

PROFITS OVER PRINCIPLES: REDLINING IN THE NEWSPAPER INDUSTRY

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For the people who have inspired me most in my life:

My mother, Linda K. Ellis

My wife, Allie Jordan Hallmark

My daughter, Lana Michelle Hallmark Williams

ABSTRACT

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This dissertation tests previous unsubstantiated accusations that newspapers intentionally draw their circulation boundaries to exclude minority areas to make their audience look more white and affluent to increase advertising revenue. Analyzing 328 daily newspapers from 2002 – 2015, this dissertation compares the demographics of the zip codes a newspaper serves to the neighboring zip codes a newspaper does not serve. Mirroring how the Department of Justice has defined redlining under the legal theory of disparate impact, I argue that newspapers who serve minority residents at less than 4/5's the rate of white residents have created discriminatory practices. Using this measurement, I find that in 2014/2015, 15% of daily newspapers with circulations over 10,000 were redlining African American residents, 14% were redlining Asian American residents, and 10% were redlining Hispanic residents. I then show that since 2002, the percentage of papers engaging in redlining has decreased and that newspapers who stopped redlining were most likely to do so after decreasing their service boundaries by more than 25 miles. Using logistic regression, I then show that depending on the racial group, region, residential segregation, and circulation size are significant predictors of whether a paper will engage in redlining. I conclude by arguing that more research is needed to explore whether redlining shapes news coverage and the process in which newspapers set their service boundaries.

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Chapter 1: Introduction

In 1979, the *Columbia Journalism Review*, a watchdog magazine for journalism, investigated why the *Los Angeles Times* was not devoting more resources to covering ethnic minority communities. Surprisingly, the newspaper's executives explained that the decision was easy to make. Otis Chandler, the publisher, said that it simply "would not make sense financially for us" because "that audience does not have the purchasing power and is not responsive to the kind of advertising that we carry" (Gutierrez & Wilson, 1979 p. 53). Likewise, John Mount, the paper's marketing and research specialist, noted that the newspaper wanted to reach readers with a "high demographic profile... We don't approach marketing from a racial standpoint, it just happens that the more affluent and educated people tend to be white and live in suburban communities" (ibid). While it may be tempting to write off these comments as reflecting a different time period, it is important to note that a similar sentiment was expressed in 1995 by the Newspaper Association of America's chief economist who argued that papers are "basically delivering eyeballs to advertisers" so "low-income areas are not where you concentrate efforts" (Cranberg, 1995, n.p.).

Of course, many scholars would argue that newspapers have a responsibility to serve minority communities even if advertisers weren't interested in reaching them. After all, residents living in minority neighborhoods need information to hold government accountable just as much as residents living in white neighborhoods. These blunt remarks

reveal an important truth: because newspapers have traditionally depended on advertising revenue to account for 80% of their total revenue (Picard, 2004; Perez-Pena 2008), the demands of advertisers can strongly influence the decisions of newspaper executives. Indeed, a central tension in the news industry is how to balance commercial pressures with democratic goals. On the one hand, society depends on news organizations to provide the information necessary for a healthy democracy, a purpose that the journalism industry embraces (Steele, 2002). On the other, news organizations are businesses that depend heavily on advertising revenue to maintain profitability. What happens then, when a news organization is torn between democratic and economic pressures?

While many studies have tried to answer this question by documenting examples of advertising interests overpowering editorial coverage (Bagdikian, 1997) or studying how who owns the paper influences political news coverage (Gilens and Hertzman, 2000), this dissertation proposes a new area of study: interrogating how newspapers set their circulation boundaries. While this seemingly benign bureaucratic procedure is normally taken for granted, at its core, it reveals which members of the community the newspaper does – or does not – value.

Indeed, in the 1990's, members of the newspaper industry began warning the public that behind-the-scenes, newspapers executives were asking:

Does that neighborhood have demographics that our advertisers want?

If not, should we stop delivering the paper to that neighborhood?

In “Read All about it!” James Squires, a former editor of the *Chicago Tribune*, blew the whistle on this industry practice. He wrote that “newspapers routinely control costs and enhance profits by cutting off circulation that is unprofitable because it lacks value as a quality audience...By reducing circulation efforts among low-income, minority readers, newspapers actually improve the overall demographic profile of their audiences, which they then use to justify raising advertising rates” (1994, p. 91). In other words, papers were improving their bottom line by eliminating newspaper delivery to areas with low-income minority residents to make their audience seem more white and affluent. Even though this hurt their circulation figures, the increased advertising rates more than made up for it. Of course, it also blatantly disregards an unofficial motto of our nation’s press that journalism should look to “comfort the afflicted and afflict the comfortable” (McChesney, 2003; Alterman & Richardson, 2013). Instead, newspapers were purposefully exiling the afflicted from their readership.

Accusations against certain papers were sometimes made public – like when the publisher of a small tri-weekly newspaper in San Francisco accused the daily *San Francisco Examiner* of “redlining.” “If you live in a black neighborhood you can’t subscribe to the *Examiner*...If that’s not redlining, I don’t know what is” (Stein, 1994, n.p.). In this dissertation, I use the term redlining to refer to historical practices in the banking and insurance industries where companies did not serve certain neighborhoods if they were composed primarily of ethnic-minority households, regardless of an individual’s credit-worthiness or insurability. Oftentimes, companies would take a map and, with a red pencil, draw the geographic boundaries of which neighborhoods they would serve and which neighborhoods were excluded (D’Rozario and Williams, 2005).

Hence the term redlining was born, which is now used more broadly to describe discrimination based on race/ethnicity along geographic boundaries.

Noting how this troubling practice was spreading in the newspaper industry, the *Washington Post*'s ombudsmen wrote that "There is no area in the District without home delivery... This is a far cry from many newspapers, which have essentially adopted redlining: They simply cease to serve areas of little interest to advertisers" (Overholser, 1996, n.p.). As Picard and Brody (1997) summarized

The practice of cutting circulation has increased in the past two decades with papers halting circulation to areas where readers don't interest advertisers – such as inner cities or districts with lower incomes or other unwanted demographics – or where distribution costs are higher. Although these practices may serve the interests of the economic role of newspapers, they are harmful to newspapers' social roles of conveying information and providing the communication links necessary for a healthy society (p. 89).

But these accusations, from newspaper executives, journalists, and academics, have become increasingly rare. Whether newspapers are "redlining" has become a forgotten question. Why? The answer is probably simple: because the accusations have never been empirically tested.

While such accusations may sound conspiratorial, it is important to note that academic studies have confirmed that audience demographics – not just audience size – shape advertising rates (Depken, 2004; Napoli, 2003). Moreover, research has shown that

outlets with more affluent audiences command higher advertising rates (Koschat and Putsis, 2000, 2002) and that the presence of minorities in an audience decreases advertising rates (Webster and Phalen, 1997; Ofori, 1999; Napoli, 2002). Possibly offering an explanation as to how this happens, studies have found that publishers with and less diverse audiences command higher advertising rates because advertisers value reaching targeted audiences (Thompson, 1989; Chandra & Kaiser, 2014). Consequently, newspapers serving more diverse areas and/or greater geographic distances are correlated with lower advertising rates (Chandra, 2009). In other words, newspapers that limit service to nearby affluent, white audiences seem to be able to charge more for advertising.

This dissertation offers the first empirical support for accusations of redlining through the most authoritative data source available – the archives of the Alliance for Audited Media (AAM).¹ For decades, this organization has tracked where a newspaper is sold to provide transparency and trust between the newspaper and advertising companies. By analyzing the circulation boundaries of 328 daily newspapers, this dissertation tests whether newspapers are more likely to exclude areas with higher percentages of ethnic minorities from service.

It is important to note, newspapers still derive a majority of their revenue from print advertising, despite the growth of the internet (Barthel, 2016). Indeed, while print revenue has declined steeply, for the vast majority of newspapers it still accounts for more revenue than digital advertising or circulation. Thus, the economic incentives to

¹ Created in 1914, this organization was originally called the Audit Bureau of Circulations.

cater to certain demographics for the purposes of appeasing print advertisers are still ongoing. If anything, the commercial pressures on newspapers have become more extreme in today's economic environment. Consider *The Atlanta Journal-Constitution*, which cut delivery from 74 to 49 counties in 2008 (Associated Press, 2008). Given the need to hold onto whatever print revenue they can retain, the demographics of those counties—and whether advertisers find them valuable—were likely analyzed before deciding which to keep or cut.

This dissertation asks three questions that are central to understanding redlining in the newspaper industry: 1) How common, if at all, is redlining in the newspaper industry today; 2) In the past 14 years, has redlining becoming more or less common; and 3) What factors predict whether a newspaper will engage in redlining?

This dissertation explores these questions using a political economy framework to contextualize its findings within the broader history of the United States media system. There is a rich history of academics who have studied how commercial pressures on news organizations interfere with the democratic needs of society—this dissertation seeks to add to this literature. However, rather than analyzing the result of this tension, such as a content analysis of the business section (Kollmeyer, 2004) or political news coverage (Gilens and Hertzman, 2000), I argue that analyzing local demographics and circulation boundaries allows scholars to “peek behind the curtain” to help reveal how newspaper executives decide which community residents they do – or do not – value.

Ultimately, this dissertation asks a simple but novel question: Does the newspaper industry's reliance on advertising revenue incentivize papers to exclude minority areas from their circulation boundaries? Given that about 1/4 of the newspapers analyzed are

significantly more likely to exclude African Americans, Hispanics, or Asians from service, the answer is a resounding yes.

Plan for the Dissertation

In Chapter 2, I present the theoretical foundation for my predictions. I begin by reviewing previous research that has explored the tension between democratic and commercial pressures in the media industry from a political economy framework. By scrutinizing circulation boundaries, I forge a new theoretical approach that links the demographics desired by advertisers to the actions of a newspaper based on local community demographics. Next, I explore the limited research on redlining in the newspaper industry to highlight the need for empirical testing, which this dissertation provides. Finally, I argue that past research on retail redlining internalizes the market logic of corporations by utilizing a definition of redlining that excuses discrimination based on market conditions. To demonstrate how problematic this is, I argue that this approach would excuse the original example of redlining, by justifying that banks in the 1930's refusing to lend to African American residents were acting in their economic interests. To broaden this definition, I introduce the legal theory of disparate impact to the literature on retail redlining, which shifts the focus towards how discriminatory practices impact local residents regardless of intention.

Chapter 3 describes the data and methods used throughout my analysis. This dissertation relies on circulation data at the zip code level that were self-reported to AAM by individual newspapers. Notably, AAM is an opt-in panel, as newspapers have the

choice of partnering with AAM to have a third-party audit their circulation figures. Over 50% of daily newspapers do so. In conjunction with data from AAM, demographic information at the zip code tabulation area was collected from the 2000 census and the 2014 5-year American Community Survey. By combining these two data sets, I am able to compare the demographics of the zip codes that a newspaper serves to the demographics of the adjacent zip codes the newspaper does not serve. For 328 newspapers, I empirically test whether significant differences exist between the demographics of residents who live in areas with services compared to those excluded from service.

In Chapter 4, I begin offering empirical evidence of redlining in the newspaper industry from 2014-2015. I start by illustrating that the circulation boundaries of nearly 1/4 papers have a disparate impact on a minority group. I then show that approximately 88 papers (15%) redline African Americans, and that for 82 of these papers, a person living in poverty is more likely to live in an area with service than a Black resident. Analyzing how circulation boundaries impact Hispanics, I find that 60 papers (10%) are significantly less likely to serve Hispanics than Whites. For 53 of the 60 papers, a person living in poverty is more likely to live in an area with service than a Hispanic resident. I show a similar pattern for Asian Americans, as 85 papers (14%) redline Asians residents. For 83 of the 85 papers, a person living in poverty is more likely to live in an area with service than an Asian resident. These figures offer strong support for accusations of redlining in the newspaper industry and give reason to doubt that the differences are attributable to differences in income. This chapter offers empirical insight into which customers newspapers value most and crystallizes the tension between the commercial

pressures on newspapers and the democratic goal of providing information to all members of the community.

Chapter 5 analyzes how redlining has changed between 2002 and 2015. Using a panel of data to allow longitudinal comparisons, I show that the number of newspapers engaged in redlining has decreased slightly during this time period. However, deeper inspection reveals that this change oftentimes coincides with newspapers cutting off service to distant zip codes with a large percentage of White households as opposed to adding zip codes with a large percentage of minority households. This change corresponded with the Great Recession, when newspapers lost millions in advertising revenue that has not been recovered (Pickard, 2015). This suggests that redlining may reflect newspapers narrowly extending into distant white suburban areas but not their surrounding urban areas, an extension that is becoming rarer in the contemporary media environment.

Chapter 6 examines the factors that help predict whether a newspaper will engage in redlining. I show that redlining is more common in the Northeast and that this difference is not attributable to different demographic, ownership, or circulation patterns. I find little empirical support for accusations that publicly traded newspaper companies would be more likely to engage in redlining. Instead, I find that the best predictor for whether a newspaper will engage in redlining in 2014 is whether they were redlining in 2002. While this finding may seem obvious, it has important implications. It suggests that many newspapers have an institutional legacy of redlining that they are unlikely to deviate from.

Chapter 7 analyzes the implications of this dissertation. I argue that the data presented is the first empirical evidence of redlining by newspapers. This supports accusations that newspapers may prioritize the interests of advertisers over the information needs of local residents. Moreover, it demonstrates that newspapers reify racial inequalities, regardless of intention, by serving white and non-white residents at different rates. Ultimately, this dissertation argues that papers have an economic incentive to make their audience as white and affluent as possible, that about 25% of daily newspapers with circulations over 10,000 taken this warped logic to its troubling conclusion and engage in redlining, and that commercial pressures are damaging how newspapers serve non-white communities. While this contribution is noteworthy, more research is needed to understand how these disparities may impact other facets of the newsmaking process. For example, if newspapers do not want minority communities reading their paper, they may invest less resources into covering those communities accurately. Additionally, given that the best predictor for whether a newspaper will engage in redlining is whether they have done so in the past, more longitudinal research is needed to trace these patterns to their origin points. I conclude by arguing that the institutional legacy of redlining in the newspaper industry may help explain disparities in news coverage and staffing in the newspaper industry.

Chapter Two: Literature Review

Accusations of Redlining in the Newspaper Industry

Between 1955 and 1985, the number of daily newspapers in the United States changed from 1,760 papers to 1,676. Yet during this time period, the number of independent newspapers was drastically reduced, from 1,300 to 700 (Neiva 1996). Large newspaper chains developed during the 1970s and raised large amounts of capital by becoming public companies, which allowed them to offer such high purchasing prices that even reluctant owners would sell their newspapers (Soloski 2013). But by 1980, most owners who would consider selling their papers already had done so, and the newspaper industry became a stable and highly profitable industry. In the 1980's and 1990's, most newspaper companies had profit margins exceeding 20 percent (Picard 2008). In 2000, US newspapers were receiving two and a half times more advertising dollars than they received at mid-century, in real-term value (Picard 2002).

In "Read All about it! The Corporate Takeover of America's Newspapers" James Squires, a former editor of the *Chicago Tribune*, argues that this corporatization is corrupting the ideals of journalism (1994). Detailing how he personally witnessed newspapers begin to care more about maximizing profits than providing quality information to the public, this memoir describes how newspaper executives are increasingly cutting costs and chasing advertising revenue. In his most scathing critique, Squires writes:

Nowhere does the Constitution define “the people” as the predominantly white upper 35 percent of the population between twenty-five and fifty years of age who make \$50,000 a year. Yet newspapers routinely control costs and enhance profits by cutting off circulation that is unprofitable because it lacks value as a quality audience...By reducing circulation efforts among low-income, minority readers, newspapers actually improve the overall demographic profile of their audiences, which they then use to justify raising advertising rates. Thus, with few exceptions, the profitability of newspapers in monopoly markets has come to depend on an economic formula that is ethically bankrupt and embarrassing for a business that has always claimed to rest on a public trust (p. 90).

Ultimately, Squires left the industry after growing tired of watching newspapers prioritize appeasing advertisers over serving the information needs of the public.

While Squires does not label this practice “redlining”, others soon did. That same year, *Editor and Publisher*, a trade magazine, noted that *The San Francisco Examiner* was accused of redlining by the publisher of a neighboring triweekly newspaper. “If you live in a black neighborhood you can’t subscribe to the *Examiner*...If that’s not redlining, I don’t know what is” (Stein, 1994, n.p.). In response, the circulation manager for the *Examiner* acknowledged that the paper’s independent carriers have refused to deliver in certain neighborhoods for “safety reasons” (ibid).

In 1996, the ombudsmen of the *Washington Post*, Geneva Overholser, said as much in an op-ed about newspaper redlining. In blunt terms, she traces the source of the tension to the economics of the newspaper industry. She writes that “A newspaper is a

business. The reader pays some 20 percent of its costs, the advertiser the rest. So the readers the advertisers want are much more financially attractive than those they don't" (Overholser, 1996, n.p.). She concludes by declaring that the *Post* does not engage in this practice, as "There is no area in the District without home delivery, none where The Post fails to press for new starts. This is a far cry from many newspapers, which have essentially adopted red-lining: They simply cease to serve areas of little interest to advertisers" (ibid).

In the *Columbia Journalism Review*, a watchdog magazine for journalism, Gilbert Cranberg published an in-depth op-ed on newspaper redlining in 1997. A professor and former editor, Cranberg quotes the Newspaper Association of America's (NAA) chief economist, Miles Groves, as endorsing the logic behind the practice

"We're basically delivering eyeballs to advertisers," said Groves, and fringe readers, by definition, have lower demographics. To illustrate, he repeated the old tale about the tabloid owner who made an advertising pitch to a retailer by citing big circulation numbers. To which the merchant scoffed. "But your customers are my shoplifters" (Cranberg, 1997, n.p.).

Here, it is important to note the use of "fringe readers" by Groves is not referring to readers who are geographically distant—or else they wouldn't "by definition, have lower demographics." The phrase "lower demographics" is itself troubling. Is lower referring to members of the community who are less educated, earn less money, and/or have darker skin? Implying that people with "lower demographics" are shoplifters is equally

troubling. This hierarchy of news consumers contradicts the ethos of journalism—rather than trying to inform all members of the community, a leader of the NAA argued that newspapers should exclude people with certain demographics. Hinting at the prevalence of this practice, Cranberg says that circulation executives at ninety of the nation’s largest one hundred newspapers often talked about witnessing redlining.

Given the serious accusations that Cranberg levied, the NAA, individual newspapers, or newspaper corporations could have strongly criticized this report if it was baseless or inaccurate. To my knowledge, no such complaint was ever published. Indeed, the year after the report condemning this industry practice was published, Cranberg noted that “I am unaware of any challenge to the facts and conclusions in the piece” (Phillips, 1998, p. 62)

At this point, accusations that newspapers were redlining began appearing in academic publications. In “The Newspaper Publishing Industry,” Picard and Brody (1997) succinctly summarize the rise of the practice and its troubling implications

The practice of cutting circulation has increased in the past two decades with papers halting circulation to areas where readers don’t interest advertisers—such as inner cities or districts with lower incomes or other unwanted demographics—or where distribution costs are higher. Although these practices may serve the interests of the economic role of newspapers, they are harmful to newspapers’ social roles of conveying information and providing the communication links necessary for a healthy society (p. 89).

These criticisms were repeated by Bezanson (1998), who shifted the focus to the future of the newspaper industry. Noting that the media environment was beginning to fragment, giving news consumers greater control over what content they consume, he warns that through redlining, newspapers have already shown they will sacrifice their values to chase advertising revenue. Increasingly, newspapers will be able to measure what white affluent readers choose to read, and newspapers will begin warping what they publish to further match the desires of the powerful. To Bezanson, rather than focusing on separating journalists from the wants of the owner, the news industry needs to focus on building mechanisms to separate journalists from the wants of the most powerful people in the audience – the readers that advertisers care about the most.

A few years later, Cranberg and Bezanson collaborated with John Soloski to publish “Taking Stock: Journalism and the Publicly Traded Newspaper Company” (2001), which analyzed 17 newspaper companies that were publicly traded from 1997 to 1999. Detailing how corporate ownership is negatively affecting the quality of journalism produced by newspapers, the analysis argues that newspapers are increasingly owned by thousands of stockholders who value financial return, not news quality. In an interview with Maxwell E.P. King, former editor of the *Philadelphia Inquirer*, King recalls that in 1998, the *Inquirer* had lost 70,000 daily readers and 100,000 Sunday readers over the last 15 years. Despite these losses, there were no complaints from advertisers or from the paper’s executives

“Although the *Inquirer* had lost gross circulation numbers,” said King, “its demographic statistics – the wealth, education, and other characteristics of our

reading population – had improved substantially. In fact, although we lost circulation badly in the city, we have been gaining circulation in the wealthier suburban neighborhoods...Most of our advertisers were pretty happy about the readers we were delivering” (Cranberg, Bezanson & Soloski, 2001, p. 91).

King went on to explain that these patterns were seen at most of the other metropolitan newspapers, suggesting that the *Inquirer*’s situation was far from unique.

Over the next several years, Cranberg continued decrying this practice. Speaking to the National Conference of Editorial Writers, Cranberg (2001a) noted that journalists who have editorialized about redlining in lending institutions and real estate firms should be aware that their own newspaper might be engaging in redlining too. He urged editors to “inquire about their papers' practices and, if only to avoid hypocrisy, vigorously advocate the obligation of a newspaper to serve the whole community” (n.p.). Repeating this message in print, Cranberg published another op-ed, this time in *Nieman Reports*, which encouraged advocacy organizations for minority journalists to help fight this practice (2001b). Cranberg and Bezanson (2006) then published a law review article detailing how this troubling practice made economic sense and why that is so troubling for the future of the news industry, which will continue to be dependent on advertising revenue. In 2007, Cranberg summarized the legacy of redlining and its historical trajectory, writing that

Once upon a time, circulation gains were regarded as a plus because they meant more people had access to the news and information that greased the wheels of

democracy; readers were thought of as assets. But that was before the ascendance of newspaper numbers-crunchers who decided there were “quality readers” with upscale demographics they wanted to keep and those from the wrong side of the tracks who were seen, not as readers to be served, but as drags on the bottom line. (n.p.).

Cranberg, now a Professor Emeritus, was the most vocal critic of newspaper redlining. It is noteworthy that his initial report in 1997 reads as if he is highlighting this practice to “sound the alarm” to help stop it. Yet a decade later, after writing numerous academic and non-academic publications about newspaper redlining, his report in 2007 is much more resigned to the prevalence of this enduring practice.

In the literature on redlining, the accusations are based on interviews and firsthand testimony. But there is no quantitative evidence that this practice occurred. There is not, for example, statistics detailing how a newspaper circulation boundaries exclude greater portions of minority residents. Given how many executives talked about witnessing this pattern happen, it seems unlikely that the entire practice never occurred. It seems more plausible that academics were unsure of how to test for it.

This dissertation addresses the lack of empirical measurements concerning redlining by measuring the circulation boundaries for 328 newspapers over the period of 14 years, matching those boundaries to local demographics, and then testing whether the demographics of those living in areas with service are significantly different from those living in areas without service.

Political Economy Framework

To understand why newspapers may engage in redlining, this dissertation is informed by the political economy approach, which emphasizes the central role of power dynamics in defining the structure of society. Mosco (2009) defines political economy as “The study of the social relations, particularly the power relations, that mutually constitute the production, distribution, and consumption of resources” using four central dimensions: history, social totality, moral philosophy, and praxis (p. 2). That is, political economists emphasize the importance of historical and social context and the need to engage in interventions that benefit democratic goals. Using macro-level studies, political economists analyze strategic uses of power, which is “the ability to control other people, processes, and things, even in the face of resistance” (ibid, p. 7).

In the United States, studies using this perspective have illustrated how economic and political interests have influenced the allocation of resources at media institutions and the regulatory framework of the media system. Studies focusing on economics, for example, have analyzed how media markets are dominated by oligopolies that reduce competition and diversity while inflating consumer prices (Baker, 2006), and how the unequal allocation of internet access has led to the “digital divide” or “the information poor” (Wasko, 2005). Studies focusing on politics have shown how the sinking of the Titanic led to regulations that shifted the use of public airwaves in the radio industry from a public right to a corporate privilege (Douglas, 1987), traced how media reform debates in the 1940’s became marginalized to the point that strengthening lax media regulations is now viewed as radical (Pickard, 2015), and analyzed how policies have diminished the

potential benefits of the internet (Mansell, 2011). Of course, these two strands of research intersect, with much research demonstrating how the deregulation of the media industry has intersected with commercial forces to diminish the likelihood of a healthy local news ecosystem (e.g. McChesney & Pickard, 2011).

This dissertation continues a stream of political economic scholarship demonstrating that the commercialization of the media system contradicts the goals of a healthy democratic media system (Schiller, 1989; McChesney, 2000; Pickard, 2014a). In the United States, mass media serves two distinct audiences: citizens who consume published content and advertisers who pay to market to those consumers. While newspapers have strived to separate editorial freedom from the desires of advertisers, going so far as to model it after the separation of church and state, there is ample evidence that the press falls short of this goal.

Indeed, a central concern in this literature is how media institutions amplify the voices of the powerful. Since the deregulation of the media industry in the 1930's and 1940's, ownership of media institutions has become increasingly consolidated in the United States. Consequently, news organizations have become more dependent on maximizing advertising revenue to appease corporate shareholders (Cranberg, Bezanson & Soloski, 2001). To maximize profits, news organizations rationally follow market cues that encourage catering to the interests of the wealthy rather than prioritizing the interests of the public. As a result, news reporting reinforces the reality offered by legitimated power holders (Murdock, 1973) and media institutions are rarely critical of corporations (Bagdikian, 1997), which hurts the ability of citizens to fight corporate interests. For example, Kollmeyer (2004) notes in an analysis of economic coverage of the *Los Angeles*

Times that the business section overwhelmingly favors the perspective of corporations and investors. Publishing how a business decision is impacting workers is rare and typically brief, suggesting that newspapers privilege the interests of the elite over regular citizens. Likewise, news organizations rely heavily on official sources (Hallin, 1986), which favors news stories that feature individuals in powerful positions. This bias renders the experiences and opinions of vulnerable individuals as unreliable.

Rather than serving the public interest, acting as the fourth estate, and emphasizing the importance of equal access and representation, media institutions focus on maximizing profits. Due to reliance on advertising revenue, the demographics that advertisers are most interested in receive more news coverage, which often causes the urban and rural poor to be neglected in news coverage while the interests of upper-class white communities are over represented (Hamilton, 2004).

The main contribution of this dissertation to the political economy framework is that it extends analyses of the newspaper industry to scrutinizing the circulation boundaries that they set. Paired with community demographics, this unit of analysis offers concrete insight into which members of the community a newspaper includes or excludes as from service. In doing so, this dissertation forges a new theoretical approach that links the demographics desired by advertisers to the actions of a newspaper based on local community demographics. Like many scholars, I am studying the tension between the commercial pressures of the news industry and the democratic needs of society. However, rather than only analyzing the result of this tension, such as a content analysis of the business section (Kollmeyer, 2004) or political news coverage (Gilens and

Hertzman, 2000), I argue that this approach reveals which community members a newspaper values.

