically required for full-time education but before the age at which social security can be claimed (Burtless 2015).

The proportion of the adult population classified as poor is broadly similar on each of the dimensions, using the thresholds described above. The slight exception is the risk of living in a jobless household, which is somewhat lower, at 11 percent.



Source: Author's tabulations of 2014 ACS 1-year estimates

Our primary motivation is to measure how often those who are poor on one dimension are also poor on other dimensions—in other words, how often disadvantages cluster together for particular individuals and families. Almost half the population suffers from at least one of our five disadvantages. Almost a quarter have two or more disadvantages, and almost a tenth have three or more. Few (just over 2 percent) suffer from four or more.

50% 47% 45% 40% Percent of population 35% 30% 25% 23% 20% 15% 9% 10% 5% 2% 0% at least 1 at least 2 at least 3 at least 4 Number of disadvantages

Figure 2. Half face at least one disadvantage

Source: Author's tabulations of 2014 ACS 1-year estimates

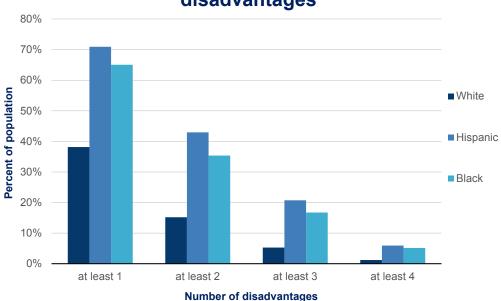
The proportion of the population who are disadvantaged on all five dimensions is so small—less than 1 percent—that we do not report results for this group. On the face of it, there is some encouraging news here. While disadvantages do cluster together, a relatively small proportion of overall population suffers from more than two disadvantages at the same time.

Large race gaps in multidimensional poverty rates

But there may be different risks of multidimensional poverty for different groups or different geographical areas. In what follows, we examine racial differences in the extent to which the dimensions of disadvantage cluster together.

There are marked differences in multidimensional poverty rates and patterns by race. Most blacks and Hispanics are disadvantaged on at least one dimension; most whites are not.¹³ (We do not report results for Asian Americans here, but they are almost identical to those for whites).¹⁴ Most whites who are disadvantaged on one dimension are not disadvantaged on any others. By contrast, most African Americans and Hispanics who are disadvantaged on one dimension are also disadvantaged on at least one more.

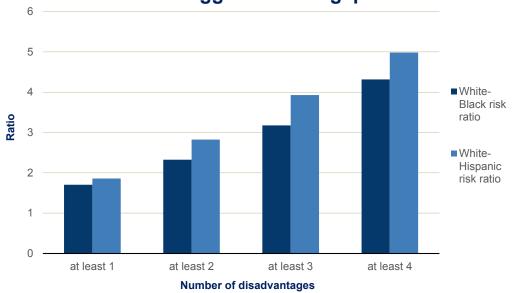
Figure 3. Blacks and Hispanics face more disadvantages



Source: Author's tabulations of 2014 ACS 1-year estimates

Multidimensional poverty, then, is clearly much more common among blacks and Hispanics. While the percentage of all groups with many disadvantages is obviously low, the absolute numbers are not trivial; more than 3 million black and 5 million Hispanic adults suffer from at least three disadvantages. A different way to illustrate this stark race gap is in terms of the relative risk for African Americans and Hispanics of being disadvantaged on multiple dimensions compared to whites.

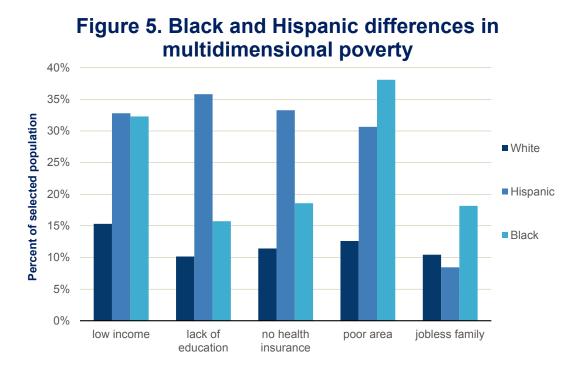
Figure 4. The more dimensions of poverty, the bigger the race gap



Source: Author's tabulations of 2014 ACS 1-year estimates

With each additional dimension, the relative risk for blacks and Hispanics rises by roughly a factor of one. Compared to whites, blacks and Hispanics are twice as likely to be disadvantaged on at least two dimensions; more than three times as likely to be disadvantaged on at least three dimensions; and more than four times as likely to be disadvantaged on at least four dimensions. Blacks and Hispanics are more likely to experience disadvantages piling on top of each other.

