



DARTMOUTH UNDERGRADUATE  
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OF POLITICS, ECONOMICS AND WORLD  
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## **LETTER FROM THE EDITOR**

Throughout this past year, undergraduate students overcame obstacles that upended any sense of educational normalcy. Many students returned to their college campuses for the first time in a year and a half, continued to navigate the COVID-19 pandemic, and experience hybrid forms of learning inside and outside of the classroom. Despite the challenges presented to every student, undergraduates across the country and the world carried on and made the most of an atypical school year.

The staff of DUJPEW has been incredibly grateful to read the wonderful submissions that we received this year and collaborate with our peers in the undergraduate community. This year's selection process was as difficult as our past editions thanks to the intellectually engaging submissions that we received from across the country. Like the submissions that we received, the nine papers that we present in this edition of DUJPEW cover a variety of topics, including American presidential elections, Canadian immigration, and juror selection bias. Dartmouth College Class of 1819 alumnus Rufus Choate once said, "Happy is he who has laid up in his youth, and held fast in all fortune, a genuine and passionate love of reading." I and the rest of the staff at DUJPEW are hopeful that the works in this issue of the journal stimulate the mind and further intellectual curiosity.

I would like to thank the entire DUJPEW staff for their great work this year. Although we had a smaller team than in past years, the selection and editing processes went smoothly, and the enthusiasm that each staff member brought allowed this year's issue to be as strong as ever. I must also thank Jacob Meister and Mason Wegener for bringing me into the DUJPEW community during my freshman year — it has been an honor helping the journal persevere through the complications presented due to the pandemic. I would also like to express thanks to Noah Freundlich and Jonathan Briffault, who helped keep the journal alive and were great to work with last year.

In closing, I would like to thank the nine authors who contributed the fabulous pieces of writing that make up this year's publication. Each of these works adds something new and fascinating to their disciplines, and we are proud to be able to provide a platform to share these pieces to a wide audience. I hope that all readers of this year's journal will be able to appreciate the time and effort that has gone into creating this year's publication, and that endeavor begins with our nine authors' commitment to their crafts.

Addison Dick '22, Editor-in-Chief  
*Dartmouth Undergraduate Journal of Politics, Economics and World Affairs*

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## **The Religious Seculars: How Does Yom Kippur Impact Electoral Turnout?**

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**ABSTRACT:** Does Yom Kippur impact electoral turnout in religious and secular Jewish communities in Israel? By collecting data on electoral behavior in elections to local councils from 1983 to 2018 in Jewish-secular, Jewish-religious and non-Jewish municipalities, this research attempts to elucidate the relationship between the communal Yom Kippur experience and electoral turnout. This research finds that the Yom Kippur experience appears to decrease turnout in secular municipalities, while no statistically significant impact was observed in religious municipalities. Research on the psychological significance of novelty and religious events, as well as ethnographic analysis of Israel, suggests that the Yom Kippur experience undermines the stakes of both intra- and inter-communal disputes, decreasing the perceived significance of the elections in the heterogeneous secular municipalities. Further research is necessary to explore the politically potent religious undertones of Israeli secular identity.

### **Introduction**

As election campaigning approaches the ballot date, politicians encourage citizens to pilgrimage to the polls and exercise their “civic” right to vote. They emphasize that electoral participation is paramount to the maintenance of accountable government, and that democracy demands the participation of the citizenry in the political process. Yet despite the rhetoric, citizens in the developed world seem increasingly less inclined to vote. Mirroring this worrying pattern, turnouts have substantially decreased in Israel over the years, in both national and municipal elections. Consistent turnout decline, however, does not fully encompass the puzzle the Israeli voter poses to researchers; electoral participation in Israel has been the most volatile out of all OECD countries between 1996 and 2015.<sup>1</sup> Furthermore, Israeli attitudes towards secularization defy trends in the developed world. Judaism remains inseparable from the Israeli experience, and most Israelis refuse both modern secularism and religious orthodoxy. As the Israeli identity crisis festers, questions surrounding religion’s role in the public sphere are increasingly salient on party platforms. Meanwhile, social rifts in Israel have widened due to right-wing populism and the occupation of Palestine, rendering electoral participation more important than ever.

Considering both the significance of electoral turnout to a vibrant democracy and Judaism to Israelis, this research aims to contribute to the literature on elections in Israel. Specifically, this research strives to delineate the impact of Yom Kippur on electoral turnout among religious and secular communities. Literature on the impact of religious events on electoral turnout is lacking, and existing scholarship is ambivalent about the impact of Yom Kippur on political participation. On one hand, research finds that individuals exposed to religious messages are more politically assertive and willing to participate. On the other hand, other scholars find that religious

experiences bolster political attitudes that potentially reduce the importance of elections. By analyzing elections in religious and secular municipalities in Israel from 1983 to 2018, I find that Yom Kippur diminishes electoral turnout in secular municipalities but has no statistically significant impact in religious municipalities.

## Literature Review

The fact that citizens participate in elections itself is the underlying enigma of election turnout research. Drawing upon Ordenshook and Riker's observation that the power of the individual to impact election results is infinitely small, Macaluso and Wanat deduce that voting cannot be comprehensively explained from a purely "utilitarian" perspective<sup>2</sup>. Scholars presented numerous explanations for why individuals vote despite their votes' insignificance to electoral outcomes. Gerber and Cutts explore the possibility that voting is driven by "habit-formation"<sup>3 4</sup>. Other scholars conjectured that voting is valued as a "civic duty" in liberal democracies<sup>5 6</sup>. Relatively recently, scholars began earnestly examining voting as an expressive act<sup>7 8</sup>. Striving to revise the paradigm, scholars such as Franklin et al. criticized the focus on the voter in explaining turnout patterns, claiming that the elections themselves, and how they are perceived are the main driver behind turnout<sup>9</sup>. The focus on the elections rather than the individual buttresses numerous theories, such as the "stakes-hypothesis", which posits that individuals decide to vote based on the perceived significance of the elections.

Yet despite the miscellaneous motivations to vote, turnout changes in every election. Among the most studied explanations for changes in electoral turnout is economic performance, yet scholars disagree about the direction of the impact. Rosenstone and Park find that poor economic performance decreases political participation, while Lau finds evidence that negative perceptions of economic performance are correlated with higher turnout rates<sup>10 11 12</sup>. Hofseter finds that higher levels of competition between parties enhances electoral<sup>13</sup>. Lending validity to the "stakes-hypothesis," Pacek finds that the perception of the importance of elections most accurately captures changes in electoral participation<sup>14</sup>. Correspondingly, Zimmer claims that social diversity within a community increases political participation as it increases competition for resources<sup>15</sup>. Geys cites research by G. Cohen indicating that homogeneity, rather than heterogeneity, increases electoral participation, yet finds evidence that provides some support for Zimmer's thesis<sup>16</sup>. Stockemer and Wittington find that election turnout also appears to be impacted by the proximity of an election to a war<sup>17</sup>.

Despite contradicting views on the motivation for and differences in turnout, religion appears to be a consistently accurate predictor of both turnout and political affiliation, as well as a reliable motivator for electoral participation. Research has found that individuals who frequent religious institutions exhibit higher election turnouts<sup>18</sup>. Macaluso and Wanat find that the more ritualistic a religion is the higher electoral participation among its members<sup>19</sup>. Scholars designed numerous explanations for the high turnout displayed by religious individuals. Brady et al. postulates that attendance in religious services facilitates the development of civic skills that are indispensable to political participation<sup>20</sup>. Luedeman suggests that voting in elections may be perceived as a religious act<sup>21</sup>. Gerber et al. asserts that political participation is often socially mandated by fellow parishioners and churches are often explicitly political, increasing voting rates among church frequenters<sup>22</sup>. Nonetheless, research on the impact of religion on electoral participation has almost exclusively focused on associational religiosity. Scholars have largely disregarded the potential role of religious ideas or personal religiosity in impacting turnout. Religious "communalism" is prevalent in Israel, especially among "Traditionalists," who are less

likely to frequent the synagogue but exhibit comparable levels of religious beliefs to Orthodox Jews<sup>23</sup>.

The focus on the “associationally religious” also overlooked singular religious experiences and their potential impact on political attitudes. The meager research on singular religious experiences indicates that they may meaningfully influence political attitudes. Clingingsmith et al. explores the impact of the Hajj on Pakistani participants, finding that Hajjis are more tolerant of other ethnic and religious groups, and endorse peace, equality and harmony<sup>24</sup>. McLendon and Riedl find that religious “self-reaffirmation” messages ameliorate propensity towards political participation among participants<sup>25</sup>. Their findings reaffirm previous inferences by Rosenstone that “a sense of personal efficacy” is likely to induce political participation<sup>26</sup>. Most salient to this research, Cohen-Zada et al. establishes that participation in the “Selichot”, a communal prayer at the synagogue during Yom Kippur, increases risk-seeking behavior as well as trust in Muslims, and decreases support for political compromise<sup>27</sup>. Psychological research elucidates that the impact of the repetition of religious activities diminishes over time. For example, Sheldon finds that individuals prefer novelty to repetition, suggesting that a motley of activities are indispensable to sustaining happiness<sup>28</sup>. Likewise, theories of decreasing marginal utility were applied to religious goods by previous scholars, such as Zaleski and Zech<sup>29</sup>. The literature appears to support the notion that a religious activity is more impactful the first time it is experienced, and utility to the individual moulders with repeated experience.

Yom Kippur is an annual religious experience that constitutes “one of the most prominent days in contemporary Israeli public culture”, transcending the secular-religious divide. Yom Kippur is arguably the most significant fast in Judaism, as individuals settle their “account with God” by fasting and expressing remorse for their sins<sup>30</sup>. Little research is devoted to the relationship between religious fasting and politics; in their historical analysis of fasting in Scotland, Stephen concludes that collective fasting was a socially unifying experience<sup>31</sup>. Correspondingly, in Israel, religious and secular Jews alike frequent the synagogue annually for the fast. Despite the prominence of secular Jewish culture in Israel, Keissar-Sugarmen finds that “a sweeping majority of Jews” in Israel abide by the fast<sup>32</sup>. While Cohen-Zada et al. earnestly explores the impact of Selichot, they fail to account for the entirety of the Yom Kippur experience. Throughout the holiday all business and transportation activities stop; As television programs cease to air, bicycles fill the streets. None of these social prohibitions are enshrined by law, yet they are followed with equal vehemence by both secular and religious citizens. At the center of Yom Kippur is the individual’s relationship to God, family, and the community. Throughout Yom Kippur, Israelis “contemplate the previous year and try to be better people”<sup>33</sup>. In the public sphere, individuals stroll the streets “meeting with people in the neighborhood” and greet passersby with the ritualistic “See you next Yom Kippur”. At home, individuals resort to spending quality time with their families; often, they fast but remain at home and do not visit the synagogue. Therefore, the Cohen-Zada account captures merely one version of Yom Kippur and fails to encompass some of the amorphous and communal aspects, as well as the personal traditions, of Yom Kippur.

Despite the absence of research directly addressing the relationship between religious experiences and turnout, the aforementioned research could be manipulated to hypothesize both an increase and a decrease in political participation following Yom Kippur. Research on electoral behavior among religious individuals seems to insinuate that after a religious experience, an individual would be more willing to participate in elections. For religious individuals, Yom Kippur might constitute a reaffirmation of their association with the synagogue and their Jewish identity, relationships that foster greater political participation. Among seculars, the rush to the synagogues

during Yom Kippur might expose individuals to the “organized-religion effect” on political attitudes, civic skills and sense of duty. Secular individuals, who intuitively are more connected with Judaism during Yom Kippur, might see value in voting as a religious act. Perhaps the Yom Kippur experience, which is associated with the community and the family, buttresses a sense of social responsibility and consequently increases the stakes of the elections. Following Yom Kippur secular individuals might frequent the synagogue more often. Therefore, there are myriad hypothetical explanations, rooted in the literature, that support the notion that Yom Kippur may enhance electoral participation.

Conversely, the research on the impact of religious experiences on political positions lends itself to the turnout-diminishing effect hypothesis. Research on both the Haj and Yom Kippur found that attitudes towards out-group members improve following the religious experience. Considering the Israeli social hodgepodge and its political cleavages, the softening of attitudes towards out-group members could potentially diminish the stakes of the elections. Among the most salient issues in every Israeli election is Judaism’s role in the public sphere. Secular-leftist parties promise to halt the “Judaization” of the public sphere and tax-benefits to Yeshivas and Orthodox Jews, while the religious right calls to protect and expand the prevalence of Judaism in Israeli society. As the debate intensifies towards election day, the perception of the elections’ stakes purportedly increases. The enhanced tolerance among all synagogue visitors in Yom Kippur, as well as the attachment of seculars to Jewish institutions during Yom Kippur, might lead both sides to be more accepting of the other’s view. Furthermore, the focus on self-reflection and improved perception of the other might placate political assertiveness between adjacent social groups. Secular and religious Jews, for example, are fluid and ill-defined categories in Israel, in contrast to the clear demarcation between Jews and Muslims. Cohen-Zada et al. finds that Yom Kippur did not fundamentally change political positions; rather, it caused participants to gravitate towards the “strongly opposed camp” and decreased the political assertiveness of the strongly in favor. They find that all Jews were more likely to reject political compromise, and as a result they were more ideologically aligned. Lastly, the Yom Kippur experience, which is associated with increased risk-acceptance, might undercut the stakes of the elections, as individuals may be more difficult to mobilize to vote for issues they would otherwise find risky not to vote on.

## **Methodology**

To understand the impact of Yom Kippur on electoral turnout in Israel, I examine Israeli municipal elections. Beginning in 1950, municipal elections took place concurrently with the national elections in Israel. Following the 1975 election reforms, municipal elections were separated from the elections to the Knesset. The reforms stipulated that the elections would be held every five years in all municipalities simultaneously and residents vote separately for the municipal council and the mayor<sup>34</sup>. Ever since, the structure of municipal structure and voting has not meaningfully changed.

There are numerous reasons why municipal election turnout is an appropriate dependent variable for the impact of Yom Kippur. Most importantly, the elections take place in relative proximity to Yom Kippur, between October and November, and thus allow us to isolate the impact of Yom Kippur on electoral attitudes. According to the 1965 Local Authorities Election Law, the elections must be held on the first Tuesday of Cheshvan on the Hebrew calendar<sup>35</sup>. Because the Hebrew Calendar varies from the Gregorian calendar, the months do not perfectly overlap, and the date of the election on the Gregorian calendar changes every year. Nevertheless, the relative distance between Yom Kippur to the municipal elections remains intact. As anticipated, both



proximity to Yom Kippur and variance within the data were salient: the furthest day from Yom Kippur was only 41 days, and the closest was 22 days. If elections were to take place months after Yom Kippur, the attitudinal impact of the Yom Kippur experience will likely diminish, and a connection between Yom Kippur and changing attitudes throughout the year will be difficult to isolate. Therefore, the relatively short distance between Yom Kippur and the elections allows us to credibly gauge the psychological impact of Yom Kippur on electoral attitudes.

Municipal elections are also particularly apt considering the literature on the importance of stakes to electoral turnout, and its potential connection to religious experiences. In a 2020 assessment of municipal elections in Israel, the Jerusalem Institute for Policy Research found that despite the *de-jure* Unitarianism of the Israeli political system, the local authorities hold “central role” in providing education, welfare, and religious services<sup>36</sup>. Municipalities, for example, regulate numerous functions pertaining to religion in the public sphere, most controversially public transportation during Saturday. Issues concerning housing permits and religious services are salient cleavages along Arab-Jewish and religious-secular lines respectively. Consequently, municipal elections, in both religious and secular municipalities, constitute relatively high-stakes elections.

To evaluate the relationship between turnout in municipal elections and Yom Kippur, I calculated the turnout in all available municipal elections between 1983 and 2018 in twelve municipalities within the internationally recognized boundaries of Israel. I analyzed Jewish religious and Jewish secular municipalities to distinguish the impact of the Yom Kippur experience on turnout in religious and secular municipalities. The non-Jewish municipalities were employed as a control group, as they are not expected to be impacted by Yom Kippur. The four secular municipalities were Tel Aviv, Herzliya, Holon and Rishon Lezion; The four religious municipalities were Bnei Brak, Beit Shemesh, Dimona and Safed; The four non-Jewish municipalities were Rahat, Sakhnin, Qalansawe, and Umm al-Fahm. The results in all religious municipalities were coded together, while results in secular municipalities were coded together. The Israeli Central Bureau of Statistics (CBS) lacks consistent and reliable data on religiosity in Israel on a municipal basis. Consequently, this research had to rely on an alternative indicator of Jewish religiosity. While numerous municipalities publish data on the percentage of youth who study at a Yeshiva, the indicator would only apply to Orthodox Jews. In 2018, “Free Israel” published a report on the level of “religious involvement” in municipalities across the country, ranking them by separation of the synagogue and the state<sup>37</sup>. Municipalities with large Jewish religious populations, of varying degrees of adherence, are presumed to score lower on religion-state separation; therefore, the metric better encompasses both the Traditionalists and Orthodox. The assumption that the level of separation between religion and state institutions reflects upon demographics complies with platforms of national religious parties, and religious calls for greater role for religious role over the private sphere. The religious municipalities were picked from the lowest strata of “religious freedom” and the secular municipalities from the highest strata. The religious or secular composition of the municipalities was also qualitatively reaffirmed. Municipalities with significant non-Jewish populations such as Haifa and Jerusalem were excluded from the analysis to isolate the Jewish religiosity, which is more indicative of participation in Yom Kippur, than religiosity in general.

Lacking data about the turnout posed an obstacle to this research. Most challenging, the municipal results record only the total number of votes, and the turnout is not officially published. To emulate turnout, I recorded the total number of votes as a fraction of the total population of the municipality. However, data on Israeli demographics indicates that religious and secular

municipalities have significant variations in age. Considering the high birth-rates in religious communities, a larger fraction of the religious population than the secular population is likely to be ineligible to vote. Therefore, we anticipate that the results will underestimate turnout in religious communities. Likewise, this research would have benefited from more data-points, but for numerous reasons, only seven elections were apt for our analysis. Considering the significance of the electoral system in determining voter turnout, data from prior to the 1975 reforms would weaken the credibility of the analysis. Additionally, the elections 1988 were excluded from the analysis because they took place in March and were considerably further from Yom Kippur than the rest of the dataset. For each election I marked the distance between the election date and the end of Yom Kippur that year in days. Because Yom Kippur and the municipal elections have fixed Hebrew dates, the distance between the events retains its proximity, but changes slightly every year. Unexpectedly, three of the coded election years had the same distance between Yom Kippur and the election date.

To ensure we isolate the impact of Yom Kippur on turnout, this research employed numerous controlling variables. As outlined in the literature review, economic performance is believed to be of utmost significance in influencing voter turnout. Therefore, if economic performance in November is substantially different from the economic performance in September, it will be difficult to isolate the “Yom Kippur effect” from the effect of the economy. Research on the relationship between economic performance and turnout claims that economic prosperity as well as exhaustion with political incompetence influence political participation. As a result, we employed both GDP and unemployment controls. The purpose of the GDP variable is to control for the level of economic prosperity, and the unemployment controls for the effectiveness of governmental economic policies. No available data was found for unemployment rates and GDP growth by month. Therefore, for every election the annual GDP growth rate and the annual unemployment rate were coded as *GDP* and *Unemployment* respectively; the data was collected from the World Bank and the CBS. Furthermore, the possibility that another event might be impacting electoral turnout must be considered. Other Jewish holidays, such as Rosh Hashana, take place prior to Yom Kippur in September. To examine whether another event might be the underlying cause for changes in electoral participation, we added another variable, *DSSI*, coded as the distance between the elections and September 1st. If Yom Kippur is not connected with an increase or decrease in electoral participation, we would expect the coefficient of the relationship to be comparable and for the relationship to be statistically significant. However, due to resource and time limitations this research is lacking in controls. For instance, the literature appears to suggest a relationship between warfare and electoral turnout. While no election in this research took place within a year after a war or a major operation began, the geographical separation of the towns and continuous warfare was not controlled for. Safed, for example, is in the north; between 1982 and 2000 Israel and Lebanon engaged in continuous warfare which claimed the lives of many Israelis and was bound to impact political attitudes. The political and psychological impacts of the war in Safed would be unparalleled in Bnei Brak, located in the center of the country. Future research, therefore, ought to control for both geographical and temporal separation from warfare.