The relationship between an outlet's audience demographics and its advertising rates is well established. Previous research has demonstrated that in advertising, higher household income is positively related to higher audience value (Fisher, McGowan, & Evans, 1980; Berry & Waldfogel, 1996; Napoli, 2003). At the aggregate level, household income is often referred to as purchasing power. Size is also an established predictor of audience value, with larger audiences commanding more value (Fisher, McGowan, & Evans, 1980; Napoli, 2003; Waterman & Yan, 1999). That is, a radio station with a larger audience can generally demand higher advertising rates. Likewise, as an audience group grows in members, its "clout" is thought to increase, with advertisers being more likely to cater to their desires.

That being said, there is one noticeable caveat to how advertisers value household income and audience size – the rules may be different for non-white audiences. Indeed, previous research has indicated that the mere presence of minority audiences can lower advertising rates. Webster and Phalen (1997) found that greater proportions of non-Whites in a market was negatively correlated with the average cost of reaching 1,000 television viewers within a market – even after controlling for income. In a survey of sixty-four general managers of minority-owned radio stations, 91% indicated that they had encountered "dictates" not to buy advertisements on their radio stations, which resulted in a "minority discount" that reduced their revenues by an average of 63% (Ofori, 1999). That is, radio stations with larger minority audiences had difficulty selling advertising space at market value. An analysis of 3,745 radio stations supported this

assertion, as stations that target programming to minority listeners earn less revenue per listener than stations that air general market programming, albeit with the caveat that more research was needed to explain why (ibid). While these previous studies focused on advertising rates by market and format, Napoli (2002) studied the demographic composition of radio station audiences and found that ethnic composition was negatively correlated with a radio station's advertising rates.

Notably, most studies of the relationship between advertisers and media outlets have focused on television or radio, likely because advertising data for these mediums is more readily available than for print. Additionally, given that there are more broadcast outlets than print outlets in a market, advertisers are better able to target specific audiences in broadcast. Consequently, it is easier to compare advertising rates for different programs, formats, and outlets, in advertising. That being said, Thompson (1989), hypothesized that decreasing circulation allows a newspaper to present advertisers with a concentrated target audience with higher average incomes and thus a greater probability of responding to advertising. He argues that "as circulation increases the average income usually falls; hence the quality of the advertising space to advertisers is decreased" (p. 186). In an analysis of 34 British and Irish newspapers, Thompson finds that high-income readers are more valuable to advertisers than low-income readers. By restricting the level of circulation, he argues, newspapers forego revenues from circulation but recoup this loss from increased advertising revenue. Indeed, Koschat and Putsis (2000, 2002) analyzed 101 magazines and found that those with younger or more affluent audiences disproportionately commanded higher advertising rates, which they fear incentives magazines to cater to these audiences. Depken (2004) also analyzed 94

magazines and found that those with more affluent audiences were able to command higher advertising rates, and suggests that because advertising rates are based on audience demographics and not circulation alone, more research is needed to understand how this shapes print outlets.

The desires of advertisers to reach narrow audiences may also be impacting newspapers. Chandra (2009) analyzed how homogenous the demographics of a newspaper's circulation area were and their advertising rates. Notably, he concluded that the less diverse a newspaper's audience is, the higher their advertising rates were. Likewise, he found that newspapers serving less distant zip codes also tended to demand higher advertising rates. He speculated that this reflects advertisers valuing predictable readership that lacked socio-economic or geographic diversity. A subsequent study further validated that outlets with more homogenous audiences are able to charge more for advertising (Chandra & Kaiser, 2014).

Taken together, these studies suggest that newspapers may have a strong market incentive to try and limit how diverse their readers are, to narrow the geographic areas they serve, and to maximize the number and percentage of affluent readers. This market logic, paired with previous statements by newspaper executives (Squires, 1994; Overholser, 1996) and the Newspaper Association of America (Cranberg, 1995), make allegations of redlining seem less nefarious and more symptomatic of a broken economic system. Still, if newspapers are prioritizing the interests of advertisers above the information needs of non-white residents in their community, the implications are far reaching. It would be a vivid example of advertising interests overpowering editorial interests. Newspapers engaging in redlining would be reifying racial inequalities and

purposefully excluding residents from service, which could shape everything from community involvement to local elections.

Redlining and Disparate Impact

The term redlining originally refers to practices in the banking and insurance industries where companies did not serve certain neighborhoods if they were composed primarily of ethnic-minority households, regardless of an individual's credit-worthiness or insurability. Oftentimes, lenders would take a map and, with a red pencil, draw the geographic boundaries of which neighborhoods they would serve and which neighborhoods were excluded (D'Rozario and Williams, 2005). Notably, the practice of redlining has been traced back to government policies. During the Great Depression, The Home Owners' Loan Corporation was established by Congress in 1933 to refinance millions of mortgages in default as part of President Roosevelt's New Deal Legislation. By 1934, about one in five mortgages in America were owned by this corporation and by 1936, it had provided over a million new mortgages. After adjusting for inflation, The Home Owners' Loan Corporation had lent out approximately 750 billion dollars (Roosevelt Institute, 2012). To evaluate loans, this corporation prepared "neighborhood security maps" by drawing red lines around neighborhoods with an "infiltration of foreign-born, negro, or lower grade population" that were deemed ineligible for government-guaranteed refinancing (Bliss, 2015, n.p.).

With the government adopting policies that penalized mortgages in minority neighborhoods, private companies soon followed suit. If a mortgage property was in a

neighborhood where minorities lived, it was deemed risky and required higher interest rates, if it was approved at all. At the same time, if a person of color applied for a mortgage to secure a property in a White area, it's approval was viewed as potentially diminishing the value of the other homes in the surrounding area. Summarizing these practices, in 1969, the Douglas Commission concluded that "there was evidence of a tacit agreement among all groups – lending institutions, for insurance companies, and FHA [Federal Housing Administration] – to block off certain areas of cities within 'red lines,' and not to loan or insure within them."

Community activists in Chicago coined the term "redlining" in the late 1960s to protest this literal practice of drawing red lines around minority neighborhoods to exclude them from service (Hillier, 2013). As a result of this toxic interplay between government and private company policies, between 1933 and 1968, 98% of mortgages receiving government support went to whites (Lui, Robles, Leondar-Ross, Brewer, & Adamson, 2006). This disparity did not go unnoticed, as organizations like the National Association for the Advancement of Colored People and the National Committee Against Discrimination in Housing lobbied for Congress to address this inequality. Dr. Martin Luther King Jr. was also at the forefront of this battle, as he led marches in Chicago demanding fair housing.

After two years of consideration, Congress finally passed the Fair Housing Act of 1968, which prohibited discrimination concerning the sale, rental and financing of housing based on race, religion, national origin and sex. Since then, the Act's reach has been notably extended by three laws passed in the 1970's: 1) the Equal Opportunity Act of 1974 made discrimination relating to any aspect of a credit transaction unlawful; 2) the

Home Mortgage Disclosure Act of 1975 required lenders to publicly disclose mortgage lending data; and 3) the Community Reinvestment Act of 1977 required banking institutions that receive Federal Deposit Insurance Corporation insurance to be evaluated on whether the bank is offering credit to all parts of the community.

While these laws certainly helped reduce overt discrimination that was written on paper or drawn on maps, it is important to note that they were used sparingly in the next 40 years. The Department of Justice, for example, did not file a single mortgage discrimination case until 1991 (Gano, 2017). Private cases were also rare, likely because they were extremely difficult to win. This is not to suggest that discrimination in housing was no longer alleged. To the contrary, this inaction had less to do with the actions of lenders and more to do with the uncertainty regarding the legal standard used to evaluate discrimination. In essence, there are two possible legal theories that can be used to evaluate whether businesses are discriminating: disparate treatment and disparate impact.

Disparate treatment discrimination occurs when a business intentionally discriminates against one or more individuals. Disparate impact discrimination, on the other hand, can occur when the business has no animus or intent. From 1968 to 2007, cases involving lending discrimination was evaluated under the theory of disparate impact discrimination, which required plaintiffs to demonstrate that a business was intentionally discriminating against people of color. This high burden of proof had a chilling effect, with cases rarely being pursued. To understand the real-world differences between these two approaches, consider that in 1996 a Citibank in Chicago was shown to reject Black applicants at more than twice the rate of white applicants. Because the

plaintiffs could not identify the policy that caused the discrimination, they could not demonstrate intent, and the court rejected the case (Gano, 2017).

Since 2007, there has been a significant increase in the number of federal enforcement cases that alleged unlawful discrimination in mortgage lending on a national scale. Under the Obama administration, these cases used the legal theory of disparate impact discrimination, and focused on using statistics to demonstrate that regardless of intention, the lender's policies resulted in non-white citizens being treated differently from their white counterparts. As the New York Times explained in 2010, "Under federal civil rights laws, a lending practice is illegal if it has a disparate impact on minority borrowers, and the Obama administration is signaling that it intends to make the enforcing of fair lending laws a signature policy push in 2010" (Savage, 2010, n.p.).

Indeed, in 2011 and 2012, the Department of Justice brought two cases against national banks that alleged redlining, which settled for a combined \$510 million (Gano, 2017). In 2015, the Consumer Financial Protection Bureau and Housing of Department of Housing and Urban Development brought allegations of redlining against two regional banks that resulted in settlements for a combined \$227 million (ibid). Because these cases settled, it is unclear how the courts would have evaluated the theory of disparate impact in the context of fair lending. Still, these cases demonstrate that discrimination, regardless of intent, is worth scrutiny.

Retail Redlining

A newspaper refusing to sell their product in certain geographic areas due to the racial/ethnic composition of a neighborhood regardless of an individual's worthiness as a customer is similar to redlining, although it is not illegal as it is in the banking and retail industries. A recent strand of economic literature created the term "retail redlining," which is defined as "a spatially discriminatory practice among retailers, of not serving certain areas, based on their ethnic-minority composition, rather than on economic criteria, such as the potential profitability of operating in those areas" (D'Rozario and Williams, 2005, p. 175).

Research using this concept have demonstrated that retail grocery stores often refuse to open in low-income, minority areas – which forces those residents to use smaller, overcrowded stores that raise their prices to take advantage of consumers without any other option (Bell and Burlin, 1993). Other examples of this phenomenon include health amenities, healthy food sources, hardware stores, pharmacies, savings banks and convenience stores (Eisenhauer, 2001; Fitzpatrick & LaGory, 2013; Kwate, Loh, White, & Saldana, 2013). Notably, this developing body of literature strives to demonstrate that businesses avoid minority areas in spite of data suggesting that it would be in their financial interest to serve those areas. For example, research has shown that when retail grocery stores open in a low-income, minority area, they often earn more than their middle-income neighborhood counterparts (Bell & Burlin, 1993). From an economic perspective, this is a lose-lose situation, as businesses are not properly allocating their resources and consumers may be forced to rely on inferior products, further warping the economic market.

Accordingly, the suggested methodology to test for retail redlining essentially models how businesses decide where to provide service to demonstrate that if the business was acting in its economic interests, it would serve more minority areas. Summarizing the 10th and final step in their proposed methodology, D’Rozario and Williams (2005) argue that their process allows

the most stringent test of the definition of retail redlining, which is that the racial- and/or ethnic-minority composition of an area per se has caused retail redlining to take place in that area. This is the most important test to conduct, because this is what is consistent with the definition of retail redlining...it is hoped that the method we propose above will allow us to be more certain about whether retail redlining is being practiced in a given area and perhaps possibly also be more certain...about whether there was intention to discriminate based on race and/or ethnic-minority status (p. 185).

In other words, the proposed definition and methodology to test for retail redlining are predicated on demonstrating that a business is not acting in its financial interests due to race and instead has the intention to discriminate. This approach mirrors the logic of the legal theory of disparate treatment.

While newspaper redlining may initially seem to fall under this definition, there is a key difference. In the newspaper industry, the practice of redlining – while criticized as violating the norms of journalism by disregarding the information needs of minority communities – is not believed to be against an individual newspaper’s economic interest. As newspaper executives (Cranberg, Bezanson & Soloski, 2001) and leaders of the Newspaper Association of America have argued (Cranberg, 1995), market cues dictate

catering to affluent white readers and excluding minority readers who may diminish the value of their audience profile to advertisers. Indeed, a central concern over newspaper redlining is that the underlying economics of the news industry actually encourage it (Cranberg and Bezanson, 2006).

This difference is far from trivial and demonstrates that the definition of what constitutes retail redlining must be broadened. In effect, the current definition of retail redlining reinforces economic injustices by suggesting that discrimination based on market logic is legitimate. To understand how problematic this is, consider that by focusing on whether businesses are acting in their own financial interest, the proposed definition of retail redlining would not apply to banks in the 1930's who refused to grant loans to people of color because they would lower the value of existing mortgages in the area. This contradiction, that retail redlining would not apply to the most fundamental and historical example of redlining, severely limits the definition's real-world applicability.

This dissertation applies the legal theory of disparate impact to retail redlining and argues that discrimination, regardless of intention, is harmful to communities of color and worth scrutiny. In doing so, I broaden the focus to not only analyze the actions of an individual business, but to also scrutinize whether the broader market factors are negatively impacting people of color. In the context of redlining in the newspaper industry, this approach is necessary, or else the inquiry would stop after realizing that newspaper executives and trade associations have explained that newspapers are acting in their own economic interests (Picard and Brody, 1997; Overholser, 1996). Given political economy's focus on critically analyzing whether commercial pressures are overpowering

the democratic and informational needs of citizens, this broader measurement of retail redlining is particularly fitting.

Do Newspapers Still Matter?

Of course, if newspapers are not relevant in the contemporary media environment, perhaps it is no longer important to scrutinize whether they are serving members of the community equally. However, previous surveys and research have shown that despite setbacks in the newspaper industry, papers are still widely read, newspapers are still the foundational source of information for other news mediums, and local communities benefit from the presence of a newspaper.

To elaborate, despite industry cutbacks, it is clear that citizens still read newspapers. Based on survey data, Nielsen recently estimated that more than 169 million adults in the U.S., or 69% of the population, read a newspaper in the past month whether it be in print, on a website or in a mobile app (Nielsen, 2016). The same survey estimates that 51% of monthly newspaper readers engage exclusively with the print product. For comparison, Twitter, which has been praised as major instrument for news dissemination, recently revealed in their July 2017 filings that the company has about 68 million users in the United States that logged in to their account within the last month (Fiegerman, 2017). And according to Nielsen estimates, the combined average primetime viewership of Fox News, CNN, and MSNBC in 2017 was 5.1 million total viewers (Otterson, 2017). While the relative size of these audiences are constantly changing, newspapers clearly remain a vital source of information for the American public. Indeed, as the 2012 Pew State of the

Media report concluded, “the crisis for newspapers is an advertising problem, not an audience problem” (Edmunds et al., 2012, n.p.).

Indeed, the Newspaper Association of America estimates that between 2000 and 2012, the newspaper industry lost over \$40 billion in annual advertising revenue (Pickard and Williams, 2014).² Because newspapers traditionally depend on advertising revenue to account for 80% of their total revenue (Perez-Pena 2008), this loss is particularly detrimental. While newspapers have tried to increase circulation revenue to account for these losses, the revenue generated pales in comparison to print losses.³ Given that readers are migrating to the web, it was initially hoped that digital advertising gains would replace print advertising losses. However, because digital ad inventory is so plentiful, and the rates are so low, the amount of digital advertising revenue generated by the newspaper industry is still much lower than revenue from print advertising (Barthel, 2016). Thus, print advertising is still the main source of revenue and appealing print advertisers is still a major consideration for newspapers.

To survive these revenue losses, newspapers have had to cut costs, often through staff reductions. According to data from the American Society of News Editors, the estimated number of newsroom staff at daily newspapers has decreased from a peak of 55,000 in 2007 to 32,900 in 2015 (“Minority Employment,” 2015). In the span of 9 years, newspapers cut approximately 40% of their staff. In 2011, the workforce qualified as the

² The Newspaper Association of America has not updated the advertising revenue figures since 2012.

³ The *New York Times* may be the exception that proves the rule, as their circulation revenue surpassed advertising revenue in 2013. Still, the paper reported a \$14 million net loss for the first quarter of 2016 because it continued to “grapple with how to offset falling revenue in print advertising” (Ember, 2016, n.p.).

smallest ever since the census began in 1979. Since then, each successive year has broken the record set the year before, as the workforce becomes even smaller each year.

Steep advertising losses have also caused many of the nation's newspapers to declare bankruptcy. In an analysis of the top 100 newspapers ranked by daily circulation in 2005, Williams and Pickard (2016) found that that 22 newspapers had their owners file for bankruptcy between 2005 and 2015, with prominent companies like the Tribune Company, MediaNews Group, and Lee Enterprises doing so. Additionally, of newspapers ranked in the top 100 by circulation in 2005: one newspaper ceased publication (*Rocky Mountain News*); one newspaper merged into a new newspaper (*Honolulu Advertiser*); eight papers reduced home delivery to 4 days or fewer (*Detroit Free Press*; *Detroit News*; *The Times-Picayune*; *Birmingham News*; *The Plain Dealer*; *The Oregonian*; *Post-Standard*; and the *Patriot News*); and one newspaper went online only and cut all but a handful of staff (*Seattle Post-Intelligencer*).

These trends are especially troubling because much of the US media ecosystem arguably depends on newspaper-produced journalism. When other media publish “hard news”, they often draw from stories initially reported by newspapers. The Pew Research Center documented this trend in an exhaustive study of Baltimore's media ecology for one week in 2009 (“How News Happens,” 2010). Tracking both old and new media – including newspapers, radio, television, websites, Twitter, and blogs – the researchers found that despite the proliferation of media sources, much of the news people received contained no original reporting. The study revealed that “Fully eight out of ten stories studied simply repeated or repackaged previously published information”, and old media like the *Baltimore Sun* still generated more than 95 percent of original news stories (n.p.).

Moreover, the *Sun*'s production of original news stories was itself down more than 30% from 10 years ago and down 73% from 20 years ago.

Likewise, in a major report titled "The Information Needs of Communities," the Federal Communications Commission concluded that drastic newspaper cutbacks have left news organizations

less time to investigate, to question, to take a story to the next level... less daily beat reporting about municipal government, schools, the environment, local businesses, and other topics that impact Americans' future, their safety, their livelihood, and their everyday life...the dramatic newspaper-industry cutbacks appear to have caused genuine harm to American citizens and local communities (Waldman, 2011, p. 57).

Similarly, while local television is cited as one of the most common ways of getting news, a 2015 study by the Pew Research Center found significant differences in newspaper and local television news coverage in three cities. In Denver, CO, Macon, GA, and Sioux City, IA, newspapers published 2-3 times more press-initiated stories than television ("Local News in a Digital Age," 2015). By press initiated stories, the researchers refer to stories that are not triggered by outside events, individuals, or institutions, such as investigative reporting or more civic-oriented reporting.

Given the important role newspapers still play, scholars have recently begun exploring how newspaper closures impact local communities. A study by Lee Shaker (2014) illustrates that the civic engagement in Seattle and Denver dropped significantly

after the cities had a daily newspaper close, which leads him to conclude that the newspaper closures likely reduced civic engagement. Analyzing newspaper coverage of all 435 House races during the 2010 midterm and survey data from the 2010 Cooperative Congressional Election Study, Hayes and Lawless (2015) reached a similar conclusion, noting that citizens in districts with lower volumes of coverage are “less able to evaluate their member of Congress, less likely to express opinions about the House candidates in their districts, and less likely to vote” (p. 448). While such studies are still in their infancy, they suggest that reducing access to a daily newspaper impacts readers in tangible ways.

Despite the importance of newspapers, circulation boundaries have rarely, if ever, been scrutinized. Given the affordances the government has given print media, and the central role newspapers often play within the local news ecosystem, inequalities between whites and people of color would be deeply troubling. A newspaper engaging in redlining would serve as evidence of an unjust news ecosystem in which certain residents are systematically excluded from accessing information because advertisers have deemed them less valuable. Rather than serving the demographic needs of its community, newspapers would be comforting the comfortable and afflicting the afflicted to earn extra money. In short, it would demonstrate that the desires of advertisers can overpower the information needs of citizens, which raises the question of whether an economic system that encourages this behavior is broken.

Chapter Three: Data and Methodology

To contribute to these bodies of literature, this dissertation tests three sets of hypotheses. First, I argue that studies have not empirically tested whether newspapers purposefully exclude service to zip codes with a high proportion of minority residents. While studies have used testimony from newsroom staff to suggest that redlining occurred, it is not yet known how prevalent this practice is or was. Based on previous research suggesting that newspapers are less likely to serve minority areas (Squires, 1994; Picard and Brody, 1997; Overholser, 1996; Cranberg, Bezanson & Soloski, 2001; Cranberg and Bezanson, 2006; Cranberg, 2007), I ask:

RQ1: Do the service boundaries of newspapers exclude a greater proportion of African American, Hispanic, or Asian residents?

If newspapers do exclude a greater portions of minority residents, it would complement previous studies suggesting that the presence of minorities diminishes advertising rates (Webster and Phalen, 1997; Ofori, 1999; Napoli, 2002). However, this dissertation would broaden this literature to including print media while expanding the conversation to focus on how media outlets prioritize the interests of advertisers over the interests of their community members.

Second, this dissertation argues that this body of research lacks longitudinal data on how redlining has changed over time. Given the number of newspapers who filed bankruptcy,

cut staff, and/or changed their delivery patterns to survive steep advertising losses, it is worth testing exploring whether the collapse in 2008 increased the number of papers engaging in redlining:

RQ2: Following advertising losses in 2008, were newspapers more likely to create service boundaries that exclude a greater proportion of African American, Hispanic, or Asian residents?

If advertising losses do correlate with an increasing number of newspapers engaging in redlining, it would build upon previous studies suggesting market failure in the print media (Pickard, 2014b; McChesney & Pickard, 2011). If the market dictates that newspapers should exclude non-white audiences from reading their paper, and struggling newspapers have taken this to the logical conclusion of excluding minority areas from their areas of service, it would demonstrate that the desires of advertisers have overpowered the democratic goals of the press. Not only would advertising be influencing circulation, it would be trampling over the information needs of non-white audiences as newspapers try to stay afloat.

Third, this dissertation argues that studies have not tested what factors influence a newspaper to engage in redlining. While this research is exploratory, based on previous research speculating that the media oftentimes reinforce power imbalances, and that corporate ownership may diminish a paper's commitment to its community (Squires, 1994), I ask:

RQ3: What local or institutional factors, if any, help predict whether a newspaper's service boundaries will exclude a greater proportion of African American, Hispanic, or Asian residents?

Answering these questions will require multiple ways of testing whether and how the desires of advertisers shape the service areas of newspapers. While previous studies have commented that newspapers may have an incentive to cater to affluent audiences (Koschat and Putsis, 2000; Koschat and Putsis, 2002; Depken, 2004) and limit diversity (Thompson, 1989; Chandra, 2009; Chandra & Kaiser, 2014), this dissertation tests whether papers have taken this warped economic incentive to its logical conclusion: excluding people of color from reading the paper to make their readers look more white and affluent for advertisers.

Sampling Frame for Newspapers

To test these hypotheses, data concerning the circulation boundaries for individual newspapers was gathered from the headquarters of the Alliance for Audited Media (AAM) by the author in May of 2016. AAM, originally known as the Audit Bureau of Circulations, is the major trade organization that acts as a mediator between newspapers, publishers, and advertisers to help set advertising rates. Formed in 1914, AAM strives to bring trust and accountability to the media market. Due to AAM's prominence in the industry, their data is commonly used by academics as both a sampling frame (e.g.

Singer, 2006; Singer, 2014) and as a measurement for circulation (e.g. Di Cicco, 2010; Boczkowski & Peer, 2011).

Despite its common usage, AAM's data is not without concern. The circulation data is self-reported by newspapers themselves. As with any self-reported data, the respondent may intentionally or unintentionally give inaccurate responses. Because AAM conducts audits of how many readers are in each zip code that a newspaper reports serving, the potential for false positives (a newspaper listing a zip code it does not serve) is minimized. There is still a chance of false negatives (a newspaper omitting a zip code that it does serve). However, the audits of AAM are responsible for "catching" such a mistake. Because no alternative data source offers the same breadth of newspapers or level of granularity, information from the AAM was the deemed the most appropriate data source.

Annual audit data was collected from 2002 – 2015, with each audit providing the zip codes that a newspaper serves for approximately 700 newspapers. These audits also include the number of subscribers in each zip code and a unique ID number for each newspaper. This allows longitudinal comparisons to identify how newspapers have changed their circulation boundaries over time. Because newspapers may choose to provide this information on an annual or bi-annual basis, and smaller newspapers are more likely to choose bi-annual, data for consecutive years was merged. This was done to avoid biasing the sample towards larger newspapers. In doing so, I include all zip codes for a paper even if it was only served in one year. For example, in the 2014/2015 dataset, if a newspaper that was audited in both 2014 and 2015 indicated that they delivered to a zip code in 2014 but not 2015, it is still included as a served zip code. If a newspaper

served the same zip code in both years, the circulation figures were averaged so that each zip code includes one figure for average circulation.

While data was collected for each year between 2002 and 2015, a panel of newspapers was created to only include the daily newspapers who were audited in 2002/2003, 2004/2005, 2006/2007, 2008/2009, 2010/2011, 2012/2013, and 2014/2015. This approach was taken to best allow longitudinal comparisons. While it may have been possible to treat each of these years as representative cross sectionals, it was ultimately decided that it would be impossible to demonstrate that the samples for each year are fully representative of the newspaper industry and the phenomena of redlining given the lack of research on this topic. Given how exploratory this research topic is, it is difficult to gauge whether the cross section from 2002/2003 is equally as representative as 2014/2015. Likewise, it would be difficult to discern what variables are needed to produce an accurate model for each cross sectional.

The panel of papers includes 328 daily newspapers. Below, I compare the sample to the newspaper industry writ large. Figures for the newspaper industry as a whole were collected from the 2014 Editor and Publisher.

Table 1: Circulation Groups of Sample Compared to Newspaper Industry.

Circulation Groups of
Sample vs Newspaper Industry

		Sample	Newspaper Industry
10k - 25k	Newspapers	184	385
		(56%)	(64%)
25k - 50k	Newspapers	74	112
		(23%)	(19%)
50k - 100k	Newspapers	33	49
		(10%)	(8%)
100k - 1 million	Newspapers	37	53
		(11%)	(9%)
Grand Total	Newspapers	328	599
		(100%)	(100%)

Table 2: Geographic Region of Sample Compared to Newspaper Industry.

Geographic Region of
Sample vs Newspaper Industry

		Sample	Newspaper Industry
Midwest	Newspapers	92	157
		(28%)	(26%)
Northeast	Newspapers	62	122
		(19%)	(20%)
South	Newspapers	126	192
		(38%)	(32%)
West	Newspapers	48	128
		(15%)	(21%)
Grand Total	Newspapers	328	599
		(100%)	(100%)

Comparing the sample to the population by circulation group, we see each circulation group in the sample is within 8 percentage points of the population. Consequently, I concluded that the sample is fairly representative of the newspaper industry by circulation size.

