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Poverty Rate Inequality: Analyzing the Causes of the Larger Difference in the Poverty Rates between Black and White Americans in Philadelphia and New York City

Abstract

This paper purports to find a cause for the larger differences in poverty rates between black and white Americans in Philadelphia and the same two groups in New York City. Three hypotheses, the education spending per student hypothesis, the economic hypothesis, and the social spending per capita hypothesis, are each respectively devised to explain these differences in the respective poverty rates. The education spending per student and social spending per capita hypotheses are tested using data from each city, leading to the conclusion that the lower social and education spending per capita in Philadelphia when compared to New York City are potential causal factors of the higher poverty rates in Philadelphia.

Keywords

Social Spending, Education Spending, Poverty, Philadelphia, New York City, Black Poverty

Poverty Rate Inequality: Analyzing the Causes of the Larger Difference in the Poverty Rates Between Black and White Americans in Philadelphia and New York City – *Patrick Carney, Villanova University*

Introduction

Amongst the “poorest large cities in the United States,” Philadelphia’s poverty rate of 26 percent was the third highest in the country and has consistently been higher than the national average, which is around 11.4 percent.¹ Included in the impoverishment of the city are black Americans, whose poverty rate of around 30% is the second-highest in Philadelphia among racial groups.² Comparatively, white Americans in the same area have a poverty rate of only 13%, which is the lowest rate among all racial groups in the city. These two numbers are drastically different, especially when compared to New York City, where the poverty rates among black Americans have hovered around 20% and among white Americans have stayed around 12%.³ Why is there a larger difference in the poverty rates between black and white Americans in Philadelphia when compared to New York City? To find out why, this paper analyzes different variables that cause poverty. Specifically, it seeks to identify the factors that are not as drastic or do not exist in New York City that, comparatively, cause black Americans to face higher rates of poverty than whites in Philadelphia.

¹ Diez Roux AV, Moore KA, Melly SJ, Wang X, Joshi R. 2017. “Neighborhood Health and Poverty in Philadelphia. Urban Collaborative Data Brief Number 2.” Philadelphia, PA: Dornsife School of Public Health, Drexel University. ; Bureau, US Census. “Income and Poverty in the United States: 2020.” Census.gov, October 18, 2021.

² Eichel, Larry. “Philadelphia 2021: The State of the City.” The Pew Charitable Trusts, April 2021.

³ Eichel, “Philadelphia 2021: The State of the City.” ; New York City Government; NYCgov Poverty Rates, by Race/Ethnicity
Total NYC Population, 2005 - 2019

Existing literature explains this difference in poverty rates between black and white Americans through three different schools of thought, those being the redlining policy school of thought, the economic school of thought, and the education school of thought. Through analysis of data from Philadelphia and New York City, the education and economic schools of thought best explained the higher rate of poverty among black Americans in Philadelphia when compared to New York City. Although the policy school of thought helped explain differences in poverty rates between white and black Americans, there was not enough concrete data to support the hypothesis that there were significant differences in redlining policies between Philadelphia and New York that would help cause the difference between the two cities.

The structure of the paper will proceed as follows. The subsequent section will analyze the existing literature on differences in poverty rates between white and black Americans. Then, the logic behind the selection of New York City and Philadelphia as cases will be discussed. This will be followed by a discussion of how I have chosen to operationalize the key terms to answer the question at hand, as well as a discussion of the method of analysis used, and the sources of the data found. After this, relevant data will be presented with an analysis of this data and the findings that the data leads to. To close, the findings and the implications of this paper for the future will be discussed.

Existing Literature

In order to answer the question, existing research on poverty and the difference in poverty rates between races have to be analyzed. To perform this analysis, the different relevant research can be organized into different “schools of thought” or “approaches.” For this specific topic, the explanations can be organized into the following three trains of thought: the redlining

school of thought, the economic school of thought, and the education school of thought. The redlining policy school of thought seeks to explain the reason for higher poverty rates—which contribute to the difference between white and black poverty rates—as policies on the federal, state, or local levels lead to higher poverty rates in black communities than in white communities. The economic school of thought contends that unemployment and low social spending correlate with and are major contributors to the difference in these poverty rates. Specifically, this approach argues that unemployment, lower spending on social programs that help individuals living in poverty, low-paying jobs, and the social impacts of unemployment cause individuals to live in poverty. Finally, the education school of thought seeks to explain the difference between the two groups' poverty rates through the lens of education, focusing on low spending on education and the impacts this has on students living in poverty.

Redlining Policy

Literature falling into this school of thought argues that different redlining policies help lead to higher poverty rates amongst black individuals. The policy itself encompasses laws passed on local, state, and federal levels in the United States. The significant policy that has led to the difference in poverty rates was instituted by the Home Owners Loan Corporation and is known as redlining.⁴ The Home Owners Loan Corporation (HOLC) was founded in 1933 as part of President Franklin Roosevelt's New Deal, and it aimed to help expand access to housing for white American housing via loans.⁵ This federal corporation literally drew red lines around areas that contained a higher population of black Americans, aiming to segregate black Americans

⁴ Gross, Terry. "A 'Forgotten History' of How the U.S. Government Segregated America." *NPR*. May 3, 2017.