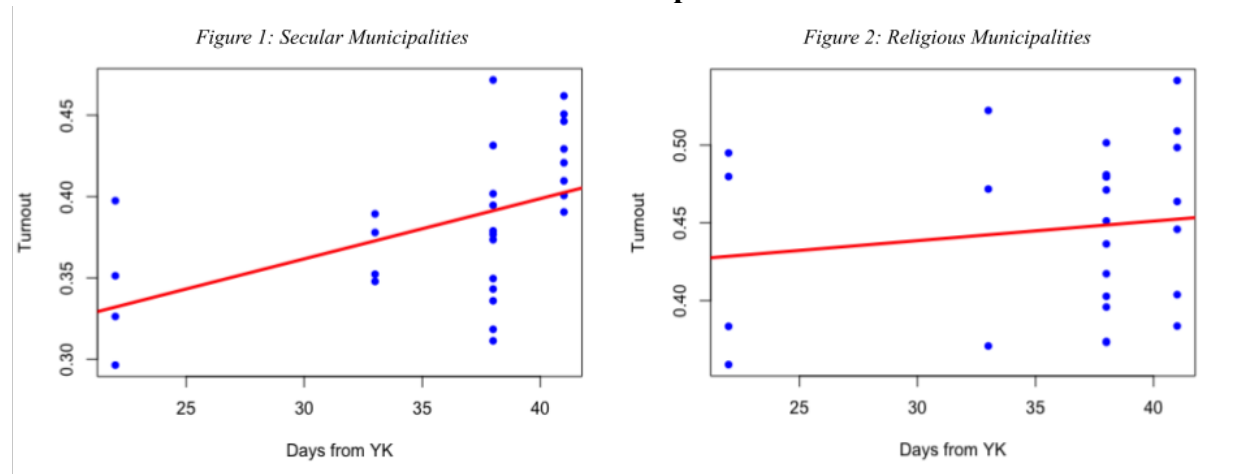
Despite the vast literature indicating that Yom Kippur is likely to impact electoral turnout, it is ambivalent on whether we ought to expect a decrease or an increase in turnout. We intuit that the impact of electoral participation will be more pronounced in secular municipalities. Considering Yom Kippur’s outsized weight to secular Jews, for whom Yom Kippur is the only holiday observed, this research infers, in line with research on hedonic activities, that its

psychological impact will be correspondingly larger. Therefore, this research posits two hypotheses:

1. Yom Kippur will *increase* electoral turnout in both the religious and secular municipalities, and the impact will be more salient in the secular municipalities
2. Yom Kippur will *decrease* electoral turnout in both the religious and secular municipalities, and the impact will be more salient in the secular municipalities

Figure 1 and Figure 2, as well as Table 1 and Table 2, show the result of the analysis in the religious and secular municipalities respectively. On the Y-axis appears the turnout in the municipal election as a fraction and the X-axis records days since Yom Kippur.

**Figure 1 and 2: Electoral Turnout by Days Since Yom Kippur in Secular and Religious Municipalities**



**Table 1: Secular Municipalities Regression**

	Estimate	Std. Error	t value	Pr(> t )
<i>Intercept</i>	0.0696803	-0.0995121	-0.700	0.49113
<i>DSYK</i>	0.0133373	0.0025878	5.154	3.63E-05 (***)
<i>UNEMPL</i>	0.0042333	0.0022313	1.897	0.07100 (.)
<i>DSSI</i>	0.0020535	0.0009583	2.143	0.04345 (*)
<i>GDP</i>	-0.0569594	0.0144183	-3.951	0.00068 (***)

**Table 2: Religious Municipalities Regression**

	Estimate	Std. Error	t value	Pr(> t )
<i>(Intercept)</i>	0.192316	0.178427	1.078	0.293
<i>DSYK</i>	0.003448	0.004427	0.779	0.445
<i>GDP</i>	-0.002174	0.023953	-0.091	0.929
<i>UNEMPL</i>	0.004571	0.003902	1.171	0.255
<i>DSSI</i>	0.001749	0.001775	0.985	0.336

**Table 3: Non-Jewish Municipalities Regression**

	Estimate	Std. Error	t value	Pr(> t )
<i>(Intercept)</i>	0.448607	0.251164	1.786	0.0893 (.)
<i>DSYK</i>	-0.005273	0.006549	-0.805	0.4301
<i>GDP</i>	0.027323	0.036352	0.752	0.4610
<i>UNEMPL</i>	-0.003792	0.006086	-0.623	0.5403
<i>DSSI</i>	0.002608	0.002459	1.061	0.3014

(Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1)

## Results

The data indicates that there is a positive correlation between the distance from Yom Kippur and electoral turnout, in both religious and secular municipalities. The coefficient of the relationship with the controls for secular municipalities stands at 0.0143383 and in religious municipalities at 0.005035. Consequently, the findings indicate that Yom Kippur decreases electoral turnout in secular municipalities 2.85 times more than in religious municipalities. The relationship between electoral turnout and Yom Kippur was found to be statistically significant in secular municipalities when controlling for annual unemployment rate, annual GDP growth and days since September 1st ( $P < 0.001$ ). Nevertheless, the relationship was *not* found to be statistically significant in religious municipalities ( $P > 0.1$ ). Likewise, no statistically significant impact was identified in non-Jewish municipalities, as hypothesized. The analysis finds that annual GDP growth is a statistically significant indicator of electoral turnout in secular municipalities, in line with previous research, but not in religious municipalities. Interestingly, there does not appear to be a strong statistically significant relationship between voter turnout and unemployment in either religious or secular municipalities. Likewise, the relationship between distance from September 1st and election turnout was found to be statistically significant, indicating that previous holidays or events in September are of significant to electoral turnout.

## Discussion

The findings reaffirm the vast literature indicating that religious individuals are more likely to vote in municipal elections. The highest coded turnout in the secular municipalities approaches 45% while the lowest turnout stands at 30%. In religious municipalities, however, the highest turnout coded approaches 60% and the lowest turnout is 40%. Despite our inability to discern the reason for higher turnout among the Jewish religious population, the findings demonstrate that Jewish religiosity complies with trends observed among Christian denominations. Yet this research acknowledges that voting patterns in religious municipalities do not incontrovertibly reflect the voting patterns of religious individuals. While very unlikely, perhaps the secular individuals in the religious municipalities vote in significantly higher numbers because of their minority status. Future research could benefit from stronger indicators of religious demographics, such as local surveys on membership in the synagogue, frequency of prayer and belief in God, which would encompass both Orthodox and Traditionalist Jews. Furthermore, the results from secular municipalities indicate a statistically significant relationship between economic performance and electoral turnout, reaffirming existing literature. Intriguingly, religious municipalities appear unfazed by changes in economic performance. Future research could delineate the separate relationship between economic performance and electoral turnout by different levels of religiosity, exploring their respective sensitivity to economic changes. Lastly,

earlier events in September, perhaps but not certainly Rosh Hashana, were found to have a slight, yet statistically significant, impact on electoral turnout in secular municipalities. Rather than weakening our analysis, the finding might reaffirm the potency of religious events in impacting electoral turnout, particularly in secular municipalities. While impossible to ignore, the coefficient of the relationship between turnout and *DSSI* is 6.5 times smaller than the relationship with Yom Kippur, indicating that any previous event in September does not comprehensively account for the decline in turnout following Yom Kippur.

The results seem to support our second hypothesis, that Yom Kippur decreases electoral participation, particularly salient in secular municipalities. For every 10 days following Yom Kippur, electoral turnout appears to increase by 3.6%. The results suggest that Yom Kippur impacts electoral participation and reduces the likelihood of individuals to vote in secular municipalities. While the results are suggestive of causal connection, there are several explanations for the decrease in voter turnout that do not entail the Yom Kippur experience. The most likely alternative explanation is that the lower voter turnout following Yom Kippur might indicate the importance of voter mobilization in motivating turnout, rather than a noticeable attitudinal change. Voter turnout increases when voters are approached to vote (Bedolla and Michelson, 2003). The proximity of the elections to Yom Kippur to the municipal elections might decrease the time and resources that are spent on voter mobilization, and consequently reduce turnout. Evidently, campaigning ceases throughout Yom Kippur. However, the mobilization hypothesis is unlikely to be applicable to this research. Most importantly, besides Yom Kippur itself, there exists no legal or social limitations on campaigning before and after Yom Kippur. Subsequently, it is safe to assume that campaigning should only cease for the duration of Yom Kippur. The 25-hour period is unlikely to constitute a significant difference in levels of mobilization, when political campaigns often last for months. Even if we were to accept that the “mobilization lost” from Yom Kippur significantly decreases voter turnout, the mobilization thesis fails to explain why the further the elections are from Yom Kippur, or the 25-hour campaign halt, the more likely an individual is to turnout. Lastly, the application mobilization hypothesis to this research will rely on the assumption that secular voter turnout is more contingent on political mobilization than religious voter turnout.

The research on the impact of single religious events on political attitudes provides another explanation for the lower turnout following Yom Kippur. Clingingsmith et al. Finds that participation in the Haj fosters greater solidarity among Muslims, as well as increases peaceful attitudes towards out-group members. Following the Haj, participants are more likely to report belief in harmony between genders, ethnicities and religions. Similarly, Cohen-Zada et al., finds that while individuals who visited the synagogue during Selichot are less likely to believe in political compromise, their view of Muslims does not worsen, and Sephardic participants even exhibit a slight increase in trust towards Muslims. Therefore, it seems that religious events, and Yom Kippur in particular, could potentially enhance congruency and trust between religious groups. Increase in trust of out-group members, such as Orthodox Jews and non-Jews in secular municipalities, might decrease the perceived importance of the elections, dissuading individuals from voting.

Secular-religious and Muslim-Jewish divides manifest themselves in numerous political cleavages that are pertinent to the municipality’s mandate. Claims of “Judaizing” in the public sphere, and particularly in schools, elicit public outcry continuously. In 2018, a research outlining public school textbook contents and alleging that there is no “Judaizing” in the education system caused vociferous debate on the role of Judaism in education<sup>38</sup>. In fact, almost a third of Israeli parents express worry of the role of Judaism in the public education system<sup>39</sup>. Likewise, issues

concerning the institution of public transportation during Saturday, the Shabbat, are subject to intensive debate, as currently, secular municipalities largely lack public transportation. In the race for municipal elections in 2018 in Tel Aviv, at the center of the challenger's agenda, Asaf Zamir, was the establishment of public transportation during Saturday, who exclaimed that "this city is secular"<sup>40</sup>. Demonstrating the significance of religious-secular divide all throughout Israel, Alternate Prime Minister Lapid's entrance to politics was marked by his lamentations that religious individuals are not obliged to serve in the military and calls for criminal sanctions against religious evaders<sup>41</sup>. Thus, if Yom Kippur assuages the secular-religious divides, by bringing secular individuals closer to their Judaism and rejuvenating tolerance of the other, the elections could be perceived as less important, and subsequently less worthy of turnout.

The data also supports the inference that the impact on secular individuals would be more salient than the impact on religious individuals. Although a religious individual is more likely to visit the synagogue for Selichot, fast and engage in earnest rumination, they are seemingly less influenced (or not at all) by the Yom Kippur effect on turnout. While ostensibly counterintuitive, there are numerous ways to understand the divergence between secular and religious municipalities. Most persuasively, the difference might lie in the novelty effect of the religious experience on secular individuals in comparison to religious individuals. Intuitively, religious individuals are more likely to engage with the synagogue and fast throughout the year. For secular Jews, however, Yom Kippur is often the only religious event that they observe. Unsurprisingly, Yom Kippur is known to be the "busiest day" of the year in synagogues<sup>42</sup>. One might intuit that recurring participation in religious events decreases the significance of each event treated separately. In other words, the psychological impact of Yom Kippur on a religious Jew, who visits the synagogue on a weekly basis and fasts six times a year, is lower than the impact on a secular Jew, whose participation in religious activities during Yom Kippur is avant-garde and unfamiliar. Another explanation might lay in the different rituals undertaken by religious and secular Jews. Throughout Yom Kippur, secular residents stroll the neighborhood and interact with their neighbors. Yom Kippur becomes not only a religious experience, but a communal one. Religious individuals, who are stricter about the prohibition on any "work", refrain from some activities that are perceived as communal, such as riding bikes with children. Perhaps, the positive impact of Yom Kippur on perceptions of out-group members does not occur exclusively within the walls of the synagogue. Political attitudes are brewing in the streets, where neighbors interact, and in the households, where parents mull over their values, actions, and relationship to God and their families. Demarcating the Yom Kippur experience to associational and communal is beyond the scope of this research. Yet the findings reaffirm the need to earnestly explore Yom Kippur as an experience of both secular and religious Jews, one that occurs in the synagogue, the street, at home and within oneself.

The explanation that positive attitudes towards out-group members diminished electoral turnout could also explain the divergence between secular and religious municipalities. Religious municipalities in Israel tend to be more homogenous than secular municipalities in Israel. For instance, according to the Israeli Bureau of Statistics, 99.9% of Bnei Brak's population is Jewish, and the vast majority of the city is Orthodox. Conversely, Rishon Lezion is 90% Jewish, and Orthodox, traditional and secular Jews reside in the. The heterogenous secular municipalities have noticeably more "out-groups" and "in-groups" than the religious municipalities. Perhaps, the findings of this research help tie the stakes-hypothesis and the contradicting findings of Geys, Zimmer and Cohen about the relationship between heterogeneity and electoral turnout. Indeed, this research finds that religious municipalities, which are less diverse, have a higher base-turnout

than secular municipalities, ostensibly rebuking the heterogeneity hypothesis. However, the significant decrease in political participation following Yom Kippur might indicate that socially homogenous communities are not equally susceptible to turnout volatility as socially heterogeneous communities, whose changing political attitudes immediately influence the stakes of elections.

### **Conclusion**

To conclude, this research strived to enrich the literature on political participation in Israel by examining the impact of Yom Kippur on electoral turnout. Previous literature presented different ways in which religiosity and religious experiences might modulate electoral turnout. By evaluating municipal elections in Israel since 1983, this research concludes that Yom Kippur reduces turnout in secular municipalities, while no significant relationship between Yom Kippur and turnout was found in religious municipalities. Ultimately, this research aimed to induce more research on the relationship between singular religious experiences and electoral turnout, particularly in Israel. As acknowledged, the methodology of the paper is flawed, and the results are primarily suggestive rather than conclusive. Hopefully, this research sheds light on numerous shortfalls in current research on religion and politics and presents meaningful amendments to future research. Future research should earnestly examine the religiosity of secular individuals, acknowledge the holistic nature of religious experiences, which are not bound by associational institutions and occur both in the public and private spheres, and invest in understanding the impact of ideas, interactions, and messages conveyed in religious settings on political attitudes and participation.

## Appendix

**Table 4: Votes and Population by Municipality, Religious Municipalities**

MUNICIPALITY	YEAR	VOTES	POP.	TURNOUT	DSYK	GDP	UNEMPL	DSS1
BNEI BRAK	2018	80299	198,863	0.4037905493	41	3.5	4	59
BNEI BRAK	2013	69463	172,485	0.402719077	38	4.2	6.2	51
BNEI BRAK	2003	53534	139,634	0.3833880001	22	1.1	13.5	57
BNEI BRAK	1993	46415	124,400	0.3731109325	38	3.4	12.7	51
BNEI BRAK	1983	40119	96150	0.4172542902	38	2.6	4.3	51
DIMONA	2018	18486	34,135	0.5415555881	41	3.5	4	59
DIMONA	2013	15961	33,188	0.480926841	38	4.2	6.2	51
DIMONA	2008	16922	32400	0.5222839506	33	3	7.7	71
DIMONA	2003	16777	33,896	0.494955157	22	1.1	13.5	57
DIMONA	1998	16696	32,800	0.5090243902	41	3.9	10.7	59
DIMONA	1993	14794	29,500	0.5014915254	38	3.8	12.7	51
DIMONA	1983	10698	27,026	0.395841042	38	2.6	4.3	51
BEIT SHEMESH	2018	45,524	118,676	0.3835990428	41	3.5	4	59
BEIT SHEMESH	2013	35,151	94,069	0.373672517	38	4.2	6.2	51
BEIT SHEMESH	2008	26,955	72,700	0.3707702889	33	3	7.7	71
BEIT SHEMESH	2003	20,468	57,046	0.3587981629	22	1.1	13.5	57
BEIT SHEMESH	1998	13,063	29,300	0.4458361775	41	3.9	10.7	59
BEIT SHEMESH	1993	8828	18,400	0.4797826087	38	3.8	12.7	51
BEIT SHEMESH	1983	5663	12,976	0.4364210851	38	2.6	4.3	51
SAFED	2018	16,562	35,715	0.4637267255	41	3.5	4	59
SAFED	2013	14,846	32,901	0.4512324853	38	4.2	6.2	51
SAFED	2008	13,963	29,600	0.471722973	33	3	7.7	71
SAFED	2003	12,853	26,790	0.4797685704	22	1.1	13.5	57
SAFED	1998	11,863	23,800	0.4984453782	41	3.9	10.7	59
SAFED	1993	10,023	20,900	0.479569378	38	3.8	12.7	51
SAFED	1983	7,342	15,583	0.4711544632	38	2.6	4.3	51



**Table 5: Votes and Population by Municipality, Secular Municipalities**

MUNICIPALITY	YEAR	VOTES	POP.	TURNOUT	DSYK	GDP	UNEMPL	DSS1
TEL AVIV	2018	203489	451,523	0.4506725017	41	3.5	4	59
TEL AVIV	2013	143656	418,590	0.3431902339	38	4.2	6.2	51
TEL AVIV	2008	142087	403,301	0.3523100612	33	3	7.7	71
TEL AVIV	2003	107724	363,387	0.2964442867	22	1.1	13.5	57
TEL AVIV	1998	146689	354,400	0.4139080135	41	3.9	10.7	59
TEL AVIV	1993	143387	348,245	0.4117417335	38	3.8	12.7	51
HERZELIA	2018	43,944	95,142	0.4618780349	41	3.5	4	59
HERZELIA	2013	27,965	89,813	0.3113691782	38	4.2	6.2	51
HERZELIA	2008	33,602	86,300	0.3893626883	33	3	7.7	71
HERZELIA	2003	33,245	83,644	0.3974582755	22	1.1	13.5	57
HERZELIA	1998	36,820	82,759	0.4449062942	41	3.9	10.7	59
HERZELIA	1993	32,283	82,759	0.3900844621	38	3.8	12.7	51
HERZELIA	1983	27,246	63,155	0.4314147732	38	2.6	4.3	51
HOLON	2018	75,874	194,273	0.3905534995	41	3.5	4	59
HOLON	2013	59,356	186,399	0.3184351847	38	4.2	6.2	51
HOLON	2008	61,329	176,300	0.3478672717	33	3	7.7	71
HOLON	2003	54,097	165,773	0.3263317911	22	1.1	13.5	57
HOLON	1998	66,733	163,082	0.4091990532	41	3.9	10.7	59
HOLON	1993	61,345	163,082	0.3761604592	38	3.8	12.7	51
HOLON	1983	50,575	133,460	0.3789524951	38	2.6	4.3	51
RISHON LEZION	2018	108058	251,719	0.4292802689	41	3.5	4	59
RISHON LEZION	2013	83085	237,639	0.3496269552	38	4.2	6.2	51
RISHON LEZION	2008	85716	226,800	0.3779365079	33	3	7.7	71
RISHON LEZION	2003	75,400	214,616	0.3513251575	22	1.1	13.5	57
RISHON LEZION	1998	71,369	163,245	0.4371895004	41	3.9	10.7	59
RISHON LEZION	1993	50,529	163,245	0.3095286226	38	3.8	12.7	51
RISHON LEZION	1983	38,988	104,387	0.3734947838	38	2.6	4.3	51