I then compared the sample to the population by census region group. I found that each region was within 6 percentage points of the population. Again, this confirmed that the sample is fairly representative of the newspaper industry in terms of region. To increase our ability to speak to industry trends, the sample was weighted to be representative of the newspaper industry as a whole in terms of both circulation size and census region. In the rest of the dissertation, the figures cited are based on weighted figures. That being said, when appropriate, the dissertation will still conduct case studies of specific newspapers or identify which specific papers shared a characteristic.

Measuring a Newspaper's Potential Circulation Area

For each of these newspapers, a zip code was defined as being served if the paper reported delivering any subscriptions to, selling any single copies in, or giving away any papers in (e.g. at hotels). While other possible definitions were considered, such as only including zip codes where the paper offers delivery, this was the most lenient definition of service that was available. Given the gravity of stating that a newspaper engages in redlining, this definition was chosen to err on the side of caution. A paper is required by the Alliance of Audited Media to include all zip codes that receive over 25 papers a day. That being said, it is possible that a newspaper would “leave off” a zip code with sparse

service. However, given that the purpose of these audits is to demonstrate to advertisers how widely circulated your paper is, it seems unlikely that papers systematically leave off a large number of zip codes with sparse service. Indeed, when reviewing the data, it is not uncommon for a paper to list a zip code as receiving a single newspaper a day.

Deciding how to measure the areas a newspaper could serve but chooses not to was challenging given the lack of literature on this subject. While studies have suggested that that distance and demographics may play a role in selecting what areas a newspaper serves (Chandra, 2009), they have not analyzed what areas a newspaper is not serving. To understand how this dissertation defines the areas a paper is excluding from service, it is necessary to explore how those areas can be defined. Three approaches were considered:

1. For a given circulation size group, identify the average circulation radius within that group by averaging the maximum distance between a newspaper's headquarters and a zip code it serves. Thus, if there were 5 newspapers within the same circulation group size that had maximum circulation distances of 50 miles, 60 miles, 70 miles, 80 miles, and 90 miles, the average circulation radius would be $(50+60+70+80+90) / 5 = 70$. Consequently, every zip code within a 70-mile radius of these newspapers' headquarters would be included as the potential circulation area. However, because newspapers in the same circulation group may vary in their service boundary patterns due to geographic location, population density, or neighboring newspapers, this approach was deemed too broad and general.

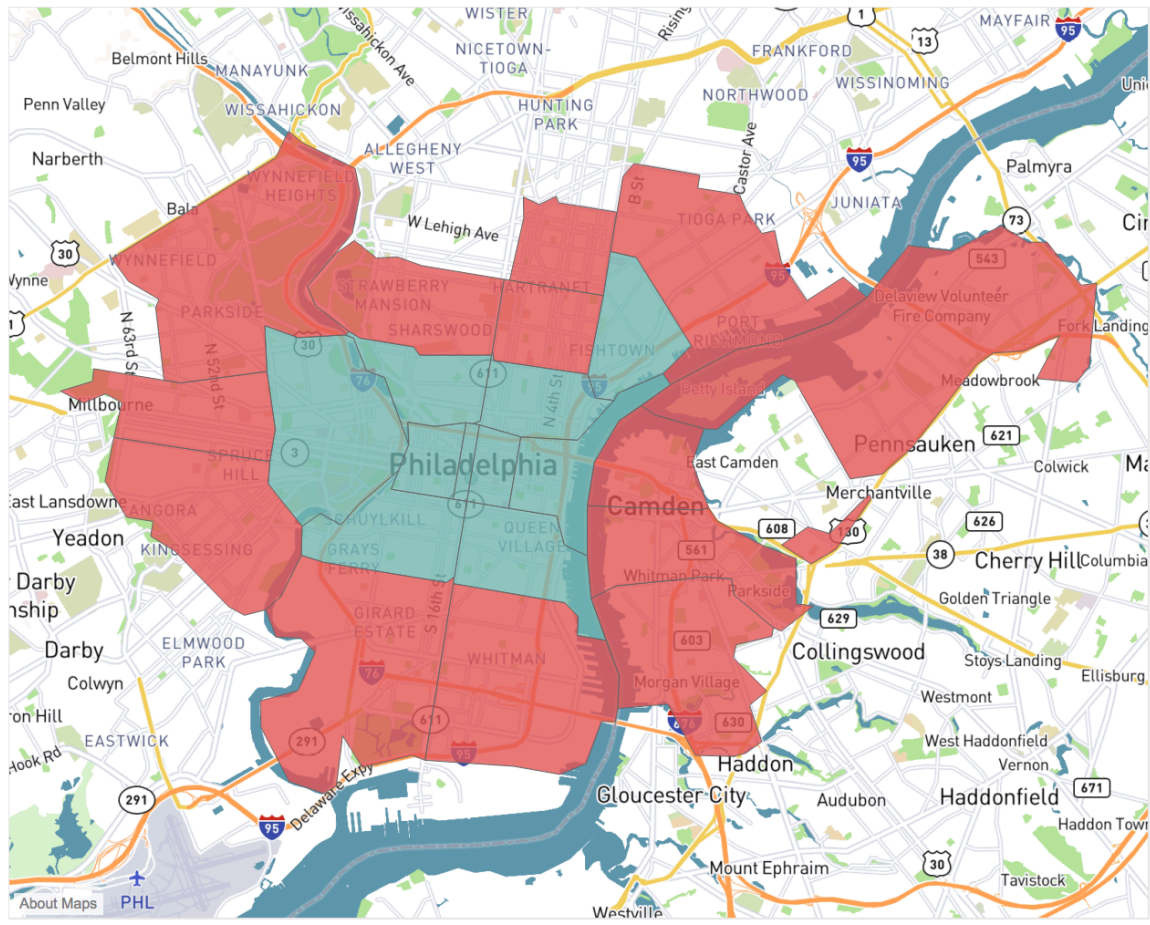
2. For each newspaper, take the maximum distance between the paper's headquarters and a zip code it serves. For example, if the zip code furthest from Newspaper X with service is 100 miles away, then arguably the newspaper could serve every zip code within 100 miles of the newspaper's. Consequently, Newspaper X's potential circulation area would be every zip code within 100 miles of the newspaper's headquarters. While this approach seemed reasonable at first, upon closer inspection, it posed an unreasonable burden on newspapers. Newspapers are unlikely to serve a zip code that is not adjacent to a zip code that already has service, as doing so would not be cost effective. Because of this, drawing a perfect radius around the paper's headquarters does not reflect the practical considerations newspapers take to minimize costs. Consequently, this approach was deemed a poor representation of how newspaper's may approach deciding to include or exclude an area from service.
3. For each paper, include all zip codes that are adjacent to a zip code with service. Thus, if a newspaper serves zip code 54321 but no its neighboring zip code of 54322, 54322 would be included as a zip code that is excluded from service. If, on the other hand, zip code 54325 is close by, but it is not adjacent to a zip code with service, it would not be included in this dissertation's definition of an excluded area. This measurement was chosen because it is a reasonable proxy of how a newspaper's leadership may approach drawing a paper's circulation area. After all, the paper has

likely considered serving these neighboring zip codes. This approach was chosen because it is the most lenient definition of potential service area that was available that still reflected how local residents may be excluded from service.

Given that the third option is the narrowest definition, this dissertation defines an area that is excluded from service as a zip code without service that is adjacent to a zip code with service. To understand the implications of this definition, consider a hypothetical newspaper in Philadelphia, PA. The newspaper either offers delivery, newspaper stands, or free newspapers for zip codes in Central Philadelphia, which are colored teal in the map below. The neighboring zip codes that the newspaper does not serve are defined as areas that are excluded from service, which are colored red. Taken together, the teal and red zip codes represent the newspaper's potential service area. This dissertation would then test whether minority residents are more likely to live in the red zip codes than white residents.

Figure 1: Example A of Hypothetical Newspaper Service Boundaries.

Example A of Hypothetical Service Boundaries in Philadelphia, PA



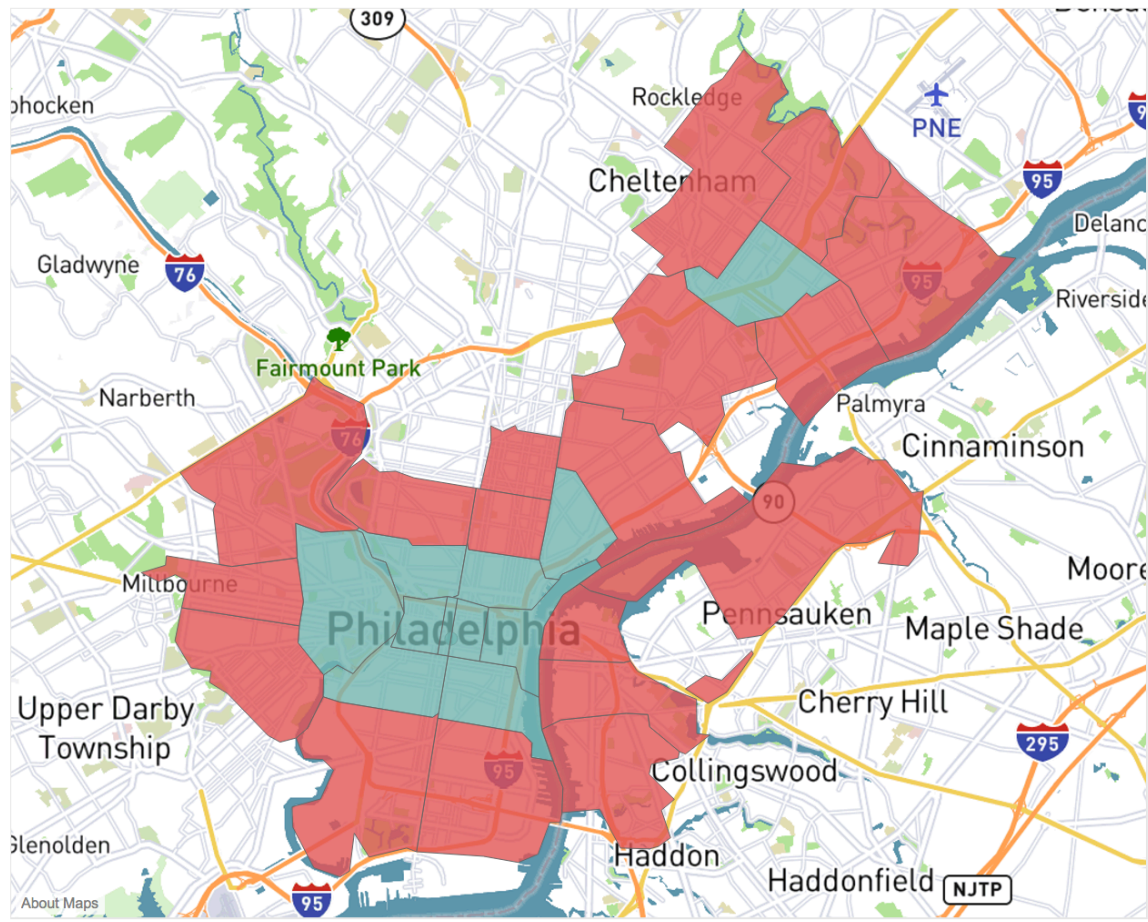
It is important to note that the areas excluded from service do not always share the same city, county, or state as the areas with service. In the map above, the neighboring zip codes in New Jersey are included as areas without service. This decision was made to reflect that newspapers often serve nearby cities, counties, and states.

Now, imagine that the newspaper decides to begin serving a zip code in Northeast Philadelphia that is not geographically connected to its current areas with service. By adding one distant zip code, each of the neighboring zip codes are now defined as areas that are excluded from service. This is meant to reflect that when the newspaper

expanded to the remote zip code in the Northeast portion of the city, they likely considered serving its neighboring areas but chose not to. This scenario is mapped below.

Figure 2: Example A of Hypothetical Newspaper Service Boundaries.

Example B of Hypothetical Service Boundaries in Philadelphia, PA



One implication of this approach is that newspapers with evenly drawn boundaries will exclude a lower percentage of residents in their potential service area. Newspapers that serve remote zip codes while omitting others will exclude a higher percentage of residents in their potential service area. In both cases, by testing whether minority residents are more likely to live in the areas excluded from service, it is possible to

discern whether the newspaper's service boundaries have a disparate impact on residents of color.

Because zip codes were created by the United States Postal Office and are not actual polygons, this dissertation uses Zip Code Tabulation Areas that are provided by the census to closely mirror the boundaries of zip codes. While zip code tabulation areas are not a perfect representation of zip codes (Krieger, N. Waterman, Chen, Soobader, Subramanian, & Carson, 2002), their usage is the common approach for data relating to zip codes (Cook, Grala, Wallis, 2006; Acevedo, 2001; Luo & Wang, 2003). Given that the smallest geographic unit of analysis that the Alliance of Audited Media provides is zip codes, this approach was considered the most appropriate. An alternative approach could look at what counties newspapers serve, but this geographic unit is so large that a newspaper only serving an affluent neighborhood in a county would be coded the same as a newspaper serving the entire county regardless of socio-economic status. To identify adjacent zip codes, the 2000 TIGER shapefile of zip code tabulation areas from the Census website were used for the datasets from 2002 – 2009. For data from 2010 – 2015, the 2010 TIGER shapefile of zip code tabulation areas from the Census website were utilized.

Measuring Local Demographics

While the Alliance for Audited Media data helps us identify what zip codes a newspaper does and does not serve, it cannot not tell us why. To measure whether certain demographic patterns exist, this dissertation identifies the demographics of the all zip

codes with or without service. To do so, I first use data from the 2000 Decennial Centennial report for the datasets from 2002 – 2009. For the datasets from 2010 – 2015, I utilize the 2014 American Community Survey (ACS) 5-Year Estimates. The ACS, which replaced the decennial Census, uses probability sampling to survey over 1% of the population each year. While ACS publishes 1-year Estimates, the 5-Year Estimates (which pool 5 years of survey responses into one) are the most accurate projections. When precision is the primary concern, the Census Bureau recommends using the 5-Year Estimates (U.S. Census Bureau, 2016). Because census data is the most authoritative public data source available, it is commonly used by scholars interested in studying residential demographics.

For each newspaper, various population statistics were calculated for two groups of residents: those living in a zip code with service and those living in a zip code without service. For each of these two groups, the following demographics were collected:

- Black residents: the non-Hispanic Black population
- Hispanic residents: the Hispanic population, regardless of ethnicity. While the census distinguishes between Hispanic Whites, Hispanic Asian Americans, and Hispanic African Americans, that distinction is not used in this dissertation
- Asian residents: the non-Hispanic Asian population
- White residents: the non-Hispanic White population
- % of Black residents: the non-Hispanic Black population divided by the total population
- % of Hispanic residents: the Hispanic population divided by the total population

- % of Asian residents: the non-Hispanic Asian population divided by the total population
- Residents in poverty: the population living below the federal poverty line
- Residents 2x the poverty line: the population earning more than 2x the poverty level

Measuring Redlining

Previous studies on retail redlining have proposed modeling the economic factors that predict whether a business should serve a community, testing whether that model predicts that a business should serve minority areas that it is not, and then concluding that they cannot reject the null hypothesis that racial demographics are impacting the decision making of the business (D’Rozario & Williams, 2005). However, this approach is predicated on the notion that retail redlining is only objectionable if it is not in the business’ financial interest. That is, if a business is not serving a minority-majority area because advertising rates are lower in those areas, this business approach would be deemed appropriate. This runs counter to the most fundamental and historic example of redlining, in which banks refused to give loans to African Americans because their presence would lower the value of the surrounding homes and mortgages. After all, banks at the time argued that they were just following sound economic logic, which the proposed testing of retail redlining would justify as reasonable. Similarly, the Newspaper Association of America has implied that drawing circulation boundaries to limit minority readers is appropriate because it helps the bottom line financially.

I argue that this definition of retail redlining ignores the needs of local residents, particularly those who are most vulnerable, to be treated equally and fairly. Therefore, I propose that measuring redlining in the newspaper industry should be based on the theory of disparate impact, which argues that a business treating a minority group differently, regardless of intention, is cause for concern.

This shift follows recent lawsuits brought by the Department of Justice that applied the legal theory of disparate impact to the lending industry to pursue accusations of redlining (Savage, 2010). While the fundamental approach to these cases is apparent, the cases are either pending or settled out of court (Gano, 2017). Consequently, it is not clear how redlining would have been measured in detail the courtroom. That being said, previous cases in lower courts have grappled with what constitutes evidence of racial discrimination regardless of intent. In certain instances, in which the data on how businesses should make decisions is available, advanced testing is done to compute odds ratios to demonstrate how unlikely differences between white customers and non-white customers are due to chance (Tobia, 2017). For example, in the lending industry, the Home Mortgage Disclosure Act requires lenders to provide the public with access to information about the: type of loan; type of property, loan purpose, loan amount, resulting action, date of the action, location, ethnicity of the borrower, gender of the borrower, gross annual income of the borrower, reason for denial if applicable, and the rate spread, which assists in reporting whether the rate given to the borrower is above a certain threshold of the prevailing rates at the time of application (McCoy, 2007). As such detailed information is not available in the newspaper industry, and the logic behind deciding what areas to serve or exclude from service is not established by previous

literature, this dissertation feared that relying solely on modeling the predictors or odds of discrimination to define redlining could be inaccurate or unreliable.

Instead, disparate impact was first measured in accordance with the “Four-Fifths” or “Eighty Percent” Rule that was established by the U.S. Equal Employment Opportunity Commission. This test calculates an Impact Ratio (IR) by comparing the selection rates of the majority group (SR_{maj}) to that of the minority group (SR_{min}):

$$IR = \frac{SR_{min}}{SR_{maj}}$$

If the impact ratio is less than 80%, there is evidence of disparate impact (Morris, 2001). In other words, if the minority group was less than four-fifths as likely to be selected, there is evidence of disparate impact. This has become the standard methodology for determining disparate impact. To illustrate how the rule functions, consider a business that is hiring 100 positions. Out of 1000 applicants, 800 are White and 90 are hired, for a selection rate of 11.25%. The remaining 200 applicants are Black and only 10 are hired, for a selection rate of 5%. Because the selection rate for Black applicants was less than 4/5 of the selection rate of White applicants, the hiring practice may have a disparate impact on Black applicants.

However, the test may be less useful when the sample size or overall selection rate is extremely low. For example, consider a similar hiring scenario but with smaller numbers - imagine the business was only hiring 10 positions, and 9 of the 80 White applicants were hired compared to 1 of the 20 Black applicants, the selection rates still be

11.25% compared to 5%, resulting in support for disparate impact. Yet hiring one more of the Black applicants would cause the selection rates of Black applicants to be 20%, which is higher than that of Whites and changes the conclusion. For this reason, courts have relied on statisticians to demonstrate the statistical significance of the disparity between the two groups (Gano, 2017; Tobia, 2017).

This is often done in one of two ways. First, researches can conduct a Z-test for the difference between the two proportions. If the result is more than two standard deviations above or below 0, or more specifically ± 1.96 to correspond to the 95% confidence interval, the difference is considered significant. The test is computed as follows, where SR_T is the total selection rate, and N_1 and N_2 are the number of applicants in each group:

$$Z_D = \frac{SR_{\min} - SR_{\max}}{\sqrt{SR_T(1 - SR_T) \left(\frac{1}{N_1} + \frac{1}{N_2} \right)}}$$

Notably, this test is based on effect size, or the difference between selection rates, whereas the Four-Fifths Rule is based on the selection of ratios. On the one hand, these two tests can be used in conjunction to demonstrate both statistical and practical difference. On the other, it may be simpler and more powerful to conduct a significance test on the impact ratio directly. That is, the power of this approach to detect statistically significant differences with a smaller minority group is slightly greater (Morris & Lobsenz, 2000). Through the inclusion of standard error, this test provides sufficient information to measure both practical and statistical significance under the same logic by

focusing exclusively on the ratio between the selection rates (Morris, 2001). Here, the null hypothesis of equal selection rates implies that the population impact ratio should be equal to one. This hypothesis can be tested using a Z-test on the natural log of the impact ratio (Z_{IR}), where the numerator reflects an effect size and the denominator is the standard error of the effect size when the null hypothesis is true:

$$Z_{IR} = \frac{\ln\left(\frac{SR_{\min}}{SR_{maj}}\right)}{\sqrt{\frac{1 - SR_T}{(SR_T)(N)(P_{\min})(1 - P_{\min})}}}$$

In accordance with the Four-Fifths Rule, disparate impact was measured as when a minority group was less than 4/5 as likely as the majority group to live in areas with service. Thus, if a paper offered service to 50% of White residents, the threshold for disparate impact would be 4/5s of 50%, or 40%. As a result, if the paper offered service to 41% of Black residents it would not constitute disparate impact for Black residents. But, if the paper offered service to 39% of Black residents, it would be identified as showing a disparate impact for Black residents. For ethnicity, the majority group was defined as White residents. For income, the majority group was defined as residents earning more than 2x the poverty level. While these groups may not always be the numerical majority, in the context of this dissertation, they are most likely to be the groups that advertisers and newspapers are trying to reach. Consequently, they were defined as the majority groups because they have more power than the minority groups.

If the Four-Fifths Rule showed support for redlining, both of the statistical tests described above were performed. A newspaper was coded as redlining if the disparity between the minority and majority groups was less than 4/5s and the difference between the selection rates and the difference between the selection ratios were statistically significant. Similar to other measurements used in this dissertation, this approach was taken to err on the side of caution while still reflecting how courts have approached measuring disparate impact.

Measuring Predictors of Redlining

To understand what factors help predict the likelihood that a newspaper will engage in redlining, logistic regression models were used to analyze newspapers in 2002 as well as in 2014. Accordingly, each of the following variables were recorded in 2002 and 2014.

Residential Segregation –Measured using the Dissimilarity Index (DI) at the census tract to county level from the 2010-2014 American Community Survey. This index is a demographic measure of the evenness with which two groups are distributed across the census tracts that make up a county. In layman’s terms, it is the proportion of people that would need to switch census tracts to ensure that the racial makeup of each census tract mirrors that of the overall county. It is measured as

$$D = .5 * \sum_{i=1}^n \left| x_i / X - y_i / Y \right|$$

with X_i representing the minority population in a census tract, Y_i representing the reference population in a census tract, X representing the reference population in a county, and Y representing the minority population in a county. To facilitate comparison, counties were defined as “well integrated” ($DI < 0.3$), “moderately segregated” ($0.3 < DI < 0.6$), and “highly segregated” ($DI > 0.6$).

The index was calculated for each minority group (Black-White, Hispanic-White, and Asian-White) for the county where each newspaper’s headquarters are located. Notably, this is the only measurement that is not based on a newspaper’s potential service area. This compromise was made because calculating the index at the potential service area level would require transforming zip codes from the Alliance of Audited Media into census tracts from the Census. This is challenging because zip codes are created by the post office and they do not adhere to administrative regions from the Census. Whereas every census region is composed of states that are composed of counties that are composed of census tracts that are composed of census block groups that are composed of census blocks, with each assignment at each level being exclusive, a census tract can cross into multiple zip codes. Consequently, translating census tracts into zip codes requires assigning portions of a census tract to multiple zip codes, that may or not be in a newspaper’s potential service area. While it would be possible to assume an even distribution of households in a census tract and evenly distribute the population of a census tract to different zip codes based on the size of the overlap between the zip code and the census tract, this process would not be as precise as using census tracts and

counties. Therefore, by using the county of a newspaper's headquarters as a proxy for segregation in the potential service area, we preserve more accuracy and precision.

Type of Owner – the owner of each newspaper was identified using the 2000 and 2014 editions of Editor and Publisher. Based on Soloski (2005), a list of publicly traded newspaper companies in 2000 was created to identify papers owned by a public company. Below, I list the publicly traded newspaper companies and how many papers they owned in the sample:

- A.H. Belo Corporation (3 newspapers)
- Dow Jones & Company (5 newspapers)
- E. W. Scripps (7 newspapers)
- Gannett (56 newspapers)
- GateHouse Media Inc. (1 newspaper)
- Journal Register (5 newspapers)
- Knight Ridder (20 newspapers)
- Lee Enterprises (20 newspapers)
- Media General (9 newspapers)
- New York Times (14 newspapers)
- News Corp (1 newspaper)
- Pulitzer (3 newspapers)
- The McClatchy Company (6 newspapers)
- Tribune (9 newspapers)

- Washington Post Company (1 newspaper)

Similarly, in consultation with Edge (2014), a list of publicly traded newspaper companies in 2014 was created. Again, the publicly traded newspaper companies are listed below alongside how many papers they owned in the sample:

- A.H. Belo Corporation (1 newspaper)
- Digital First Media (16 newspapers)
- Gannett (47 newspapers)
- GateHouse Media (31 newspapers)
- Journal Communications (1 newspaper)
- Journal Media Group (7 newspapers)
- Lee Enterprises (24 newspapers)
- McClatchy Company (22 newspapers)
- News Corp (1 newspaper)
- Tribune Publishing Company (11 newspapers)
- Washington Post Company (1 newspaper)

Circulation – the average daily circulation of each newspaper was identified using the 2014 editions of Editor and Publisher. To facilitate comparison, newspapers were grouped into one of the following circulation groups:

- 10,000 – 25,000

- 25,000 – 50,000
- 50,000 – 100,000
- Over 100,000

While it was possible to identify the circulation size for newspapers in 2002, this dissertation made the decision to keep the circulation group consistent in 2014 terms. This path was chosen because of circulation figures have changed significantly during the time period examined. For most newspapers, circulation has decreased significantly, which means the distribution between the circulation groups would also change. Additionally, the term circulation has broadened to include digital readers. Consequently, when comparing circulation data for individual newspapers in 2002 and 2015, a newspaper may move “up” or “down” a circulation group in unpredictable ways. As a result, longitudinal comparisons would become difficult to interpret as the differences may be attributable to changes in redlining, changes in how circulation was defined, or changes in the distribution between circulation groups. This dissertation chose to avoid this pitfall and instead emphasize that the circulation data should be interpreted in 2014 terms.

Geography – using the state of the newspaper’s headquarters, newspapers were assigned to one of the four major census regions:

- Northeast (Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont)

- Midwest (Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin)
- South (Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia)
- West (Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming)

Percent not served – the portion of the population that is excluded from service within the newspaper’s potential service area. This was calculated as (population not served/total population). Newspapers with service boundaries that are evenly distributed will have a lower percentage not served than newspapers whose service boundaries are scattered and remote.

Percent in Poverty – the portion of the population that is living below the federal poverty rate within the newspaper’s potential service area. This was calculated as (population in poverty/total population).

Maximum Distance – the maximum distance between the newspaper’s headquarters and a zip code that it delivers to. For each newspaper, the distance between the latitude and longitude coordinates of a newspaper’s headquarters and the latitude and longitude coordinates for the center point of every zip code with service were calculated. The maximum distance was then recorded.