⁵ Gross, Terry. "A 'Forgotten History' of How the U.S. Government Segregated America."

from white Americans, and effectively barring them from investing in a home. By doing so, the HOLC helped to take away a key factor in establishing wealth in the United States:

homeownership. Research suggests that, as of 1990, areas that were redlined have home values that are on average about 5% lower than areas that were not redlined, with their value continuing to decrease since.⁶ The majority of the areas that were redlined in both Philadelphia and New York were occupied by black Americans and were redlined because these individuals lived there. Literature on this has shown that this redlining has led to higher poverty levels among individuals in these areas.⁷ Since the majority of individuals who live in these areas are black, the conclusion is that redlining leads to higher poverty amongst these black individuals.

Economic Approach

The next school of thought deals with the impact unemployment, low-paying jobs, low social funding, and unemployment have on poverty rates, while also addressing the difference in poverty rates among races. For example, an analysis of the causes of poverty, as well as the difference between black and white poverty rates, suggests that employment explains almost 20% of the discrepancy in poverty between black and white Americans.⁸ Additionally, being unemployed, which black Americans face at a rate consistently twice that of white Americans, has shown to contribute to mental and physical impediments to the condition one is in and the ability to find and maintain a job, which together lead to further poverty.⁹ Other evidence leads

⁶ Appel, Ian and Jordan Nickerson. "Pockets of Poverty: The Long-Term Effects of Redlining." SSRN Electronic Journal, October 15, 2016, 1–53.

⁷ Appel, Ian. "Pockets of Poverty: The Long-Term Effects of Redlining."

⁸ Baker, Regina S., David Brady, Zachary Parolin, and Deadric T. Williams. "The Enduring Significance of Ethno-Racial Inequalities in Poverty in the U.S., 1993–2017." 17. Population Research and Policy Review, 2021.

⁹ Paul, Mark, William Darity, Darrick Hamilton, and Khaing Zaw. "A Path to Ending Poverty by Way of Ending Unemployment: A Federal Job Guarantee." RSF: The Russell Sage Foundation Journal of the Social Sciences 4, no. 3 (2018): 46. Goldsmith, Arthur, Jonathan Veum, and William Darity Jr. 1997. "Unemployment, Joblessness,

to the conclusion that higher poverty rates amongst black individuals coincide with lack of employment, and that their financial situation will not improve without access to quality employment.¹⁰ Research also shows that social spending programs, such as welfare, food stamps, government healthcare, and government-supported housing, all help alleviate poverty.¹¹ Therefore, higher spending on programs such as these would ultimately help black individuals at a higher rate than white individuals, since the poverty rate of black individuals is higher than that of white individuals.

The literature falling under this school of thought may be the strongest in support of the difference between white and black Americans' poverty rates. Conclusive evidence suggests that relatively higher rates of unemployment play a major role in causing black Americans to live in poverty. For example, the fact that white Americans are employed at a much higher rate is strong evidence to indicate that unemployment causes poverty, especially given that other research in this approach strongly suggests a lack of employment directly correlates with poverty.¹²

Therefore, these data from the economic approach have a strong argument to imply an almost definite causal relationship between unemployment and poverty. However, although unlikely, the possibility must be noted that these two variables could both be caused by a third variable. Literature under the redlining school of thought shows how redlining has contributed to retail discrimination within black areas due to redlining. This retail discrimination entails

Psychological Well-Being and Full Employment: Theory and Evidence.” *Journal of Socio-Economics* 26(2): 133–58. quoted in Paul, Mark, et al; “A Path to Ending Poverty by Way of Ending Unemployment: A Federal Job Guarantee.” *RSF: The Russell Sage Foundation Journal of the Social Sciences* 4, no. 3 (2018): 46

¹⁰ Teitz, Michael B., and Karen Chapple. “The Causes of Inner-City Poverty: Eight Hypotheses in Search of Reality.” *SSRN Electronic Journal*, Emerging Issues in Urban Development (1998), Vol. 3, no. No. 3 (1999): 33–70.

¹¹ Rothenberg Pack, Janet “Poverty and Urban Public Expenditures,” *Urban Studies*, Vol. 35, no. 11 (1998): 1995–2019.; M. Joassart-Marcelli, Pascale, Juliet A. Musso, and Jennifer R. Wolch, “Fiscal Consequences of Concentrated Poverty in a Metropolitan Region,” *Annals of the Association of American Geographers*, Vol. 95, no. 2 (2005): 336–56,

¹² Baker, Regina S., David Brady, Zachary Parolin, and Deadric T. Williams. “The Enduring Significance of Ethno-Racial Inequalities in Poverty in the U.S., 1993–2017.”

companies divesting from redlined communities, which in turn would lead to the lack of high paying, or even any, employment opportunities.¹³ This antecedent factor suggests that the redlining has helped cause the economic environment leading to higher unemployment amongst, and worse paying jobs for, black individuals that have subsequently helped lead to higher levels of poverty when compared to white Americans amongst black Americans.