But while Hispanics and blacks have similar rates of multidimensional poverty, the specific clusters differ. The rates of income poverty (using our 150 percent FPL cut-off) are virtually identical (32 percent and 33 percent), and more than twice the rate of white income poverty. But while black Americans are more likely to be jobless and/or live in a poor area, Hispanics are more likely to have a lower level of education and/or lack health insurance.



Source: Author's tabulations of 2014 ACS 1-year estimates

Disadvantage clusters by race: Low income plus other dimensions

We can dig further into race gaps by analyzing specific clusters of disadvantage to see which dimensions overlap with each other for different racial groups. With five dimensions, there are of course a large number of different possible combinations. So for the purposes of this exercise, we treat low income as a necessary condition of multidimensional disadvantage. Many of the adults with multiple disadvantages tend to suffer from low income; among white adults with 2 or more

disadvantages, 71 percent are low-income. For Hispanic adults, the figure is 66 percent, and for black adults, it's 75 percent. In all the analyses that follow, we adopt this "income-plus" approach to the creation of clusters of disadvantage.

Whites are less likely than the other two demographic categories to have both a low household income and some other disadvantage. But there are also clear differences between Hispanic and black residents. Hispanics, for example, have about the same rate of the "low income plus unemployment" disadvantage as whites (both around 6 percent), but four times the risk of having the "low income and no high school diploma" disadvantage compared to whites (17 percent vs. 4 percent). Blacks adults, however, are much more likely than white adults to have the double disadvantage of low income and joblessness, or low income and concentrated geographic poverty.

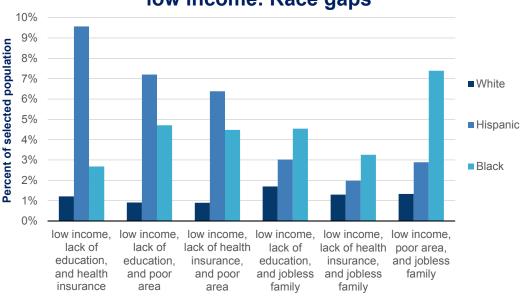
Figure 6. Two disadvantages including low income: Race gaps 18% 16% Percent of selected population 14% ■ White 12% 10% Hispanic 8% Black 6% 4% 2% 0% low income and low income and low income and low income and lack of education lack health poor area jobless family insurance

Source: Author's tabulations of 2014 ACS 1-year estimates

Next we calculate how many people suffer from a combination of at least three disadvantages. The overall rate is of course lower—about 9 percent. Among that 9 percent, the vast majority suffer from the low-income disadvantage. And the race gaps are even larger.

Again, black and Hispanic residents suffer from different forms of clustering. Hispanics are almost 10 times more likely than whites to be low-income, without a high school degree, and uninsured (9.6 percent vs. 1.2 percent). On the other hand, black adults are 7 times more likely than white adults to be low-income, live in a high-poverty area, and reside in a jobless household (7.4 percent vs. 1.3 percent).

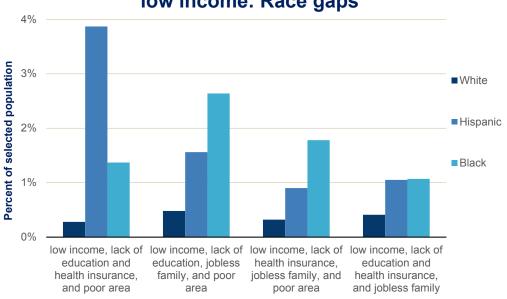
Figure 7. Three disadvantages including low income: Race gaps



Source: Author's tabulations of 2014 ACS 1-year estimates

Turning last to the small number of deeply disadvantaged people, those below our disadvantage thresholds on four or even all five categories, the same story emerges. There are almost no white adults in this category. Low-income Hispanics are most at risk of additionally being without health insurance, having less than a high school education, and living in a poor area. For black Americans, being in a jobless household is a bigger risk factor.