Chapter 4: Recent Redlining in the Newspaper Industry

Despite accusations of redlining in the newspaper industry, no research to the author's knowledge has empirically tested for evidence of this practice. In this chapter I address this literature gap by analyzing whether newspapers engage in redlining, which is defined as a paper with circulation boundaries that have a disparate impact on a racial minority group according to the Four-Fifths Rule. That is, whether a minority group is less than 80% as likely to live in an area the paper serves as the majority group. If so, this dissertation tested whether the difference between the selection rates and the ratio between the selection rates are statistically significant at the 95% confidence level. In this chapter, only results that are statistically significant by both measures are included as evidence of redlining.

To apply this test to the newspaper industry, I first collected the most recent release of zip code data for newspapers from the Alliance of Audited Media, which was 2015. To avoid excluding smaller newspapers that are only audited every other year, this data was combined with the year before it (2014). A zip code was included as being served if the newspaper reported any subscribers or paid circulation (e.g. at a newspaper stand) in the zip code in either year. A newspaper's potential circulation area was defined as including all of the zip codes with service and all of the zip codes that neighbor a zip code with service. These choices were made to err on the side of caution by taking the most conservative approach available. Demographics from the 2010-2014 American Community Survey were then collected, and the demographics of the residents living in

areas served by each paper were compared to the demographics of the residents living areas in areas excluded from service by that paper.

While testing for redlining was conducted for each time period for African Americans, Hispanics, and Asians, it is useful to first look at the major story that unfolds. After studying the circulation boundaries of 328 daily newspapers with circulations over 10,000, this dissertation finds strong support that redlining occurs. Of the 599 newspapers in the industry, I estimate that 149 papers, or 25%, have circulation boundaries that have a disparate impact on Black, Hispanic, or Asian, residents. Of course, it is possible for a paper to create circulation boundaries that systematically exclude multiple racial minorities at the same time. Of these 149 papers, 80 have a disparate impact on only one of the three groups (13% of total sample); 56 have a disparate impact on two of the three groups (9%); and 14 have a disparate impact on all three groups (2%). Below, I summarize how many newspapers redline Black, Hispanic, and Asian residents while offering a few select case studies.

Do Newspapers Redline African Americans?

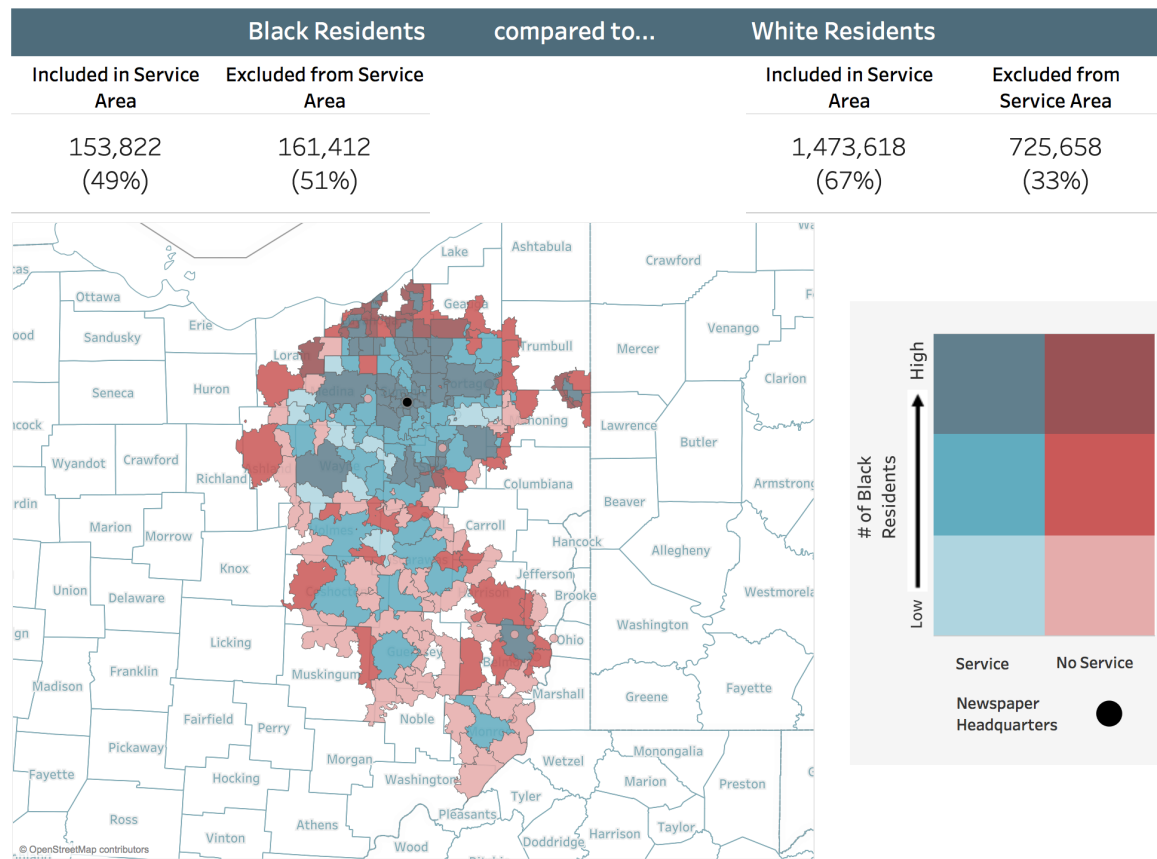
Testing whether African American residents are more likely to live in areas that the local newspaper does not serve than White residents, I found that the circulation boundaries of 88 papers, or 15%, have a disparate impact on Black residents. As each of these disparities were statistically significant, these findings support accusations of redlining in the newspaper industry against Black residents. This data offers the first empirical support for accusations of redlining in the newspaper industry. While 15% does not constitute an industry norm, it is more than large enough to be noteworthy.

As an example, consider the *Akron Beacon Journal*, a daily newspaper in Akron, Ohio that has a daily circulation of about 68,000. Cleveland, it should be noted, has received national news coverage over its enduring residential segregation patterns (Moulthrop, 2015). Indeed, nearly 45% of Cleveland's Black residents live in neighborhoods that are at least 80% Black (Sauter and Frohlick, 2016). These patterns can be traced back to the early 1900's when Black families could only access housing on the East side of the city, which is where Black families continue to be concentrated today. Of course, if the *Akron Beacon Journal* is following the journalism credo of comforting the afflicted, and acting as a watchdog for vulnerable citizens, they should be serving these segregated areas just as they would the white areas. But is this the case?

Analyzing the zip codes that the paper serves and the adjacent zip codes the newspaper does not serve, which we call the paper's "potential circulation area", we find that the Beacon serves 153,822 Black residents area while excluding 161,412 Black residents, for a selection rate of 49%. In contrast, 1,473,618 White residents live in areas with service compared to 725,658 without service, for a selection rate of 67%.

To understand this discrepancy, we can analyze the individual zip codes the newspaper serves. In the northern portion of the paper's potential circulation area, we see that the paper serves zip code 44124, which has a total population of 37,584 and 7% of the population lives in poverty. Yet the paper does not serve the neighboring 44122, which has a similar total population of 34,057, a similar poverty rate of 7%, and is closer to the newspaper's headquarters. One key difference: in the zip code with service, 10% of the residents are Black compared to 34% in the zip code without service.

Figure 3: 2014 Potential Service Area of *Akron Beacon Journal*.



Zip code 44128, is another zip code that is excluded from service despite being closer than 44124. Notably, this zip code is 95% Black and it has the largest number of Black

residents (27,450) in the potential circulation area. While 24% of the population lives in poverty, this figure is lower than several other zip codes with service. In other words, the *Akron Beacon Journal* excludes the zip code with the greatest number of Black residents in its potential circulation area while still serving more impoverished areas and zip codes that are farther away. As shown in Table 3, of the 10 zip codes with the largest number of Black residents in the newspaper's potential circulation area, only 3 have service.

Table 3. *Akron Beacon Journal* service summary of zip codes with the largest Black population.

Zip Code	Service Summary	Black Population	Black %	In Poverty %
44128	Excluded from Service	27,450	95%	24%
44146	Included in Service	16,871	59%	14%
44121	Excluded from Service	16,373	51%	12%
44137	Excluded from Service	15,746	70%	21%
44320	Included in Service	15,255	76%	27%
44103	Excluded from Service	13,762	82%	45%
44122	Excluded from Service	11,437	34%	8%
44102	Excluded from Service	10,704	26%	39%
44125	Excluded from Service	9,047	32%	15%
44505	Included in Service	8,735	46%	32%

If only 49% of Black residents live in areas with service compared to 67% of White residents, is the disparity between them due to income? To explore this possibility, this dissertation tested whether there was a disparate impact when comparing those in poverty to those earning more than 2x the poverty line. Here, I found that 59% of residents living in poverty live in areas with service compared to 66% of those earning more than 2x the poverty line. Because this is greater than the 4/5s cutoff, which would be less than 53%,

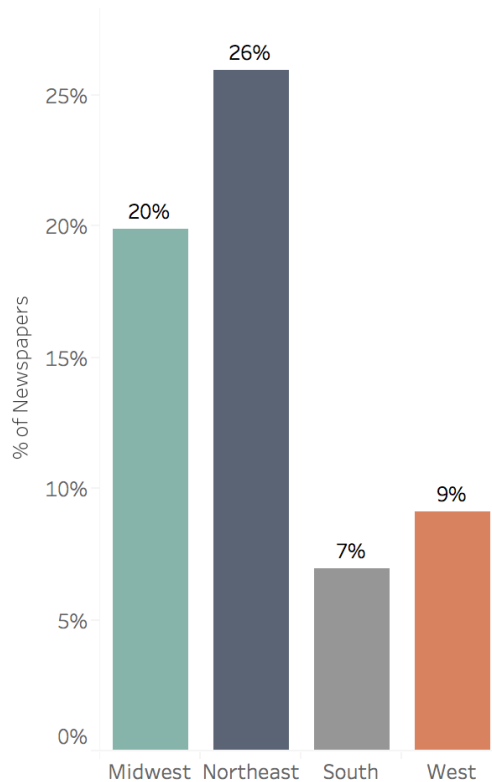
there is no evidence of unequal treatment by income under the theory of disparate impact. Thus, we can reject the possibility that the inequality between Black and White residents is due to income alone. Indeed, by selection rate, it is noteworthy that the *Akron Beacon Journal* serves a greater portion of those living in poverty than Black residents.

These patterns hold true for many of the 88 newspapers that redline Black residents. Alarming, of these 88 papers with evidence of redlining, 82 serve a greater portion of those living in poverty than Black residents. Put another way, for residents near these 82 papers, a person living in poverty is more likely to live in an area with service than a Black person is. If newspapers were only treating Black and White residents differently due to income, this clear pattern would not emerge.

More than just analyzing whether redlining of African Americans is occurring, we can also analyze *where* it is happening. By assigning each newspaper to its geographic census region, we find that 26% of daily newspapers in the Northeast redline Black residents, which is where it is most common. The region with the second highest proportion of papers with a disparate impact on Black residents was the Midwest, with 20% of papers doing so. In the West region, “only” 9% of daily newspapers had service boundaries that redlined Black residents. And the region least likely to redline African Americans was in the South, where only 7% did so.

Figure 4: 2014 Redlining of African Americans by Region of Newspaper.

Redlining of African Americans
by Region of Newspaper



These findings are particularly interesting given the enduring segregation patterns found in these regions. As detailed by the Census in 2002, between 1980 and 2000, the Midwest and Northeast consistently had higher levels of segregation among Black and White residents than the South and the West. In 2000, the segregation index in the Midwest and Northeast both stood at 74% compared to 58% in the South and 56% in the West. This tentatively suggests that newspapers may be more likely to redline African Americans when they are based in areas with higher levels of residential segregation between Whites and African Americans.

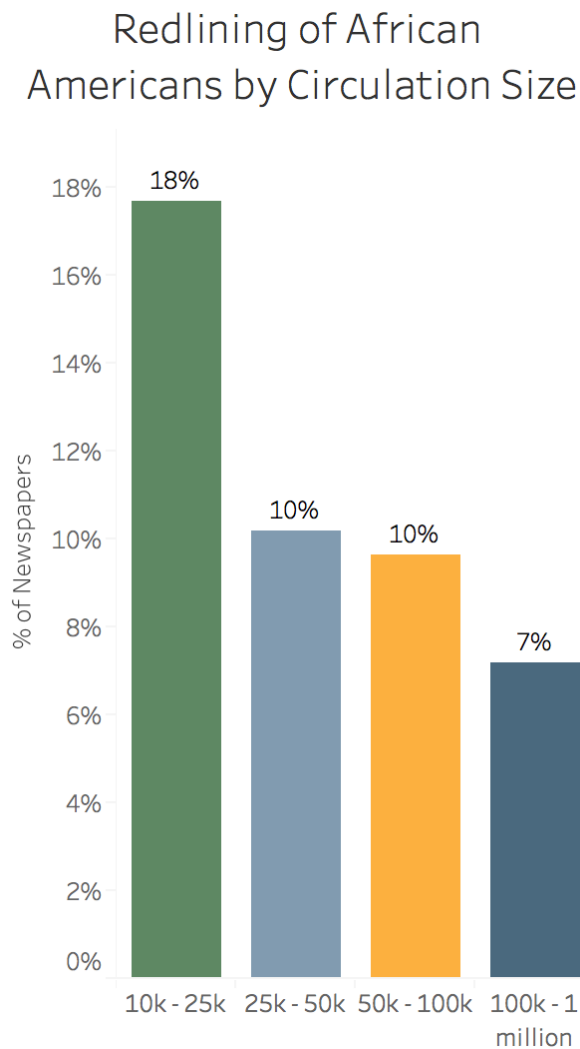
Figure 5: Black-White Segregation Index by Region.



Source: United States Census Bureau.

Additionally, we can look at whether certain sized newspapers are more likely to redline African Americans. Here, we consistently see that newspapers with lower circulation are more likely to engage in redlining. At the ends of the spectrum, we find that 18% of daily newspapers with a circulation between 10,000 – 25,000 engage in redlining Black residents compared to 7% of daily newspapers with a circulation over 100,000.

Figure 6: 2014 Redlining of African Americans by Circulation Size of Newspaper.



This finding is interesting given that smaller newspapers are also the least diverse.

According to the American Society of News Editors, in 2015, only 6.5% of newsroom staff at newspapers with circulations between 10,000 – 25,000 were people of color. At newspapers with circulations between 100,000 – 250,000, this figure grows to 18.5% (“Table F”). This may suggest that newspapers with more diverse staff are less likely to engage in redlining. Conversely, newspapers that engage in redlining may also be less likely to value staff diversity. In either case, the combination of these findings suggest

that African Americans living in areas that are served by a small local newspaper are more likely to be redlined and also less likely to be covered by a diverse newsroom staff.

Do Newspapers Redline Hispanics?

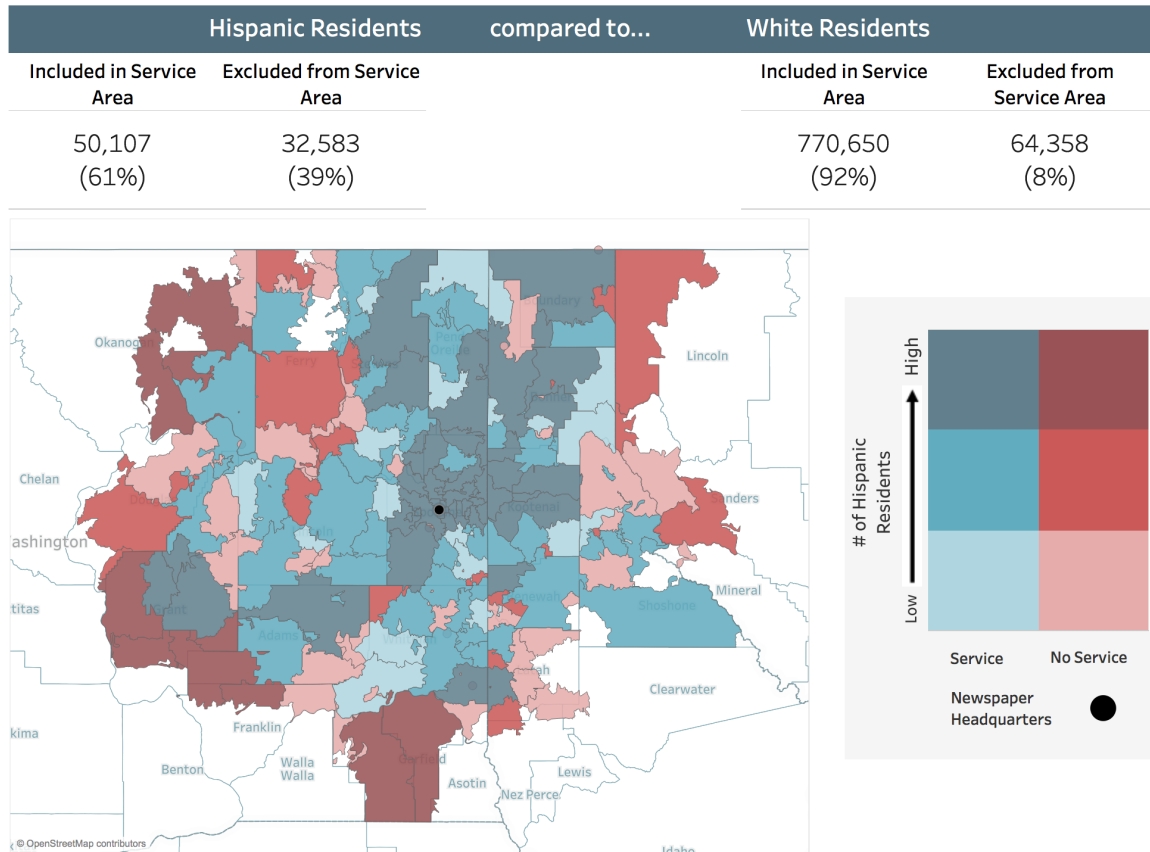
Testing whether Hispanic residents are more likely to live in areas that the local newspaper does not serve than White residents, I found that the circulation boundaries of 60 papers, or 10% have a disparate impact on Hispanic residents. That newspapers are more likely to redline African Americans than Hispanics is noteworthy. This may reflect that Hispanics are the largest minority group in the United States with more than one in six Americans claiming Hispanic origin (Colby, & Ortman, 2017). Moreover, Hispanic purchasing power accounts for nearly 10% of the total in the US, compared to 9% for African Americans and 6% for Asian Americans (Multicultural Economy Report, 2017). Thus, Hispanics are the largest minority group with the most purchasing power, which may make them a more attractive minority group for advertisers.

The *Spokane Spokesman-Review*, a daily newspaper in Spoke, Washington with a daily circulation around 76,000 is a vivid example of redlining against Hispanics. Spokane, it should be noted, is 90% White, 5% Hispanic, 2% Black, and 2% Asian. Given that this population is relatively low on diversity, how equally does the *Spokane Spokesman-Review* serve all communities? Scrutinizing the paper's potential circulation area, we find that the paper serves 50,107 Hispanic residents while excluding 32,583, for a selection rate of 61%. In contrast, 770,650 White residents live in areas with service compared to 64,358 without service, for a selection rate of 92%. Because the selection

rate for Hispanics is less than 4/5s the selection rate of white residents, the newspaper's service boundaries have a disparate impact on Hispanic residents.

To understand this discrepancy, we can again analyze the zip codes the newspaper serves. In the Southwestern portion of the paper's potential circulation area, we see that it serves zip code 98837, which has a total population of 41,130 and about 17% of the population lives in poverty. Yet the paper does not serve the neighboring 99344, which has a similar total population of 17,311 and a poverty rate of 24%. Of course, a key difference is the percentage of Hispanic residents: in the zip code with service, 26% of the residents are Hispanic compared to 73% in the zip code without service. Indeed, zip code 99344 actually has the greatest number of Hispanic residents in the paper's potential circulation area.

Figure 7: 2014 Potential Service Area of *Spokane Spokesman-Review*.



Again, we tested whether this may be due to income. The *Spokane Spokesman-Review* did now show a disparate impact based on poverty, as 87% of those in poverty lived in areas with service compared to 91% of those earning more than 2x the poverty line. With only 73% of Hispanics living in areas with service compared to 87% of those in poverty the *Spokane Spokesman-Review* serves a much greater portion of those in poverty than Hispanics. In fact, Hispanics are much less likely to live in areas with service than any other group as shown in Table 4.

Table 4: Selection Rates for the *Spokane Spokesman-Review*.

Selection Rates for the Spokane Spokesman-Review	
Hispanic Residents	61%
Black Residents	95%
Asian Residents	97%
White Residents	92%
Living Below Poverty Level	87%

Another egregious example is the *Kane County Chronicle*, a small daily newspaper in Kane County, Illinois, which only serves 56,992 Hispanic residents while excluding 158,347 in its potential circulation area (a 26% selection rate). In contrast, the paper serves 42% of White residents in the area, or 226,180 people. Notably, of the 10 zip codes with the largest number of Hispanic residents, the paper only serves 2 of them (see Table 5).

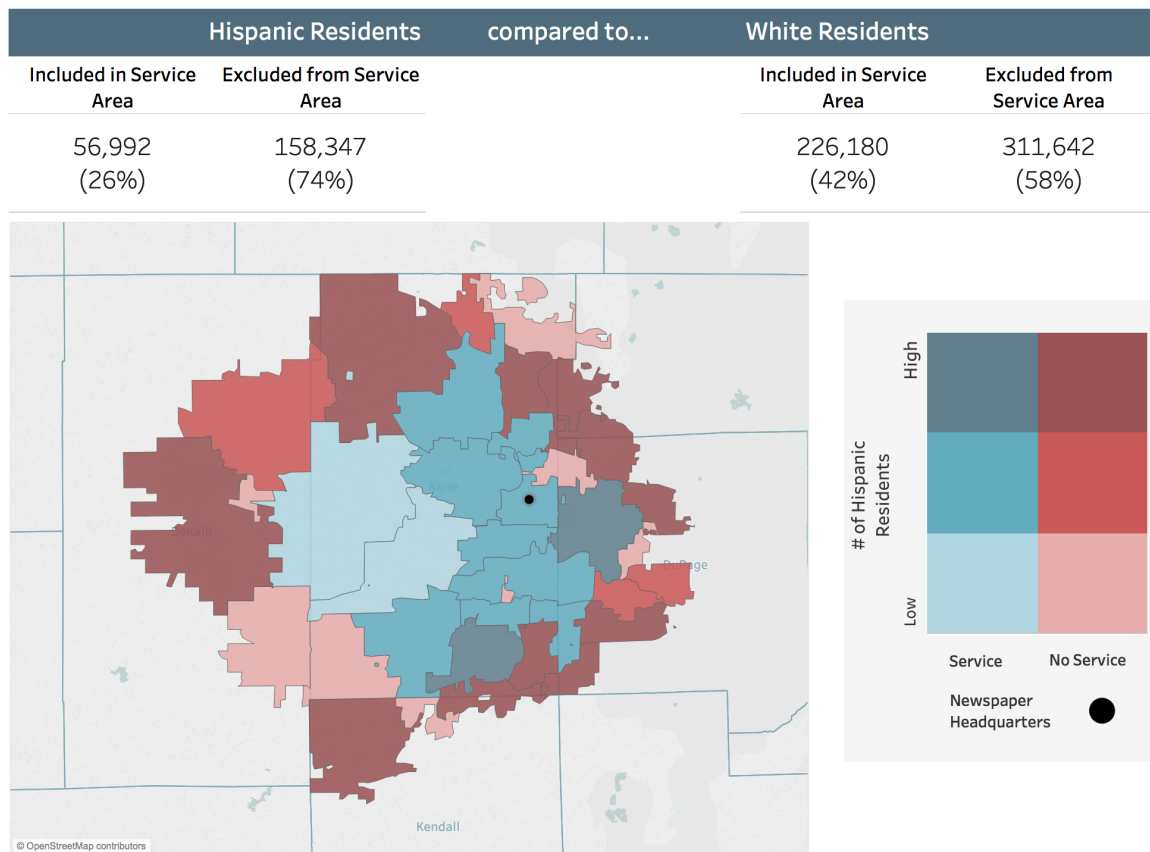
Table 5: Service Summary of *Kane County Chronicle*'s Largest Hispanic Zip Codes.

Zip Code	Service Summary	Hispanic Population	Hispanic %	In Poverty %
60505	Excluded from Service	56,302	76%	23%
60120	Excluded from Service	29,338	59%	17%
60506	Included in Service	21,887	40%	19%
60123	Excluded from Service	19,170	40%	15%
60185	Included in Service	16,617	46%	12%
60538	Excluded from Service	8,487	32%	8%
60504	Excluded from Service	7,960	22%	9%
60115	Excluded from Service	5,920	13%	31%
60188	Excluded from Service	5,538	13%	8%
60103	Excluded from Service	4,786	11%	5%

It is important to note that the zip code with second largest Hispanic population is 60120, which is 59% Hispanic (29,338 residents) and has a poverty rate of 17%. Despite

neighboring the zip code of the newspaper’s headquarters, the *Kane County Chronicle* reported that it does not serve this zip code.

Figure 8: 2014 Potential Service Area of *Kane County Chronicle*.



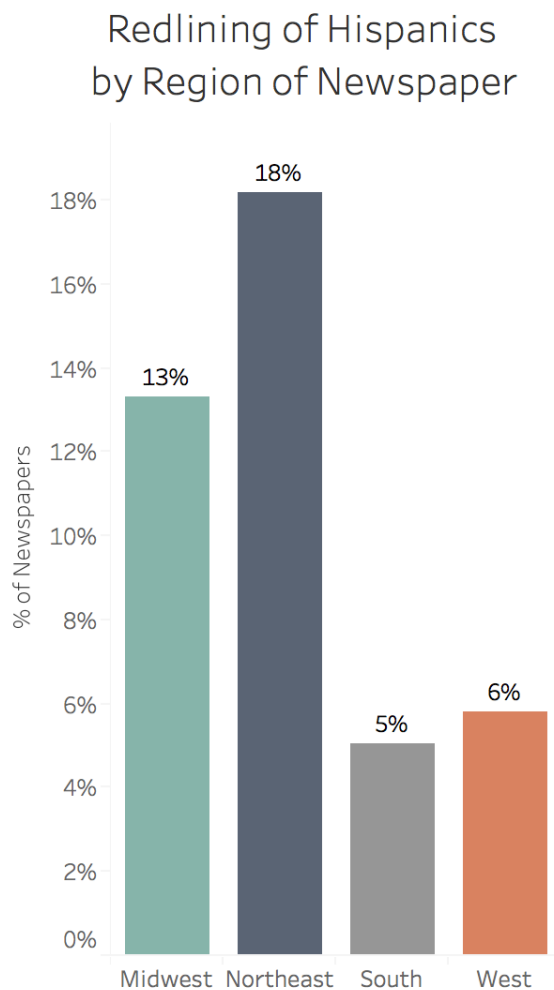
Overall, those living in poverty near the *Kane County Chronicle* are about equally as

likely as those who are Hispanic to live in an area with service (25.9% compared to 26.4%).

Similar to the pattern for African Americans, of the 60 newspapers with evidence of a disparate impact on Hispanics, 53 papers served a greater portion of those living in poverty than Hispanics. Again, this demonstrates that the differences between Whites and Hispanics are not likely attributable to income alone.