Educational Approach

Lastly, some works fall under the educational school of thought. This school suggests that lower educational quality, based on outcomes and funding, leads to the difference in poverty rates among races. For example, the lack of education spending policies by the state and federal government that might address the disparity in educational outcomes in math and reading has helped to contribute to the poverty gap between black and white Americans.¹⁴ These educational differences show lower-quality education, such as lower retention rates among black elementary and high school students, which also may help explain the higher poverty rate in these communities.¹⁵ Also, there is data to suggest that these differences in the quality of education—as measured through outcomes for reading, writing, math, retention in high school, and continuation to higher education—between black and white Americans contribute to about 37% of the difference in the poverty rates of these two groups.¹⁶ Studies across the globe and the

¹³ Knowles, Anne Kelly, and Amy Hillier. “Redlining in Philadelphia.” Essay. In *Past Time, Past Place: GIS for History*, 79–92. Redlands, CA: ESRI Press, 2004.

¹⁴ Paschall, Katherine W., Elizabeth T. Gershoff, and Megan Kuhfeld. “A Two Decade Examination of Historical Race/Ethnicity Disparities in Academic Achievement by Poverty Status.” *Journal of Youth and Adolescence* 47, no. 6 (2018): 1164–77

¹⁵ Paschall, et al; “A Two Decade Examination of Historical Race/Ethnicity Disparities in Academic Achievement by Poverty Status.” *Journal of Youth and Adolescence* 47, no. 6 (2018):1175.

¹⁶ Gradín, Carlos. “Poverty among Minorities in the United States: Explaining the Racial Poverty Gap for Blacks and Latinos.” *Applied Economics* 44, no. 29 (2012): 3793–3804.

United States have shown that higher educational quality leads to lower poverty and economic development.¹⁷ Therefore, the low quality of education in poor black communities can be seen to lead to further impoverishment in the same communities.

The strength of the argument in this train of thought lies in the high correlation between poor education and the difference in the poverty levels between white and black Americans. This correlation is high enough to suggest that poor education may be a large causal factor behind this difference. However, similar to the weakness in the literature regarding the perpetual poverty train of thought, there still is reason to question the causal relationship between poor education and poverty. Could this contrast in poverty rates be because the high poverty rates lead to poor quality education? Or because another factor, such as employment issues among poor black Americans, is the cause for both of these factors. These reasons must be considered in order to properly assess this school of thought.

Case Selection

I am planning on analyzing the major causes of differences in poverty within the United States. I analyze the different variables that cause poverty. In turn, I analyze the factors identified as causing poverty that either does not exist or are not as drastic in New York City as they are in Philadelphia. In all, I am hoping to attribute these factors as the cause of the difference in the cities' poverty rates, as well as identify what causes the difference in the poverty rates between races. The time frame in which poverty rates between the two groups are measured extends from

¹⁷Tariq Khan, Muhammad. "Role of Education in Poverty Reduction" *International Journal of Information, Business and Management*, 7, No. 3 (2015): 124-134

2005 to 2019, spanning 15 years. This time frame is selected for several reasons. The fact that the poverty rate in each city has not fluctuated on an extreme level, which is established as 10% due to the fact that this is between 33% to 50% of each of the two cities poverty rates over any period of time from 1950 onwards is one, and the other being that this 15-year period provides recent data that is easy to access.

The variation exists between the two cities in multiple areas. First, in terms of their geographic location, Philadelphia is in Pennsylvania and subject to the state and local laws and the same as New York City for the state of New York. Further, the state legislature in Pennsylvania has mostly been run by Republicans over the time period, whereas the opposite is true in New York. Finally, the poverty rate amongst black individuals is different in these two cities, averaging about 10% higher in Philadelphia over the period.

These two cities are appropriate for answering the research question due to some of their similarities. For example, both cities have mostly had Democratic mayors since 1985, with New York City having around 10 years of Republican mayoral leadership in that period compared to Philadelphia having none.¹⁸ Further, in terms of population, New York City is the largest city, followed by Philadelphia second, on the Eastern coast of the United States.¹⁹ Additionally, they are both situated in a similar geographic location, located only 95 miles apart from each other, therefore experiencing quite similar weather. Also, the two cities are similar economically, having converted from mainly industrial hubs to now more serving as hubs of service workers. Each city lost the majority of its industrial workers from 1950 onwards and subsequently can be

¹⁸ “City Archives: Department of Records.” City of Philadelphia. City of Philadelphia, April 1, 2022. Mayors of the City of New York. New York City Government.

¹⁹ Bureau, US Census. “City and Town Population Totals: 2010-2019.” Census.gov. US Census Bureau, October 8, 2021. <https://www.census.gov/data/tables/time-series/demo/popest/2010s-total-cities-and-towns.html>.

considered deindustrialized.²⁰ These two cities also share cultural similarities, given that they are both in the United States and quite proximal to each other. The difference in poverty rates between black Americans and white Americans in these two locations is why New York City was chosen; there exists a large difference in poverty rates between races in both cities, but a larger difference within Philadelphia. What is of interest in this area is the fact that across the time period of 2005-2019, the poverty rate amongst black individuals in New York City has declined marginally while the poverty rate of this group in Philadelphia has stayed approximately the same. This, when coupled with the social, geographic, political, and economic similarities of the two cities make it logical to compare these rates and see why there is a larger difference in the poverty rates between black and white Americans in Philadelphia compared with New York City.