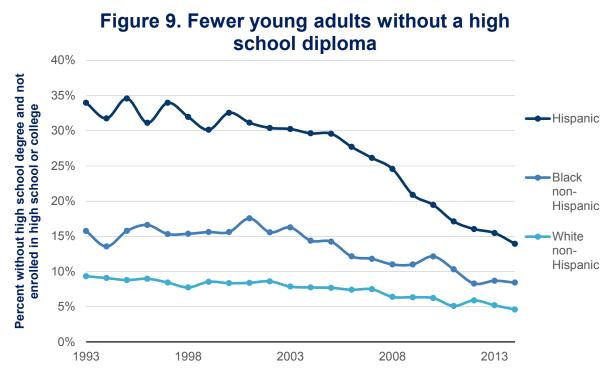
Figure 8. Four disadvantages including low income: Race gaps



Source: Author's tabulations of 2014 ACS 1-year estimates

Mixed messages: Trends in risk factors for multidimensional advantage

So far we have presented a snapshot of multidimensional disadvantage at a particular moment in time. But a number of factors, including changes in the economic cycle, unemployment rate, and immigration patterns, are likely to influence these results over time. If the goal of policy is to decluster these disadvantages, it is important to look not only at existing patterns, but also at trends. Good news first. On one of the non-income dimensions of disadvantage that Hispanics are most likely to experience—low high school graduation rates—the trend is in the right direction. The proportion of young Hispanics without a high school diploma (and not currently enrolled in either high school or college) has dropped sharply in recent years.¹⁵



Source: Author's tabulations of IPUMS CPS, 1993-2014; University of Minnesota

There is a still some way to go to close race gaps in high school graduation, of course. There are also growing concerns about the value of a diploma (Kamenetz 2015). But it seems certain that the risks of being both low-income and without a high school diploma are declining in general, and for the Hispanic population in particular.

What about the other key risk factor for low-income Hispanics, lack of health insurance? The trend in recent decades has been discouraging—at least until the introduction of the Affordable Care Act (ACA).

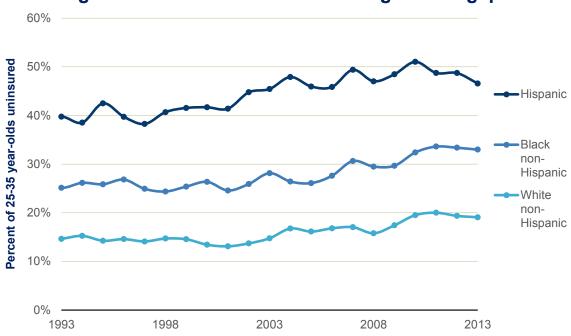


Figure 10. Health insurance coverage: Race gaps

Source: Author's tabulations of IPUMS CPS; University of Minnesota

If anything, the gap between Hispanics and the rest of the population in terms of health insurance coverage has widened in the last 20 years. ¹⁶ This suggests that the clustering of low-income status and lack of health insurance has increased. However, the trend among adults has at least stabilized in the last few years. Among Hispanic children the picture is rosier, with a drop from 16 to 10 percentage points in the portion of the population that was uninsured between 2009 and 2014, according to research by La Raza and the Georgetown University Health Policy Institute (Schwartz et al. 2016). If the ACA has the intended effect of expanding coverage, there ought to be a slow declustering of these two disadvantages in the years to come.

On balance, then, we might expect that Hispanic multidimensional disadvantage will abate to some degree. However, that might not be the case for black adults. First, the black/white employment gap has shown little sign of improvement, especially for men: their black/white employment gap has remained between 13 and 18 percentage points over the last 20 years.

40% Percent of non-military males age 25-35 unemployed 35% 30% Black non-Hispanic men 25% -Hispanic 20% men 15% White non-Hispanic 10% men 5% 0% 1998 2003 2008 2013 1993

Figure 11. Joblessness: Stubborn black-white gaps

Source: Author's tabulations of IPUMS Current Population Survey; University of Minnesota

Second, the risk of living in a poor area remains significantly higher for black families. In the 1990s there was some improvement on this front, but according to recent work by Elizabeth Kneebone and Natalie Holmes (2016), the recession brought that progress to an abrupt halt. Between the 2000 decennial census and the 2010-2014 American Community Surveys, the chances that black Americans living below the FPL in the nation's 100 largest metro areas also resided in an extremely poor census tract (where more than 40 percent of residents lived below the poverty line) rose from 1 in 5 to more than 1 in 4.