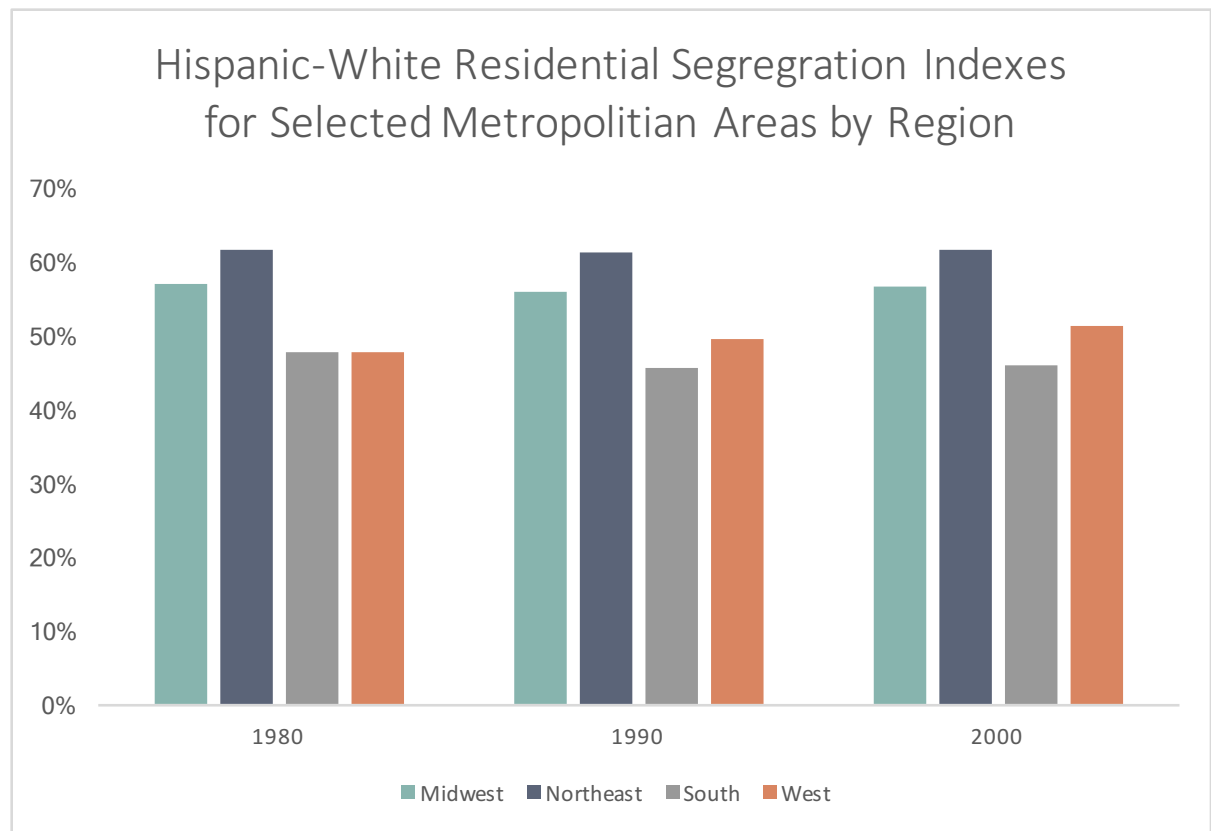
Where is redlining Hispanics most common in the newspaper industry? Here, we see a similar pattern to the redlining of African Americans. The region most likely to redline is again the Northeast, with 18% of papers having a disparate impact on Hispanics. This is followed by the Midwest, where 13% do so. Newspapers in the West (6%) and the South (5%) are least likely to redline Hispanics.

Figure 9: 2014 Redlining of Hispanics by Region of Newspaper.



These figures are again similar to the Hispanic-White segregation indexes from 1980 to 2000. Consistently, the regions with the worst segregation patterns have been the Northeast, Midwest, West, and then the South. In 2000, for example, the Hispanic-White segregation index was 62% compared to 46% in the South. While we must be careful not to embellish this directional correlation, it is notable that the regions most likely to have segregated Hispanics are also where newspapers are most likely to redline Hispanics. This may suggest that the service boundaries of newspapers, regardless of intention, reify decades of residential segregation patterns by excluding minority areas from service.

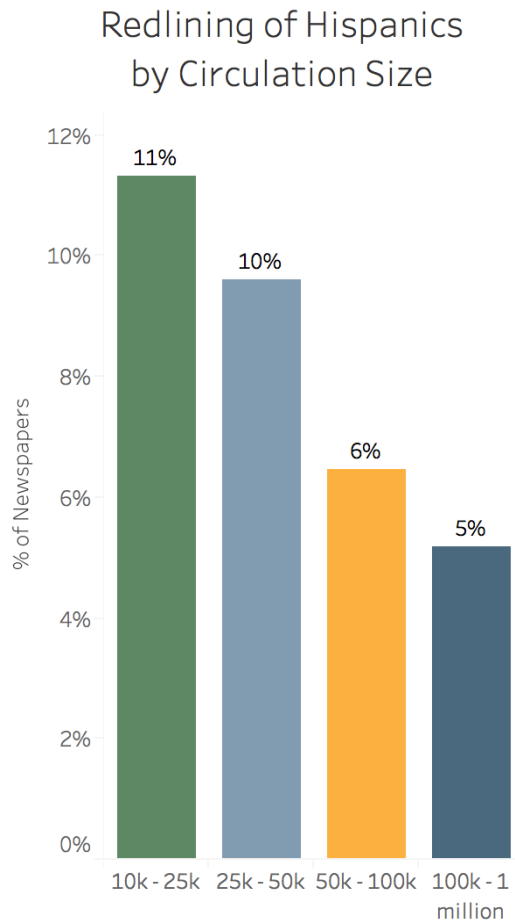
Figure 10: Hispanic-White Segregation Index by Region.



Source: United States Census Bureau.

Analyzing the redlining of Hispanics by circulation size, we again see the same pattern as African Americans – smaller newspapers are most likely to redline Hispanics. Of daily newspapers with a circulation between 10,000 – 25,000, 11% of papers have circulation boundaries that have a disparate impact on Hispanics. Among newspapers with a circulation over 100,000, “only” 5% redlined Hispanics.

Figure 11: 2014 Redlining of Hispanics by Newspaper Circulation Size.



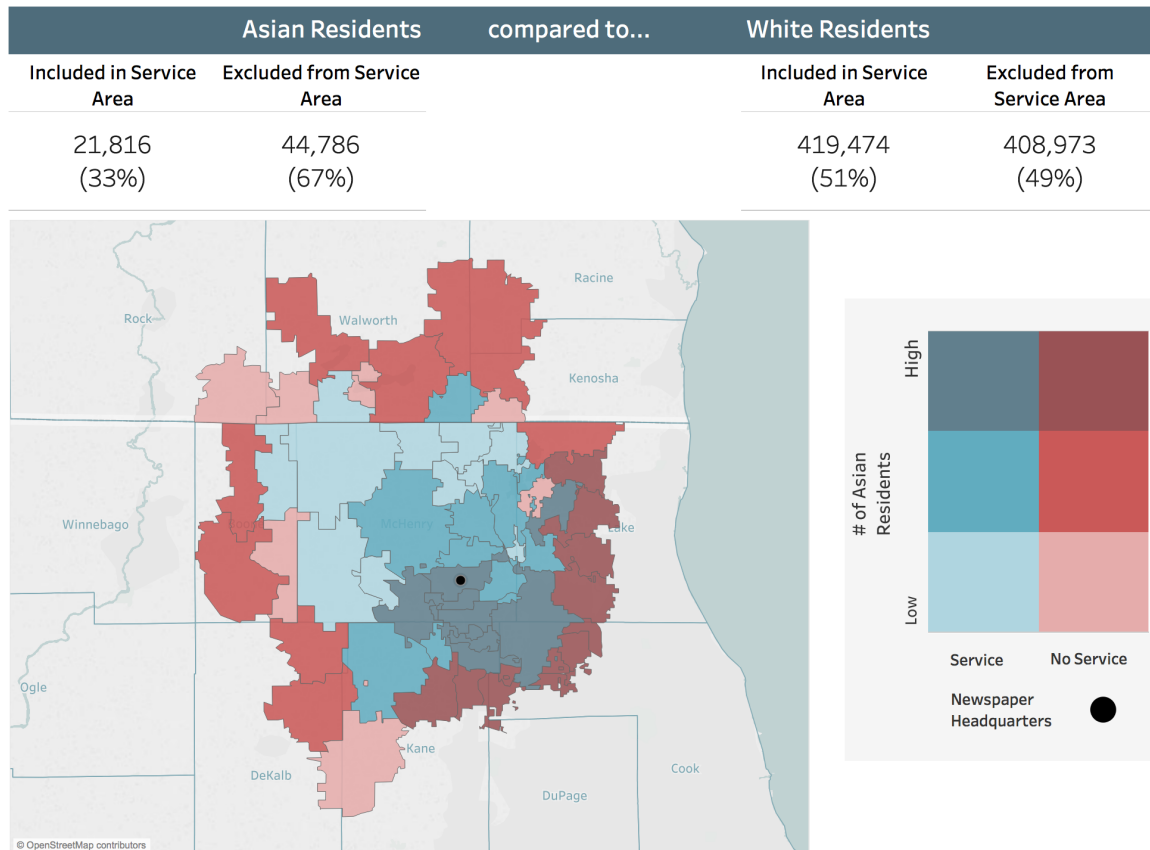
This is again notable because smaller newspapers also have the least diverse staff. Consider that the typical newspaper with a circulation between 10,000 – 25,000 employs 6 White reporters and 0 reporters of color. At newspapers with a circulation between 100,000 to 250,000, the newsroom typically contains 30 White reporters and 6 minority reporters (Williams, 2015). As a result, Hispanic residents living near a smaller newspaper is more likely to be redlined and also less likely to have their community covered by a reporter of color.

Do Newspapers Redline Asian Americans?

Testing whether Asian residents are more likely to live in areas that the local newspaper does not serve than White residents, I found that the circulation boundaries of 85 papers, or 14% have a disparate impact on Asian residents. Given that Asian Americans are stereotyped as the “model minority” this finding is surprising. One possible explanation is that despite high median incomes, Asian Americans constitute only 6% of purchasing power in the US, compared to 9% for African Americans and 10% for Hispanics (Multicultural Economy Report, 2017). Thus, advertisers may not value reaching this relatively small audience. Another possible factor is that while Asian Americans have a median household income of about \$73,000, there is wide variation between different Asian subgroups. For example, according to the Pew Research Center, eight of the 19 Asian groups analyzed had poverty rates higher than the U.S. average (Lopez, Ruiz, & Patten, 2017).

The *Northwest Herald*, a small daily newspaper in Crystal Lake, Illinois is one of the 85 newspapers that redlines Asian Americans. While they serve 51% of White residents in their potential circulation area, only 33% of Asian residents live in areas with service. As a result, 66,602 Asian residents are excluded from service. Examining the circulation area of the Northwest Herald, we see that the paper serves zip code 60140, which is 1% Asian and 10% in poverty. Yet the neighboring zip code of 60124 is excluded from service despite only 4% living in poverty. One key difference – 60140 is 1% Asian whereas 60124 is 13%.

Figure 12: 2014 Potential Service Area for *Northwest Herald*.



In fact, of the 10 zip codes with the highest number of Asian residents, the paper only serves 2 of them. The four zip codes with the largest Asian populations are excluded from service. See Table 6 for a detailed summary.

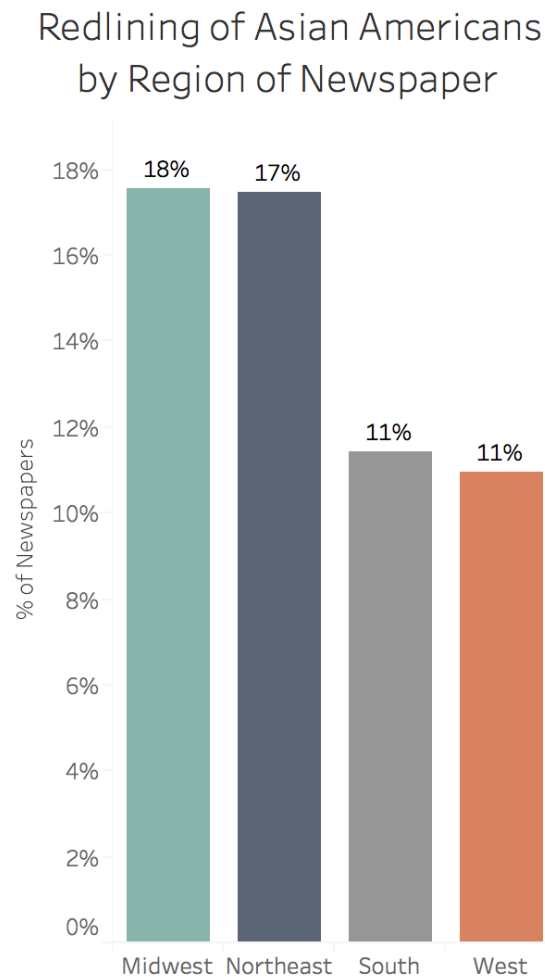
Table 6: Service Summary of Northwest Herald's Largest Asian Zip Codes.

Zip Code	Service Summary	Asian Population	Asian %	In Poverty %
60169	Excluded from Service	8,058	24%	7%
60067	Excluded from Service	5,508	15%	5%
60074	Excluded from Service	5,058	13%	15%
60192	Excluded from Service	4,707	29%	2%
60010	Included in Service	4,593	11%	5%
60047	Excluded from Service	3,611	9%	4%
60073	Included in Service	3,224	5%	13%
60060	Excluded from Service	3,016	8%	9%
60120	Excluded from Service	2,709	5%	17%
60124	Excluded from Service	2,544	13%	4%

Mirroring the pattern seen for Black and Hispanic residents, of the 85 papers with circulation boundaries that show a disparate impact on Asian residents, 83 serve a greater portion of those in poverty than those who are Asian. This again is reason to doubt that the differences between Whites and Asian residents is due solely to income.

Analyzing where the redlining of Asian Americans is most common, we again see a similar pattern to the redlining of Black or Hispanic residents. Newspapers in the Midwest (18%) and Northeast (17%) are again considerably more likely to engage in redlining than newspapers in the South (11%) and West (11%).

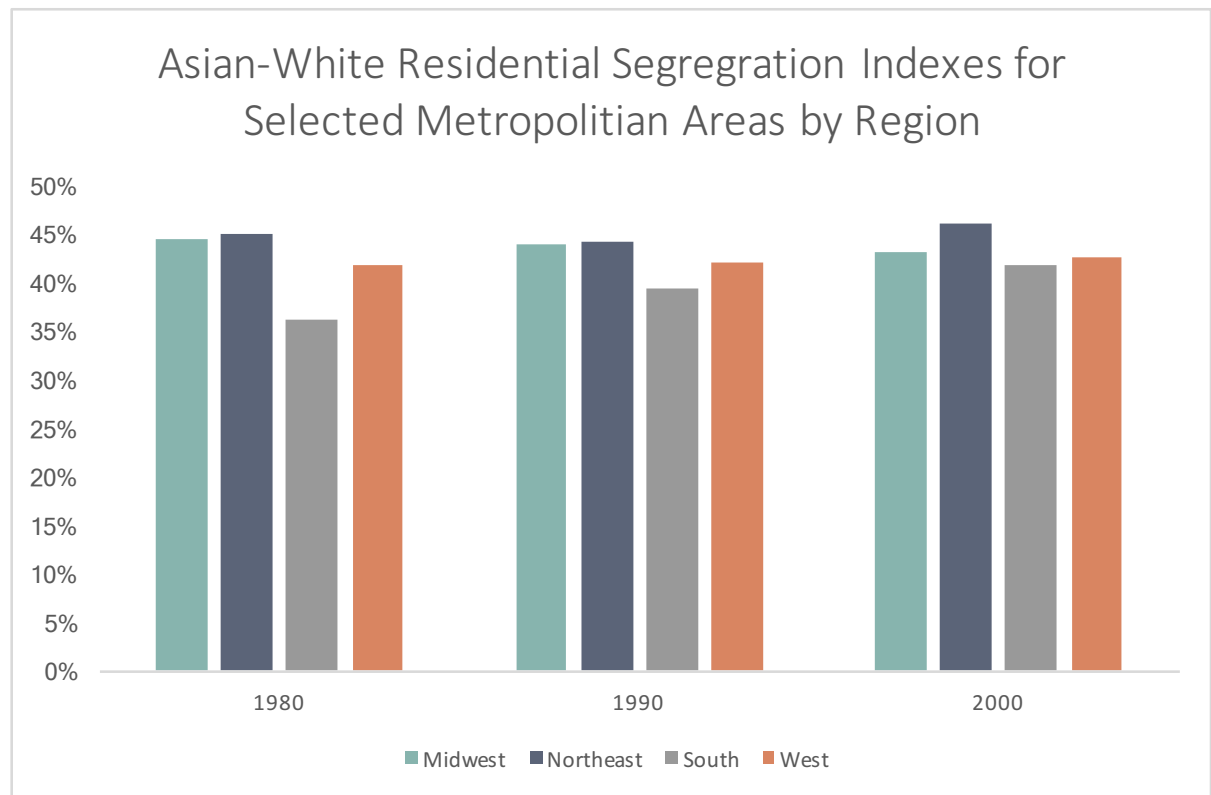
Figure 12: 2014 Redlining of Asian Americans by Region of Newspaper.



However, these figures mirror the segregation indexes for Asians-Whites less than the previous examples. While the direction is similar, with the Northeast (46%) and the Midwest (42%) having higher levels of segregation than the West (43%) and South (42%), there are not large differences between the regions in terms of segregation whereas there are for newspaper redlining. Indeed, segregation patterns for Asian Americans has been shown to differ from that of Blacks and Hispanics. Whereas segregation for Black and Hispanic residents in relation to Whites is predicted by various

socio-economic indicators, for Asians, the predictors are much less reliable (French, 2008). It is unclear what causes these differences in residential segregation.

Figure 13: Asian-White Residential Segregation Indexes by Region.

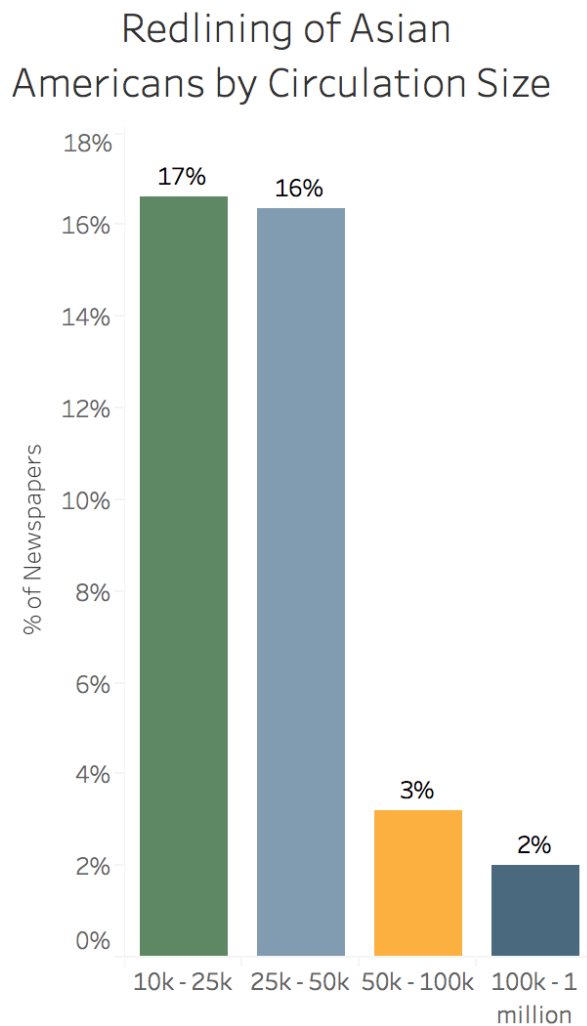


Source: United States Census Bureau.

Analyzing redlining by circulation size, we find that smaller newspapers are more likely to redline Asian residents, which mirrors our findings for the redlining of African American and Hispanic residents. Here, however, we see the most lopsided differences, with 17% of daily newspapers with circulations between 10,000 to 25,000 redlining Asians compared to 2% of newspapers with circulations over 100,000. We also see that

16% of newspapers with circulation between 25,000 to 50,000 redline Asian Americans, which is considerably higher than the same figure for Black residents (10%) or Hispanic residents (10%).

Figure 14: 2014 Redlining of Asian Americans by Circulation Size of Newspaper.



That smaller newspapers are consistently more likely to engage in redlining each ethnicity group is deeply troubling. Residents living near these types of local newspapers often have fewer media outlets to choose from. For example, a 2015 report by Pew

Research Center found that in Denver, CO, there were 143 local news providers compared to 24 in Macon, GA and 31 in Sioux City, IA (Local News in a Digital Age). The newspaper's importance in providing the information and social links necessary for a healthy democracy may be more pronounced in these small, close-knit communities. Why then, are these newspapers most likely to engage in redlining?

While the next chapter will analyze the factors that help predict whether a newspaper will engage in redlining, one plausible difference between small and large newspapers is that the advertising base is much more local. That is, at small newspapers, advertising revenue is likely more reliant on local businesses. Explaining the relationship between local demographics and local advertisers, the Newspaper Association of America's chief economist repeated an adage of a tabloid owner who made an advertising pitch to a retailer by citing big circulation numbers. To which the merchant scoffed. "But your customers are my shoplifters" (Cranberg, 1997, n.p.). Indeed, it is noteworthy that in areas where the executives are most likely to be aware of the zip codes they are excluding from service, and merchants are most likely to be aware of what types of people are reading the newspaper, that this is where redlining is most common. Given these findings, more research is needed to examine the process by which newspaper executives at small newspapers set their service boundaries.

Do Newspapers Redline More than One Group?

Once it became clear how common redlining was in the newspaper industry, it became necessary to ask whether newspapers redline multiple minority groups

simultaneously. To answer this question, we explored how many papers have a disparate impact on more than one racial group. To summarize, of the 599 papers in the estimated population, we find that 35 newspapers have a disparate impact on Asian residents only (6% of sample), 27 have a disparate impact on Black residents only (5%), and 18 have a disparate impact on Hispanic residents only (3%). These newspapers comprise the 80 papers who are “only” redlining one minority group. Of the 56 papers that redline two of the three racial groups, 27 have a disparate impact on both Black and Asian residents (5%), 20 have a disparate impact on both Black and Hispanic residents (3%), and 9 have a disparate impact on both Asian and Hispanic residents (2%). Lastly, 14 papers (2%) have a disparate impact on all three racial groups - Black residents, Hispanic residents, and Asian residents. At these 14 newspapers, each minority group is less than 80% as likely to live in an area with service as their white counterparts.

Chapter Summary

This chapter offered the first empirical evidence that redlining in the newspaper industry takes place. By comparing the demographics of the zip codes with service to the neighboring zip codes without service, I showed that nearly 1/4 papers have a disparate impact on a minority group. The redlining of Black, Hispanic, and Asian residents shared three clear patterns 1) a sizeable portion of newspapers engage in redlining and the papers that do usually serve a higher portion of people in poverty than the redlined minority group; 2) papers in the Northeast and Midwest were most likely to engage in redlining; 3) newspapers with lower circulation were more likely to engage in redlining.

To elaborate, I found that approximately 88 papers (15%) redline African Americans, and that for 82 of these papers, a person living in poverty is more likely to live in an area with service than a Black resident. Analyzing the redlining of Hispanic residents, I find that 60 papers (10%) are significantly less likely to serve Hispanics than Whites. For 53 of the 60 papers, a person living in poverty is more likely to live in an area with service than a Hispanic resident. I show a similar pattern for Asian Americans, as 85 papers (14%) redline Asians residents. For 83 of the 85 papers, a person living in poverty is more likely to live in an area with service than an Asian resident. These figures offer strong support for accusations of redlining in the newspaper industry and give reason to doubt that the differences are attributable to differences in income.

For all three ethnicity groups, newspapers in the Northeast and Midwest were most likely to engage in redlining. In the Northeast, 26% of papers redlined African Americans, 18% redlined Hispanics, and 17% redlined Asian Americans. In the South, redlining was least common, with 7% redlining African Americans, 5% redlining Hispanics, and 11% redlining Asian Americans. These patterns are noteworthy because residential segregation patterns tend to be most pronounced in the Northeast and least pronounced in the South. This may reflect that the home value disparity between neighborhoods that were redlined and their white counterparts is most pronounced in the Northeast (Aaronson, Hartley, & Mazumder, 2017). In other words, the legacy of redlining is arguably still felt the most today in the Northeast.

Newspapers with lower circulation figures were also consistently more likely to engage in redlining for each ethnicity group. Of newspapers with circulation between 10,000 and 25,000, 18% of papers redlined African Americans, 11% redlined Hispanics,

and 17% redlined Asian Americans. Newspapers with circulation over 100,000 were least likely to engage in redlining, with 7% redlining African Americans, 5% redlining Hispanics, and 2% redlining Asian Americans.

There are two important possible implications of smaller newspapers being more likely to engage in redlining. First, the most common route to a first job in the newspaper industry is by working at a smaller newspaper. But for journalists of color, smaller newspapers may have a conscious or unconscious bias against hiring them (Barthel, 2015). And if they do, they are more likely to start their careers at a newspaper that is redlining African Americans Hispanics, or Asian residents, which may reflect less interest in covering these communities well. Indeed, research has clearly established that communities of color are often given stereotypical news coverage, if they are covered at all. These working conditions may help explain why journalists of color are more likely to leave the newspaper industry (Williams, 2015). Second, the news ecosystem in these smaller communities are arguably more dependent upon the local newspaper than larger cities that have a greater number of news outlets to choose from. Executives at these papers are more likely to be intimately familiar with the areas and people that the paper is choosing not to serve, as are the businesses. Consequently, this finding may reflect that the newspapers who are most likely to scrutinize areas of service are also most likely to engage in redlining, possibly to appease local advertisers. While investigating these implications falls outside the realm of this dissertation, more research is needed to understand how local newspapers set their service boundaries and how it relates to disparities in newsroom staffing and news coverage.

Chapter 5: How Has Redlining Changed Over Time?

While the previous chapter established that about 1/4 newspapers redlines a minority group, existing research has not established how redlining in the newspaper industry may have changed over time. In this chapter I address this literature gap by analyzing whether the number of newspapers engaging in redlining has changed between 2002 – 2015. To facilitate comparison, a panel of newspapers was created to only include the daily newspapers who were audited in 2002/2003, 2004/2005, 2006/2007, 2008/2009, 2010/2011, 2012/2013, and 2014/2015. Because newspapers may choose to provide this information on an annual or bi-annual basis, and smaller newspapers are more likely to choose bi-annual, it was necessary to group papers in two year increments to avoid biasing the sample. In doing so, I include all zip codes for a paper even if it was only served in one year. For example, in the 2014/2015 dataset, if a newspaper that was audited in both 2014 and 2015 indicated that they delivered to a zip code in 2014 but not 2015, it is still included as a served zip code. If a newspaper served the same zip code in both years, the circulation figures were averaged so that each zip code includes one figure for average circulation.