Defining Key Concepts

In order to answer the question at hand, terms used to operationalize poverty, such as poverty and poverty rates, must be defined. Further, educational spending per student and social spending must be defined as they will be used in this paper. The Census Bureau determines poverty status by using an official poverty measure (OPM) that compares pre-tax cash income against a threshold that is set at three times the cost of a minimum food diet and adjusted for family size and inflation.²¹ As for poverty rates, the annual poverty rate describes the percent of people who were classified as such in the aforementioned definition of poverty in a calendar

²⁰ Licht, Walter. "Workshop of the World." Encyclopedia of Greater Philadelphia, February 1, 2022. Hopper, Kim, et. al "Urban Anthropology and Studies of Cultural Systems and World Economic Development" *The Institute, Inc.* Vol. 14, No. 1/3, Declining Fortunes: Anthropological Perspectives on Deindustrialization (SPRING-SUMMER-FALL): 197

²¹ US Census Bureau. 2019. "How the Census Bureau Measures Poverty." Census.gov. August 27, 2019.

year.²² These are the definitions used for poverty as well as poverty rates when speaking about New York City and Philadelphia. As for educational spending per student, this term is used to describe the dollar amount spent on average in a city on a single student in a given year. As for social spending programs, the following adjusted definition²³ is used for social spending programs: “Social expenditure is the provision by government institutions of benefits to, and financial contributions targeted at, households and individuals to provide support during circumstances that adversely affect their welfare, provided that the provision of the benefits and financial contributions constitutes neither a direct payment for a particular good or service nor an individual contract or transfer.”²⁴ Examples of these types of expenditures would include but are not limited to, child welfare, food stamps, homeless services, and housing assistance. These definitions are used when describing the social and education per capita spending of Philadelphia and New York City.

Hypotheses

Multiple hypotheses are tested to determine whether the factors described in the literature review to cause the difference in poverty rates between white and black Americans in Philadelphia and New York City can be attributed as factors causing the higher poverty of black Americans in Philadelphia than in New York City. The first hypothesis to be tested stems from the education school of thought; this hypothesis contends that lower funding per student for

²² US Census Bureau. 2019. “How the Census Bureau Measures Poverty.”

²³This definition has been adjusted from the original definition from the Office of Economic Cooperation and Development to remove the word “private” from the definition and the replacement of the word “public” with government. This was done in order to specify government spending on the described programs, as these are the relevant programs at hand in this paper

²⁴Adema, Willem, and Pauline Fron. “The OECD SOCX Manual.” OECD. *Office of Economic Cooperation and Development*, 2019.

education in Philadelphia than in New York City has led to higher black poverty rates. This hypothesis is tested based on data on education spending per student in each city. The next hypothesis based on the redlining policy school of thought attempts to see if higher levels of discriminatory redlining policies in Philadelphia than in New York have led to higher black poverty rates in Philadelphia. Data on the methods of redlining in each respective city are collected in order to test the hypothesis. Finally, the last hypothesis seeks to prove that lower social spending per capita and fewer job opportunities in Philadelphia lead to higher black poverty rates than in New York. Information on employment opportunities and employment overall by race in each city, as well as respective social spending program funding, is interpreted to analyze this hypothesis.