**Table 6: Votes and Population by Municipality, non-Jewish Municipalities**

MUNICIPALITY	YEAR	POP.	VOTES	TURNOUT	DSYK	DSS1	GDP	UNEMPL
RAHAT	2018	69,032	28767	0.4167197821	41	59	3.5	4
RAHAT	2013	58,690	23200	0.3952973249	38	51	4.2	6.2
RAHAT	2008	43,863	18726	0.4269201833	33	71	3	7.7
RAHAT	2003	35,760	14679	0.4104865772	22	57	1.1	13.5
RAHAT	1998	27500	11090	0.4032727273	41	59	3.9	10.7
RAHAT	1993	24700	7819	0.3165587045	38	51	3.8	12.7
SAKHNIN	2018	31,057	20071	0.6462633223	41	59	3.5	4
SAKHNIN	2013	28,136	17457	0.6204506682	38	51	4.2	6.2
SAKHNIN	2008	25,582	15140	0.5918223751	33	71	3	7.7
SAKHNIN	2003	23,224	13065	0.5625645884	22	57	1.1	13.5
SAKHNIN	1993	17,800	8755	0.4918539326	41	59	3.9	10.7
SAKHNIN	1983	12,880	5205	0.4041149068	38	51	2.6	4.3
KALANSUA	2018	22,788	10577	0.4641477971	41	59	3.5	4
KALANSUA	2013	20,645	10252	0.4965851296	38	51	4.2	6.2
KALANSUA	2008	18,302	8429	0.4605507595	33	71	3	7.7
KALANSUA	2003	15,919	8066	0.5066901187	22	57	1.1	13.5
KALANSUA	1993	11,200	5330	0.4758928571	41	59	3.9	10.7
KALANSUA	1983	7,800	3213	0.4119230769	38	51	2.6	4.3
UMELFAHEM	2018	55,182	26620	0.4824036824	41	59	3.5	4
UMELFAHEM	2013	50,597	20233	0.3998853687	38	51	4.2	6.2
UMELFAHEM	2008	44,497	20892	0.4695147988	33	71	3	7.7
UMELFAHEM	2003	39,046	16796	0.4301592993	22	57	1.1	13.5
UMELFAHEM	1998	33,200	16494	0.4968072289	41	59	3.9	10.7
UMELFAHEM	1993	28,100	13419	0.477544484	38	51	3.8	12.7
UMELFAHEM	1983	20,100	7637	0.3799502488	38	51	2.6	4.3

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## **“Pure People” and “Corrupt Elites:” Corruption Talk in the 2020 Election**

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**ABSTRACT:** The word “corruption” has two separate but interrelated meanings. The first kind of corruption refers specifically to an abuse of public office for private gain; the second is broader and indicates a disjunction between a political reality and the ideal to which that reality ought to conform. This paper explores the role of various forms of “corruption talk” in the 2020 presidential election. The first part of the paper examines the “supply side,” looking at the kinds of “corruption narratives” that politicians offered in 2020. Using natural language processing, I analyze how Joe Biden, Donald Trump, and Bernie Sanders spoke about corruption. I show that while Biden tended to speak about corruption in a manner familiar to political scientists — as an abuse of public office for private gain — Sanders and Trump used “corruption” in a completely different way, referring to it as a quality of social groups, corporate interests, “foreign” values, or even the “system” as such. I then examine the “demand side,” using data from the American National Election Survey (ANES) to demonstrate how various forms of “corruption talk” may have played a role in voting outcomes. Finally, I situate the rise of the anti-establishment appeal in the context of the neoliberal turn and propose that the most powerful tool to fight right-wing populism is a discourse that acknowledges the “corruption” of the status-quo and appeals to the principle of popular sovereignty, thereby providing a liberal and inclusive alternative to populism.

### **Introduction**

This election will decide whether we restore the rule of a corrupt political class or whether we declare that in America we are still governed. We are the people. We govern. We’re the boss. We’re the people.<sup>1</sup>

- Donald Trump, Oct 30, 2020, rally in Michigan.

What are you hiding? ... Russia’s paying you a lot. China’s paying you a lot on... all your businesses all around... the world. China’s building a new road to a new golf course you have overseas... Release your tax return or stop talking about corruption.<sup>2</sup>

- Joe Biden, Oct 22, 2020, second presidential debate.

There has been practically no civilization without some concept of corruption — the meaning of corruption, however, has changed drastically from classical and medieval times to today.<sup>3</sup> In their *Intellectual History of Political Corruption*, Bruce Buchan and Lisa Hill explore the historical trajectories of two concepts of political corruption, what they call “degenerative” corruption and “public office” corruption.<sup>4</sup> They show that from the times of the early medieval

Christian kingdoms until just a couple of centuries ago, political corruption was primarily conceptualized as a degeneration or decay of the polity, rather than (exclusively and specifically) as an abuse of public office for private gain. From Socrates corrupting the morals and reason of the youth of Athens to Aquinas excoriating “tyranny as the “corruption” of monarchy”<sup>5</sup> — “degenerative” corruption captured any kind of disjunction between real and ideal. In the broadest sense, corruption has always referred to the relationship between a “real” state of affairs and the ideal to which that “real” state ought to conform — “co-rruption” is the *rupture between the real and the ideal*.

But in contemporary times, centrist politicians and political scientists almost exclusively talk about corruption as an abuse of public office for private gain. On the other hand, “populist” and “popular” politicians like Donald Trump and Bernie Sanders invoke the “degenerative” conception of corruption quite often. Nonetheless, these two concepts of corruption are by no means mutually exclusive, and as we will see, the liberal public office conception of corruption arises from the need to formally institutionalize safeguards against “degenerative” corruption. If “corruption” reflects the relationship between political ideal and political reality, in order to examine the divergence in the use of “corruption,” we must first examine the underlying logic of “liberal” and “populist” politics.

## I. The People, Democracy, and Corruption

With the exception of a few theocracies and dictatorships, contemporary states derive their legitimacy from some conception of popular sovereignty: the idea that legitimate *kratos* (power) resides in the *demos* (citizenry). Political corruption in the contemporary context therefore involves a derogation from the ideals underlying a political system grounded in the power of “the people.” But what exactly is this entity, “the people”? If popular sovereignty means that (all) the people rule, “the people” can never be identified as an actual, empirical, unified political agent to which one can ascribe a particular action or will. This is because identifying the popular sovereign as a particular entity with particular qualities would mean excising a part of the people from the people,<sup>6</sup> thereby contradicting the principle of popular sovereignty — that (all) the people rule. For example, by identifying the will of the people with a pro-life stance, those who do not hold a pro-life stance are thereby excluded from the people. Instead, “who ‘the People’ are remains an open question, one which democracy in many ways is *about*. [emphasis mine]”<sup>7</sup>

Following this logic, the ideal of popular sovereignty is based on two conflicting ideas: 1) that there is a subject called “the people” which wields popular sovereignty, and 2) that the people can never be identified as an actual, empirical, unified agent.<sup>8</sup> If “the people” cannot be identified, we can never be certain that “the people” rules: *popular sovereignty is an ideal which by its nature can never be realized*. It contains a constitutive “corruption” — a rupture between real and ideal, which can only be papered over through various fictions.

As Edmund Morgan has convincingly shown, identifying “the people” as the basis of political legitimacy required the use of “make believe” from the very beginning: “Make believe that the people have a voice or make believe that the representatives of the people are the people.”<sup>9</sup> But populism and liberalism resolve the tension (“co-rruption”) inherent in the idea of popular sovereignty through two very different kinds of “make believe.”

The liberal interpretation of popular sovereignty transforms the rulers from individual people into abstract office holders and conceives of the state as fundamentally neutral. Populism, on the other hand, brushes off one side of the contradiction: that the people is never identified as an actual, empirical, unified agent. Populism conceives of the People-as-One and of the populist

ruler as the only true embodiment of the people, thereby making democracy mythologically “pure” again.

### a. Popular Sovereignty and Corruption in Liberal Democracy

Following Claude Lefort’s concept of democracy as a “form of society” in which “the locus of power becomes an empty place,”<sup>10</sup> we understand that democracy resolves the “constitutive corruption” of popular sovereignty through the fiction that no One rules; that the place of the sovereign is never occupied and the state serves as the terrain of conflict in which the interests of the people (plural) are debated, collated, and acted on. As long as “the people” is not imagined as an actual, empirical, unified agent (as One), it is impossible to definitively identify the *essence* and *will* of the popular sovereign: what it *is*, and what it *wants*; and, as a corollary, it is impossible to identify corruption *positively* with respect to it — as a degeneration of a moral and social order the validity of which emanates from beyond the social; “the people” is not conceived of as a unified transcendent entity: the source of social truth, morality, and power.<sup>11</sup> Instead, “the people appear only in the plural.”<sup>12</sup>

But while it is impossible to identify the people *positively* as associated with a particular social and moral order, it is possible to identify it *negatively*: the popular sovereign is not the particularistic interests of an individual or faction. In this light, corruption in liberal democracy came to be understood as *the appropriation of sovereign power for private or factional ends*. In order to keep sovereign power out of the hands of private or factional interests, democracy requires the functional separation of “private person” and “public office.”<sup>13</sup> In the words of Max Weber, “members of the administrative staff should be completely separated from ownership of the means of production or administration” and citizens and officials “insofar as they obey a person in authority, do not owe this obedience to him as an individual, but to the impersonal order.”<sup>14</sup> The boundaries that separate “public” and “private” are defined into existence and are, to an extent, arbitrary. But “rules of separation” are necessary in order to maintain the illusion of uncorrupted popular sovereignty: the illusion that officials act as agents of the people.

This codification of public and private interest means that there is a distinction between a “substantive” approach to corruption — the belief that regardless of formal rules, the conduct of an official or the content of legislation advances factional or individual interests — and a “formal” approach, which is entirely contingent on the formal terms of the official’s authorization. To illustrate this difference between formal and substantive corruption, consider the following example, which I take from Peter Bratsis’ analysis of the “Clinton Coffee Scandals” during Clinton’s campaign for a second term in office:

If the coffee is being consumed by prospective campaign contributors in a public area, say, the nonresidential areas of the White House, it can be said to constitute political corruption because the president is allowing his private interests to contaminate the purity of the public space... If coffee is being consumed and contributions are being sought in space that is designated for the president’s use as a private individual, no corruption is present. The same people, the same coffee, the same money changing hands; the only difference is in the room where it is occurring, which constitutes all the difference between corruption and noncorruption.<sup>15</sup>

Clearly, from a substantive standpoint, it is unclear why meeting in the oval office would constitute more of a subversion of public power for private ends than meeting in the private residences; but from a formal standpoint, it makes all the difference.

*A substantive allegation of corruption involves direct, popular appeals* (“the campaign finance system is corrupt because it has empowered the superrich at the expense of working people”); whereas allegations of formal corruption (“official X illegally embezzled Y dollars”) unless combined with a substantive element,<sup>16</sup> involve no *direct* appeal to the idea of democracy as such. However, because the rules that govern public office are, or ought to be, designed to prevent substantive corruption, most formally corrupt instances are also substantively corrupt. (In other words, public office corruption is typically a subset of substantive corruption.)

As we will see, Sanders primarily spoke about corruption within the substantive/popular framework, whereas Biden primarily spoke about corruption within the formal, public office framework.

### **b. Popular Sovereignty and Corruption in the Populist Imagination**

Populism reinterprets the principle of popular sovereignty through a conception of the “People-as-One.” The popular sovereign — the principle of political legitimacy and the basis of power — is equated with “the people” who are presented as an actual, empirical, unified agent, identified with the heartland and held up as the moral source of political legitimacy.<sup>17</sup> As theorist Claude Lefort notes, populism is an “image of a society which is one with itself,” an image of an “organic community.”<sup>18</sup>

Populists imagine that there is a singular common good, that a concrete and homogeneous political subject called “the people” can discern and will that common good, and that only the populist leader is capable of correctly interpreting the will of the “true people.”<sup>19</sup> But this “people” is (and can only ever be) a *part* of the *whole* citizenry. The “true people” must be extracted from the empirical population.<sup>20</sup> Donald Trump put it best when he announced that “the only important thing is the unification of the people – because the other people don’t mean anything.”<sup>21</sup>

Substantive and formal corruption can often create an opportunity for the emergence of populism, and populists make both substantive and formal critiques of corruption. But while the populist and the formal and substantive conceptions of corruption will often coincide, this is not because populists understand corruption in the same way.

If the “true people” are the only legitimate basis of political power, corruption in the populist framework doesn’t involve just any kind of appropriation of sovereign power for factional ends, it *involves undermining the “real people,” and the political, social, and moral order that is imagined to be connected to “the people.”* Populist politics is largely defined in terms of the *symbolic* opposition between “the people” and the “corrupt elite” which stands between “the people” and power. Consequently, allegations of “corruption” play an outsized role in populist discourse.

*The conception of corruption that is unique to populism is what I call “symbolic corruption.”* Unlike the liberal substantive critique of corruption, in the symbolic framework, corruption is no longer understood to mean any privileging of private or factional interests against the interests of the whole (understood as the entire population); instead, corruption refers to actions, actors, groups, and institutions which are *symbolically* identified with the “corrupt elites.” Through an analysis of campaign speeches by Joe Biden, Donald Trump, and Bernie Sanders, we will see how the formal/liberal, symbolic/populist, and substantive/popular conceptions of corruption (respectively) manifested in political discourse during the 2020 election and further elucidate each framework. We can then look at how this “corruption talk” may have affected voter choices. Finally, we can examine the underlying (substantive) factors – the crisis of representation, skyrocketing economic inequalities, and status anxieties caused by globalization and skill-biased technological change — that have created a latent “demand” for a political discourse built around



the (symbolic) narrative that American democracy has been stolen from “real Americans” and that the power of the “real people” has been usurped by outside forces.

## II. Corruption Talk in 2020 Campaign Discourse

In order to examine candidate discourse around the issue of “corruption,” I use transcripts from Rev.com, a database that includes campaign rallies, political speeches, town halls, and presidential debates between January 15<sup>th</sup> and November 3<sup>rd</sup>, 2020 (which were harvested using web scraping software). There are a total of 230 unique transcripts in which Biden, Sanders, or Trump speak at least once; of these, there are 94 transcripts in which the word “corrupt” or “corruption” appears at least once. Each transcript is separated into paragraphs averaging around 250 words, which I treat as discrete “documents” for the purposes of natural language processing.

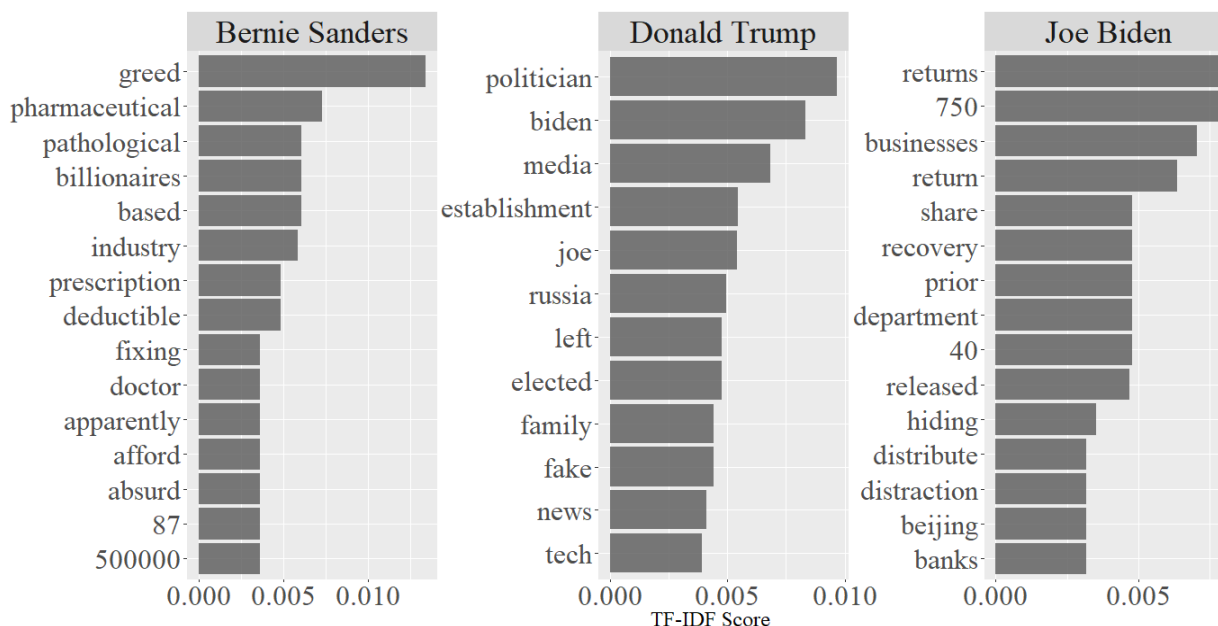
From a preliminary glance at the data, we find that Sanders and Trump invoked “corruption” far more often than Biden (7 and 9.4 times more often respectively), as we might expect given the central importance of critiques of the “corruption” of the status quo in the substantive/popular and symbolic/populist frameworks.

**Table 1: Rev.com Database Descriptive Statistics**

	Transcripts	Transcripts containing “corrupt” or “corruption”	% of transcripts containing “corrupt” or “corruption”	Words	# of instances of “corrupt” or “corruption”	Rate per 100,000 words
<b>Biden</b>	142	13	9.2%	120,372	18	14.96
<b>Trump</b>	104	69	66.3%	256,100	362	141.35
<b>Sanders</b>	33	13	39.4%	21,706	23	105.96
<b>Total</b>	230 <sup>22</sup>	94	40.9%	398,178	403	101.21

I begin by examining what kinds of words were most important for each speaker within the collection of “documents” that contained reference to corruption in order to determine the general kinds of ideas and issues that were most associated with each speaker’s use of “corruption.” For this purpose, I use the tf-idf statistic which is intended to measure how important a word is to a document within a collection of documents by dividing the term frequency within a subset of documents by the inverse of the number of documents in the whole corpus in which the term appears.<sup>23</sup>

**Figure 1: TF-IDF by Speaker Among Documents Containing the Word “Corrupt”**



As we can see, Sanders and Trump tended to use more morally and normatively inflected vocabulary, such as “greed” and “family” when talking about corruption, whereas Biden tended to use more technical and neutral language. Trump appears to connect corruption with politicians, media, and the “establishment,” Sanders with billionaires and the pharmaceutical industry and Biden with illegal business practices. Broadly, tf-idf can give us an idea of the general semantic sphere in which each candidate used the word “corrupt,” corroborating the hypothesis that Trump, Biden, and Sanders use the word in a symbolic/populist, formal/liberal, and substantive/popular manner respectively.