This approach yielded a panel of 328 newspapers that are weighted by circulation size and census region to mirror 599 daily newspapers with circulations over 10,000. As in the previous chapter, a zip code was included as being served if the newspaper reported any subscribers or paid circulation (e.g. at a newspaper stand) in the zip code in either year. A newspaper's potential circulation area was defined as including all of the zip codes with service and all of the zip codes that neighbor a zip code with service. For the time periods between 2002 – 2009, demographics from the 2000 Census were

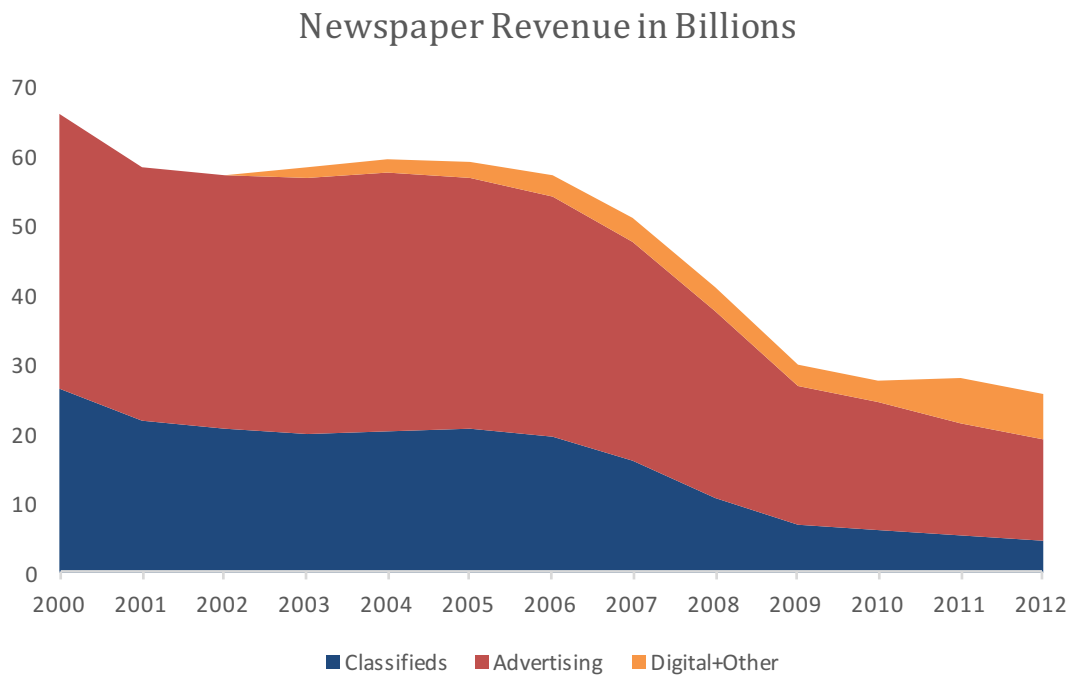
collected and the demographics of the residents living in areas served by each paper were compared to the demographics of the residents living areas in areas excluded from service by that paper. For the time periods between 2010 – 2015, demographics from the 2010-2014 American Community Survey were used instead of the 2000 Census.

Before analyzing how redlining has changed in the newspaper industry, it is instructive to review how the newspaper industry has changed during the time period examined. When the stock markets opened on January 3rd, 2007, the Gannett Company's stock was trading at \$61.35, McClatchy Company's stock was at \$43.30 a share, and Lee Enterprises was selling at \$31.22. These corporations were three of the largest newspaper owners in the United States. Two years later, Gannett Company's stock opened at \$8.13, McClatchy Company's stock was at \$0.81 a share, and Lee was selling at \$0.42. In two years, the combined value of these three companies declined by nearly \$15 billion (Soloski 2013). The newspaper industry's precipitous decline was reflected in depressing 2013 headlines in the business press, including Forbes "The Death of Newspapers" (Conerly), Business Insider's "Sucks to be a Newspaper" (Blodget), and Business Week's "What Gannett Loves About Belo: No Newspapers" (Stock).

What changed? In 2000, the newspaper industry was annually earning \$26.5 billion in classifieds revenue and \$39.3 billion in advertising revenue, according to estimates by the Newspaper Association of America. By 2012, these figures had dropped to \$4.6 billion in revenue from classifieds and \$4.5 billion in advertising revenue. In 12 years, the newspaper industry lost \$46.6 billion dollars in revenue between these two sources. While it was initially hoped that digital advertising could help make up for these losses, between 2000 and 2012, digital advertising only grew to \$6.3 billion. The figures

have been so depressing that the Newspaper Association of America has refused to release more recent figures.

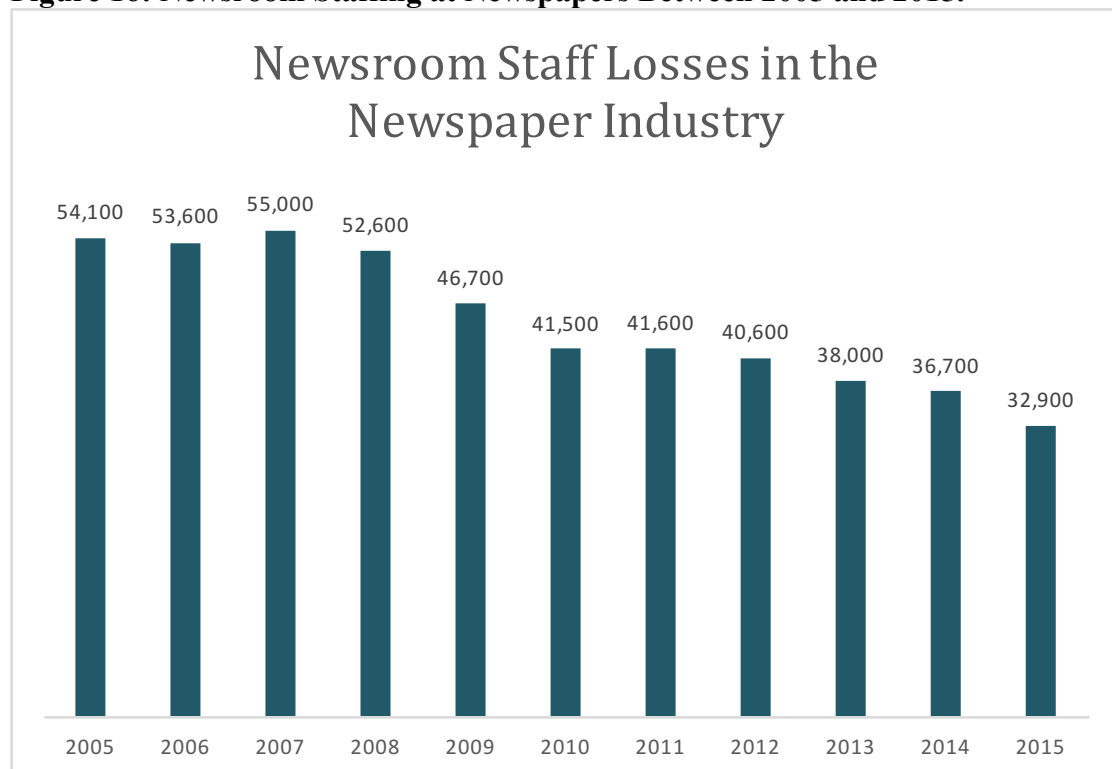
Figure 15: Newspaper Revenue Between 2000 and 2012.



Source: Newspaper Association of America.

To survive these losses, newspapers have cut costs by reducing delivery to distant areas (Kirchhoff, 2010), reducing days of delivery (Williams and Pickard, 2016), and reducing staff. Indeed, between 2005 and 2015, total newsroom staff was reduced from 54,100 to 32,900. Put another way, in 11 years, newspapers cut 39% of their newsroom staff.

Figure 16: Newsroom Staffing at Newspapers Between 2005 and 2015.



Source: American Society of Newsroom Editors.

Given these significant changes, it is worth testing whether newspapers have become more likely to redline residents to maximize advertising revenue. After all, if newspapers are desperate to survive these losses, they may be more willing to resort to the dubious practice of redlining to make their readers more attractive to advertisers. While testing for redlining was conducted for African Americans, Hispanics, and Asians in each time period, it is instructive to first look at the overall picture that emerges. In 2002, this dissertation finds that 201 papers, or 33%, have circulation boundaries that have a disparate impact on Black, Hispanic, or Asian, residents. In 2010, the number of papers redlining decreased to 149 papers, or 25%, which is the lowest figure during the

14 years examined. Despite increasing slightly to 160 newspapers in 2012, the number of papers engaging in redlining fell back to 149 papers, or 25%, in 2014.

Figure 17: Redlining by the Newspaper Industry 2002 – 2014.



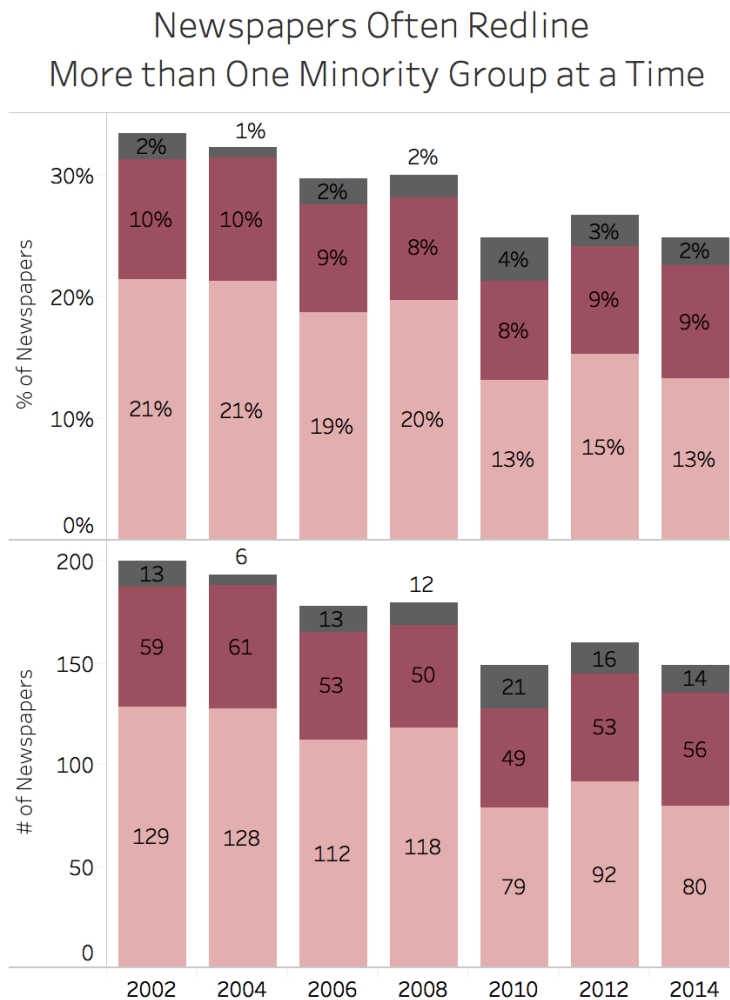
Notably, the number of papers engaging in redlining has decreased since 2008.

Therefore, the answer to RQ2, which asked whether newspapers were more likely to create service boundaries that exclude a greater proportion of African American, Hispanic, or Asian residents following steep losses in advertising revenue in 2006, is a resounding no. As this chapter will later show, this prediction was half right – newspapers are indeed reducing their service areas. However, rather than increasing

redlining, it has helped decrease it, as newspapers are less likely to serve distant suburban areas that a majority white while excluding their surrounding area. This change coincided with newspapers trying to cut delivery costs to make up for failing revenue.

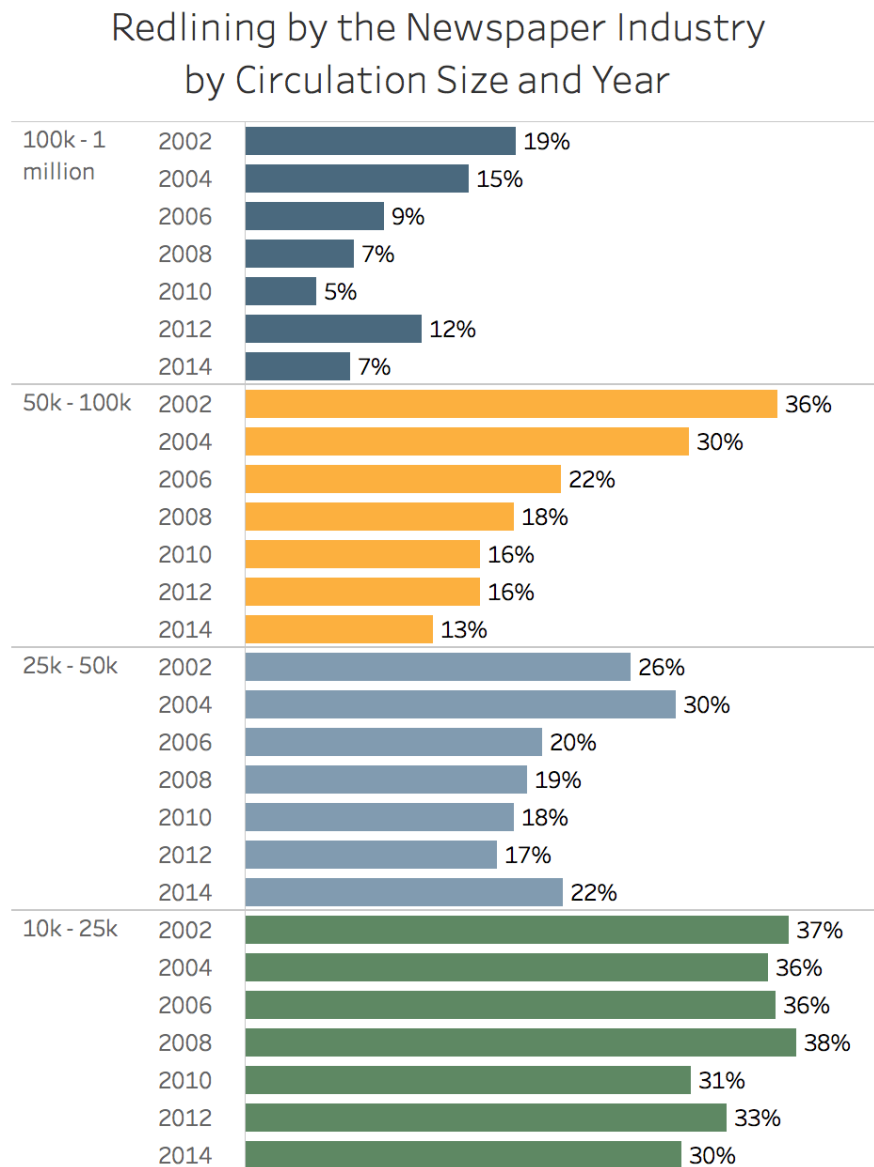
Of course, it is also possible for a paper to create service boundaries that redline multiple minority groups simultaneously. For that reason, it is important to explore how many papers are redlining multiple groups at once. In 2002, I find that 129 papers redlined a single group, 59 redlined two groups, and 13 papers redlined all three minority groups examined. Since then, the percentage of papers redlining a single group has decreased from 21% to 13%, the portion of papers redlining two or three groups has stayed relatively steady at around 10% and 2%.

Figure 18: Redlining by Newspaper Industry by Number of Ethnicities 2002 – 2014.



How has redlining changed over time by circulation? To answer this question, we will analyze the number of papers who redline any group (regardless of what race). Here, we see that redlining has consistently trended downwards for each circulation group. For newspapers with a circulation over 100,000, the percentage of newspapers declined from 19% to 7%. At the other end of the spectrum, for papers with circulations between 10,000 and 25,000, the portion of papers redlining decreased from 37% to 30%. The circulation group that changed the most was 50,000 to 100,000, which decreased from 36% to 13%.

Figure 19: Redlining by the Newspaper Industry by Circulation Size and Year.

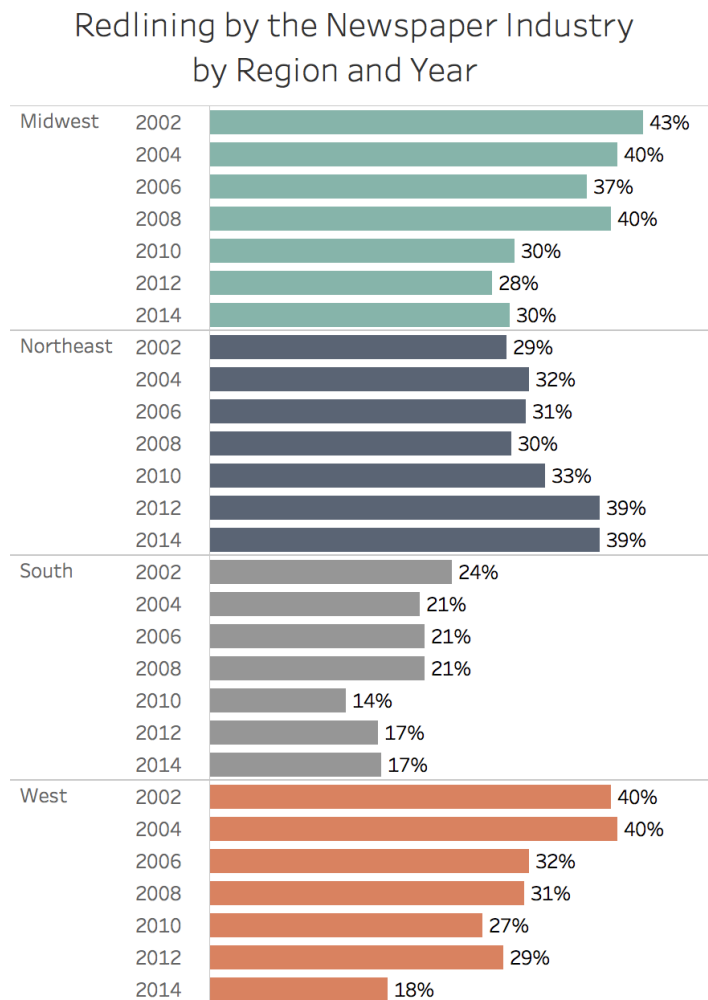


Additionally, we can look at how redlining changed in each region over time.

Using census regions again, we see that redlining has trended downward for every region except the Northeast. Instead, the percentage of papers in the Northeast that engage in redlining increased from 29% in 2002 to 39% in 2014. In contrast, the portion of papers in the West that engage in redlining decreased substantially from 40% in 2002 to 18% in

2014. In other words, the percentage of papers engaging in redlining was more than cut-in-half in the West.

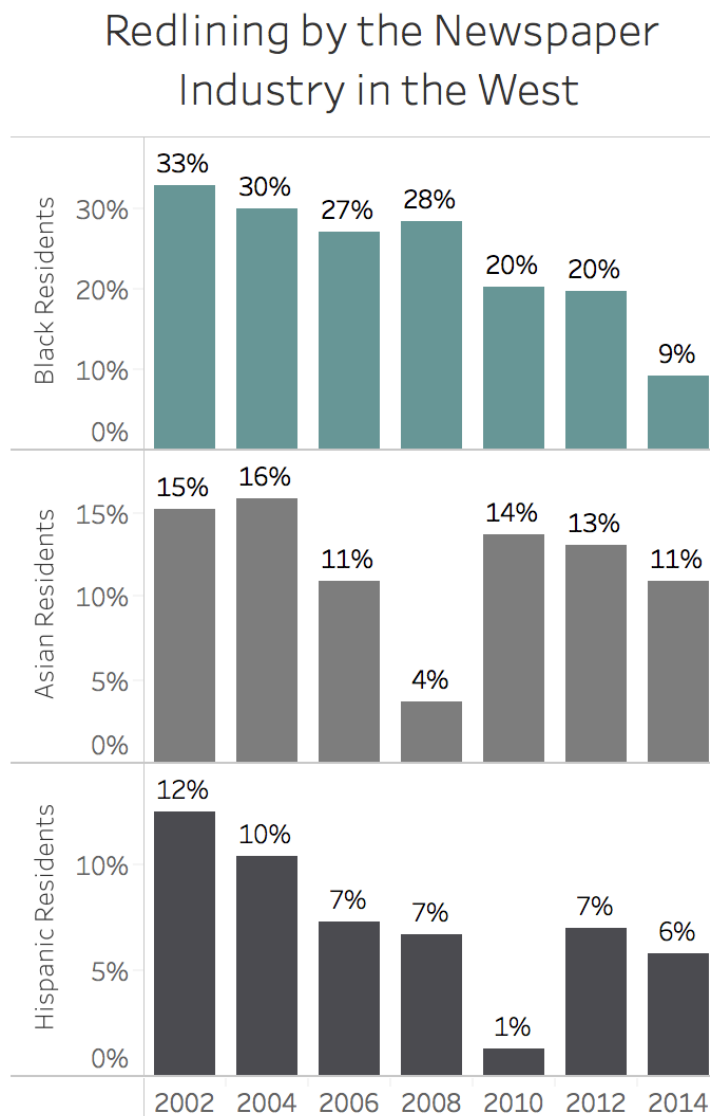
Figure 20: Redlining by the Newspaper Industry by Region and Year.



To explore the implications of this shift, we will analyze redlining in the West over time. Looking at the percentage of papers in the West that redline each ethnicity group, we see that this shift mostly benefitted African American residents as they became substantially less likely to be redlined. That is, in 2002, 33% of newspapers in the West

redlined African Americans. By 2014, this figure was reduced to 9%. While the portion of newspapers redlining Hispanic residents and Asian residents also declined, the shift was not as pronounced.

Figure 21: Redlining by Newspapers in the West.

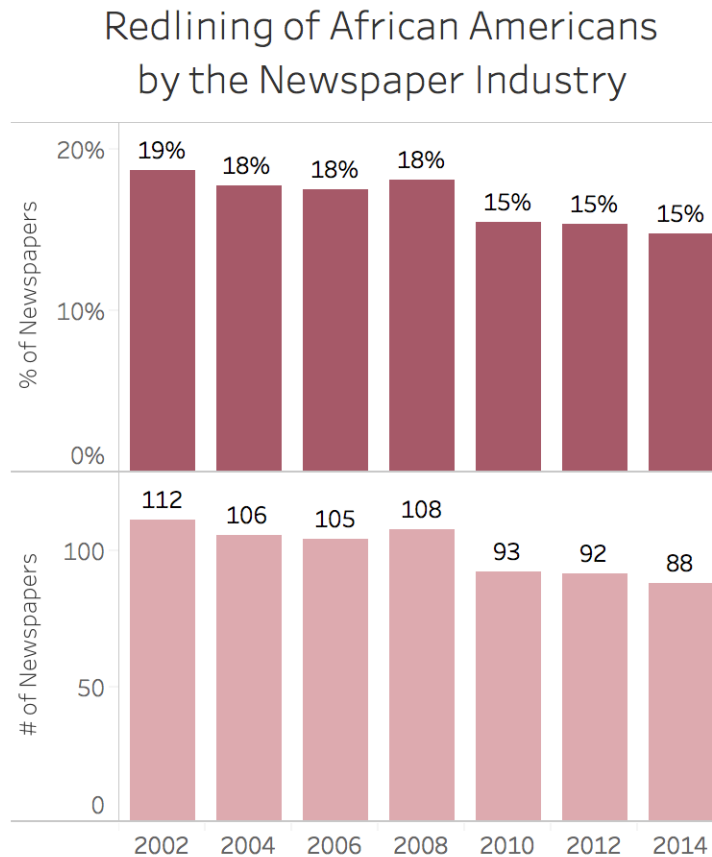


With that context in place, we will explore how the redlining of Black, Hispanic, and Asian residents have shifted over time. Then, we will explore how papers have adjusted their service boundaries since the Great Recession and how it relates to redlining.

Is the Number of Newspapers Redlining Black Residents Increasing?

In the past 14 years, how has the redlining of Black residents by newspapers shifted over time? Based on steep advertising losses in the newspaper industry in 2008, it was predicted that the number of newspapers that exclude areas with a high percentage of African American residents from service may increase after 2008. However, this prediction is not supported by the data. Instead, the number of papers whose service areas have a disparate impact on Black residents peaked in 2002 at 119 papers (19%). Since then, the number of papers redlining African American residents has decreased to 88, or 15% of papers.

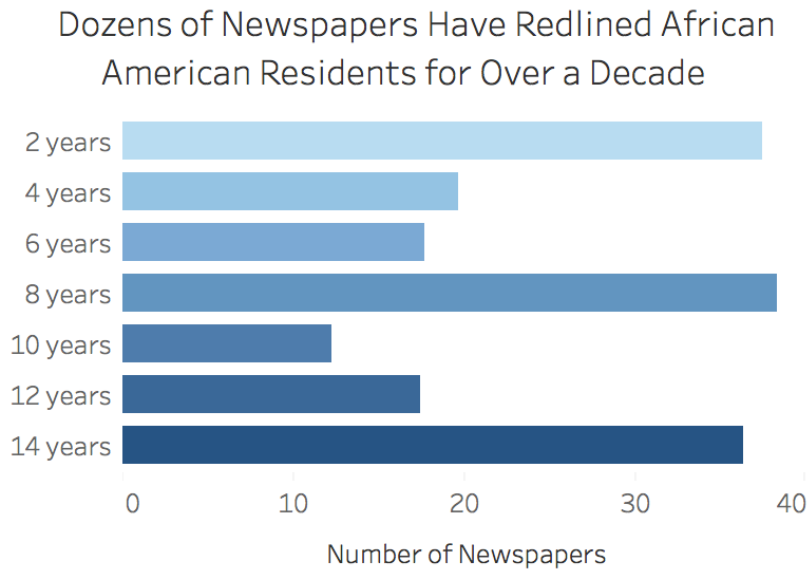
Figure 22: Redlining of African Americans from 2002 – 2014.



With the number of papers fluctuating, how have the papers themselves changed?

Notably, I estimate that 30% of newspapers, or 179 papers, appear as redlining African Americans at some point in the time periods examined. Fully 36 newspapers redlined Black residents in all 14 years examined (6%), 17 papers did so for 12 years (3%), 12 papers did so for 10 years (2%), and 38 papers did so for eight years (6%).

Figure 23: Number of Years Newspapers Redlined African Americans.