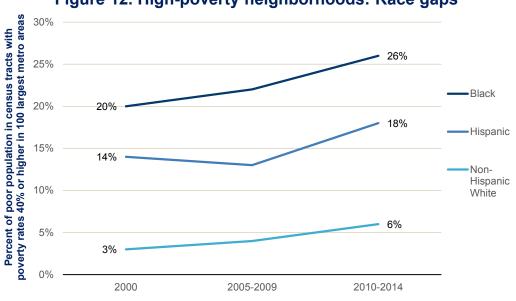


Figure 12. High-poverty neighborhoods: Race gaps

Source: Elizabeth Kneebone and Natalie Holmes' tabulations of decennial census and American Community Survey data

De-clustering disadvantage: Policy implications

Polices aimed at tackling poverty often focus solely on raising income. But an equally important goal of anti-poverty policies is to de-cluster disadvantage, and reduce the *consequences* of having a low income on other aspects of life. In other words, make income poverty matter less.

Health care reform offers a topical example. The U.S. is still some way from providing universal health care, but great strides have been made at both the federal and state level to reduce the chances of lacking health insurance as a result of lacking income. Data from the State of Colorado illustrates the point. The proportion of state residents without health insurance has dropped sharply, from 14.3 percent in 2013, before the Affordable Care Act kicked in, to 6.7 percent in 2015 (Olinger 2015; Reeves and Sawhill 2015). The impact has been particularly strong for lower-income minority families, who saw their uninsurance rates cut almost in half.¹⁷ The reform has, in other words, helped to de-cluster income poverty and lack of health care.

Of course, other states have taken a different approach to health insurance coverage. Policymakers at all levels of government, as well as at non-profit institutions, have different priorities, resources, and tools. Our hope is that taking an explicitly multidimensional approach to measurement will help policymakers and practitioners leverage and deploy existing (and limited) resources, by understanding how disadvantage clusters differently across the groups they serve, and also how clusters vary between different places (the subject of our next paper).

Poverty: More than an income story

"Organization of social insurance should be treated as one part only of a comprehensive policy of social progress," wrote William Beveridge in his famous report. "Social insurance fully developed may provide income security; it is an attack upon Want. But Want is one only of five giants on the road of reconstruction and in some ways the easiest to attack."

Beveridge was writing about a war-ravaged United Kingdom, not 21st century America. But his reminder is still relevant. Disadvantage extends well beyond income poverty. Understanding the different patterns and clusters of disadvantage is an important step towards understanding inequality in its broadest sense. In particular, a multidimensional approach further illuminates the yawning race gaps that afflict the U.S., and the need for concerted action to eliminate them.

Endnotes

- 1. "Liberal" here refers to the UK Liberal Party, one of the two major parties in the 19th and early 20th centuries. See https://en.wikipedia.org/wiki/Liberal_Party_(UK).
- 2. Previous analyses of the "underclass" in the U.S. provide examples of geographically-based multidimensional frameworks. See Wilson (1987) or Sawhill and Jargowsky (2006).
- 3. Child opportunity maps for U.S. metropolitan areas can be found here: http://www.diversitydatakids.org/data/childopportunitymap.
 - 4. For commentary, see Reeves 2015.
- 5. The 2016 federal poverty guidelines can be found here: https://aspe.hhs.gov/poverty-guidelines.
- 6. See the link below for a list of the variables in the 2014 ACS public-use microdata: http://www2.census.gov/programs-surveys/acs/tech_docs/pums/data_dict/PUMSDataDict14.pdf
 - 7. For recent evidence, see Finkelstein et al. 2012.
 - 8. For a detailed analysis of concentrated poverty, see Kneebone and Holmes 2016.
- 9. For more information on PUMAs, see https://www.census.gov/geo/reference/puma.
- 10. The ACS includes a question about the length of time since respondents last worked, but the possible responses are somewhat broad: "within the past 12 months," "1 to 5 years ago," or "over 5 years ago or never worked." See here for a copy of the 2014 ACS questionnaire: https://www.census.gov/programs-surveys/acs/methodology/questionnaire-archive.2014.html.
- 11. Excluding active duty members of the military and people living in group quarters, like college dormitories, nursing homes, or correctional facilities.
- 12. Part of the character of "deeper" multidimensional disadvantage appears in the income figures. Adults with at least 3 disadvantages have household incomes that average only 93 percent of the federal poverty line. Those with one or more disadvantages average 220 percent of the FPL.
- 13. In constructing our racial categories, we have followed the approach of William H. Frey and others. Respondents are categorized as "white" and "black" based on their own definition,

but only if they described themselves as "non-Hispanic." "Hispanics" include those who defined themselves as such, as well as in many cases describing themselves as "white" or "black." See Frey 2014. Our sample also includes non-citizens.