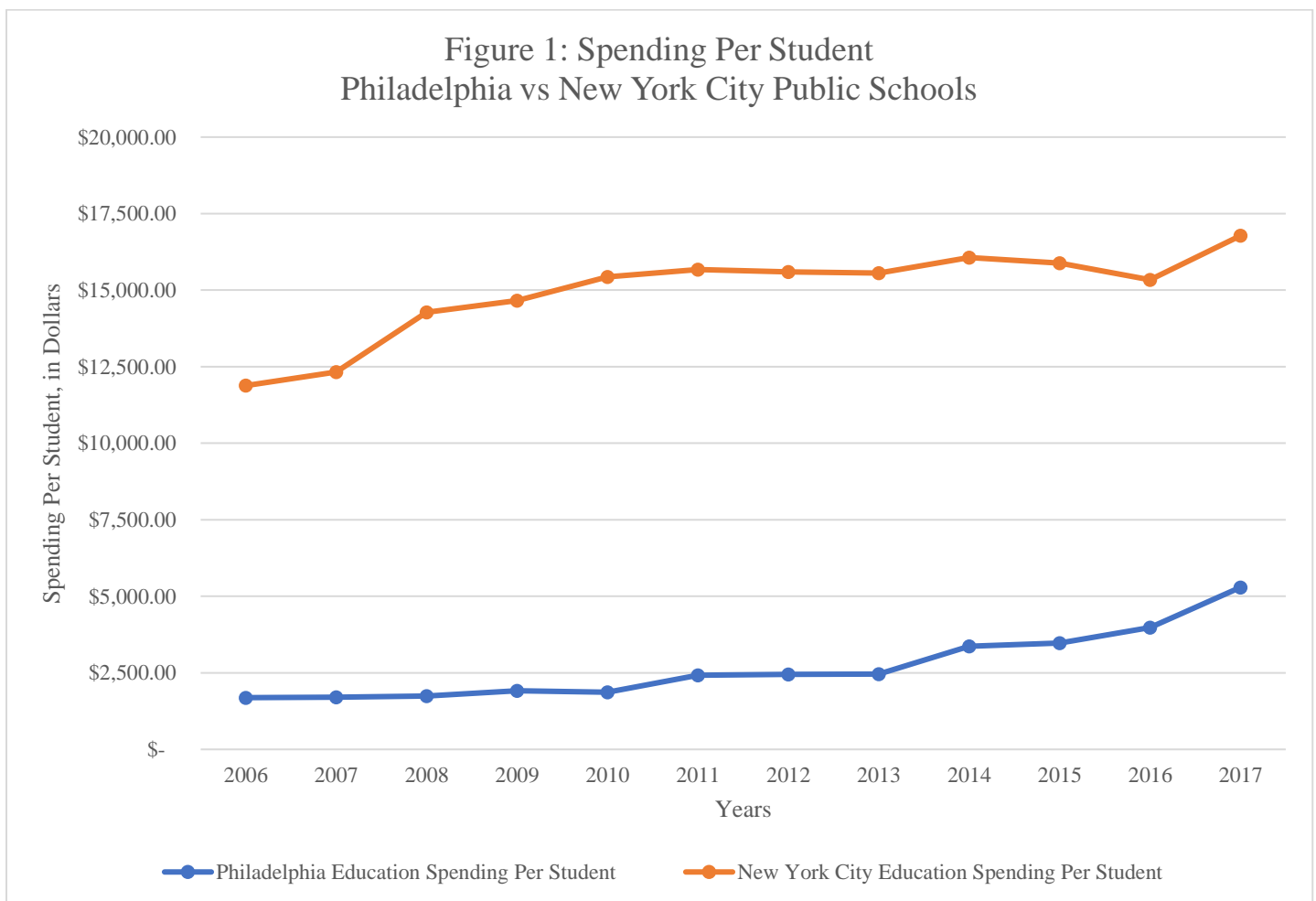
Data and Method of Analysis

Preview of Data and Method of Analysis

The following section will discuss the data discovered and the respective relationships that these data have to the larger difference in the poverty rates between black and white Americans seen in Philadelphia when compared to New York City. First, in order to test the education spending per student hypothesis, an interpretation of the spending in New York City and Philadelphia is done. This spending is then compared between the two cities in order to see if a higher rate of spending on each student in New York has caused a lower poverty rate comparatively to New York, which the data suggests is a possible cause. This data is also related to the poverty rates of each city to see if there is a direct impact on higher spending over time reducing the poverty rate of either respective city. Next, the limitations on access to redlining data that would allow a comparison of New York and Philadelphia, as well as limited data on

employment opportunities and levels of employer discrimination in the two cities made testing the redlining hypothesis and part of the economic hypothesis impossible are presented. Finally, data on the expenditures by each city on social spending are compiled in order to test the social spending per capita hypothesis. The social spending per capita in each city shows that lower per capita spending in Philadelphia compared to New York could be a cause of the higher black poverty rates in Philadelphia. Then, the social spending per capita will be juxtaposed with the cities' poverty rates to see the trend overtime in each city with the context of the social spending.

Testing the Education Spending Per Student Hypothesis



The education spending hypothesis suggests that the difference in black poverty rates between Philadelphia and New York is due to lower education spending per student in Philadelphia than in New York City. When analyzing this spending on education in each city, an extreme difference emerges.²⁵ Data collected on this spending from both Philadelphia and New York City's yearly budgets from 2006 to 2017, as is presented in Figure 1, demonstrates a difference in spending that helps confirm this hypothesis. From 2006 to 2017, Philadelphia averaged \$2,697.92 spent per student and New York City averaged \$14,957.59 spent per student; during this period, New York City spent \$12,259.67 on average more per student than Philadelphia did. The two cities' education spending per student was not close during this period, with the \$10,192.91 difference in 2006 being the closest in funding that the two cities were over this period.

Black individuals in New York City from 2006 to 2019 had, on average, 7.7% lower poverty rates than black individuals in Philadelphia. Given the much lower spending per student in Philadelphia when compared to New York City, this information also falls in line with the education spending hypothesis. With New York City spending five times more, on average, than Philadelphia does on its education spending, it is not surprising that the average difference in black poverty rates between these two cities was 9.4%. All of the data from these two cities suggests that the lower education spending per student in Philadelphia has some causal relationship with why the poverty rates of black individuals who live there are higher than those who live in New York City.

²⁵ Data from: "Public School Enrollment Reports 2006-2017." Department of Education. State of Pennsylvania Department of Education. Accessed April 1, 2022. ; "School Enrollment 2006-2017." NYC Open Data. City of New York. ; "The City Budget 2006-2017." Budget. City of New York.; "Financial Reports: City Treasurer's Office." City of Philadelphia. City of Philadelphia.

When comparing the data on education spending per student to the poverty levels in each city, increased spending on education in both cities over the time period has been directly related to reduced poverty rates amongst black individuals. In Philadelphia in 2006, the poverty rate for black individuals was at 31.6% and the spending per student was \$1690.58; by 2017, the same poverty rate was down to 26.7% and the spending per student was up to \$5,294.83. This represents an increase in spending of \$3,604.24 and a 4.9% decrease in the poverty rate. In New York City in 2006, the poverty rate for black individuals was 21.4% and the spending per student was \$11,883.50. By 2017, alongside a spending per student increase of \$3,074.09, the poverty rate of black individuals in New York City fell 1.1%. These decreases in poverty rates are in line with the existing literature that purports that lower spending on education helps contribute to higher poverty rates.