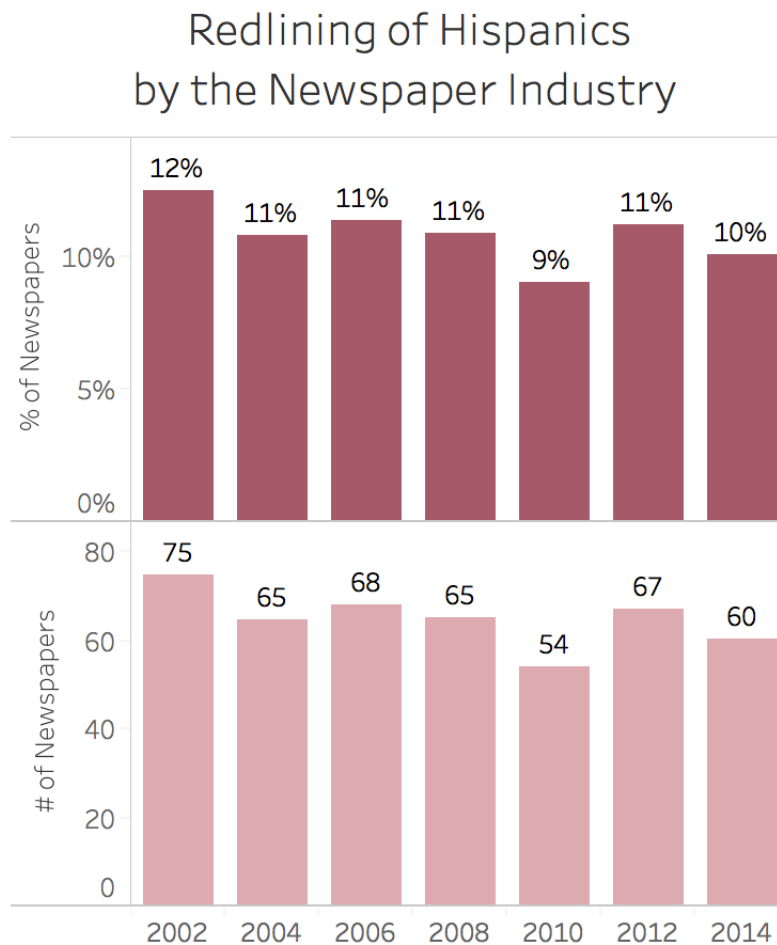
Demonstrating the importance of examining multiple years, at the other end of the spectrum, 37 papers redlined African Americans for “only” two years (6%), 20 did so for four years (3%) and 18 papers did so for 6 years (3%).

Notably, this suggests that dozens of newspapers redlined African Americans for all 14 years examined and over a dozen more did so for 12 years. As we will see in the next chapter, the best predictor for whether a newspaper will engage in redlining in 2014 is whether they were redlining in 2002. While this may seem intuitive, it suggests an institutional legacy at the newspaper that may continue to redline minority residents due to structural inertia. That is, perhaps these newspapers have excluded minority neighborhoods for so long that it is taken for granted and never revisited.

Is the Number of Newspapers Redlining Hispanic Residents Increasing?

Scrutinizing how the service areas of newspapers have impacted Hispanic residents in the past 14 years, we again see that redlining Hispanics is less common than redlining African Americans. Whereas the percentage of papers redlining Black residents ranged from 15-19%, for Hispanics, it ranges from 10-12%.

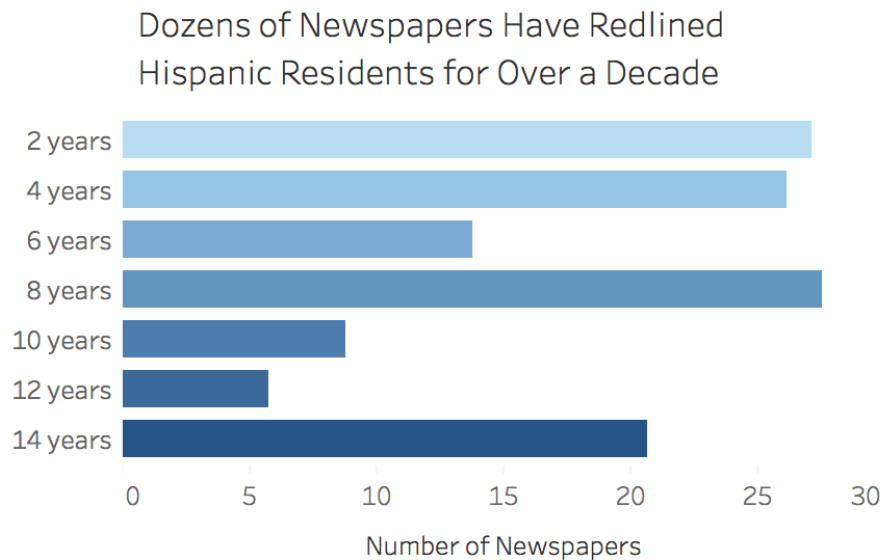
Figure 24: Redlining of Hispanics from 2002 – 2014.



The redlining of Hispanics by the newspaper industry also peaked in 2002, as it did for African Americans. Rather than staying relatively flat since 2008, however, for Hispanics, the number of papers engaging in redlining increased from 54 to 67 in 2012 before falling to 60 papers in 2014. Unfortunately, it is unclear what caused this anomaly.

Given that the overall numbers are more volatile compared to African Americans, it is not surprising that the number of papers redlining Hispanics in multiple years is also less constant. I estimate that 130 papers redlined Hispanic residents at some point during the 14 years examined, or 22% newspapers. The most common durations for redlining were 8 years (28 papers, or 5% of the overall sample), 2 years (27 papers or 5%) and 4 years (26 papers or 4%). Fully 54 newspapers redlined African Americans for 12-14 years compared to “only” 26 papers that redlined Hispanics. Arguably, this pattern suggests that redlining Hispanics is rarer than redlining African Americans and that papers who engage in redlining Hispanics are less likely to have internalized the practice.

Figure 25: Number of Years Newspapers Redlined Hispanic Residents.



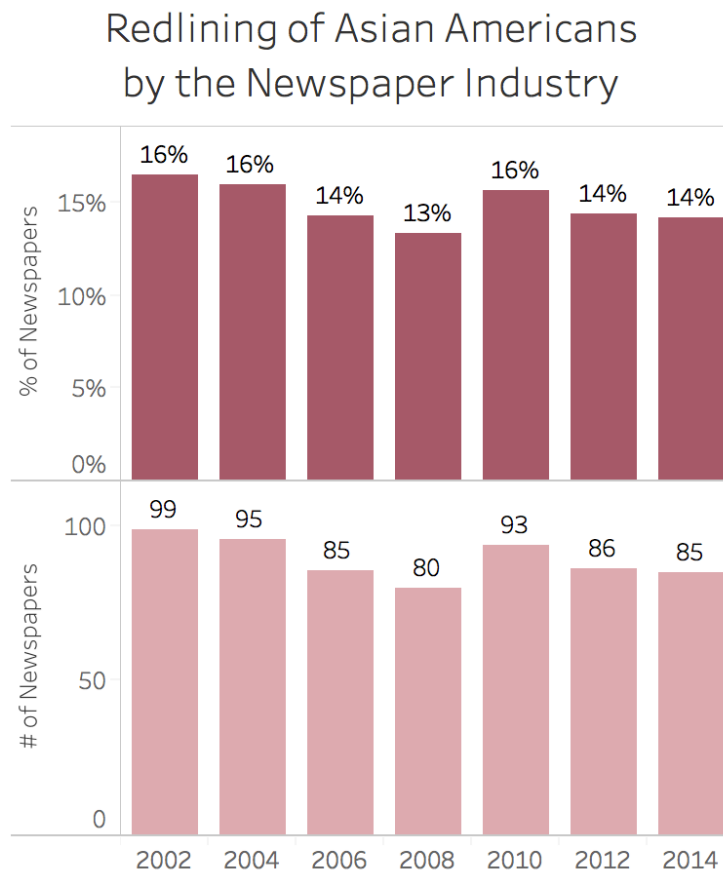
In summary, these results suggest that redlining of Hispanics was less common than African Americans and less constant. For both groups, redlining peaked in 2002 and has not increased significantly since advertising rates declined drastically in 2008.

Is the Number of Newspapers Redlining Asian Residents Increasing?

Scrutinizing how the service boundaries of newspapers impact Asian residents, we find that that redlining of Asians is about as common as African Americans. For Asians, the percentage of papers engaging in redlining between 2002 – 2015 ranges from 14-16%, which is similar to the range for African Americans (15-19%). As with redlining Black and Hispanic residents, the number of papers redlining Asian residents peaked in 2002, with 99 papers doing so (or 16%). As with Hispanics, the lowest number of papers redlining occurred in 2008 (80 papers or 13%). Since then, the number of papers

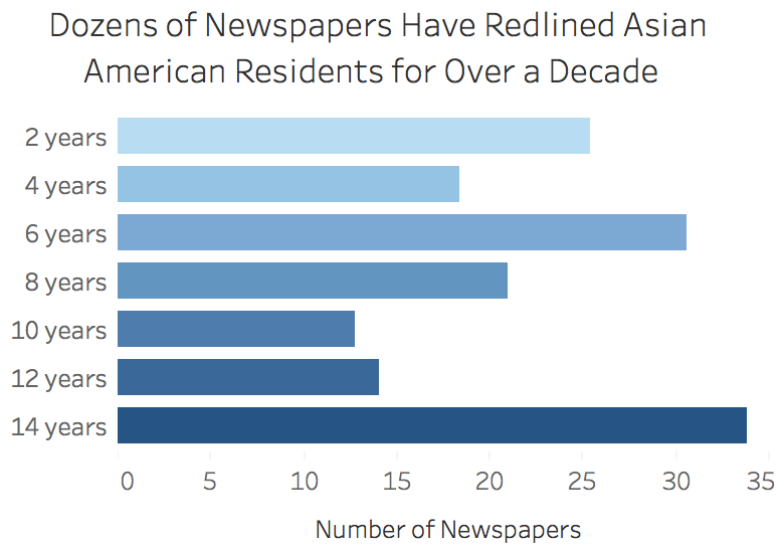
engaging in redlining has stayed relatively flat. Again, the number of papers redlining Asian residents after 2008 did not increase significantly.

Figure 26: Redlining of Asian Americans from 2002 – 2014.



Looking at the duration for redlining Asian residents, we again see a similar pattern to how papers redlined African Americans. The most common duration for redlining Asian residents was 14 years, with 34 papers doing so (6% of sample). This closely resembles the 37 papers who redlined Black residents for all 14 years, suggesting that many newspapers may have an institutional legacy of redlining that is taken for granted. The next most common duration for redlining Asian residents was 6 years, with 31 papers respectively (about 5%).

Figure 27: Number of Years Newspapers Redlined Asian Americans.



These figures demonstrate that the redlining of Asian residents closely resembles the redlining of African Americans in terms of duration. Put another way, the redlining of Hispanics stands out as it does not resemble the redlining of Asian or Black residents. This may reflect that according to the 2010 Census, 4.8% of the country identifies as Asian, 12.6% identify as African American, and 16.3% identify as Hispanic. The growing size of the Hispanic population may have caused advertisers to value them more than the other two ethnic minority groups. Indeed, as many of noted, Hispanics may soon be a numerical majority in certain areas (Pollard & Mather, 2008). With Hispanics having the most purchasing power of the three minority groups (Multicultural Economy Report, 2017), they may be less likely to be redlined because advertisers value their readership more than Black or Asian residents.

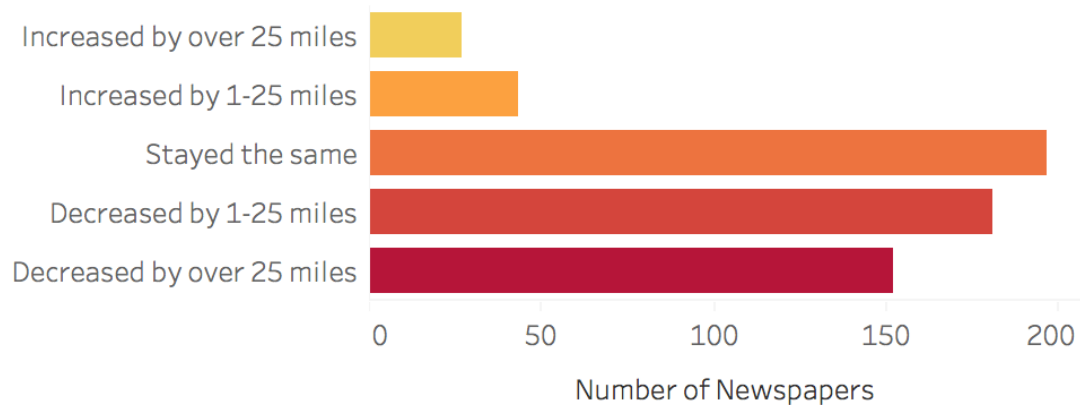
How have Circulation Boundaries Changed Over Time?

To understand why the prediction that more newspapers would engage in redlining after experiencing steep advertising losses was incorrect, it is important to review the circulation boundaries themselves. Have newspapers decreased their service areas since the Great Recession as we expected? And if so, how does it relate to redlining in the newspaper industry?

To compare a paper's service areas over time, this dissertation took the distance between the center of the zip code of the newspaper's headquarters to center of each zip code with service for each time period. The maximum distance was then recorded and compared between each time period for each paper. Comparing the service boundaries in 2002 to 2015, I find that 164 newspapers (35%) have a maximum distance that has stayed about the same - give or take 0.5 miles. However, the next most frequent change by the newspapers examined was decreasing their service areas by 1-25 miles, with 147 papers doing so (32%). Another 97 papers (21%) decreased their service boundaries by over 25 miles. Surprisingly, 40 papers (9%) increased their service boundaries by 1-25 miles and 18 papers (4%) increased their service areas by over 25 miles.

Figure 28: Changes in Newspapers' Service Boundaries Between 2002 and 2015.

Between 2002 - 2015, a majority of newspapers have decreased their service boundaries



To understand how this impacted redlining in the newspaper industry, we will place each newspaper into one of three categories:

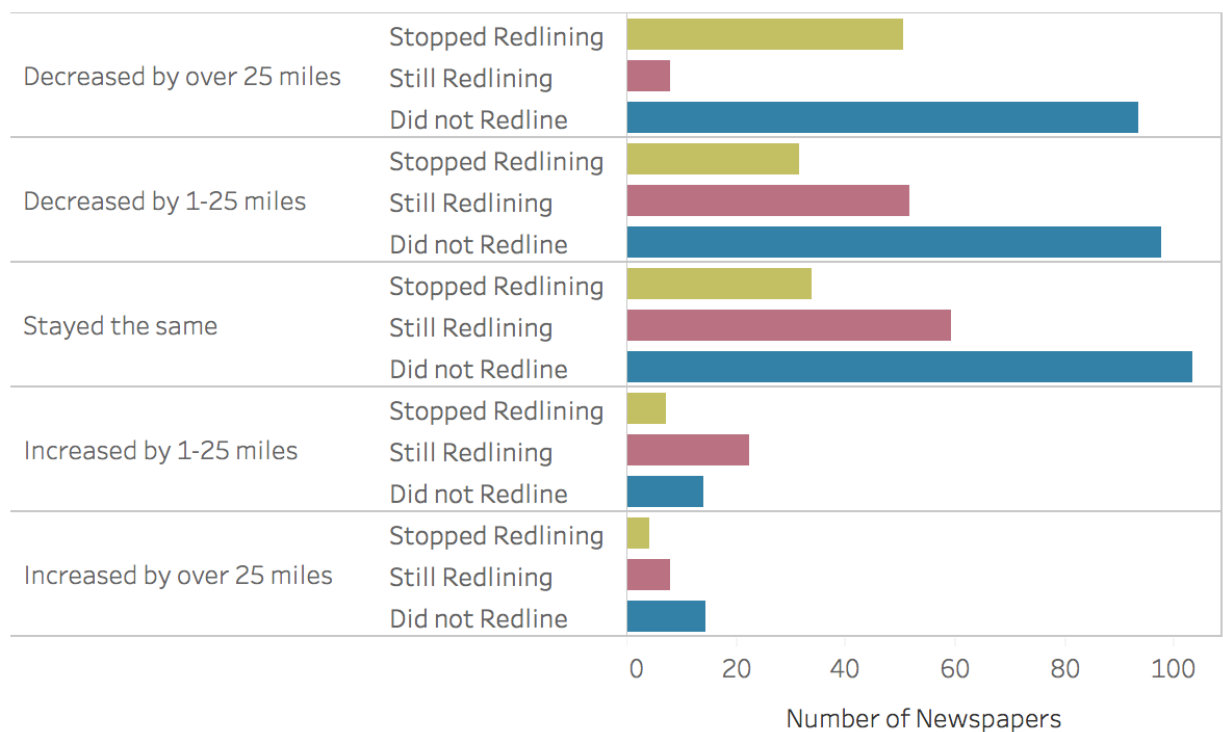
- Newspapers that previously redlined any minority group that was not still redlining in 2014/2015 (127 papers)
- Newspapers that are still redlining any minority group in the 2014/2015 time period (149 papers)
- Newspapers that did not redline any minority group in any of the time periods examined (322 papers)

Comparing how each of these groups changed their service area since 2002, a few patterns stand out. First, out of all papers, 332 papers decreased their service area (52%),

196 stayed the same (35%), and 70 increased their service area (12%). Second, for papers who stopped redlining, the most common change was decreasing their service area by more than 25 miles, as 50 papers did so. This unexpected finding likely reflects papers who stopped serving white suburban areas while excluding their adjacent zip codes. Third, the most common change for papers who are still redlining was staying the same (59 papers). This may reflect that papers who continue to redline are more likely to still be serving distant white suburban areas.

Figure 29: Service Area Changes and Redlining Summary.

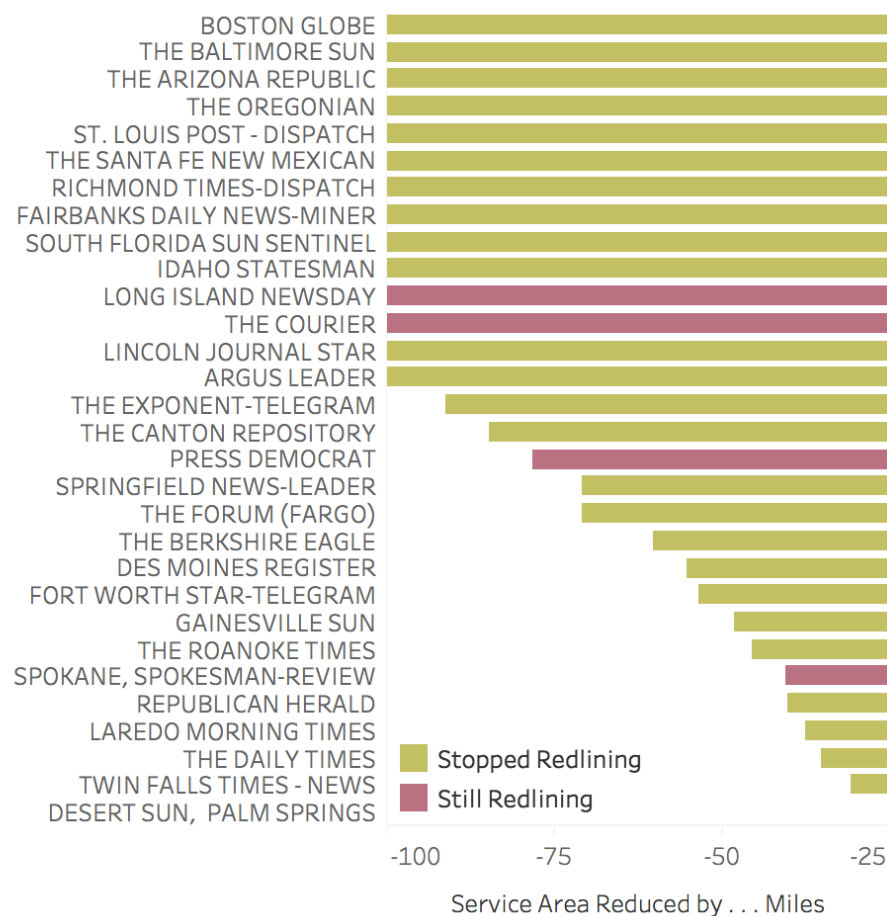
Newspapers that reduced their service area by more than 25 miles were most likely to stop engaging in redlining



Put another way, of the 58 papers that engaged in redlining at some point and decreased their service area by more than 25 miles, 50 stopped redlining (86%). These papers include prominent metro papers like the *Boston Globe*, *Baltimore Sun*, and the *Arizona Republic* as well as smaller papers like the *Canton Repository*, *The Berkshire Eagle*, and the *Laredo Morning Times*.

Figure 30: Newspapers that Reduced their Service Areas.

Newspapers that reduced their service areas by 25+ miles were more likely to stop engaging in redlining



While a majority of newspapers have decreased their service boundaries, this change may have actually led to less redlining as papers stopped serving distant suburban areas. As a result, an unexpected “benefit” of the newspaper crisis may be that some papers are less able to serve distant suburban areas while excluding their urban counterparts. Indeed, one of the ways newspapers adapted to falling advertising revenue was by cutting delivery to distant areas. Explaining how newspapers are surviving steep revenue losses, the Associated Press explained that “Some newspapers have reduced delivery to less profitable areas, figuring the cost of trucking newspapers far afield doesn't pay off in extra advertising dollars” (2008). In doing so, it appears that the unequal treatment between White residents and minority residents may have been unexpectedly lessened.

Chapter Summary

This chapter first reviewed how the value of newspaper companies plummeted in the mid 2000's as advertising revenue for the newspaper industry was decimated. Between 2000 and 2012, the newspaper industry lost over 46 billion dollars in annual revenue. To survive these losses, newspapers have cut nearly 40% of their newsroom staff in the past 11 years. While it was plausible that more newspapers would engage in redlining to survive within this economic environment, the data does not support this assertion. In fact, of the years examined, redlining seems to have peaked in 2002 (the earliest year with data available), with 33% of newspapers redlining at least one ethnic minority group. By 2008, this figure had declined to 30%. By 2014, it had fallen by 25%. While it is appalling that ¼ daily newspapers with circulations over 10,000 engage in redlining, it is important to note that redlining is actually becoming less common.

The number of papers redlining Black, Hispanic, or Asian residents has been trending downward. However, a larger number of newspapers redlined African Americans or Asian Americans for all 14 years examined than Hispanics. Put another way, a larger portion of newspapers seem to have an institutional legacy of redlining Black or Asian residents. For Hispanics, it was more common for a newspaper to “only” redline for a handful of years. This may reflect that Hispanics are the largest minority group with the most purchasing power. Consequently, newspapers may be less likely to purposefully exclude them from service as advertisers may value reaching Hispanic households.

To understand why redlining is trending downward, this dissertation analyzed how the circulation boundaries of newspapers changed between 2002 and 2014. As predicted, it was much more common for a newspaper to decrease their service area than to increase it. Interestingly, of the 58 papers that engaged in redlining at some point and decreased their service area by more than 25 miles, 50 stopped redlining (86%). I argue that this change likely reflects these newspapers eliminating delivery to distant suburbs that neighbored urban areas that were excluded from service. Given that newspapers are likely reducing delivery to such areas to survive advertising losses, an unexpected benefit of the newspaper crisis may be that newspapers are becoming more likely to serve white and non-white residents equally as they refocus their efforts towards serving the nearby area. While this may seem like reason for optimism, it is important to note that the treatment of minority residents was not improving – rather, the treatment of Whites just became less favorable. Such changes, while noteworthy, will likely do little to improve

relationships between newspapers and communities of color, which have been strained by stereotypical news coverage (Campbell, 1995; Dixon and Linz, 2000; Clawson and Trice.

Chapter 6: Predicting Newspaper Redlining

While we have established that about 25% of daily newspapers engage in redlining, and that this figure has decreased since 2002, we have not explored what factors predict whether a newspaper is more likely to engage in redlining. Certainly, we have seen wide variation in terms of circulation size and region, with greater portions of smaller newspapers and papers in the Northeast engaging in redlining. Still, it is possible that these findings simply reflect other patterns. For example, perhaps newspapers with smaller circulations are also more likely to be owned by public companies that are more likely to engage in redlining. Or, maybe newspapers in the Northeast are more likely to be based in segregated areas, and that the level of segregation is actually what causes papers in the Northeast to be more likely to redline.

To tease out these types of possibilities, this dissertation utilizes logistic regression models for data in 2002 and 2014. In each time period, we will test what variables help predict whether a newspaper will redline one of the following ethnic groups: Black residents, Hispanic residents, or Asian residents. Because our outcome variable is a binary nominal variable, with papers that engage in redlining being coded as 1 and papers who do not engage in redlining being coded as 0, logistic regression was deemed the most approach. Below, I summarize the variables that were included in the model.

Summary of Variables

- **Minority Population Percentage (Interval)** – calculated as the percentage of Black, Hispanic, or Asian populations within the newspaper’s potential service area divided by the total population in the potential service area. If the outcome variable is redlining Black residents, only the Black Percentage is included.
- **Poverty Percentage (Interval)** – calculated as the percentage of the population living below the federal poverty line within the newspaper’s potential service area divided by the total population in the potential service area.
- **Population Without Service Percentage (Interval)** – calculated as the percentage of the population without service within the newspaper’s potential service area divided by the total population in the potential service area.
- **Maximum Distance (Interval)** – the maximum distance in miles between a newspaper’s headquarters and the center point of a zip code with service
- **Region (Categorical)** – the census region of the newspaper’s headquarters. To facilitate comparison, the reference group was coded as the West region, which generally had the lowest percentage of papers that engage in redlining.
- **Circulation Size (Categorical)** – measured as the daily circulation of a newspaper in 2014. Note that in the 2002 dataset, the circulation size is based on circulation in 2014. This decision was made to avoid confounding changes in the circulation size variable between 2002 and 2014, as both the distribution of newspapers in the circulation groups has changed over time (as circulation has generally gone down across the industry) as well as changes in how circulation can be calculated (with some papers in 2014 now including digital readership in

their circulation figures). To facilitate comparison, newspapers were grouped into the following categories based on their daily circulation: 10,000 – 25,000; 25,001 – 50,000; 50,001 – 100,000; Over 100,000. Because the circulation group of over 100,000 was generally least likely to engage in redlining, it was designated as the reference group.

- **Public ownership (Categorical)** – a binary variable that measured whether the newspaper was owned by a publicly traded newspaper company
- **Segregation Summary (Categorical)** – based on the dissimilarity index for the minority group being studied. This index represents the proportion of people within a county that would need to change census tracts to ensure an equal racial composition across all census tracts within the county. Based on this figure, newspapers were grouped into the following categories: “well integrated” ($DI < 0.3$), “moderately segregated” ($0.3 < DI < 0.6$), and “highly segregated” ($DI > 0.6$). The reference category was “well integrated”. If the outcome variable is redlining Black residents, only the summary for Black-White segregation is included.
- **Redlined Previously (Categorical)** – a binary variable in the 2014 dataset that measured whether the newspaper redlined the minority group in question in 2002. If the outcome variable is redlining Black residents, only the measurement for whether the newspaper redlined Black residents in 2002 is included.

Distribution of Variables

Turning to the distribution of these variables, for census region, the distribution in

both years is identical and mirrors the newspaper industry writ large, with 32% of daily newspapers with circulation over 10,000 being based in the South, 26% being based in the Midwest, 21% being based in the West, and 20% being based in the Northeast..

Table 7: Newspapers by Census Region.