But within these respective discourses, they each used “corruption talk” in the context of specific topics that were characteristic of their particular approach to the issue. In order to analyze what kinds of topics each candidate talked about and in what proportion, I use the structural topic model package in R (STM), which utilizes Bayesian estimation to search for “topics” in a large set of documents, assuming that these “topics” are latent variables which determine the content of the documents.<sup>24</sup> The model assumes that a “topic” is composed of a mixture of words where each word has a probability of belonging to a topic. It further assumes that a document is composed of a mixture of topic proportions that determine the word distributions within that document.<sup>25</sup> The sum of topic proportions across all topics for a document is one, and the sum of the word probabilities for a given topic is one.<sup>26</sup>

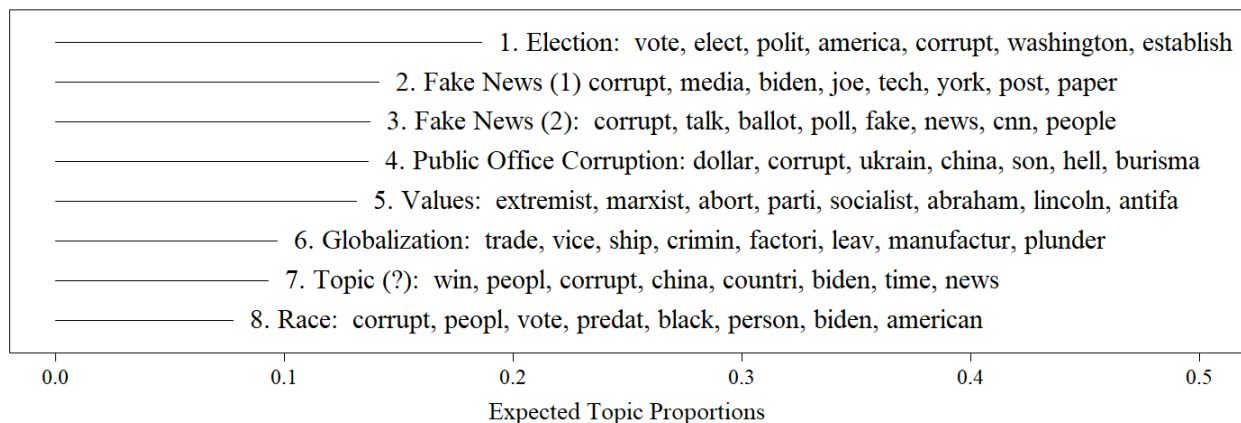
Applying the topic model to only the subset of documents in which corruption is discussed or mentioned, we can get an idea of how often each candidate talked about an issue or set of issues in conjunction with corruption.

## II. A - Trump’s Corruption Discourse

In order to model Trump’s corruption talk, I specify a topic model containing 8 topics.<sup>27</sup> Figure 2 below shows the relative proportion of these topics — if a topic has a proportion of .2, that means around 20% of Trump’s corruption talk revolves around that topic. The model also returns the words that are most likely to indicate the presence of each topic<sup>28</sup> as well as the topic proportion of each document. (For example, a given document might be a mixture over topics 5

and 3, containing 70% topic 5 words and 30% topic 3 words.) In the figure below, each topic is labeled with a title that most closely fits the content of the documents containing the highest proportion of that topic. For example, the documents containing high proportions of topic 5 are about the corruption of American values by the left – hence the label “values.”

**Figure 2: Trump Expected Topic Proportions**



We find that the 5 most prevalent themes in Trump’s corruption discourse, in order, were: the election (more specifically, dethroning the corrupt elites and giving power to “the people”) (topic 1), fake news, particularly in conjunction with election coverage (topics 2 and 3), Joe Biden and Hunter Biden’s alleged public office corruption (topic 4), the corruption of American values (topic 5), and globalization (topic 6).

Trump often uses the word “corruption” when he is not talking about public office corruption (or anything that a political scientist schooled in the principal-agent model might recognize as “corruption”). As we’ve outlined, “populistic” political logic pits a “pure people” against a “corrupt elite.” In describing this opposition in terms of policy, values, culture, etc. Trump will often use the word “corrupt” as an *adjective* to qualify an organization, person, group, value, or idea associated with the “corrupt elite.”

Topic 1 — election and rule by “the people” vs. “the elites” demonstrates the symbolic conception of corruption in its most distilled form; it tells us the most about Trump’s use of “corruption talk” and is a logical place to begin. The following are some excerpts from the documents most associated with topic 1. In the table below (and in all subsequent tables) documents are ordered by how highly associated they are with the topic – i.e. the document that is 99% “about” topic 1 is listed first, the document that is 98% “about” topic 1 is listed second, etc. Among the top-ranked documents, some are omitted because their content is identical or nearly identical to another document in the selection (candidates will often use specific lines over and over again during the campaign).

	<b>Topic 1 – Election: Restoring American Democracy to “The People”</b>
Michigan, November 2	This election comes down to a very simple choice. Do you want to be ruled by the corrupt and selfless [sic] political maniacs? Or do you want to be ruled by the American people? You’re supposed to be ruled by the American people. <sup>29</sup>
Michigan, October 30	This election will decide whether we restore the rule of a corrupt political class or whether we declare that in America we are still governed. We are the people. We govern. We govern. We’re the boss. We’re the people.
Pennsylvania October 31	In 2016 Pennsylvania voted to fire this corrupt political establishment and you elected an outsider as President who is finally putting America first... And if I don’t sound like a typical Washington politician, it’s because I’m not a politician. Right? <sup>30</sup>
Michigan, November 2	If you want your children to be safe, if you want your values to be honored, if you want your life to be treated with dignity and respect, then I am asking you to go to the poll tomorrow and vote, vote, vote... For the last four years, the depraved swamp has tried everything to stop me and to stop you... Together we will defeat the corrupt establishment. We will dethrone the failed political class, and we will drain the Washington swamp. And we will save that American dream. That beautiful, beautiful American dream. <sup>31</sup>
Wisconsin, November 2	Do you want to be ruled by the corrupt and selfish political class or do you want to be governed by the American people? That’s what it’s all about. It’s the American people. They’ve taken that away. <sup>32</sup>

These excerpts contain little to no substantive content. Trump’s discourse is full of what theorist Ernesto Laclau calls “empty signifiers”: signifiers with a vague, highly variable, unspecifiable or non-existent signified that have different meanings to different people, allowing the audience to project their own signification onto the speech.<sup>33</sup> Words such as “American people,” “American dream,” “political establishment,” “depraved swamp,” “values,” “dignity,” etc. have no fixed or concrete meaning – they are all marshaled by Trump to set up a Manichean opposition between the “pure American people” and the “corrupt elite,” signifying who “we” are in opposition to who “they” are.

Without directly addressing any particular issues, Trump evokes the idea that America and American democracy have been stolen from its rightful owners, the “true people.” Populist political logic divides society into two camps: on the one side the elite and the consolidated power structure, and on the other the block constituted by the populist leader and the people.<sup>34</sup> Following this logic, Trump claims to be an outside maverick, who “doesn’t sound like a typical Washington politician” or “play by the rules of the Washington establishment.”<sup>35</sup> He is the voice of the people and claims to represent them directly. Within this “logic,” being “governed by the American people” is the same thing as being governed by Trump.

<b>Topics 2 and 3 – Corrupt media and Fake News</b>	
Rally - Pennsylvania, Oct 26	CNN is fake corrupt news... they're corrupt. They have to report the news. They are the enemy of the people. They really are. They're the enemy of the people. <sup>36</sup>
Rally - Pennsylvania, Oct 26	They're fake and they're corrupt people. They're fake. They're corrupt. I never watched CNN, but I had to see it this morning... I watched MSDNC... MSDNC. And you watch these polls and you say, they're fake polls. They're fake. These are real polls [gestures toward crowd]. We're going to win in Florida. We're going to win in Pennsylvania... we're watching you, governor, very closely in Philadelphia. A lot of bad things happen there with the counting of the votes. We're watching you Governor Wolf, very closely. <sup>37</sup>
60 Minutes Interview Oct 22	I wouldn't be here if I didn't have social media, because the media is corrupt... the media is corrupt... the media is fake, and frankly, if I didn't have social media, I'd have no way of getting out my voice. <sup>38</sup>

Democratic representatives are made accountable to the citizenry through both “direct” and “mediated” mechanisms. Direct accountability occurs during election time or in the case of recall votes. Mediated accountability involves the check that civil society and the media exert on governmental power.

Trump frames civil society and media institutions as part of a group of liberal, coastal elites that want to trick and mislead the people in order to further their own (rather than “the people’s”) interests. He therefore claims that the only way to get the truth out and to communicate “directly” with the people without the corrupt mediation of the mainstream media, is through his various social media platforms. Trump positions himself simultaneously as the leader, and as one of the people (“we are the people, we govern”). His identification with the “real people” makes mediated accountability through the “fake media” — and “corrupted,” “elite” institutions more generally — not only unnecessary but a subversion of the power of “the people,” and thereby a “corruption” of popular sovereignty.<sup>39</sup>

But the idea that his base somehow plays a role in his decision making or in checking his power, is a complete illusion. In the words of Jan Werner Müller, populists imply “that ‘the people’ can speak with one voice and issue something like an imperative mandate that tells politicians exactly what they have to do in government... Yet the fact is that the imperative mandate has not really come from the people at all; its supposedly detailed instructions are based on an interpretation by populist politicians.”<sup>40</sup> When Trump says that only “we” are qualified to watch vote counting he really means “I” and those who do exactly what I tell them. Within this framing, there is no role for the institutions of horizontal accountability to exert any sort of restraining influence on the true representative of the “real people.”<sup>41</sup>

	<b>Topic 5 - The “Corruption” of American Values</b>
Rally – North Carolina, March 2 <sup>nd</sup>	The Democratic party is the party of high taxes, high crime, unlimited regulations, open borders, late term abortion, socialism, blatant corruption, and the total obliteration of your second amendment. The Republican party is the party of the American worker, the American family, the American dream, and the late great Abraham Lincoln. <sup>42</sup>
Rally - Michigan, November 2 <sup>nd</sup>	Every corrupt force in American life that betrayed you and hurt you is supporting Joe Biden. The failed establishment that started the disastrous foreign wars... The career politicians that offshored your industries and decimated your factories and sent your jobs away... The open border lobbyists that killed our fellow citizens with illegal drugs and gangs and crime... The far-left Democrats that ruined our public schools, depleted our inner cities, defunded our police, and demeaned your sacred faith and values... The anti-American radicals defaming our noble history, heritage, and heroes... Antifa, and the rioters, looters, Marxists, and left-wing extremists, they all support Biden. <sup>43</sup>
Rally – Michigan, October 17 <sup>th</sup>	This election will decide whether we preserve our magnificent heritage or whether we allow far left radicals to wipe it all away. Joe Biden has made a corrupt bargain in exchange for his party’s nomination. He has handed control of his party over to the hardcore militant left... [The democratic party is] now the party of socialists, Marxists and left-wing extremists... America is the most magnificent, most virtuous nation that has ever existed. <sup>44</sup>

Beyond the media and the political establishment, much of Trump’s corruption talk concerned external threats to the values, lifestyles, and livelihoods of the “real people.” Within this discourse, it is not the principle of popular sovereignty itself that is being corrupted, but rather the popular sovereign (“the real people”) is threatened with cultural and economic displacement by the “other people.” In the United States as elsewhere in developed Western nations, the transition from industrial to post-industrial society and the spread of post-materialist values led to a restructuring of the cultural axis of political contestation.<sup>45</sup> Across the post-industrial regions of Western Europe and North America “white working-class people sense that they have been demoted from the center of their country’s consciousness to its fringe.”<sup>46</sup> Trump played off of this feeling, claiming to give voice to groups whose status is increasingly in decline, identifying them as real Americans whose “noble history, heritage, and heroes” must be protected against the “corrupt force[s] in American life.” Once again, the use of empty signifiers is extremely important in Trump’s construction of the dichotomy between “pure people” and “corrupt elite.” Trump extols the virtue of the “American worker, the American family, and the American dream,” defined in opposition to some nebulous group (“every corrupt force in American life that betrayed you and hurt you”); he gestures towards a set of amorphous values connected with some unspecified time when American was “great.”

<b>Topic 6. Globalization and the Economy</b>	
Rally – NV, Feb 21st	For years, Washington politicians took money from lobbyists, global corporations and corrupt special interests to ship our jobs and factories. They stole our wealth. They shipped it overseas and to other countries. America lost one in four manufacturing jobs following the twin disasters of NAFTA and China’s entrance into the WTO... Under my administration, the great betrayal of America is over. America is no longer for sale. <sup>47</sup>
Rally – Pennsylvania, Oct 26 <sup>th</sup>	The corruption of politicians like Biden and it is corruption, is exactly why I ran for president. I ran for trade; I hated the trade deals. I said, “Why are you allowing them to take all of your car companies and moving them to Mexico and Canada?” <sup>48</sup>
Rally – Wisconsin, Oct 17 <sup>th</sup>	Joe Biden shipped away your jobs, shut down your factories, threw open your borders and ravaged our cities while sacrificing American blood and treasure in endless wars. Joe Biden is and always has been a corrupt politician. <sup>49</sup>
Rally – Georgia, Oct 16 <sup>th</sup>	Joe Biden is the living embodiment of the corrupt political class that enriched himself [sic] while draining the economic life and soul from our country. For the last 47 years, Joe Biden, he shipped away your jobs, shut down your factories, threw open your borders and ravaged our cities while sacrificing American blood and treasure in endless and ridiculous foreign wars. <sup>50</sup>

While Trump does not truly identify, much less actually address the underlying causes of status loss, in this case he does connect the feeling of status loss to real, substantive issues: immigration, trade globalization, deindustrialization, and economic decline supposedly orchestrated by a corrupt elite (of which “Joe Biden” is the living embodiment”). This is the closest Trump comes to making a substantive rather than symbolic critique of corruption.

Trump paints America as the victim of a collusion between the liberal establishment and foreign countries, who together “drained the economic life and soul from our country.” He also connects the economic disruption caused by globalization and technological change with migration — not logically, but affectively. Immigrants, foreign countries, and the domestic elites they supposedly collude with are convenient scapegoats. This narrative is capable of explaining a complex and heterogeneous reality through a simple affective logic: “here is what is happening, this is why, and these are the people who are doing it to you.” *They* are taking *our* jobs and our factories. This is who we are; these are our enemies; only I can defeat them and restore us to our rightful place. Ultimately, even this more substantive critique of corruption is subordinated to a symbolic logic.

In these excerpts, Trump also seems to vaguely gesture at formal, public office corruption. But while Trump may, at times, be implying *not only* that Biden is on the side of a secretive cabal aiming to undermine American workers, *but also* that Biden personally and illegally profited in doing so, it’s clear that Trump’s allegations of “corruption” here as well as elsewhere do not refer to an actual act of law breaking or anything resembling formal public office corruption. The “corrupt special interests” are never identified with any particular person or group in a plausible way, they gesture instead at the Manichean opposition between the people and the “corrupt political class” behind the “sacrifice of American blood and treasure” and the “great betrayal of America.”

	<b>Topic 4 - Public Office Corruption</b>
Rally - Michigan, Nov 1 <sup>st</sup>	While Biden was giving China your jobs, his family raked in millions and millions of dollars from the Chinese communist party. Joe Biden is a corrupt politician who bought and is paid for... His son's like a human vacuum cleaner. "Hey Dad, what country are you going to today?" "China." "Oh, good, maybe I can take in a couple of million." ... [Hunter] wants China to pay \$10 million a year for recommending service... I guess he calls it introductory services. He's introducing his father. <sup>51</sup>
Rally – North Carolina, Sept. 19 <sup>th</sup>	In Ukraine, [they gave Hunter] \$183,000 a month, and a \$3 million upfront payment for him and his friends, with no experience and no job, and they said, do you know energy? No, I don't... They're corrupt. <sup>52</sup>
Rally – Florida, Oct 29 <sup>th</sup>	All Biden does is talks [sic] about COVID... He doesn't call it the China virus. You know why? Because China has him paid off... They gave his son one and a half billion to manage. He makes millions of dollars a year, I assume. <sup>53</sup>
Rally – Minnesota, September 30 <sup>th</sup>	And what about Omar where she gets caught harvesting? <sup>54</sup> I hope your US attorney is involved. I've been reading these reports for two years about how corrupted, crooked she is... frankly harvesting is terrible, but it's the least of the things that she has done... she tells us how to run our country... she's been crooked for a long time... AOC also. You take a look at the corruption, the disgusting corruption. 700% increase refugees coming from the most dangerous places in the world including Yemen, Syria, and your favorite country, Somalia, right? Biden will turn Minnesota into a refugee camp... Overwhelming public resources, overcrowding schools, and inundating your hospitals. <sup>55</sup>

Even when Trump did speak about “public office” corruption – which was the case in somewhere around 15-20% of his invocations of “corruption” – he usually framed (often vague and unspecified) charges of public office corruption in terms of the broader claim that the elites are fundamentally morally bankrupt and, ultimately, *evil*. The last excerpt is particularly telling; after accusing Ilhan Omar of corruptly tampering with ballots, he expresses outrage that she — an outsider and enemy of “the people” — “*tells us* how to run *our country*” and warns that as a consequence of her “disgusting corruption” Minnesota can expect a “700% increase in refugees.” It is also notable that Trump’s accusations of public office corruption against Biden increased as Biden began to comment on Trump’s various conflicts of interest in the lead up to the election. It has repeatedly been noted that part of Trump’s strategy is to fling whatever he is accused of back at his accusers,<sup>56</sup> which may explain the relative increase in his accusations of public office corruption over the course of the campaign, culminating in various accusations against Hunter Biden.

Notably, in the Hunter-Ukraine case, Trump illegally abused the powers of his office, threatening to withhold funds from Ukraine in order to further his private interest (getting re-elected) — in other words, Trump committed public office corruption. However, within Trump’s framing, Trump was using all of the powers at his disposal to unmask the moral degeneracy of the “corrupt elite” – and to some extent, this framing worked. A Pew poll conducted in November of 2019 found that 65% of Republicans who got their news from right-wing outlets believed that Trump “temporarily withheld US aid to Ukraine because he wanted to advance a US government position” whereas only 10% believed he did so in order to “help his reelection campaign.”<sup>57</sup>



## II. B - Biden and Sanders on Corruption

In order to model Biden and Sanders’ corruption talk, I use models with 3 rather than 8 topics, given the far smaller samples; in both cases, all topics had nearly equal topic proportions, and so I omit the STM topic proportion plots for the sake of tidiness.

As shown in Table 1 (on page 8), Biden spoke about corruption over nine times less frequently than Trump. When he did speak about corruption, he nearly always used the term to indicate formal, public office corruption. Occasionally, he mixed more substantive appeals into his discourse, but these always served the purpose of exciting outrage about issues of public office corruption. Out of Biden’s eighteen mentions of corruption, all but two fall into one of three broad topics: 1) Trump’s tax returns and illegal business activity, 2) public office corruption in the Trump administration, or 3) corrupt disbursement of CARES act funds. (The other two mentions were unrelated and model reported that they contained equal mixtures of all three topics, when in fact they corresponded to none of the topics.)

	<b>Biden - Topic 1. Public Office Corruption of the Trump Administration</b>
Energy Plan Speech – July 14 <sup>th</sup>	It seems like every few weeks, when he needs a distraction from the latest charges of corruption in his staff or the conviction of high-ranking members of his administration and political apparatus, the White House announces “it’s infrastructure week.” <sup>58</sup>
Discussion – NC, Sept. 23 <sup>rd</sup>	This has been the most corrupt administration in modern American history. The Justice Department has turned into the president’s private law firm... <sup>59</sup>

	<b>Biden - Topic 2. Trump’s Tax Returns and Illegal Business Activity</b>
Presidential Debate – Oct. 22 <sup>nd</sup>	What are you hiding? ... Russia’s paying you a lot. China’s paying you a lot on... all your businesses all around... the world. China’s building a new road to a new golf course you have overseas... Release your tax return or stop talking about corruption. <sup>60</sup>
Rally – Michigan, Oct 31 <sup>st</sup>	I released 22 years of my tax returns... He hasn’t released one. He talks about corruption. What is he hiding? He owes \$41 million out there. Who’s he owe it to? ... and this guy talks about corruption. <sup>61</sup>

Despite the fact that around 70% of Biden’s corruption talk concerned acts of public office corruption by Trump or his associates (Topics 1 and 2), Biden’s accusations of corruption didn’t stick with Trump’s base. Corruption for them was identified with an elite that Biden belonged to and which Trump attacked from the outside as an anti-establishment maverick. Within Trump’s “logic,” whether something was or was not corrupt was contingent on where it stood in the divide between people and elite. As long as an affective identification between the leader and the people is maintained, “corruption” remains trapped in this logic.