Limitations on the Economic Hypothesis

The first data collected to analyze differences in white and black poverty rates consisted of existing research surrounding this disparity across American cities. From this, the focus of the study was narrowed down to data from the cases selected. In doing so, limitations arose in terms of data on redlining policy differences between New York City and Philadelphia. An insufficient number of sources was found that provided information on whether there was a difference in how redlining was carried out in these cities. One source's explanation of how Philadelphia was redlined suggests a difference in how each city's redlining maps were drawn that more adversely affected black individuals in Philadelphia than in New York City, which would suggest that this could be a cause for the difference in poverty rates among black and white individuals in these

two cities.²⁶ However, without further data from other sources to corroborate this logic, a strong conclusion cannot be drawn from this source alone. In order to see if redlining policies were a cause of the difference between the two cities' black and white poverty rates, more data would be necessary on the exact methodologies of redlining and statistics of those who were redlined in these communities. If this data then suggested a similar difference as the source above, then this hypothesis would be strengthened and could be further tested.

As for the impact of fewer job opportunities on the difference in these poverty rates, there was not enough data to be found to indicate differences in job opportunities for black Americans between the two cities. Data suggests that in both Philadelphia and New York, black individuals have suffered from discriminatory hiring practices, but data was not found to suggest a higher level of discriminatory practices in one city over the other.²⁷ In order to see whether or not there is a substantial difference in terms of job opportunities between these two cities, more data on the demographics of individuals employed in high-paying jobs, as well as more information on discriminatory hiring practices in recent years in these two cities would be needed. If such data suggested that New York had less discriminatory hiring practices and more job opportunities for black Americans than in Philadelphia, then the hypothesis that fewer job opportunities in Philadelphia lead to a higher black poverty rate than in New York City could be supported.

²⁶ Knowles, Anne Kelly, and Amy Hillier. "Redlining in Philadelphia." Essay. In *Past Time, Past Place: GIS for History*, 79–92. Redlands, CA: ESRI Press, 2004.;

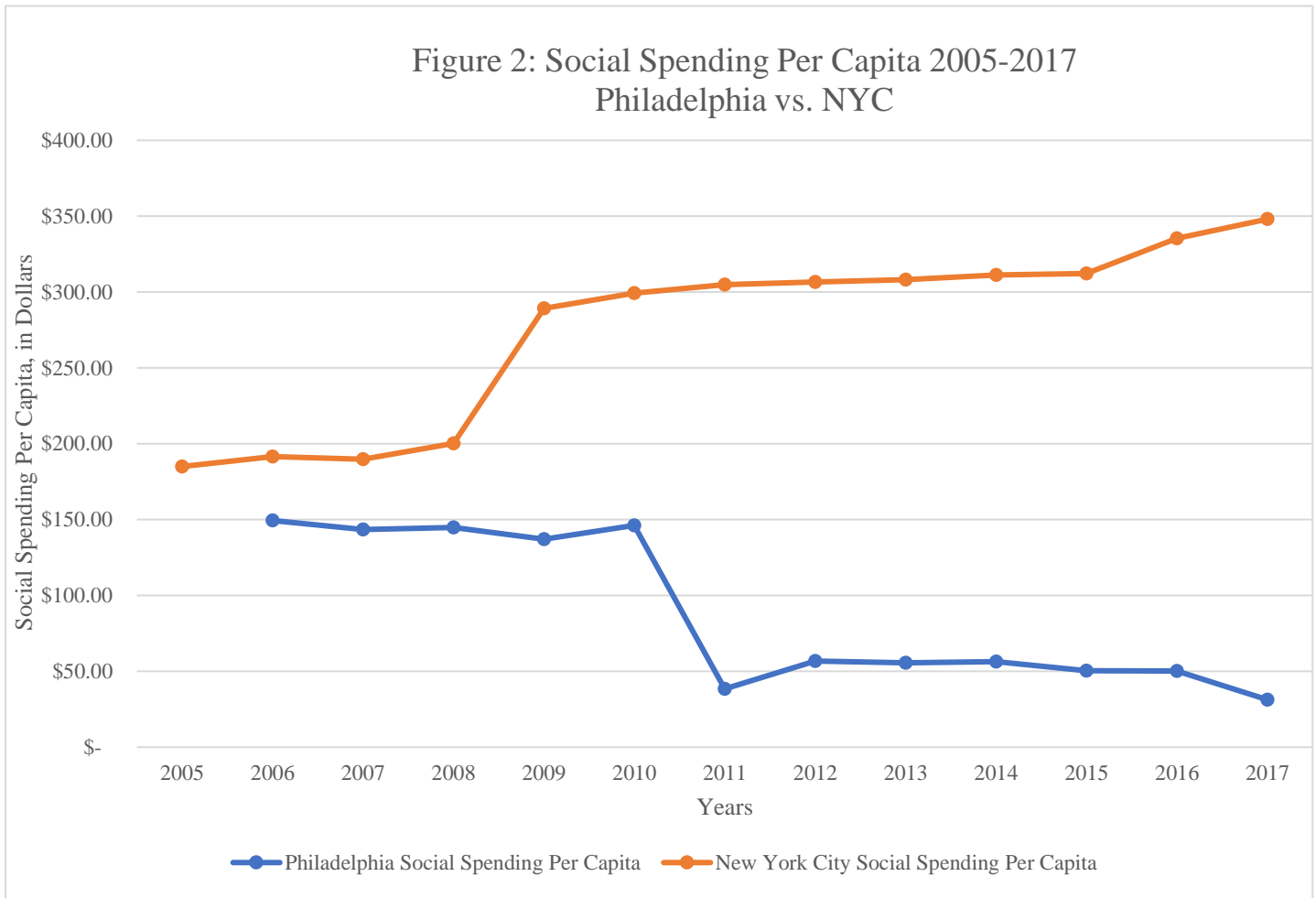
²⁷ Baker, Regina S., David Brady, Zachary Parolin, and Deadric T. Williams. "The Enduring Significance of Ethno-Racial Inequalities in Poverty in the U.S., 1993–2017."