Census Region		
Region	Frequency	Percent
Midwest	157	26.2
Northeast	122	20.4
South	192	32.1
West	128	21.4
Total	599	100

For circulation groups, because the circulation was designed to be in terms of 2014 circulation, both time periods again have the same distribution. Newspapers with circulation between 10,000 and 25,000 are most common, with 64.3% of papers falling into this category. This is followed by 18.7% of newspapers who had a circulation between 25,000 and 50,000. Next, we see that 8.2% of papers have a circulation between 50,000 and 100,000, with the remaining 8.8% having a circulation greater than 100,000.

Table 8: Newspapers by Circulation Groups.

Circulation Groups		
Circulation Group	Frequency	Percent
10k - 25k	385	64.3
25k - 50k	112	18.7
50k - 100k	49	8.2
100k - 1 million	53	8.8
Total	599	100

Examining newspaper ownership, we see that in 2002 about half of the papers are owned by publicly traded newspaper companies. More specifically, 300 newspapers were owned by a publicly traded company compared to 299 papers owned by non-publicly traded companies. In the 2014 dataset, these figures are identical.

Table 9: Newspapers by Type of Owner.

Newspaper Ownership				
	2002		2014	
Type of Owner	Count	Percent	Count	Percent
Publicly Traded Company	300	50.2	300	50.2
Non-Publicly Traded Owner	299	49.8	299	49.8
Total	599	100	599	100

Because this similarity was unexpected, an additional validity check was performed. Because I could find no other study that looked at the number of dailies owned by a publicly traded newspaper company in 2002 and 2014, I used the closest available proxy, which is the number of dailies owned by the largest newspaper companies in 2004 and 2014 from the UNC Center for Innovation and Sustainability in Local Media. With the caveat that my sample is weighted so slight discrepancies are to be expected, I compared the estimates for the two largest newspaper companies in my data: Gannett Co. and Lee Enterprises.

I found that my data estimates that Gannett owned 111 daily newspapers in 2002 and 89 in 2015. According to the UNC Center, Gannett owned 95 in 2004 and 82 in 2014. While the figures are not identical, they are trending in the correct direction, as we would expect with a weighted sample. Another example is Lee Enterprises, which my

data estimates owned 44 daily newspapers in 2002 and 54 in 2015. According to the UNC Center, Lee Enterprises owned 43 in 2004 and 52 in 2014. Given that these estimates look reasonable and track well to actual counts from other researchers, fears that the ownership data is inaccurate were assuaged.

Lastly, we can analyze how the level of segregation has changed over time and between the three ethnicity groups. Examining Black-White segregation, we see in 2002, 67.6% of newspapers were located in counties that were moderately segregated. By 2014, this figure had grown to 78.5%.

Table 10: Newspapers by Black-White Segregation Summary

Black-White Segregation Summary				
	2002		2014	
Summary	Count	Percent	Count	Percent
Well Integrated	39	6.5	11	1.9
Moderately Segregated	405	67.6	470	78.5
Highly Segregated	155	25.9	118	19.6
Total	599	100	599	100

Scrutinizing Hispanic-White segregation, we see in 2002, 57.7% of newspapers were located in counties that were moderately segregated. By 2014, this figure had grown to 85%. In 2014, only 2.8% of counties were highly segregated between Hispanic and White residents in 2014, compared to 19.6% between Black and White residents.

Table 11: Newspapers by Hispanic-White Segregation Summary

Hispanic-White Segregation Summary				
	2002		2014	
Summary	Count	Percent	Count	Percent
Well Integrated	228	38.1	73	12.2
Moderately Segregated	345	57.7	509	85
Highly Segregated	25	4.2	17	2.8
Total	599	100	599	100

Studying Asian-White segregation, I show that in 2002, 72.2% of counties were moderately segregated. This figure grew to 92.3% in 2014. That being said, the percent of newspapers located in counties that were highly segregated between Whites and Asian also grew from .8% in 2002 to 6.6% in 2014. Still, this figure again pales in comparison to the percentage of newspapers located in counties with high levels of segregation between Black and White residents.

Table 12: Newspapers by Asian-White Segregation Summary

Asian-White Segregation Summary				
	2002		2014	
Summary	Count	Percent	Count	Percent
Well Integrated	162	27	6	1.1
Moderately Segregated	432	72.2	553	92.3
Highly Segregated	5	0.8	40	6.6
Total	599	100	599	100

Regression Model for 2002 Data

Using logistic regression, how well can we predict whether a newspaper will engage in redlining in 2002? For the redlining of African American residents, the model explains about 30% of the variance observed, for Hispanics, it only explains about 16% of the variance, and for the redlining of Asian American residents, it explains about 34% of the variance. For all three groups, the percentage of the population without service was a significant predictor with a similar odds ratio. For every 1% increase in the percentage of people without service, there is about an 11% increase in the odds of redlining Black, Hispanic, or Asian residents when holding all other variables constant. For both the redlining of Black residents and the redlining of Asian residents, region was a significant predictor. Compared to newspapers in the South, the odds of newspapers in the Midwest redlining African Americans were about 5.3x greater and the odds of newspapers in the Midwest redlining Asian Americans were about 2.4x greater.

Outside of this similarity, there are key differences in what factors help predict the redlining of each ethnicity group. For the redlining of Hispanics, there was no other significant predictors. Only for the redlining of Black residents was the percentage of people living below the poverty level a significant predictor, with a 1% increase in poverty leading to an 11% increase in the odds of a newspaper redlining Black residents. Compared to papers in the South, the odds of a newspaper in the West redlining African Americans were about 14.8x greater. The minority population percentage was only significant for Asians, with every 1% increase in the Asian population leading to a 12% increase in the odds of redlining Asian Americans. Circulation was only significant for predicting the redlining of Asian Americans. When holding all other variables constant,

compared to newspapers with circulations over 100,000, the odds of a newspaper with a circulation between 10,000 to 25,000 redlining Asian Americans were 44x greater; the odds of a newspaper with a circulation between 25,000 to 50,000 were 112x greater; and the odds of a newspaper with a circulation between 50,000 to 100,000 were 84x greater.

There were two surprising findings that were only significant at the .05 level. The odds of a newspaper redlining African Americans was slightly lowered when comparing a newspaper in a well-integrated county to one that was only moderately integrated in terms of residential segregation between Blacks and Whites. And the model suggests that when holding all variables constant, newspapers owned by a publicly traded company are less likely to redline Asian Americans. Because this research is exploratory, it is possible that these findings are noteworthy. However, because they are only significant at the .05 level, we will compare them to the 2014 regression model to see if the findings illustrate a possible pattern. If not, the findings may not be reliable

Table 13: Logistic Regression Results for 2002 Data

2002			
	Redlining Black***	Redlining Hispanic***	Redlining Asian***
	Nagelkerke R2 = 0.300	Nagelkerke R2 = 0.164	Nagelkerke R2 = 0.340
	Exp(B)	Exp(B)	Exp(B)
% Without Service	1.103***	1.09***	1.107***
% Below Poverty Level	1.131***		
Minority Population %			1.208*
South: Midwest	5.349***		2.466*
South : West	14.816***		
South : Northeast			
Over 100k : 10k - 25k			44.864*
Over 100k : 25k - 50k			112.377**
Over 100k : 50k - 100k			84.304**
Owned by Public Company			0.545*
Maximum Distance			1.002***
Well Integrated : Moderately Integrated	0.982*		
Well Integrated : Highly Segregated			
* significant at the .05 level; ** significant at the .01 level; *** significant at the .001 level			

Regression Model for 2014 Data

How well can we predict whether a newspaper will engage in redlining in 2014?

Here, it is important to note that the 2014 model benefits by incorporating data on redlining in the past. Specifically, an additional variable indicates whether a given newspaper engaged in redlining in 2002. The 2014 logistic regression models explain about 50% of the variance observed for the redlining of African Americans, 33% for the redlining of Hispanics, and 49% for the redlining of Asian residents.

Here, we again see that the percentage of the population living in a paper's potential service area that is not being served is a significant predictor for all three groups. Similar to 2002, for every 1% increase in the percentage of people without service, there is about an 11% increase in the odds of redlining Black, Hispanic, or Asian residents when holding all other variables constant. This likely reflects that the percentage of people excluded from service (regardless of race), increases as newspapers

selectively pick and choose what areas to serve and exclude. The only other significant predictor for the redlining of Asian Americans was whether the newspaper redlined in the past. Specifically, if a newspaper redlined Asian Americans in 2002, the odds of the paper redlining Asians in 2014 is about 11.8x greater.

Indeed, whether a newspaper redlined in the past is a strong predictor for whether they will redline in 2014. If a newspaper redlined Black residents in 2002, the odds of the paper redlining Black residents in 2014 is about 17.3x greater. Likewise, if a newspaper redlined Hispanic residents in 2002, the odds of the paper redlining Hispanic residents in 2014 is about 7.5x greater.

Residential segregation is only a significant predictor for Hispanics. Compared to papers in well integrated counties, the odds of a newspaper redlining Hispanics are 15.7x greater for papers located in a county where Hispanics are moderately integrated and 7.5x greater for papers in highly segregated areas. The percentage of people living below the poverty line was again only a significant predictor for the redlining of Black residents, with every 1% increase in the poverty percentage increasing the likelihood of a paper redlining Black residents by about 11%. Compared to papers in the South, the odds of a newspaper in the Midwest redlining Black residents were 4.3x greater; the odds of a newspaper in the West redlining Black residents were 4.5x greater; and the odds of a newspaper in the Northeast redlining Black residents was 14.3x greater. Similarly, compared to papers in the South, the odds of a newspaper in the Midwest redlining Hispanic residents were 3.25x greater and the odds of a newspaper in the Northeast redlining Hispanic residents was 5.4x greater.

Notably, the previous findings that newspapers owned by public companies may be less likely to redline Asian residents and that moderately integrated areas are less likely to redline Black residents than well integrated areas were not repeated in this model. Similarly, the 2014 model has an implication that should also be interpreted with caution: the odds of a newspaper redlining Black residents was about 2.1x greater for newspapers owned by publicly traded companies when holding all other variables constant. However, this finding was only significant at the .05 level. Given that it complements previous accusations from newspaper executives that publicly traded companies are more likely to engage in redlining, as they are arguably further removed from being invested in the well-being of the local community, it may be worthy of future research.

Table 14: Logistic Regression Results for 2014 Data

2014			
	Redlining Black***	Redlining Hispanic***	Redlining Asian***
	Nagelkerke R2 = .503	Nagelkerke R2 = .330	Nagelkerke R2 = .487
	Exp(B)	Exp(B)	Exp(B)
% Without Service	1.135***	1.086***	1.131***
% Below Poverty Level	1.119**		
Minority Population %	1.047*		
South: Midwest	4.302**	3.25*	
South : West	4.586**		
South : Northeast	14.392***	5.402**	
Over 100k : 10k - 25k			
Over 100k : 25k - 50k			
Over 100k : 50k - 100k			
Owned by Public Company	2.169*		
Maximum Distance			
Well Integrated : Moderately Integrated		15.735*	
Well Integrated : Highly Segregated		5.122*	
Redlined in 2002	17.398***	7.56***	11.892***
* significant at the .05 level; ** significant at the .01 level; *** significant at the .001 level			

Chapter Summary

Taken together, the results of these regression models offer important insight into what factors predict redlining. The percentage of people in poverty was only significant for African Americans. In other words, the percentage of people in poverty did not help predict whether a newspaper would redline Asian or Hispanic residents. This is again strong reason to doubt that the disparities between the treatment of whites and non-whites by newspapers is driven by differences in income. While circulation was a significant predictor of the likelihood that a paper would redline Asian residents in 2002, in 2014, circulation was not significant for any racial group. And even after controlling for differences in segregation, minority population percentage, circulation size, and newspaper ownership, region was often a significant predictor in both 2002 and 2014. Ultimately, these findings may raise more questions than answers - why are papers in the Midwest more likely to engage in redlining? Why is the segregation level only significant for Hispanics in 2014? Why can't we explain more of the observed variance in these models?

Given that the best predictor for whether a newspaper would redline in 2014 was whether they redlined in 2002, it is plausible that many of these questions can only be answered with more longitudinal data. It is possible that a newspaper's path towards redlining was set decades ago. With many newspapers having the same service boundaries in 2002 as 2014, despite monumental upheaval in the newspaper industry, perhaps newspapers rarely revisit decisions regarding what areas to serve. To tease out this possibility, future research is needed to explore the process by which newspapers set their service boundaries. If service boundaries are an enduring token from the past, which

betray decisions made by previous owners or executives to exclude minority areas from service, more longitudinal research is needed to untangle when those key decisions were made any why. Still, while we are not able to reliably predict whether a newspaper will engage in redlining, it is important to remember that for minority residents that are excluded from service, who may be receiving less news coverage and diminished news access, the “why” is not important. Redlining in the newspaper industry, regardless of when a newspaper decided to do it, is still being practiced by about 25% of the daily newspapers examined.

Chapter 7: Summary and Future Research

This dissertation sought to test unsubstantiated accusations that newspapers crafted service boundaries to exclude minority readers. In doing so, newspapers may experience a small decrease in circulation revenue but it is more than made up for by increased advertising rates because that the audience appears more white/more affluent. The accusations were made in newspapers like the *Washington Post* (Overholser, 1996), trade articles like the *Columbia Journalism Review* (Cranberg, 1997), and academic articles (Picard and Brody, 1997). Possibly because they accusations were mostly based on second-hand accounts or anonymous statements, accusations of redlining were never empirically tested.

In Chapter 2, I grounded these accusations in previous research on advertising and print media. I first reviewed literature demonstrating that minority audiences are

correlated with lower advertising rates (Webster and Phalen, 1997; Ofori, 1999; Napoli, 2002). I connected this body of literature to research suggesting that decreasing circulation allows newspapers to present advertisers a concentrated target audience (Thompson, 1989). Similarly, research has found that magazines with more affluent audiences command higher advertising rates (Koschat and Putsis, 2000; Koschat and Putsis, 2002; Depken 2004). Most notably, Chandra (2009) found that the less diverse a newspaper's audience is, the higher their advertising rates were. Likewise, he found that newspapers serving less distant zip codes also tended to demand higher advertising rates. He speculated that this reflects advertisers valuing predictable readership that lacked demographic or geographic diversity, which was confirmed by a subsequent study that showed outlets with more homogenous audiences are able to charge more for advertising (Chandra & Kaiser, 2014). These studies suggest that newspapers have a strong market incentive to try and limit how diverse their readers are, to narrow the geographic areas they serve, and to maximize the number of affluent readers. Rather than seeming conspiratorial, these bodies of research make allegations of redlining seem much less nefarious and more symptomatic of a broken economic system.

In Chapter 3, I proposed a methodology for testing for redlining in the newspaper industry. I critiqued the most common definition of retail redlining by pointing out that it would not apply to redlining in the 1920's because it excuses unequal racial treatment if it can be justified by economic incentives. Because even critics of redlining in the newspaper industry have acknowledged that redlining may make economic sense, this definition was not suitable for the newspaper industry. Therefore, this dissertation proposed a new definition and standard, based on the legal theory of disparate impact,

which states that businesses that serve minority consumers at less than 4/5 the rate of white consumers are engaging in discriminatory practices, regardless of intention.

To facilitate comparison between the residents that a newspaper does and does not serve, this dissertation created the concept of a potential service area, which is the areas that a newspaper serves plus the adjacent zip codes without service. This allows researchers to compare the demographics of areas with service to those without service. Notably, this concept is as lenient as possible – it includes areas with only a newspaper stand as being served and it is the narrowest definition of what other areas a newspaper could serve.

In Chapter 4, I applied these new concepts to test for redlining in a sample of 328 daily newspapers with circulations over 10,000 that were weighted by geographic region and circulation size to resemble 599 newspapers. This dissertation offers the first empirical evidence that redlining in the newspaper industry occurs. I showed that nearly 1/4 papers have a disparate impact on Black, Hispanic, or Asian residents. I found that 88 papers (15%) redline African Americans, and that for 82 of these papers, a person living in poverty is more likely to live in an area with service than a Black resident. Analyzing how circulation boundaries impact Hispanic residents, I demonstrated that the service areas of 60 newspapers (10%) are significantly less likely to serve Hispanics than Whites. For 53 of the 60 papers, a person living in poverty is more likely to live in an area with service than a Hispanic resident. I also found that 85 papers (14%) redline Asians residents. For 83 of the 85 papers, a person living in poverty is more likely to live in an area with service than an Asian resident. These figures offer strong support for accusations of redlining in the newspaper industry and give reason to doubt that the

differences are attributable to differences in income. For all three ethnicity groups, newspapers in the Northeast and Midwest were most likely to engage in redlining. Newspapers with lower circulation figures were also consistently more likely to engage in redlining for each ethnicity group.

In Chapter 5, I then analyzed how redlining in the newspaper industry has changed in the past 15 years. Notably, while it was predicted that redlining may increase after steep advertising losses in the newspaper industry, this was not the case. I found that redlining is trending down for all three ethnicity groups. In 2002, I show that 33% of newspapers were redlining at least one ethnic minority group. By 2008, this figure declined to 30 and by 2014, it had fallen by 25%. One possible explanation for how newspapers have stopped redlining was found by comparing each newspaper's 2002 service boundaries to its 2014 counterpart. This analysis showed that while newspapers are indeed decreasing their service areas, it may have actually decreased the unequal treatment between whites and non-whites as papers are less likely to serve distant suburban areas while excluding their urban counterparts. Indeed, of the 58 papers who engaged in redlining and decreased their service area by more than 25 miles, 50 (86%) stopped redlining. Given that newspapers are likely reducing delivery to such areas to survive advertising losses, an unexpected benefit of the newspaper crisis may be that newspapers are beginning to serve white and non-white residents more equally. While this may seem like reason for optimism, it is important to note that the treatment of minority residents did not improve – rather, the treatment of Whites simply became less favorable.

In Chapter 6, I showed that the best predictors for whether a newspaper engaged in redlining in 2002 were generally region and circulation size. In both 2002 and 2014, the percentage of people in poverty was only significant for Black residents. This is reason to doubt that differences in poverty rate help explain why newspapers redline minority groups. And in 2014, the best predictor for whether a newspaper engaged in redlining was whether they redlined in 2002. While this finding may seem intuitive, it has important implications as it may betray that many papers have an institutional legacy of redlining that they are unlikely to deviate from. That is, newspapers may rarely revisit setting their service boundaries, which would complement findings from chapter 5 that showed that many newspapers have not changed their service boundaries in the past 14 years and that many papers have redlined Black and Asian residents for all 14 years examined. As a result, more longitudinal data is needed to tease out when newspapers began engaging in redlining as well as qualitative insight into how newspapers set their service boundaries today.

Interpretation of these results should be interpreted with certain limitations in mind. Most prominently, information about the zip codes that a newspaper serves is based on data collected by the Alliance of Audited Media (AAM). AAM collected the data from individual newspapers who self-reported what zip codes they served. If a newspaper did not report their readership information correctly, or AAM did not archive it correctly, it is possible that a newspaper that this dissertation has coded as being excluded from service actually receives service from the newspaper. That being said, given AAM's prominence in the industry as the main mediator between advertisers and

newspapers, such errors are unlikely to significantly alter the results described in this dissertation.

Similarly, information about newspaper ownership and the population of newspapers was drawn from Editor & Publisher. This source has been utilized by other media researchers, including the Pew Research Center and the UNC Center for Innovation and Sustainability in Local Media. Still, it is possible that this source contains inaccuracies. Such inaccuracies are unlikely to significantly alter the findings of this dissertation.

Lastly, reasonable minds may differ on whether the definitions of key concepts are most appropriate. I have endeavored to clearly describe the other definitions that were considered and why they were ultimately not chosen. Still, as with any research developing new concepts, it is important to interpret the results as an extension of the defined measurements. If, for example, a critic believes that a selection rate for minority residents that is below 4/5s of white residents is not objectionable, the figures in this dissertation are not persuasive. That being said, the concepts proposed here were chosen to reflect real-world considerations. In the case of the 4/5 Rule, it was chosen because the Department of Justice has recently used it to pursue redlining in the lending industry.

In total, this dissertation advances our understanding of how the interests of advertisers are overpowering the needs of local communities. This continues a rich branch of political economy research demonstrating that the economic system underlying mass media in the United States often incentivizes news outlets to cater to the needs of advertisers. I show that the service boundaries of newspapers are a worthy topic of research, as they betray what communities the paper does – or does not – value. Indeed,

this dissertation offers evidence of newspapers choosing advertising dollars over serving communities of color the same as white communities. Rather than afflicting the comfortable and comforting the afflicted, I show that about 25% of newspapers comforts the comfortable while afflicting the afflicted by catering to white areas and excluding non-white areas. In doing so, existing inequalities become further ingrained into the newspaper industry.

Racial inequalities, it is important to note, are also found in terms of digital access. According to the Pew Research Center, in 2018 72% of White adults in the U.S. had broadband subscriptions at home compared to 57% of Black adults and 47% of Hispanics (“Internet/Broadband Fact Sheet”, 2018). Instead, Black and Hispanic adults are more likely to rely on their cell phone for digital access. Only 14% of White adults are “smartphone-only” internet users, which is defined as owning a smartphone, but not subscribing to a home broadband service, compared to 24% of Black adults and 35% of Hispanic adults (ibid). While it may be tempting to conflate smartphone internet access with broadband access, there are important differences. Consider how difficult it would be for a child to write a midterm paper on a cell phone or for an adult to create a resume on a cell phone. Additionally, smart phone data plans typically have data caps that limit how much the consumer is able to browse the internet. This has important consequences for news literacy, as danah boyd observed differences in how teens accessed information online. “Students from more privileged households with a computer and Internet access at home would sit there and surf, and they would do one query and then another and simultaneously...Lower-income students were always using their phone for looking things up. It’s not the best environment for comparing different sources. You can’t have

multiple pages up at the same time. So I watched low-income youths take whatever they got first. It was very practical. They didn't have the time, resources, or bandwidth to go through results one by one" (Adler, 2014, n.p.). In other words, in the digital age, inequalities in terms of news access remain prevalent. The areas and people of color that newspapers are purposefully excluding from service are also less likely to have broadband access at home and less likely to compare different news sources.

The institutional legacy of newspapers purposefully excluding minority readers begs important questions - does redlining help explain why newspapers have ignored calls for less stereotypical news coverage of communities of color (Dixon & Linz, 2000)? Does it help explain why many newspapers have ignored the fact that minority news consumers may be consuming more local news than white residents (Edmonds, 2015)? If newspapers have become desensitized to excluding minority areas from service, is it limiting their ability to grow their audience in the contemporary media environment? How does the warped incentive to exclude minority audiences from readership shape local knowledge and social relationships in a community?

This dissertation hopes to spur more research to help answer these questions. Future research may wish to consider whether the service boundaries of a newspaper are influenced by where it prints and ships its newspapers, the service boundaries of nearby newspapers, and the demographics of the newspaper's staff. Qualitative research exploring the process by which newspapers set their service boundaries would enhance our understanding of how redlining in the newspaper industry unfolds. Additionally, given this dissertation's findings that smaller newspapers are more likely to exclude

people of color from service, more research is needed to explore whether newspapers with circulations below 10,000 are more likely to engage in redlining.

Exploring the consequences of redlining unfortunately fell outside of the breadth of this dissertation. Arguably, the logical extension of redlining in the newspaper industry would be reduced coverage of the area that was systematically excluded. If newspaper executives are choosing to have zero subscribers in a minority area, why would they devote resources to covering it? When a newspaper chooses to stop delivering to a local area, the economic incentive to cover that area to gain subscribers is removed entirely. Maxwell E.P. King, former editor of the *Philadelphia Inquirer*, candidly spoke about this trend at the *Inquirer* and other metro newspapers. King stated, “the city neighborhoods and the poorer sections of our region are getting coverage that is not even close to the suburban...coverage. The economic pressures inexorably push the newspaper towards more detailed coverage of sectors with the sort of demographics that support the effort” (Cranberg, Bezanson & Soloski, 2001, p. 91). Thus, the demographics of a community and their potential value to advertisers influenced whether the paper was willing to devote resources towards covering that area.

Of course, executives were not the only people who witnessed redlining occur. Journalists did too. Joel Thurtell, who worked as a journalist with the *Detroit Free Press* from 1989 to 2006, details witnessing redlining at the *Free Press* in a series of blog posts. Thurtell describes institutional policies that journalists were told to abide by and vividly connects redlining to changes in coverage. First, he describes an editor refusing to run stories about areas that had fewer potential advertisers

In the late 1990s, I was instructed by a Free Press editor not to look for stories in the city of Pontiac, because its residents were poor and its businesses didn't buy ads in the Free Press. Look for stories in the "money belt" — the wealthy communities like Bloomfield Hills, the editor told me. More recently, I was not to look for stories in Southwest Detroit, which includes Mexicantown and the very poor community of Delray. I also could not write about River Rouge, Ecorse, Melvindale, and even Dearborn, Garden City, Westland and Inkster were off limits (Thurtell, 2008a, n.p.).

Then in a separate article, he summarizes the target audience of the paper and notes the connection between coverage and circulation.

As I pondered Detroit Free Press coverage of Kwamegate [a scandal related to Mayor Kwame Kilpatrick], I realized that the newspaper was talking to the largely white suburbs, and not to Detroit, which is largely black. How do I know this? As a staff writer for the Free Press until last November, I know from my reporter's marching orders that the Free Press simply doesn't circulate in large areas of Detroit (Thurtell, 2008b, n.p.).

Most vividly, Thurdell describes a "star" system where communities were ranked by their demographics. In two separate posts he describes his own recollection and then a transcript of another reporter's recollection:

I remember sitting through a meeting a few years ago with a top Free Press editor who'd made sticky-note labels marked "platinum," "gold," etc. She stuck them on a map to let us know the hierarchy of editors' desire for news. Communities like Pontiac were on the blacklist, while towns like Bloomfield Hills and Bloomfield Township were "platinum" communities (Thurtell, 2008b, n.p.).

As we discussed [the former reporter and Thurdell], the Free Press and News came up with a coverage game-plan more than five years ago to allegedly maximize their reporting resources. Basically, each community was ranked in order of importance based on their circulation numbers. The greater the circulation, the greater the emphasis on coverage. The ranking was put in writing for nearly every suburban community (I think it was a star system but not sure) (Thurtell, 2008c, n.p.).

These concrete descriptions from a former reporter at a major newspaper suggest that newspapers continue to prioritize suburban white readers over urban minorities. Far from subtle guidance, Thurdell describes the newspaper as creating institutional policies to ensure that reporters do not cover areas with the demographics that advertisers do not value or areas where the newspaper does not deliver to. Such testimony from King and Thurdell suggest that while previous studies have not studied the connection between changes in circulation boundaries and its impact on news coverage, it is plausible that a relationship exists.

If a newspaper redlines a minority neighborhood, does it also provide less news coverage of that area and the topics that are important to that community? While this

question may seem outlandish, it is important to remember that for 20 years, newspaper executives anonymously talked about witnessing redlining at their newspaper. These accusations were, for the most part, ignored in the academic community – possibly because they sounded outlandish. As this dissertation has endeavored to point out, redlining in the newspaper industry is something that can be measured, tested, and quantified. With nearly 1/4 papers engaging in redlining, hopefully this dissertation helps spur interest into understanding the process and consequences of newspapers using race to determine which communities are – or are not – worth serving.

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