	<b>Biden - Topic 3. Disbursement of CARES act funds</b>
Sanders Endorses Biden in Livestream Meeting, April 13 <sup>th</sup>	Donald Trump and his team are trying to gut the whole oversight of the Corporate Loan Program now. Trump fired the Inspector General ... who was put in place to police corporate corruption and what’s he trying to hide? [sic] Congress should demand answers. <sup>62</sup>
Virtual Town Hall – June 27 <sup>th</sup>	Trump’s corrupt recovery is focused on the wealthy, well-connected, not the millions of mom and pops that are out there facing ruin... 40% of the funds didn’t go to small businesses at all and the Main Street lending program has lent not a single dollar. <sup>63</sup>

In his discussion of the CARES act,<sup>64</sup> “corrupt recovery” Biden has a more substantive appeal. He implies that much of the disbursement of funds occurred in an illegal manner; but, more

importantly, he alleges that the wealthy and those with connections to the Trump administration benefitted disproportionately at the expense of “Main Street” and the American people as a whole. Regardless, only five of Biden’s eighteen mentions of corruption deal with these more substantive issues. For Biden, “corruption” (noun) signifies a specific action, event, or pattern of actions and events; Biden rarely used “corrupt” (as an adjective) to indicate a quality (not directly connected to formal public office conception) of some organization, entity, group, or society as a whole.

Unlike Biden, Sanders primarily talked about corruption in these more substantive terms, using the concept to indicate the presence of a rupture between real and ideal. He talked about the disproportionate influence of certain economic interests and social groups within democracy; he even went so far as to say that American democracy itself had been corrupted by these interests. In fact, nearly all of Sanders’ corruption talk is concerned with factional interests (corporations and the rich) exerting undue influence in political and economic life.

	<b>Sanders - Topic 1. Misc. Factional Interests in Economic and Political life</b>
Democratic Debate – Iowa, Jan. 15 <sup>th</sup>	We [need] the courage to take on the one percent, take on the greed and corruption of the corporate elite and create an economy and... government that works for all of us, not just the one percent. <sup>65</sup>
Rally – Missouri, March 9 <sup>th</sup>	Within a corrupt political system, where billionaires buy elections, our job is to reinvigorate democracy so we have one person, one vote, not billionaires buying elections. <sup>66</sup>

Nonetheless, Sanders does make vague and general allusions to formal public office corruption. When Sanders attacks the corruption of the healthcare industry, he may, in part, be thinking about illegal behavior on the part of the industry, or the public office corruption that facilitates it. When Sanders denounces Trump’s “corrupted administration,” he is doubtless at least partly thinking of Trump’s manifold violations of the emoluments clause. When he speaks of corporate corruption, he is certainly, at least in part, thinking of actual illegal activities and bribery of elected officials.

	<b>Sanders - Topic 2. The Trump Administration</b>
New Conference – March 11 <sup>th</sup>	[Trump is a] pathological liar... running a corrupt administration. He clearly does not understand the Constitution of the United States and thinks that he is a president who is above the law. He is a racist, a sexist, a homophobe, a xenophobe, and a religious bigot. <sup>67</sup>
Rally – California, March 2 <sup>nd</sup>	We will not have a corrupted administration for four more years. We will not have a President who has apparently never read the Constitution of the United States. We will not have a President who is undermining American democracy... we are a democracy, not an autocracy. <sup>68</sup>

	<b>Sanders - Topic 3. The Greed of the Healthcare Industry</b>
Rally – South Carolina, Feb. 28 <sup>th</sup>	Don’t tell me we can’t take on the greed and corruption of the pharmaceutical industry... Charging us, in some cases, 10 times more for the same exact drugs sold abroad... we’re going to pass a Medicare for All single-payer program. <sup>69</sup>
Democratic Debate – Jan 15 <sup>th</sup>	Now is the time to take on the greed and corruption of the healthcare industry, of the drug companies, and finally provide healthcare to all through a Medicare for All single payer program. <sup>70</sup>

But more importantly, Sanders is concerned with precisely the fact that so many of these “corrupt” behaviors are *not* illegal, that they have been codified in the laws as a legitimate part of

the system. For Sanders, “corruption” is something that occurs in relation to the constitution, the principles of American democracy, and the American people. Ultimately, Sanders is concerned with the corruption of democracy – with the *demos* whose *kratos* has been usurped.

However, unlike Trump, Sanders never identifies this *demos* positively, as possessing a concrete will, reason, or morality which can only be embodied in his own person. Instead, Sanders focuses on substantive appeals to the ideal of democracy; the ideal that the people, in the abstract, have a say in creating “government that works for all of us.” Sanders is quite clear that “the people,” means all the people. For Sanders, Trump is corrupt, in part, because “he is a racist, a sexist, a homophobe, a xenophobe, and a religious bigot” – because he excludes a part of the people from the people. At its core, Sanders’ appeal to the principle of popular sovereignty remains popular, rather than populist.

### III. Did “Corruption Talk” Work?

Now that we’ve seen how each candidate used “corruption talk” and examined the political logic driving these different usages, the logical next question is, “did these various forms of corruption talk work?” Perceptions of “corruption” are high among the American public, with over 70% of voters reporting that they believed political corruption was either “very” or “quite” widespread.<sup>71</sup> But did this contribute to a “demand” for “corruption narratives” that played a role in determining vote choices in the 2020 election? Did “corruption talk” appeal to voters? Furthermore, were voters concerned with public office corruption in particular? Or was the more inchoate sense that elites are removed, untrustworthy, and self-serving the factor that ultimately drove voting outcomes?

In order to answer these questions, I use data from the American National Election Study (ANES), which is a representative survey of Americans before and after the 2020 presidential elections. I am interested in the role that perceptions of public office corruption vs. a more generalized distrust of elites (which could be addressed through either substantive and symbolic “corruption talk”) have in predicting vote choice for Sanders over Biden in the Democratic primary, and vote choice for Trump over Biden in the general election.

I take answers to the question “How widespread do you think corruption such as bribe taking is among politicians”<sup>72</sup> as my indicator of perceptions on public office corruption. My variable on degenerative corruption is composed of the average of responses to three questions: 1) “Most politicians are trustworthy,” 2) “Most politicians do not care about the people,” 3) “When it comes to public policy decisions, whom do you tend to trust more: ordinary people or experts?” Responses to each question range on a 5-point scale: for the first two, the scale runs from “agree strongly” to “disagree strongly”; for the third, the scale runs from “trust ordinary people much more” to “trust experts much more.” All of the survey questions included here were administered in the month after the 2020 election.

My “corrupt elites” variable is the average of each respondent's score across all three questions.<sup>73</sup> I take these questions as good indicators of attitudes toward “degenerative” corruption because they each express an aspect of distrust toward elites: lack of trust in politicians, the feeling that politicians are emotionally removed from the people, and the belief that the people ought to take back control of government from technocratic elites. These questions have a relatively low level of correlation, with the Pearson *r* statistic ranging between .2 and .3: in other words, they are not measures of the same phenomenon; they measure *different aspects* of a single phenomenon. Answers to each of these questions were recorded on a five-point scale, which I then normalize to a one-point scale — regression coefficients thus express the change in vote outcome likelihood when moving across the entire spectrum of the variable.

I model the primary and general election using the subset of those respondents who reported voting for Biden or Sanders, and Biden or Trump respectively, excluding incomplete data. My benchmark specification is an ordinary least squares regression with the public office and “corrupt elites” variables as the main regressors, controlling for basic demographic variables — age, income, race, gender, education, rural/urban, and party identification for the Trump/Biden regression. (Table 2 below displays only the main regressors, for the full regression, see table 4 in the appendix.

Without adding the corrupt elites variable into our regression, we find that beliefs about the level of public office corruption are a strong predictor of voting outcomes, with an 18 and 16 percent increase in the likelihood of voting for Trump or Sanders when moving across the entire range of the variable.

However, given that neither Trump nor Sanders were concerned about public office corruption, this result may initially appear puzzling. Only when we consider that beliefs about public office corruption may be a product of a worldview that sees elites as “degeneratively” corrupt does this striking finding begin to make sense. Those who have an inchoate sense that elites are unrepresentative, self-interested, nefarious, and culturally removed from people like them may also be more likely to believe that politicians engage in public office corruption such as bribery.

**Table 2: Voting Outcomes Regression**

<b>Dependent Variable:</b>	<b>Trump Vote in General Election</b>		<b>Sanders Vote vs Biden in Democratic Primary</b>	
	<i>Estimates</i>	<i>Estimates</i>	<i>Estimates</i>	<i>Estimates</i>
<i>Predictors</i>				
(Intercept)	-0.02 (-0.08 – 0.05)	-0.10 ** (-0.16 – 0.04)	0.73 *** (0.59 – 0.87)	0.66 *** (0.52 – 0.80)
Public Office Corruption	0.18 *** (0.13 – 0.22)	0.03 (-0.02 – 0.08)	0.16 ** (0.06 – 0.27)	0.08 (-0.03 – 0.20)
Corrupt Elites Variable		0.36 *** (0.30 – 0.41)		0.23 *** (0.10 – 0.35)
Observations	4462	4462	1418	1418
R <sup>2</sup> / R <sup>2</sup> adjusted	0.606 / 0.605	0.619 / 0.618	0.182 / 0.177	0.190 / 0.184

\*  $p < 0.05$  \*\*  $p < 0.01$  \*\*\*  $p < 0.001$

This hypothesis is confirmed by our regression analysis. When we introduce the corrupt elites variable, the statistical significance of the public office variable drops out for both the general and primary election models. Moving across the entire range of the “corrupt elites” variable we see an extraordinary 36 and 23 percent increase in the likelihood of voting for Trump and Sanders respectively. General distrust of elites takes on the entire explanatory value of beliefs about public office corruption: public office corruption now has no role in predicting Trump or Sanders vote in a best fit linear regression model.

When Trump talked about corruption, he often referred to various cultural grievances, while Sanders was primarily concerned with economic inequalities. In order to test whether distrust of elites is affected by perceptions of economic and cultural issues, I run another regression, this time treating the corrupt elites variable as my dependent variable, again controlling for demographic characteristics.

In order to examine the effect of economic factors, I look at three variables: opposition to free trade, the belief that free trade takes away American jobs, and self-reported class (upper, middle, working, and lower). In order to measure the effect of cultural resentment, I look at four variables: the belief that American culture is harmed by immigrants, like/dislike of feminism, support for “traditional family values,” and the perception that “rural people don’t get enough respect” — note that rural/urban is one of the control variables (for the full regression, see table 5 in the appendix).

**Table 3: “Corrupt Elites” Regression**

<i>Predictors</i>	<b>Public Office</b> <i>Estimates</i>	<b>Culture</b> <i>Estimates</i>	<b>Economy</b> <i>Estimates</i>	<b>Kitchen Sink</b> <i>Estimates</i>
(Intercept)	0.30 *** (0.27 – 0.33)	0.57 *** (0.53 – 0.61)	0.59 *** (0.55 – 0.63)	0.31 *** (0.26 – 0.36)
Public Office Corruption	0.38 *** (0.36 – 0.41)			0.36 *** (0.33 – 0.38)
Culture Harmed by Immigrants		0.08 *** (0.06 – 0.11)		0.06 *** (0.04 – 0.08)
Feminism Thermometer		-0.06 *** (-0.09 – -0.04)		-0.06 *** (-0.09 – -0.04)
Traditional Family Values		0.03 ** (0.01 – 0.05)		0.02 ** (0.01 – 0.04)
Rural People don’t Get Enough Respect		0.10 *** (0.07 – 0.13)		0.06 *** (0.03 – 0.08)
globalization effect jobs			0.05 *** (0.02 – 0.08)	0.02 (-0.01 – 0.04)
Free Trade Oppose			0.07 *** (0.05 – 0.10)	0.03 ** (0.01 – 0.06)
Self-Reported Social Class			-0.10 *** (-0.13 – -0.07)	-0.07 *** (-0.10 – -0.04)
Observations	4203	4203	4203	4203
R <sup>2</sup> / R <sup>2</sup> adjusted	0.304 / 0.302	0.180 / 0.177	0.160 / 0.158	0.332 / 0.329

\*  $p < 0.05$  \*\*  $p < 0.01$  \*\*\*  $p < 0.001$

I find that cultural resentments play a large role in predicting distrust of elites, but that opposition to globalization and self-reported social class are slightly less effective at explaining variation across the corrupt elites variable. Interestingly, beliefs about public office corruption are highly predictive of beliefs about degenerative corruption, even in the kitchen sink regression, and explain more of the variation in the dependent variable than either economic or cultural factors. This does not mean that perceptions of public office corruption “cause” generalized distrust of elites; if anything, the direction of causality runs the other way: those who believe that “elites are secretly working to advance their own interests rather than those of regular people,” are more likely to believe that “acts of bribery and embezzlement are common among politicians.” However, perceptions of public office corruption are nonetheless a large component of generalized distrust of elites; indeed, they appear to be a significantly larger component than, for example, the perception that American culture is harmed by immigrants.

Ultimately, we find that the economic and cultural factors which are associated with a generalized distrust of elites are precisely the issues that Trump addressed through his discourse around corruption. (Sanders also addressed economic displacement and the increasing sense of alienation from elites, but without resorting to racist dog whistles or playing of cultural resentments.) This connection between candidate discourse, the cultural and economic factors that lead to increasing distrust of elites, and the regression analysis on vote choice strongly suggest that the feeling that the system as a whole is fundamentally corrupt was channeled through the symbolic and substantive narratives that Trump and Sanders constructed through their “corruption talk,” and that this perception of generalized corruption played a role in vote choice for Sanders/Trump and against Biden in the 2020 election.

#### IV. Conclusion

The success of anti-establishment candidates like Trump or Sanders on the national stage would have been inconceivable only twenty (maybe even ten) years ago. Over the past half century, faith in the American system of government has plummeted, with trust in the federal government decreasing from 60 percent in the years prior to the Vietnam War protests and the Watergate scandal to somewhere around 20 percent today.<sup>74</sup>

The growing feeling that the system is fundamentally corrupt and that elites are only looking out for themselves has been driven by two primary factors: skyrocketing economic inequalities and shifts in the normative order that leave certain portions of the population (particularly those with the strongest claim to traditional American identity) feeling left out of the dominant elite value system.

On the one hand, the superrich have made enormous gains in the past fifty years at the expense of the American middle class, the supposed bulwark of American democracy. Since the early 1970s, the U.S. economy has nearly doubled in size,<sup>75</sup> but this growth accrued almost exclusively to the top 1%.<sup>76</sup> In Thomas Piketty’s terms, the rate of return on capital tends to exceed the overall growth rate ( $r > g$ ), and given the absence of redistributive policies, regulation, and cooperative ownership, those who derive their income from capital have seen their fortunes skyrocket, while average hourly wages have stagnated or even declined.<sup>77</sup>

On the other hand, over the past half century, post-materialist values of autonomy, self-expression, gender equality, multiculturalism, secular values, and LGBTQ rights have increasingly replaced traditional American values grounded in a protestant work ethic and national exceptionalism. People who fail to assimilate themselves into the new normative order “feel socially-marginalized as a result of incongruence between their values and the discourse of mainstream elites.”<sup>78</sup> Many people who voted for Trump believed not only that the existing

political establishment is fundamentally corrupt, but also that American values and the American people itself has been corrupted through immigration, globalization, and the imposition of a new normative order by foreign hearted liberal elites.<sup>79</sup> These voters were seeking not only objective material gains but also an increase in subjective social status: recognition and respect. This is what Trump spoke to through his corruption talk when he excoriated:

“Every corrupt force in American life that betrayed you and hurt you, the career politicians that offshored your industries and decimated your factories and sent your jobs away... The open border lobbyists that killed our fellow citizens with illegal drugs and gangs and crime... The far-left Democrats that ruined our public schools, depleted our inner cities, defunded our police, and demeaned your sacred faith and values... The anti-American radicals defaming our noble history, heritage, and heroes.”<sup>80</sup>

Sanders and Trump both addressed our contemporary democratic discontent through their corruption talk (which, as we have shown, played a role in their respective appeals). Sanders spoke primarily to the issue of economic inequalities, while Trump spoke primarily to the feeling of status loss and cultural change. Both used a discourse that pits “the people” against a “corrupt elite”; and both spoke to the feeling that power has been taken from the people. But while Trump’s corruption talk was exclusionary and backward looking, a tool of political elites to divide and conquer through a symbolic logic that obscures substantive issues and plays off the cultural resentments of the white working class, Sanders’ corruption talk was inclusionary and constructive, emphasizing the creation of a just social system and a normative order in which everyone has a place and is accorded respect and recognition. Trump used a populist appeal to exclude a part of the people from the people; Sanders used a popular appeal, understanding that “the people” means “all people,” and that no one can ever claim to definitively speak for (let alone embody) all of the people.

Meanwhile, Biden generally avoided talking about “corruption” and when he did, his discourse was largely limited to condemning formal, public office corruption. While Biden was successful in the 2020 race, as the perception that the status-quo is “corrupt” increases, a discourse that fails to address “degenerative corruption” will be less and less effective.

In order to be successful, leftist political discourse must be grounded in the promise of American democracy — the ideal of government by the people, for the people, but avoid constructing “the people” as a part of the whole. It must identify the substantive corruption in our political system — the disjunction between the ideal of American democracy and the reality of American plutocracy — while remaining within a liberal framework. “The people” contains a beautiful promise: the promise of democracy and liberty. Despite its perils, we must return to the idea of “the people.”