Data and Analysis for Economic and Educational hypotheses

In order to find data on social spending in Philadelphia and New York City, each city's respective city government spending from 2006 to 2017 was collected. This data was then adjusted to represent the social spending per individual in each respective city. Since a majority of funding for social spending comes from the state government, information from each respective state government was compiled to see if there were details relating to the distribution of funding to either Philadelphia or New York City; there were not. The exact same was done for educational data, with information on per capita spending on students collected from 2006 to 2017 from each city's budget information. The educational outcomes of the two cities were also analyzed based on available data. This data was collected from mostly primary sources and then used to test the hypotheses regarding social spending, education spending, and education outcomes that were laid out earlier in this paper.

Presentation and Discussion of Analysis and Findings

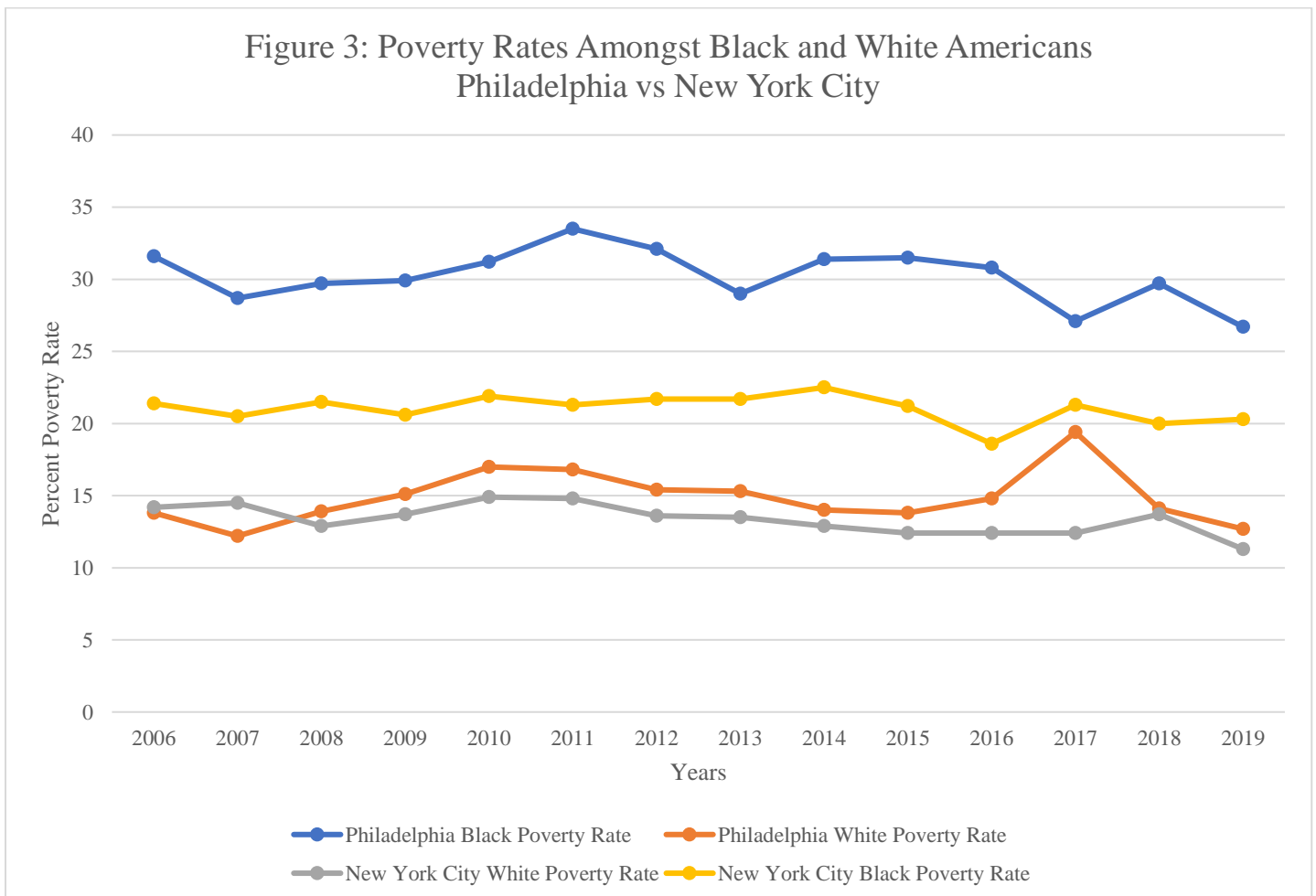
Testing the Social Spending Per Capita Hypothesis