- 14. Citizenship status makes a difference; re-tabulating the results while omitting non-citizens lowers Hispanic rates of disadvantage. The new levels are generally comparable to those experienced by black adults. 61 percent of Hispanic citizens face at least one disadvantage (versus 71 percent of all Hispanics), 31 percent face two or more (versus 43 percent), 13 percent face three or more (versus 21 percent), and 4 percent face four or more (versus 6 percent). We choose to include non-citizens in our main results, since they still participate in most aspects of American life through their workplaces and communities. (Only about a third of immigrants are unauthorized, according to analyses by the Pew Research Center. See Passel, Cohn, and Gonzalez-Barrera 2013.)
- 15. There's some debate about how much of this change represents real improvement, and how much resulted from lowering graduation standards. See Kamenetz 2015 for more.
- 16. Here, too, the citizenship status of the Hispanic population makes a difference. Roughly 19 percent of Hispanic citizens lack health insurance (versus 33 percent in the tabulations above).
 - 17. See Reeves, "Two anti-poverty strategies" for more.

APPENDIX A: PREVIOUS STUDIES OF MULTIDIMENSIONAL POVERTY: DIMENSIONS, INDICATORS, AND DATA SOURCES

Author/	Dimensions	Indicators	Data Source(s)	Selected conclusions
Date				
Acevedo-Garcia et al. (2014)	Educational opportunities Health and environment Social and economic opportunities	 School poverty rate Student math and reading proficiency Proximity to licensed and high-quality early childhood education centers Early childhood education participation High school graduation rate Adult educational attainment Proximity to health care facilities Retail health food environment index Proximity to toxic waste sites Proximity to parks and open spaces Housing vacancy rate Foreclosure rate Poverty rate Unemployment rate Public assistance rate Proximity to employment 	U.S. Department of Education, National Center for Education Statistics, Common Core of Data 2010-2011 State Departments of Education, 2010-2011 school year diversitydatakids.org Early Childhood Database ESRI Business Analyst, 2011 U.S. Environmental Protection Agency, Toxic Release Inventory, 2010 2010 Decennial Census U.S. Department of Housing and Urban Development, Neighborhood Stabilization Program, 2010 U.S. Census Bureau, ZIP Business Patterns, 2009	Across the U.S., 40% of black and 32% of Hispanic children live in very low-opportunity neighboorhods within their metro areas, compared to 9% of white children.
Alkire and Foster (2008)	Household poverty Health Educational attainment	Poverty line status Report only "fair" or "poor" health Health insurance coverage High school completion	2004 National Health Interview Survey	 At least 12% of the population deprived in terms of any of the dimensions. About 24% of the population deprived of at least one dimension, 11% of two dimensions; 4% of three; and 0.44% of all four.

Author/	Dimensions	Indicators	Data Source(s)	Selected conclusions
Date				
Dhongde and Haveman (2014)	Health Education Standard of living Housing	Health insurance coverage Disability status High school completion English proficiency Poverty status Employment status Whether there are more occupants than rooms in a home Housing costs exceed 50% of income	2011 American Community Survey (ACS) Public Use Microdata Sample	 In 2011, one in five adults was multidimensional poor; compared to an official poverty estimate of 13%. Multidimensional poor experienced about 7% of all deprivations possible. Variation explained more by race, nativity, and region than by age or gender.
Koohi- Kamali and Liu (2014)	Education Work Income Standard of living	High school completion Employment status of household head and spouse SNAP benefits Public assistance income SSI income More than 2 residents per bedroom Vehicle ownership Real estate ownership	2006-2010 ACS Public Use Microdata Sample (specifically for Pennsylvania)	Hispanics most deprived in educational dimension; blacks most deprived in employment dimension. For full sample, most significant dimension of multidimensional poverty is work status (contributes 41% of total deprivation.)
Wagle (2008)	Economic well-being Capability Social inclusion	Respondent income Total family income Satisfaction with financial situation Educational attainment Health condition Feel as though people are treated with respect at work Occupational prestige Industry Work status Weeks of work Self-employment indicator Activism Voted in 2000 Group membership Associational activity, and perceived importance of associational activities Number of friends and relatives	2004 General Social Survey	The Northeast has lower multidimensional poverty rates; the South has the highest rates. Blacks, Hispanics, and American Indians suffer from multidimensional poverty at disproportionate rates. The same is true for widowed Americans.

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