## Appendix

Table 4: Voting Outcomes Full Regression

<i>Predictors</i>	<b>Trump Vote in General Election</b>		<b>Sanders Vote in Democratic Primary</b>	
	<i>Estimates</i>	<i>Estimates</i>	<i>Estimates</i>	<i>Estimates</i>
(Intercept)	-0.02 (-0.08 – 0.05)	-0.10 ** (-0.16 – -0.04)	0.73 *** (0.59 – 0.87)	0.66 *** (0.52 – 0.80)
Public Office	0.18 *** (0.13 – 0.22)	0.03 (-0.02 – 0.08)	0.16 ** (0.06 – 0.27)	0.08 (-0.03 – 0.20)
Corrupt Elites		0.36 *** (0.30 – 0.41)		0.23 *** (0.10 – 0.35)
Income	-0.04 *** (-0.04 – -0.03)	-0.04 *** (-0.04 – -0.03)	0.00 (-0.01 – 0.02)	0.00 (-0.01 – 0.02)
Education	-0.02 *** (-0.02 – -0.01)	-0.01 *** (-0.02 – -0.01)	-0.00 (-0.01 – 0.01)	0.00 (-0.01 – 0.01)
Age	0.00 *** (0.00 – 0.00)	0.00 *** (0.00 – 0.00)	-0.01 *** (-0.01 – -0.01)	-0.01 *** (-0.01 – -0.01)
Party ID [Republican]	0.78 *** (0.75 – 0.80)	0.75 *** (0.72 – 0.77)		
Party ID [Independent]	0.31 *** (0.28 – 0.33)	0.29 *** (0.26 – 0.31)		
race [Black]	-0.10 *** (-0.13 – -0.07)	-0.11 *** (-0.15 – -0.08)	-0.20 *** (-0.26 – -0.15)	-0.21 *** (-0.26 – -0.15)
race [Hispanic]	-0.06 *** (-0.10 – -0.03)	-0.06 *** (-0.10 – -0.03)	-0.04 (-0.11 – 0.03)	-0.05 (-0.12 – 0.02)
Gender [Female]	-0.00 (-0.02 – 0.02)	0.00 (-0.02 – 0.02)	-0.07 ** (-0.11 – -0.03)	-0.07 ** (-0.11 – -0.03)
Rural Urban [Suburb]	0.01 (-0.01 – 0.04)	0.01 (-0.01 – 0.03)	-0.07 ** (-0.12 – -0.02)	-0.06 * (-0.11 – -0.01)
Rural Urban [Small Town]	0.05 *** (0.02 – 0.07)	0.04 ** (0.02 – 0.07)	-0.04 (-0.10 – 0.01)	-0.04 (-0.10 – 0.01)
Rural Urban [Rural]	0.09 *** (0.06 – 0.12)	0.07 *** (0.04 – 0.10)	-0.04 (-0.11 – 0.04)	-0.04 (-0.11 – 0.03)
Observations	4462	4462	1418	1418
R <sup>2</sup> / R <sup>2</sup> adjusted	0.606 / 0.605	0.619 / 0.618	0.182 / 0.177	0.190 / 0.184

\*  $p < 0.05$  \*\*  $p < 0.01$  \*\*\*  $p < 0.001$



**Table 5: Corrupt Elites Full Regression**

<i>Predictors</i>	<b>Corrupt Elites</b>			
	<i>Public Office</i>	<i>Culture</i>	<i>Economy</i>	<i>Kitchen Sink</i>
(Intercept)	0.34 *** (0.31 – 0.37)	0.60 *** (0.57 – 0.64)	0.59 *** (0.55 – 0.62)	0.36 *** (0.32 – 0.40)
Public Office	0.35 *** (0.33 – 0.37)			0.32 *** (0.30 – 0.34)
culture harmed by immigrants		0.08 *** (0.06 – 0.10)		0.06 *** (0.04 – 0.08)
Feminism Thermometer		-0.10 *** (-0.13 – -0.08)		-0.10 *** (-0.12 – -0.08)
Traditional Family Values		0.04 *** (0.02 – 0.06)		0.03 *** (0.02 – 0.05)
Rural people don't Get Enough Respect		0.11 *** (0.08 – 0.13)		0.07 *** (0.05 – 0.10)
globalization effect jobs			0.05 *** (0.02 – 0.08)	0.02 (-0.01 – 0.04)
Free Trade Oppose			0.08 *** (0.06 – 0.11)	0.04 *** (0.02 – 0.06)
Self- reported Social Class			-0.09 *** (-0.12 – -0.06)	-0.06 *** (-0.08 – -0.03)
Income	-0.01 *** (-0.01 – -0.00)	-0.01 *** (-0.01 – -0.00)	-0.01 *** (-0.01 – -0.00)	-0.00 ** (-0.01 – -0.00)
education	-0.01 *** (-0.01 – -0.01)	-0.01 *** (-0.01 – -0.01)	-0.01 *** (-0.01 – -0.01)	-0.01 *** (-0.01 – -0.00)
age	-0.00 *** (-0.00 – -0.00)	-0.00 *** (-0.00 – -0.00)	-0.00 *** (-0.00 – -0.00)	-0.00 *** (-0.00 – -0.00)
Party ID [Republican]	0.14 *** (0.13 – 0.15)	0.09 *** (0.08 – 0.11)	0.15 *** (0.14 – 0.17)	0.09 *** (0.07 – 0.10)
Party ID [Independent]	0.08 *** (0.07 – 0.09)	0.06 *** (0.05 – 0.07)	0.09 *** (0.07 – 0.10)	0.05 *** (0.04 – 0.07)
race [Black]	0.01 (-0.00 – 0.03)	0.01 (-0.00 – 0.03)	0.02 ** (0.01 – 0.04)	-0.01 (-0.02 – 0.01)

race [Hispanic]	-0.00 (-0.02 – 0.01)	0.00 (-0.01 – 0.02)	0.00 (-0.02 – 0.02)	-0.01 (-0.02 – 0.01)
Rural Urban [Suburb]	0.01 (-0.00 – 0.02)	0.00 (-0.01 – 0.02)	0.01 * (0.00 – 0.03)	0.00 (-0.01 – 0.01)
Rural Urban [Small Town]	0.02 ** (0.01 – 0.03)	0.01 (-0.01 – 0.02)	0.02 ** (0.01 – 0.03)	0.00 (-0.01 – 0.01)
Rural Urban [Rural]	0.04 *** (0.03 – 0.06)	0.03 *** (0.02 – 0.05)	0.05 *** (0.03 – 0.06)	0.02 ** (0.00 – 0.03)
Gender [Female]	-0.00 (-0.01 – 0.01)	0.02 *** (0.01 – 0.03)	0.01 (-0.00 – 0.02)	-0.00 (-0.01 – 0.01)
Observations	4203	4203	4203	4203
R <sup>2</sup> / R <sup>2</sup> adjusted	0.391 / 0.389	0.310 / 0.308	0.273 / 0.270	0.436 / 0.433

\*  $p < 0.05$    \*\*  $p < 0.01$    \*\*\*  $p < 0.001$

## Endnotes

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- <sup>4</sup> Buchan, Bruce, and Lisa Hill. *An Intellectual History of Political Corruption*. Palgrave Macmillan, 2014. 6.
- <sup>5</sup> Aquinas, Thomas. *Selected Political Writings*. Translated by J. G. Dawson, B. Blackwell, 1965. 19.
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- <sup>7</sup> Müller, Jan-Werner. “Populism and Constitutionalism.” Oxford Handbooks Online, 2017, <https://doi.org/10.1093/oxfordhb/9780198803560.013.28>, 13.
- <sup>8</sup> *Ibid.* 13.
- <sup>9</sup> Morgan, Edmund S. *Inventing the People: The Rise of Popular Sovereignty in England and America*, W. W. Norton & Company. Kindle Edition. 13.
- <sup>10</sup> Lefort, 17.
- <sup>11</sup> Contrast this with “degenerative” conception of corruption in feudal kingship, where corruption was understood as a deviation from the divinely ordained order.
- <sup>12</sup> Müller, Jan Werner. *What Is Populism?* (Penguin Books Ltd, 2017), 40.
- <sup>13</sup> While this separation of power and person at various levels of government may also be characteristic of other systems (such as the bureaucratic absolutist monarchies of the 18th and 19th centuries), democracy is the only system in which the ultimate source of authority is not occupied by an individual who appropriates that authority to their own person, where rational-legal authority is (at least nominally and in theory) characteristic of all levels of power, ensuring (in the words of political theorist Claude Lefort) that the ultimate place of power remains “empty.”
- <sup>14</sup> Weber, Max. *Economy and Society*. (University of California Press, 2013), 218.
- <sup>15</sup> Bratsis, Peter. “The Construction of Corruption, or Rules of Separation and Illusions of Purity in Bourgeois Societies.” *Social Text*, vol. 21, no. 4, 2003, pp. 9–33., [https://doi.org/10.1215/01642472-21-4\\_77-9](https://doi.org/10.1215/01642472-21-4_77-9), 15.
- <sup>16</sup> One could allege that Trump’s use of secret service money to pay his own private jet companies is formally corrupt. But one could then add that he is undermining American taxpayers and usurping power from the American people in order to enrich himself. This would combine a formal allegation with substantive/popular appeal.
- <sup>17</sup> Diehl, Paula. “Twisting Representation.” *Routledge Handbook of Global Populism*, 2018, pp. 135., <https://doi.org/10.4324/9781315226446-10>.
- <sup>18</sup> Lefort, 20.
- <sup>19</sup> Müller, Jan Werner. *What Is Populism?* 25.
- <sup>20</sup> Arato, Andrew. “Political Theology and Populism.” *Social Research: An International Quarterly*, Volume 80, Number 1, Spring 2013, 147.
- <sup>21</sup> “CBS Weekend News : KPIX : May 7, 2016 5:30pm-6:01pm PDT : Free Borrow & Streaming.” *Internet Archive*, [archive.org/details/KPIX\\_20160508\\_003000\\_CBS\\_Weekend\\_News/start/540/end/600](http://archive.org/details/KPIX_20160508_003000_CBS_Weekend_News/start/540/end/600). 0
- <sup>22</sup> Several Transcripts include speech data from more than one candidate (particularly debates and Rallies in which Sanders and Biden appeared together). This explains the discrepancy between total and the sum of Biden, Trump, and Sanders.
- <sup>23</sup> Silge, Julia, and David Robinson. *Text Mining with R : A Tidy Approach*. Vol. First edition, O’Reilly Media, 2017. 31.
- <sup>24</sup> Roberts, Margaret E., et al. “STM: An R Package for Structural Topic Models.” *Journal of Statistical Software*, vol. 91, no. 2, 2019, <https://doi.org/10.18637/jss.v091.i02>.
- <sup>25</sup> For a more detailed explanation, see: <https://cacm.acm.org/magazines/2012/4/147361-probabilistic-topic-models/fulltext>
- <sup>26</sup> Blei, David M. “Probabilistic Topic Models.” *ACM*, 1 Apr. 2012, <https://cacm.acm.org/magazines/2012/4/147361-probabilistic-topic-models/fulltext>.
- <sup>27</sup> The number of topics is a user determined hyperparameter. In this case, a model with 8 topics achieves the highest level of semantic coherence (a statistical property provided in the STM package which is maximized when the most probable words in a given topic frequently co-occur together) among the possible models containing less than 12 topics.

<sup>28</sup> The words shown in the table on the next page are the words that have the highest relative likelihood of indicating the presence of a topic, and already give the user an idea of what each topic is likely to be about (e.g. “Ukraine, son, Burisma” indicates that topic 7 is likely to be about Trump’s allegations of public office corruption against Joe and Hunter Biden).

<sup>29</sup> “Donald Trump Rally Speech Transcript Grand Rapids, Michigan November 2.” *Rev.com*, 3 Nov. 2020, [www.rev.com/blog/transcripts/donald-trump-rally-speech-transcript-grand-rapids-michigan-november-2](http://www.rev.com/blog/transcripts/donald-trump-rally-speech-transcript-grand-rapids-michigan-november-2).

<sup>30</sup> “Donald Trump Rally Speech Transcript Reading, Pa October 31.” *Rev.com*, 1 Nov. 2020, [www.rev.com/blog/transcripts/donald-trump-rally-speech-transcript-reading-pa-october-31](http://www.rev.com/blog/transcripts/donald-trump-rally-speech-transcript-reading-pa-october-31).

<sup>31</sup> “Donald Trump Rally Speech Transcript Grand Rapids, Michigan November 2.” *Rev.com*, 3 Nov. 2020, [www.rev.com/blog/transcripts/donald-trump-rally-speech-transcript-grand-rapids-michigan-november-2](http://www.rev.com/blog/transcripts/donald-trump-rally-speech-transcript-grand-rapids-michigan-november-2).

<sup>32</sup> “Donald Trump Rally Speech Transcript Kenosha, WI November 2.” *Rev.com*, 3 Nov. 2020, [www.rev.com/blog/transcripts/donald-trump-rally-speech-transcript-kenosha-wi-november-2](http://www.rev.com/blog/transcripts/donald-trump-rally-speech-transcript-kenosha-wi-november-2).

<sup>33</sup> Laclau, Ernesto. *On Populist Reason*. Verso, 2005. 72.

<sup>34</sup> *Ibid.*, 83-86.

<sup>35</sup> It is important to note that I am not alleging that Trump has any special attachment to the American people, or, even that deep down he subscribes to a “populist world view.” Populism is a political logic, but it is also a style and a strategy for gaining and influencing power – for the purposes of the present analysis, Trump’s psychology is irrelevant.

<sup>36</sup> “Donald Trump Rally Speech Transcript Allentown, Pa October 26.” *Rev.com*, 26 Oct. 2020, [www.rev.com/blog/transcripts/donald-trump-rally-speech-transcript-allentown-pa-october-26](http://www.rev.com/blog/transcripts/donald-trump-rally-speech-transcript-allentown-pa-october-26).

<sup>37</sup> “Donald Trump Rally Speech Transcript Allentown, Pa October 26.” *Rev.com*, 26 Oct. 2020, [www.rev.com/blog/transcripts/donald-trump-rally-speech-transcript-allentown-pa-october-26](http://www.rev.com/blog/transcripts/donald-trump-rally-speech-transcript-allentown-pa-october-26).

<sup>38</sup> “Donald Trump Leaked Unedited 60 Minutes Interview Transcript.” *Rev.com*, 22 Oct. 2020, [www.rev.com/blog/transcripts/donald-trump-unedited-60-minutes-interview-transcript](http://www.rev.com/blog/transcripts/donald-trump-unedited-60-minutes-interview-transcript).

<sup>39</sup> Diehl, 135

<sup>40</sup> Müller, Jan Werner. *What Is Populism?* 31.

<sup>41</sup> Diehl, 138

<sup>42</sup> “Donald Trump Charlotte, North Carolina Rally Transcript: Trump Holds Rally before Super Tuesday.” *Rev.com*, 2 Mar. 2020, [www.rev.com/blog/transcripts/donald-trump-charlotte-north-carolina-rally-transcript-trump-holds-rally-before-super-tuesday](http://www.rev.com/blog/transcripts/donald-trump-charlotte-north-carolina-rally-transcript-trump-holds-rally-before-super-tuesday).

<sup>43</sup> “Donald Trump Rally Speech Transcript Grand Rapids, Michigan November 2.” *Rev.com*, 3 Nov. 2020, [www.rev.com/blog/transcripts/donald-trump-rally-speech-transcript-grand-rapids-michigan-november-2](http://www.rev.com/blog/transcripts/donald-trump-rally-speech-transcript-grand-rapids-michigan-november-2).

<sup>44</sup> Taylor, Ryan. “Donald Trump Michigan Rally Speech Transcript October 17.” *Rev*, 17 Oct. 2020, [www.rev.com/blog/transcripts/donald-trump-michigan-rally-speech-transcript-october-17](http://www.rev.com/blog/transcripts/donald-trump-michigan-rally-speech-transcript-october-17).

<sup>45</sup> Roberts, 8

<sup>46</sup> Gest, Justin. *The New Minority: White Working Class Politics in an Age of Immigration and Inequality*. (Oxford University Press, 2016), 15

<sup>47</sup> “Donald Trump Las Vegas, Nevada Rally Transcript.” *Rev.com*, 25 Feb. 2020, [www.rev.com/blog/transcripts/donald-trump-las-vegas-nevada-rally-transcript](http://www.rev.com/blog/transcripts/donald-trump-las-vegas-nevada-rally-transcript).

<sup>48</sup> “Donald Trump Rally Speech Transcript Lititz, Pa October 26.” *Rev.com*, 26 Oct. 2020, [www.rev.com/blog/transcripts/donald-trump-rally-speech-transcript-lititz-pa-october-26](http://www.rev.com/blog/transcripts/donald-trump-rally-speech-transcript-lititz-pa-october-26).

<sup>49</sup> “Donald Trump Rally Transcript Janesville, Wi October 17.” *Rev.com*, 20 Oct. 2020, [www.rev.com/blog/transcripts/donald-trump-rally-transcript-janesville-wi-october-17](http://www.rev.com/blog/transcripts/donald-trump-rally-transcript-janesville-wi-october-17).

<sup>50</sup> “Donald Trump Macon, Georgia Rally Speech Transcript October 16.” *Rev.com*, 17 Oct. 2020, [www.rev.com/blog/transcripts/donald-trump-macon-georgia-rally-speech-transcript-october-16](http://www.rev.com/blog/transcripts/donald-trump-macon-georgia-rally-speech-transcript-october-16).

<sup>51</sup> “Donald Trump Rally Speech Transcript Macomb County, MI November 1.” *Rev.com*, 1 Nov. 2020, [www.rev.com/blog/transcripts/donald-trump-rally-speech-transcript-macomb-county-mi-november-1](http://www.rev.com/blog/transcripts/donald-trump-rally-speech-transcript-macomb-county-mi-november-1).

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<sup>54</sup> Trump is claiming that Omar was involved in Illegal ballot harvesting. This has been debunked. More information here: <https://www.usatoday.com/story/news/factcheck/2020/10/16/fact-check-project-veritas-no-proof-voter-fraud-scheme-link-ilhan-omar/3584614001/>

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- <sup>78</sup> Gidron and Hall, 21.

<sup>79</sup> As Noam Gidron and Peter Hall show in a recent paper, lower subjective status is positively associated with distrust of elites, a belief that the political system is corrupt, and voting for anti-establishment parties in North America and Europe. See Gidron and Hall, 20.

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## **Early Childhood Intervention and Income Inequality: An Analysis on the Intergenerational Mobility of Head Start Participants**

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**ABSTRACT:** The Head Start program is an early childhood intervention program funded by the federal government. Designed for low-income families, it promotes school readiness among its participants. In my research, I examine the effects of Head Start on the intergenerational mobility of its participants. Using data from the National Longitudinal Survey of Youth (NLSY79) and the NLSY Child and Young Adult Supplement (CNLSY), I measure the degree of earnings persistence between parents and their children for students in preschool and Head Start. I find that participation in Head Start is associated with an increase in mobility, which remains true after controlling for family effects.

### **I. Introduction**

Countries with lower intergenerational mobility tend to have higher income inequality.<sup>1</sup> I investigate whether increased access to education through the Head Start program leads to more intergenerational mobility. This higher intergenerational mobility could lead to a decrease in income inequality, a growing problem in the United States. The Head Start Program is a comprehensive early childhood intervention program that educates low-income children to prepare them for primary school. In addition to a traditional preschool education, the program provides health, nutrition, and parent involvement services.<sup>2</sup> Past literature has investigated the long-term effects of Head Start on metrics such as participant earnings, test scores, and crime rates.<sup>3,4,5</sup>

Researchers judge the immediate success of programs like Head Start through measures such as test scores. While research finds that test scores increase right after a child's participation in the program, these increases dissipate over time in what has been called the "Head Start fade."<sup>6</sup> However, test scores are not the only determinant of success for the program. Children can still benefit in the longer run as a result of better school preparation. Increased school readiness for students could cause a change in trajectory throughout primary school and make them more likely to have positive future outcomes. If Head Start participants improve their economic status relative to their parents more than students who do not enroll in Head Start, then enrollment in Head Start could decrease income inequality in the United States for future generations.

I believe my research contributes to the literature surrounding Head Start. Previous research focuses on test scores and individual young adult outcomes such as high school graduation and teen parenthood.<sup>7,8</sup> My research provides an alternate lens for looking at its potential benefits. By looking at the intergenerational mobility of Head Start participants compared to non-participants, I find that Head Start participants have more economic mobility. That is, the income of a Head Start participant's parents is less predictive of the participant's future income than it is for someone who does not participate in Head Start. This suggests that early childhood intervention programs such as Head Start accrue lasting benefits for its participants.

## II. Context and Theory

### *Connecting Mobility, Inequality, and Education*

Previous research finds associations between income inequality and other phenomena that helps explain rising income inequality in countries such as the United States. A country's intergenerational mobility is one potential link that could account for this rise. Corak (2013) discusses this relationship through the Great Gatsby Curve.<sup>9</sup> Among OECD countries, those with higher income inequality also tend to experience lower intergenerational mobility.<sup>10</sup> As a measure of intergenerational mobility, Corak uses the intergenerational earnings elasticity (IGE) of a country.<sup>11</sup> The IGE is the coefficient  $\beta$  from the regression equation of one generation's income  $Y_{i,t}$  versus a previous generation's income  $Y_{i,t-1}$ :

$$\ln Y_{i,t} = \alpha + \beta \ln Y_{i,t-1} + \epsilon_i.$$

In this equation,  $i$  represents each individual,  $t$  represents the current generation and  $t - 1$  represents the previous generation. The coefficient  $\alpha$  is the trend in average income across generations and  $\epsilon$  is an error term that captures any other influences on the current generation's income. This is the primary empirical strategy I use in my analysis of Head Start participation and intergenerational mobility; I expand on the strategy in Section III.