The average difference between Philadelphia and New York City's black poverty rates from 2007 to 2019²⁸ falls at around 10%, as Figure 3 (below) suggests. The social spending hypothesis offers that there must be a significant spending per capita difference between these two cities. Data collected from both Philadelphia and New York City's yearly budgets, as shown in Figure 2 suggests that the difference in social spending per capita between Philadelphia and

²⁸ The time range in which social spending was tracked, from 2006 to 2017, in each city differs from the poverty rate range of 2005-2019 due to a lack of detailed social spending data in the years 2005 and 2018 in Philadelphia.

New York was quite drastic; the average difference in per capita spending between the two cities over this time period was \$187.2. After the great recession in 2008, the two cities' social spending initiatives took two different paths: New York City continued to increase its social spending per capita, whereas Philadelphia drastically decreased its spending. Notably in 2012, Philadelphia cut its spending on human services, which encompasses programs such as child welfare, to only one-fifth of what it was in 2010. Philadelphia has since continued to cut its social spending per capita, with an almost \$100 decrease in spending from 2010 to 2019.²⁹



²⁹ “City Budget 2006-2017.” Budget. City of New York. Accessed April 1, 2022...; “Financial Reports: City Treasurer's Office.” City of Philadelphia. City of Philadelphia.

To further see if this data helps support the social spending hypothesis, I analyzed the poverty rates during the years 2010 to 2019 in an attempt to see tangible impacts on the poverty rate of black individuals. The data trend in New York follows as the social spending hypothesis would expect. 2014, 2015, and 2016 were three of the four highest social spending per capita years in New York, with the poverty rate of black Americans over the same time decreasing by 3.9%. In Philadelphia, despite lower social spending per capita from 2010 to 2017, the poverty rate decreased by 3.8%. This data, however, must be contextualized, as the impact of the great recession in 2008 can be seen through the increase in the poverty rate of black Americans each year from 2008 to 2011. In this context, when compared to the poverty rate of black Americans in Philadelphia in 2007, the decrease in the poverty rate was only 1.6%.

Although marginal decreases in the poverty rate of black Americans can be seen from 2006 to 2019 in Philadelphia, as stated earlier, the average difference between the black poverty rates in Philadelphia and New York City stayed at 9.4%, with the closest poverty rate between these two groups coming in 2017 at 5.8%. Further, the average difference between black and white poverty rates over this time was 7.7% in New York city compared to 15.3% in Philadelphia. The average difference between black and white poverty rates over this time in Philadelphia was exactly double the difference in New York City.³⁰

The spending data in each city seems to support the social spending per capita hypothesis. The data shows an average of \$187 less spent per capita in Philadelphia on social spending programs when compared to New York City. Further, the average difference in the poverty rates of black and white Americans in each city was substantial, at 7.7%. These data,

³⁰New York City Government; NYCgov Poverty Rates, by Race/Ethnicity Total NYC Population, 2005 - 2019; U.S. Census Bureau, American Community Survey, one-year estimates, 2005-19, Table S1703 (Selected Characteristics of People at Specified Levels of Poverty in the Past 12 Months),

when contextualized with the impact that higher social spending has on lowering poverty, help to support the hypothesis that higher social spending per capita in New York City helps explain some of the extensive difference in poverty rates between white and black Americans in these two cities.

Conclusion

The findings of the research in this paper help to suggest possible causal relationships between lower social spending per capita and educational spending per student in Philadelphia than in New York City and higher black poverty in Philadelphia than in New York City. With existing research suggesting that lower social spending causes higher poverty rates, data in Philadelphia showing lower social spending per capita and higher poverty rates from 2006 to 2017 is not surprising. Additionally, the same is true with the impact of lower education spending per student in Philadelphia. With Philadelphia's average spending in this area from 2006 to 2017 totaling about one-fifth of the spending of New York City in this area, the fact that the black poverty rate has been over 9% on average higher during this time period is also not surprising.

This paper sought to explore what variables caused higher black poverty rates in Philadelphia than in New York City. To the best of my knowledge, this study is the first of its kind in comparing poverty rates in New York City and Philadelphia in order to see what has caused a higher rate of poverty amongst black Americans in Philadelphia. The research, however, was limited due to a lack of comparative data on the specifics of redlining in Philadelphia and New York City, as well as a lack of data on concrete examples of differing levels of employment discrimination in these two cities. Information on these two topics could

supplement the research in this paper to further explore what variables cause the difference in poverty rates between these two cities. With the research and hypotheses in this paper, individuals with political power in Philadelphia who are seeking to improve the difference in black and white poverty rates could potentially argue for increased spending on social programs and education in their city. Further, with the knowledge of the difference in education and social spending between New York City and Philadelphia, Pennsylvania state legislators could use this data to push for more funding for public schools and social spending programs in Philadelphia.

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