The coefficient  $\beta$  in the above equation measures the degree to which a parent's earnings allow us to predict a child's earnings. Higher values of  $\beta$  imply lower intergenerational mobility. For some percent variation in a parent's income, the intergenerational elasticity tells us the expected percent variation in a child's income. For example, if a parent's income is 50 percent above the mean income for his generation, then an IGE of 1 implies a child will also have an income 50 percent above the mean income for the child's generation. An IGE of 0, on the other hand, implies a parent's income has no relationship to the child's income. A parent's income bracket is thus more likely to be the same as the child's future income bracket if we observe low intergenerational mobility. Corak (2013) compares the IGE to a country's level of income inequality using the Gini coefficient.<sup>12</sup> In his data, countries with a higher Gini coefficient also have a higher IGE. The United States is at the upper end of the relationship: it has high income inequality and low intergenerational mobility compared to other countries.<sup>13</sup> Since Corak's study, research has found multiple explanations for the relationship between inequality and mobility.

One such study by Jerrim and Macmillan (2015) suggests education is the primary link between income inequality and intergenerational mobility.<sup>14</sup> They present empirical evidence of this relationship across countries that participate in the Programme for the International Assessment of Adult Competencies (PIACC). Instead of regressing log child income on log parent income, the authors instead regress log child income on the highest level of parental education, claiming this method will capture financial, social, and cultural effects on the child.<sup>15</sup> They analyze two different effects in their paper: (1) the association between educational attainment of parents and children and (2) the overall returns on education for the child. Jerrim and Macmillan find both effects are positively associated with income inequality among the countries in the survey, with the persistence of educational attainment between parents and children being the stronger result.<sup>16</sup> From this, they conclude transmission of education is important for intergenerational mobility, particularly through financial investments in education. If these financial investments are primarily



at the top of the income distribution, then low-income families are left behind in education and income inequality is expected to be higher.

One potential consequence of differential investment in education is differing school quality. Grawe (2010) investigates the relationship between intergenerational earnings mobility and school quality for male students, which he proxies using the pupil-to-teacher ratio.<sup>17</sup> Theoretically, this proxy's effect on the IGE could be either positive or negative. A higher pupil-to-teacher ratio could imply a lower school quality because schools are unable to hire more teachers. In these scenarios, each student may receive less individual attention and would therefore not learn as much as he would at a school with a lower ratio. On the other hand, a lower pupil-to-teacher ratio may imply that, while a school hires many teachers, the average teacher has lower qualifications than in an identical school with the same budget that hires fewer teachers. Grawe finds a positive relationship between intergenerational mobility and the pupil-to-teacher ratio; for an increase in the pupil-to-teacher ratio, the mobility of sons increases.<sup>18</sup> While this study may say nothing about the effects of improvements in early childhood intervention, it suggests that school quality could affect mobility.

Assuming that communities with different average income levels have different levels of financial investment in education, socioeconomic segregation represents a potential hindrance to improvements in educational investment and attainment for low-income groups. In their paper "Understanding the Great Gatsby Curve," Durlauf and Seshadri (2018) argue that social factors determine education and human capital, with education acting as the mediator between parental income and the future income of their offspring.<sup>19</sup> The authors show that an equilibrium outcome of the Great Gatsby Curve can occur as a result of high socioeconomic segregation.<sup>20</sup> Central to this analysis is the assumption that people prefer to live with more affluent neighbors in larger areas. These preferences lead to socioeconomic segregation of neighborhoods.<sup>21</sup> For neighborhoods with a higher average income, members contribute more to public investments in education than neighborhoods with a lower average income. These investments will translate into greater overall investment in human capital for higher-income children in more affluent neighborhoods. The authors propose this difference in investment causes a disparity in accumulated human capital between children of low-income neighborhoods and high-income neighborhoods.<sup>22</sup> By assuming early accumulation of human capital predicts labor market outcomes in adulthood, Durlauf and Seshadri conclude that socioeconomic segregation leads to low intergenerational mobility and persistent income inequality.<sup>23</sup> Empirical research could further test this theory, but my research focuses only on the individual decisions of parents to invest in their children's human capital, not societal decisions as a whole.

Many students in the United States go to school depending on their residential district, implying residential segregation and school segregation are closely connected.<sup>24</sup> Arenas and Hindriks (2021) investigate the latter phenomenon in their research on intergenerational mobility and unequal school opportunity.<sup>25</sup> They simulate different outcomes of intergenerational mobility and efficiency to investigate the relationship between income inequality and low mobility. In this instance, the authors define a change in efficiency as the change in average human capital.<sup>26</sup> They use the US parental income distribution to assess the tradeoff between school desegregation and efficiency.<sup>27</sup> In their model, unequal school opportunity includes both unequal school quality and different probabilities of access to the best schools, which is very similar to the story of socioeconomic segregation told by Durlauf and Seshadri.<sup>28</sup> This unequal opportunity causes a gap between high- and low-income families where higher-income families will match with higher-quality schools. Arenas and Hindriks assume that investment in human capital and school quality

are complements.<sup>29,30</sup> Therefore, a higher rate of positive assortative matching implies higher school quality and higher average investment in human capital. In their simulation, Arenas and Hindriks test which effect dominates by changing school segregation and school inequality variables. They find the increase in mobility from “creating” more equal schools is higher than the loss in efficiency from this equalization.<sup>31</sup> Finding ways to make schools more equal could therefore improve economic mobility. Later, I discuss how early childhood interventions such as Head Start could improve overall school quality.

### *Traditional Models of Intergenerational Mobility*

My research focuses on a parent’s individual decision to invest in his or her child’s human capital and how this decision relates to intergenerational mobility. Becker and Tomes (1979) build the primary economic theory for intergenerational mobility.<sup>32</sup> Starting with the first principles of utility maximization, a parent faces the decision to invest either in his own consumption or in his child’s consumption. The parent obtains some discounted utility from his child’s utility—this depends on an intergenerational discount factor that represents the parent’s degree of altruism toward his child. As an equation, we represent this as

$$U = u(c) + \beta * u(c')$$

where  $U$  is the parent’s overall utility,  $c$  is the parent’s consumption,  $c'$  is the child’s consumption, and  $\beta$  is the intergenerational discount factor. Because this equation separates the utility of a parent’s consumption from the utility of his child’s consumption, we can just focus on maximizing the child’s utility in our analysis. By assumption, the child’s consumption  $c'$  is equivalent to his future earnings:

$$c' = w = ah^\gamma + x(1 + r).$$

Here,  $a$  is inherent ability,  $h^\gamma$  is the parent’s investment in human capital,  $x$  is the endowment that a parent gives to a child, and  $r$  is the interest rate on the endowment. If a parent maximizes his child’s future earnings, then the parent also maximizes his utility from his child’s consumption. A parent determines his child’s future earnings through investment in the child’s human capital and endowments to the child. Investment in human capital,  $h^\gamma$ , is an increasing function that exhibits decreasing marginal returns because  $0 < \gamma < 1$ . For two children with the same investment in human capital, the child with a higher inherent ability  $a$  will also have higher future wages. As a simplifying assumption, we assume the price of each unit of human capital is \$1. The endowment given to the child,  $x$ , earns interest  $r$  over time at a rate of  $(1 + r)$ . Solving for the optimal investment in a child’s human capital is therefore reduced to taking the partial derivatives of our first order condition:

$$\frac{\partial w}{\partial h} = a\gamma h^{\gamma-1}$$

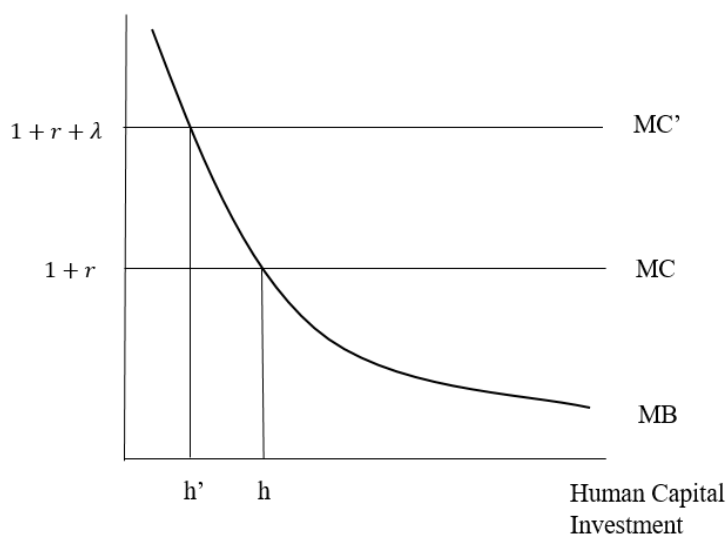
$$\frac{\partial w}{\partial x} = 1 + r$$

From these conditions, setting  $\partial w/\partial h$  equal to  $\partial w/\partial x$  gives the optimal investment in a child’s human capital. Here,  $\partial w/\partial h$  is the marginal benefit of an additional unit of investment in human capital and  $\partial w/\partial x$  is the marginal cost of the additional investment. We think of this marginal

cost as an opportunity cost—instead of investing money into a child’s human capital, the parent could instead use the money to give a bequest to the child that earns an interest of  $1 + r$ . Equating marginal benefit to marginal cost, we derive a parent’s optimal investment in a child’s human capital.

However, if credit constraints are present, then the parent’s optimization problem must change.<sup>33,34</sup> Now, the parent no longer has enough capital to give an endowment to his child. Therefore, the value  $x$  in the first order condition becomes zero and any investment in the child is only in his human capital. The marginal cost of a parent’s investment in a child’s human capital is therefore also affected by some credit constraint  $\lambda$ . The new marginal cost is therefore  $\frac{\partial w}{\partial x} = 1 + r + \lambda$ . The marginal cost curve shifts up and results in a decreased investment in a child’s human capital compared to a situation with no credit constraints. Figure 1 depicts this difference in the two scenarios, with  $h$  representing optimal investment without credit constraints and  $h'$  representing optimal investment with credit constraints.

**Figure 1: Optimal Allocation of Investment in a Child’s Human Capital**



Solon (2004) presents a theoretical model that solves for a steady state of intergenerational mobility.<sup>35</sup> In this model, a child’s human capital depends on a parent’s investment in the child’s human capital, a public investment in the child’s human capital, and an additional human capital endowment of the child independent of the investment in the child’s human capital.<sup>36</sup> This endowment is the child’s ability and represents traits the child receives either through nature or nurture. Solon gives examples of family culture, family reputation, and inherent ability as potential effects on a child’s human capital endowment.<sup>37</sup> A higher endowment implies the child will have higher human capital. Two important conclusions from the steady state equilibrium in this model are that (1) parents invest more in their child’s human capital if their income is higher and (2) the intergenerational earnings elasticity is lower if a community’s investment in public education is higher.

Corak’s (2013) findings empirically confirm conclusion (1).<sup>38</sup> In the past 50 years, parental investment in enrichment expenditures for education such as computers and private schooling have increased by about \$5,000 in 30 years for those in the top income quintile but have stayed about

the same for those in the bottom income quintile.<sup>39</sup> This conclusion is important because a higher private investment in human capital could lead to a higher human capital in children and therefore higher future earnings for children of families from higher income brackets. A remedy for this inequality could be public investment improvements for a child's education. As conclusion (2) states, higher public investment results in a lower intergenerational earnings elasticity. Parents who otherwise could not afford more investment in their child's education now receive the benefits of a public investment in their child's education. Programs such as Head Start seek to improve the suboptimal investment in a child's human capital through public investment in the child's human capital, which Becker and Tomes (1979) call a productive activity of the government.<sup>40,41</sup> This improves the overall stock of human capital for children at the lower end of the income distribution and leads to higher wages. These higher wages then cause a decrease in the intergenerational earnings elasticity.

### *Early Childhood Intervention's Promising Effects*

Even though investments in a child's human capital can occur at any point during the child's youth, Johnson and Jackson (2019) argue through the concept of dynamic complementarity that early educational investments can help break the cycle of poverty.<sup>42</sup> This concept comes from Cunha and Heckman (2007) in their paper "The Technology of Skill Formation."<sup>43</sup> They state that the skills a child learns early on in development improve later investments in a child's human capital.<sup>44</sup> This synergy has compounding effects as a child continues to gain skill and improve his human capital. Without early skill building, a child will fall behind and therefore be unable to reap the benefits of later investment in his education.<sup>45</sup> By preparing a child for elementary school education, the Head Start program can provide a direct channel for children to become school-ready when entering the K-12 system.

In addition, spillover effects to non-Head Start participants from children enrolled in Head Start could improve the learning environment for all students. Because children who enroll in Head Start may be in a more socioeconomically segregated area, these positive spillover effects might cause improved educational and earnings outcomes for all students, not just those who participated in Head Start. While my research only focuses on the intergenerational effects of students who participate in Head Start, future analysis could also analyze the intergenerational effect of Head Start on an entire *community*, not just on individual participants in Head Start. This analysis would then tie back into the earlier discussion of socioeconomic segregation through education; if Head Start had benefits from spillover effects, this could improve education in lower-income neighborhoods and thus yield a decline in income inequality.

Extending this idea of community benefits of early childhood intervention, Art Rolnick and Rob Grunewald (2003) argue in favor of early child development programs and perform a cost-benefit analysis of the Perry Preschool program.<sup>46</sup> This was an early childhood intervention program in Ypsilanti, Michigan that provided high-quality education for children who were three and four.<sup>47</sup> Instead of public investments in economic development, such as subsidizing businesses and improving professional sports stadiums, Rolnick and Grunewald argue that public investment in an early child development program would provide a much higher rate of return.<sup>48</sup> Over the five years of the Perry Preschool program's existence, they estimate the total overall benefits to participants and the public in Ypsilanti to be \$108,002 and the cost to be \$12,356 in 1992 dollars.<sup>49</sup> Benefits for the public come in the form of a decrease in crime and welfare payments and in a more efficient K-12 education.<sup>50</sup>

A similar analysis by Barnett (1995) finds comparable benefits to the Perry Preschool program.<sup>51</sup> In addition to his Perry Preschool analysis, Barnett reviews 36 previous studies on early childhood intervention programs to examine their long-term effects on children from low-income families.<sup>52</sup> He finds positive long-term effects in grade retention and special education placement to be among the most significant observations from the studies.<sup>53</sup> Although others have investigated the long-term effects of small, targeted programs, I assess the far-reaching program of Head Start to determine whether positive long-term effects of Head Start on intergenerational mobility exist.

### *Head Start's Long-Run Outcomes*

The literature on Head Start has primarily looked at the program's effects on outcomes other than intergenerational mobility. Deming (2009) first replicates previous research on initial test score outcomes for Head Start participants, then analyzes Head Start's impact on six different outcomes including college attendance, crime, and high school graduation.<sup>54</sup> He finds that after applying family fixed effects in the regression, students who participate in Head Start are predicted to score 0.145 standard deviations higher on standardized tests than students who had no preschool at ages 5-6.<sup>55</sup> Deming then goes on to show that although students have improved test scores right after Head Start, the improvements fade out by the time they are in middle school.<sup>56</sup> This pattern is similar to Lee and Loeb's (1995) previous results.<sup>57</sup>

More central to Deming's paper, however, are his results on long-term outcomes of participants. When Deming regresses an index of these outcomes—which includes college attendance, crime rates and high school graduation—on participation in Head Start, he finds a statistically significant impact of 0.228 standard deviations for children who participate in Head Start compared to children who do not.<sup>58</sup> This result implies that long-term impacts of Head Start extend beyond just initial test score gains. Deming reports improvements in multiple individual outcomes: the likelihood of high school graduation increases, the likelihood of completing some college increases, and the likelihood of idleness decreases.<sup>59</sup> People were considered idle if they were not enrolled in school and reported zero wages in 2004. These findings suggest long-term benefits of Head Start participants are present and thus prompts further investigation into the program's future benefits for children.

Garces et al. (2002) perform a similar analysis to Deming's—they look at four young adult outcomes for white and Black participants using data from the Panel Study of Income Dynamics (PSID).<sup>60</sup> These outcomes are high school graduation rates, some college education, log earnings, and crime rates.<sup>61</sup> When controlling for observable characteristics, white Head Start participants are 20 percentage points more likely to complete high school than their siblings who did not attend Head Start. However, this result does not hold for Black Head Start participants.<sup>62</sup> But Garces et al. do find a decrease in crime rates for Black Head Start participants compared to their siblings who had no early childhood education.<sup>63</sup> This crime reduction suggests a positive social benefit from Head Start that could be measured in a cost-benefit analysis. Most notable is the finding that earnings between the ages of 23 to 25 are significantly higher for children who attended Head Start compared to children that either had no early education or attended preschool.<sup>64</sup> Higher earnings for children from low-income backgrounds could help break the cycle of poverty and provides a good grounding for my research on the intergenerational mobility of children in Head Start.

### III. Hypothesis, Data, and Empirical Strategy

#### *Hypothesis*

In my research, I aim to continue Deming's work and explore the implications of the Head Start program on intergenerational income mobility. I hypothesize that the intergenerational earnings elasticity, or IGE, of Head Start participants is smaller than the IGE of non-participants. This hypothesis would suggest the Head Start program improves the mobility of participants and would provide evidence to support improvements in public education aimed to benefit lower-income families if the benefits outweigh the costs of the program.

#### *Econometric Methods*

In my regression, I combine the empirical Head Start research done by Deming (2009) with Grawe's (2010) model on intergenerational mobility.<sup>65,66</sup> Grawe interacts school quality with average family income instrumented by state to measure the effect of school quality on the IGE.<sup>67</sup> He includes this state instrument in his model because he uses census data and is unable to connect individual sons with their fathers in the sample.<sup>68</sup> Because using NLSY data allows me to directly link children with their mothers, I do not need to include any instrumental variables in my regression. I use a multivariate linear regression to estimate the log of each child's earnings as a function of the log of family earnings:

$$y_{i,c} = \beta_0 + \beta_1 y_{i,p} + \beta_2 HS_i + \beta_3 A + \beta_4 (y_{i,p} \times HS_i)$$

where  $y_c$  is the log of the child's family income,  $y_p$  is the log of family income for the parents of the child,  $HS_i$  is a dummy variable indicating whether the child participated in Head Start,  $A$  is a vector of child and parent ages that I discuss later, and  $i$  indexes the child. The parameters of interest in this model are  $\beta_1$ , the predicted intergenerational elasticity between parents and children, and  $\beta_4$ , the effect on the intergenerational elasticity if a child participates in Head Start. I hypothesize Head Start participation will increase mobility in my sample. If this is true, then I will observe a negative coefficient  $\beta_4$  in my regression, implying participation in Head Start decreases the IGE and thus increases intergenerational mobility.

Garces et al. (2002) and Deming (2009) include a control for a child's participation in preschool in their regression.<sup>69,70</sup> This is because they want to separate the effects of Head Start from other early childhood interventions and compare Head Start to these other interventions. I take a similar approach in my regression, estimating the IGE for Head Start participants, preschool participants, and children with no early childhood intervention.

In a separate regression, I also estimate all of the variables in the above equation with sibling fixed effects. The coefficients on the independent variables in my OLS regression could be capturing other family effects that my model does not specify. The fixed effects model controls for constant characteristics in households, which could include factors such as parental education, the number of members in the household, and other unobserved family background traits. This method does come with limitations. Namely, this method more than halves my sample size because I only include children who have siblings in the sample.

#### *Data*

All of my data come from the National Longitudinal Survey (NLS) Investigator in the National Longitudinal Survey of Youth (NLSY79) and Children of the National Longitudinal

Survey of Youth (CNLSY) surveys.<sup>71</sup> In their research on levels of intergenerational mobility in different geographic locations in the United States, Chetty et al. (2014) use family income observations.<sup>72</sup> I follow their approach, using family income observations for my intergenerational elasticity estimates. I adjust child family income observations in 2009, 2011, and 2013 for inflation with a base year of 2013. Following Lee and Solon (2009), I then average all income observations greater than zero and log their average, excluding any parent or child with a reported income of zero for all three years.<sup>73</sup> I apply the same transformations to parent family income in 1993, 1995, and 1997. A small number of parent income observations include out of range codes close to one million dollars for their 1995 income. I exclude these observations from my data, and this did not change the results. In every survey year, the NLSY top codes some share of the top income observations.<sup>74</sup> I choose to include these observations in my sample. The age variables in my data are from the last year of income responses: For parents, this is 1997, and for children, this is 2013.

The CNLSY asks questions about a child’s Head Start and preschool participation every two years. I take the responses for each child across all years, and if a response ever reports a child attending either Head Start or preschool, then I code the associated variable as “yes.” For scenarios when the response is “yes” for both Head Start and preschool, I recode the preschool variable as “no” and the Head Start variable as “yes.” It is feasible that respondents think Head Start is a form of preschool, so they would respond “yes” to both questions—this is the assumption that I make when creating my variables. My non-categorical variable summary statistics are shown below in Table 1 and my categorical variable summary is shown in Table 2:

**Table 1: Summary Statistics**

Statistic	N	Mean	St. Dev.	Min	Max
Log Child Avg Income	1,751	10.799	1.012	5.298	12.724
Log Parent Avg Income	1,751	10.748	0.803	6.682	12.779
Child Age	1,751	26.187	3.107	22	33
Parent Age	1,751	35.605	2.195	32	40

**Table 2: Early Childhood Education**

	Yes	No
Head Start	366	1,403
Preschool	229	1,540

I also run a fixed effects regression using a subset of my original sample. It consists only of CNLSY participants with siblings. This leads to sample attrition for two reasons: Some children in my sample did not have any siblings and some children may have had siblings, but their siblings did not meet my income criteria. In either case, these children are left out of my sample. The summary statistics for my fixed effects sample are shown in Tables 3 and 4:

**Table 3: Fixed Effects Summary Statistics**

Statistic	N	Mean	St. Dev.	Min	Max
Log Child Avg Income	741	10.763	0.988	5.298	12.724
Log Parent Avg Income	741	10.725	0.775	7.016	12.427
Child Age	741	26.193	2.991	22	33
Parent Age	741	35.564	2.126	32	40

**Table 4: Fixed Effects Early Childhood Education**

	Yes	No
Head Start	175	566
Preschool	87	654

Table 5 serves as a clarification for the age ranges at which I observe children and their parents. I first restrict my sample to children from ages 22-33 in 2013. The rationale on the lower bound is to avoid measurement error as much as possible—I do not want to observe any incomes from before a child turned 18. This is because the child could mistakenly report income from a part-time job in total family income, even though he is still a dependent. On the upper bound, I want to avoid having to make IGE comparisons across cohorts like Grawe (2010).<sup>75</sup> While analysis about IGE comparisons between cohorts could be fruitful, it is beyond the scope of my current research, which only focuses on IGE comparisons for a particular age group. This age restriction on children also tightens the range of parent ages, as seen below.

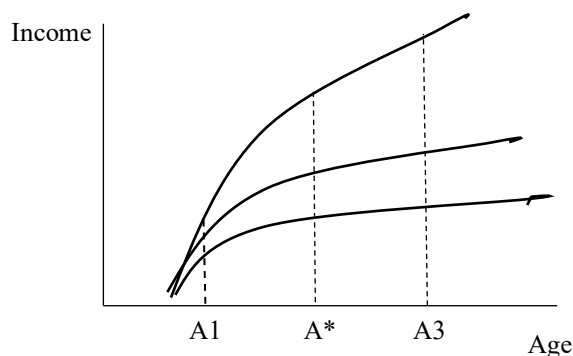
**Table 5: Age Range Information**

	Year	Observations	Age_ranges
Parent Generation	1993 - 1997	Observe family income and parent age	32-40
Child Generation	2009 - 2013	Observe child income and child age	22-33

### *Possible Econometric Issues*

Even with a solid theoretical base for my regressions, endogeneity and multicollinearity pose a threat to my empirical results. In an ideal data set, I would have access to every individual's permanent income. However, this is unrealistic because I only average income observations for three years. This leads to life cycle bias, which occurs when the true variance in a population's lifetime income is either understated or overstated. Figure 2 depicts theoretical earnings profiles for three individuals. Assume age  $A^*$  is truly representative of an individual's lifetime earnings. The variance in earnings between individuals at age  $A_1$  is much smaller than the variance at  $A^*$ , and the variance in earnings between individuals at age  $A_3$  is much larger than the variance at  $A^*$ . When we observe income earlier (later) in a person's life than  $A^*$ , the predicted mean income of a population understates (overstates) the gap in earnings. For the IGE, this shows that no "true" IGE exists when we observe income at different ages. Instead, the IGE will be different at different ages. Interacting parent income with parent age allows the IGE to vary depending on the parent's age, controlling for parent earnings at different stages in life. In separate robustness checks, I find that including these terms in my regression does not meaningfully change my results.



**Figure 2: Graphical Depiction of Life Cycle Bias**

Trends in earnings follow a quadratic path over time. At young ages, individuals have lower earnings because they do not have experience in the workforce. As they gain experience, their income grows. This initial growth is faster when an individual's lifetime earnings is higher. At some point, people approach retirement age where they work less and therefore earn less than they did at their prime age of earnings. As a result, I include linear and quadratic age parameters for children and parents.

While I can control for many endogeneity issues such as life cycle bias, I will be unable to control for two primary sources of bias: measurement error in my independent variables and top coding in the NLSY. If parents state that their child participated in Head Start due to recall error, but the child participated in a different preschool program, this would move the estimate of  $\beta_4$  toward 0. Measurement error will increase the noise of the data and therefore reduce the effect of any relationship that may exist between Head Start participation and income. In addition to misstatement of Head Start participation, classical measurement error on parent income biases the estimate of  $\beta_1$  and  $\beta_4$  downward.<sup>76</sup>

Another source of bias in one of my independent variables is top coding in the NLSY. To protect the identities of individuals with high incomes, the NLSY does not provide the reported incomes of individuals with unusually high income values.<sup>77</sup> In 1991 and 1993, the NLSY79 aggregates all values above a cutoff of \$100,000, averages them, and replaces them with this average. In 1995, a similar approach is used, but this time with the top two percent of respondents with valid income values. Both cases bias upward the coefficient on parent family income.

In addition to endogeneity, multicollinearity may be present in my regressions. The Head Start program is primarily composed of individuals at the bottom of the income distribution, so parent income could be correlated with Head Start participation. To check for this potential multicollinearity, I analyze the variance inflation factors and correlation matrices of these variables, finding that multicollinearity does not pose a large threat to my model.

#### **IV. Results and Discussion**

Table 6 shows results from my OLS, weighted OLS, and fixed effects regressions. Across all three regressions, the IGE is between 0.53 and 0.62. This is in line with other IGE estimates, which range from 0.4 to 0.6.<sup>78</sup> Even though the IGEs from my regressions are slightly higher than the approximate IGE of 0.5 in the United States,<sup>79</sup> they would most likely be closer to Corak's approximation if parent income were not top coded in my sample. The decrease in the IGE from 0.576 in the OLS model to 0.533 in the weighted OLS model suggests that some earnings

persistence was due to the nature of the NLSY. The survey overrepresents minority and low-income populations, so adding weights mutes these effects.

**Table 6: Effects of Head Start and Preschool on IGE**

	<i>Dependent variable:</i>		
	Log Child Avg Income		
	OLS (1)	Weighted OLS (2)	Fixed Effects (3)
Constant	3.467 (6.072)	3.442 (5.923)	-7.472 (10.058)
Log Parent Avg Income	0.576*** (0.033)	0.533*** (0.033)	0.617*** (0.054)
Child Age	-0.207 (0.126)	-0.345*** (0.124)	-0.161 (0.170)
Child Age Squared	0.003 (0.002)	0.005** (0.002)	0.002 (0.003)
Parent Age	0.231 (0.327)	0.378 (0.318)	0.765 (0.550)
Parent Age Squared	-0.003 (0.005)	-0.005 (0.004)	-0.010 (0.008)
Head Start	2.796*** (0.752)	2.102** (0.912)	1.884 (1.265)
Preschool	0.379 (1.053)	0.042 (1.003)	-0.346 (1.525)
Log Parent Avg Income*Head Start	-0.281*** (0.072)	-0.217** (0.087)	-0.197 (0.121)
Log Parent Avg Income*Preschool	-0.028 (0.096)	0.009 (0.090)	0.034 (0.139)
Observations	1,751	1,751	741
Adjusted R <sup>2</sup>	0.222	0.233	
F Statistic (df = 9; 1741)	56.361***	60.091***	

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

The coefficient on the interaction between a student's participation in Head Start and parent income, Log Parent Avg Income\*Head Start, is statistically significant in both the OLS and Weighted OLS estimates. For my sample, this implies that children who participate in Head Start

have a lower IGE than children who do not participate in Head Start. Holding all other variables constant, we find the IGE for a Head Start participant by adding the coefficient on the interaction between Head Start and parent income to the coefficient on Log Parent Avg Income. This results in a predicted IGE of 0.316 for Head Start participants in the weighted OLS model compared to an IGE of 0.533 for children who do not participate in any pre-kindergarten program.

This result matches my hypothesis that participation in Head Start results in a smaller IGE and thus increases mobility. As mentioned by Corak (2013), we must be careful in assigning a particular direction to this economic mobility.<sup>80</sup> The IGE only provides an average measure of the degree of mobility in a given sample and does not say anything about mobility for members of different income brackets. However, because families of Head Start participants are primarily at the bottom of the income distribution, much of the increase in mobility from participation in Head Start could plausibly come from this group. Using this interpretation, my intergenerational mobility model predicts children who participate in Head Start experience more mobility than children who do not participate in any early childhood intervention program. Care must be taken when interpreting these results because all coefficients that include parent income may have upward bias due to top coding. If bias were present, then the IGE effects that I find may not be as strong.

While these results are promising, when I add additional family controls through fixed effects, the coefficient on the interaction between Head Start and a parent's log average income loses its significance. One possible explanation is that my fixed effects sample size is much smaller than my OLS sample size. This could cause an increase in standard errors that then make the coefficient lose its significance. Another explanation is that the family controls muted the effect of Head Start on intergenerational mobility. Head Start participants could share similar unobserved family characteristics that are also associated with the Head Start program. These family characteristics could be the reason that higher mobility exists for Head Start participants instead of the program itself.

Not surprisingly, the coefficient on the interaction between a student's participation in preschool and parent income is not statistically significant. Returns to human capital investment and credit constraints have competing effects on this coefficient. Similar to Head Start participants, preschool participants receive positive returns to education. According to Becker and Tomes's (1979) theory on human capital accumulation, these positive returns lead to higher future earnings.<sup>81</sup> Parents will send their child to preschool if the investment in preschool will pay off for the child. This is more likely to occur if a child's return on investment in human capital, his ability, is higher. A scenario of optimal investment could happen if government offices such as the Administration for Children & Families provide subsidies or tax credits for low-income families. This could then encourage investment and create a situation where no family has credit constraints.<sup>82</sup> Children with the highest abilities would then attend early education programs regardless of their family's income. This scenario would imply the interaction between preschool and parent income has a negative coefficient. Depending on the randomly endowed abilities of children, they will move either up or down in the income distribution depending on that ability, not the income of their parents.

However, as discussed in Section II, if government assistance is not enough, then credit constraints force some families to provide suboptimal investment in a child's education. If only families at the top of the income distribution can afford to send their children to preschool, then only the children at the top of the income distribution will receive human capital investments. Therefore, mobility will be lower than if no credit constraints exist. Children at the lower end of

the income distribution will not get the necessary investments in education to earn more when they are adults. This would imply the interaction between preschool and parent income has a positive coefficient. Because this coefficient is not statistically different from 0 in my results, I cannot say which of the two effects dominates.

The overall effects of preschool and Head Start on a child's future income are also notable. While we would expect preschool to have a strong positive effect on child earnings later on in life, the coefficient on this variable is not statistically significant in all three models. Therefore, children who participate in preschool have similar predicted earnings to children who do not participate in preschool. This is a strange result—if we follow Johnson and Jackson's (2019) theory of dynamic complementarity, then children who participate in early childhood intervention should have higher predicted earnings than those who do not.<sup>83</sup> One potential explanation for this oddity is that different preschools have varying school quality. If some children who attend preschool do not accumulate very much human capital, then they will also have lower future earnings. We would then predict this through small (and sometimes negative) coefficients on preschool in our regression results.

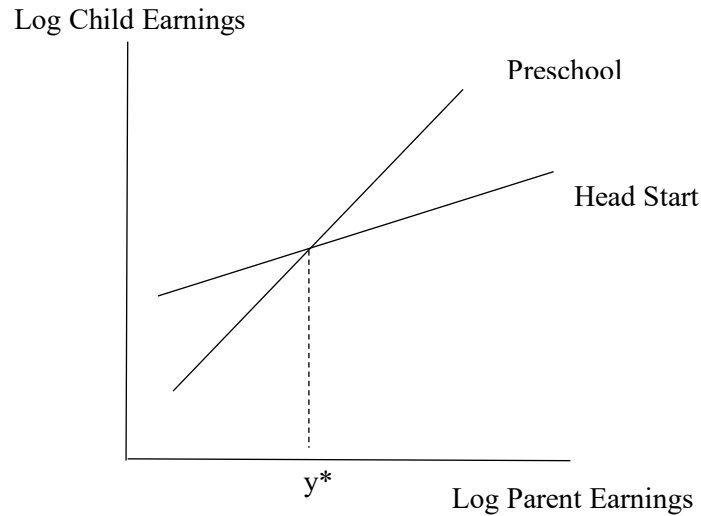
Unlike with the coefficient on preschool, the coefficient on Head Start is statistically significant in both of my OLS regressions and is positive for all child income observations one standard deviation from the predicted coefficient in my fixed effect regression. This implies that, holding all other variables constant, children who participate in Head Start have higher predicted earnings than children who do not participate in Head Start. These higher predicted earnings suggest that the Head Start program has a long-term positive effect on its participants. Along with my result about increased mobility for Head Start participants, this suggests that federal early intervention programs such as Head Start provide opportunities for children who come from low-income families to have higher long-term earnings, ultimately escaping the poverty trap.

One drawback of using the IGE as my primary mobility measure is that I cannot compare the IGE on any population subgroup to the entire distribution. Bhattacharya and Mazumder (2011) explain that not many studies examine racial differences in intergenerational mobility.<sup>84</sup> For example, if they find the IGE of a sample of a Black population, they would not be able to compare that IGE to the IGE of the entire population distribution because it only describes the rate at which earnings of Black children regress to the mean earnings of Black parents.<sup>85</sup>

Similarly, I cannot compare the IGE of Head Start participants to the overall IGE of my sample. However, I can compare the IGE to non-Head Start participants and preschool participants. In addition, Head Start is a *choice* for families rather than an inherent characteristic, such as race. Therefore, it is still valuable to look at the differences in mobility between Head Start and other forms of childhood education.

Figure 3 provides a visualization of the relationship between parent and child earnings. As parent earnings start to increase, child earnings also increase for both Head Start and preschool participants. The coefficient on log parent earnings reflects this fact. However, for Head Start participants, this increase happens at a slower rate because of the negative coefficient on the interaction between Head Start and parent income. A positive coefficient on the Head Start dummy variable implies that the intercept of child earnings for participants of Head Start is higher than the intercept of child earnings for preschool participants. We therefore observe some point  $y^*$  where a child's earnings for Head Start and preschool participants is equal. This represents the point at which it no longer pays off for parents to send their child to Head Start and should instead choose to send their child to preschool.

**Figure 3: The Predicted Effect of Head Start Participation on Intergenerational Earnings Regressions**



#### *Checks for Robustness*

In addition to the regression results reported here, I also perform regressions that include interactions between parent age and family income to control for potential life cycle bias of parent income. After calculating the IGE for the mean age of parents and children, my results are similar to those reported above. Tables 7-9 show the results of several tests for covariance and inclusion. The Variance Inflation Factors for each variable detail the percentage that the variance is inflated for each coefficient compared to if there was no multicollinearity. Normally, an inflation factor above five is cause for concern, but I include dummy variables and squared terms in my model. Because the inflation factor on parent log income is low and the rest of my variables are theoretically important, I choose to keep all of these variables. I also perform an F-test of inclusion for my Head Start variable, with the results of this test shown in Table 8. Because the p-value on Head Start and the interaction between Head Start and parent income is significant at the one percent level, I choose to keep these variables. No variable has a high covariance with other variables in Table 9, so from these three tests, I conclude multicollinearity is not a problem in my regressions. I also perform a Shapiro-Wilk test for normality and a Breusch-Pagan test for heteroscedasticity. While the Shapiro-Wilk test finds that my residuals are not normal, and this could be a result of the top-coding of high incomes. Additionally, all variables in my model are theoretically significant, so I choose to keep them. After performing the Breusch-Pagan test, I conclude that heteroscedasticity is not a major concern in my model.

**Table 7: Variance Inflation Factors**

	Variance Inflation Factors
Log Parent Avg Income	1.520
Child Age	332.946
Child Age Squared	328.073
Parent Age	1,200.859
Parent Age Squared	1,200.052
Head Start	225.931
Preschool	298.671
Log Parent Avg Income*Head Start	222.526
Log Parent Avg Income*Preschool	300.815

**Table 8: F Test for Inclusion of Head Start**

	Sum Sq	Df	F value	Pr(>F)
Log Parent Avg Income	279.525	1	346.641	0
Child Age	1.630	1	2.021	0.155
Child Age Squared	1.079	1	1.338	0.248
Parent Age	0.385	1	0.478	0.490
Parent Age Squared	0.342	1	0.424	0.515
Head Start	5.908	1	7.326	0.007
Log Parent Avg Income*Head Start	12.584	1	15.606	0.0001
Residuals	1,407.138	1,745		

**Table 9: Test for Variable Covariance**

	Log Parent Avg Income	Head Start	Child Age
Log Parent Avg Income	0.644	-0.083	-0.426
Head Start	-0.083	0.165	0.103
Child Age	-0.426	0.103	9.656

*Extensions*

While my analysis on the IGE of Head Start participants is a strong foundation for looking at differences in intergenerational mobility, a few extensions of my work could provide a more complete picture of my results. For example, I control for family effects in my regression using sibling fixed effects, but my regressions do not specify what family characteristics affect my results. Additional research could include regressions with variables for inherent family characteristics, such as whether or not a child's father lives in the household or how many earners live in the household. Finding variables that control for these family characteristics would provide more precise estimates of the coefficients in my model because they would keep the same sample size as my OLS regressions, unlike my fixed effects model.

The IGE is useful for measuring the overall mobility of a given population, which is why I use it as my primary mobility predictor. However, upward mobility is another useful measure that calculates the probability an individual will surpass his parent in income.<sup>86</sup> Researchers

display these results in a rank mobility matrix detailing probabilities of mobility across the income distribution. These matrices also allow researchers to compare population subgroups to the entire population.<sup>87</sup> As previously mentioned, this comparison is not possible using the IGE because splitting up a sample will only show regression to the subgroup mean, not the population mean.<sup>88,89</sup> Bhattacharya and Mazumder advocate for the use of upward mobility because it allows computations of intergenerational mobility at the margin.<sup>90</sup> They find that for children with parents at the bottom quartile of the income distribution, white children are more likely to move to a higher income bracket than Black children.<sup>91</sup> An extension of my work on the mobility of Head Start participants could use upward mobility to assess the probability of upward mobility for children of families at specific income brackets. This would give a more complete picture of how mobility changes across the parent's income distribution as a result of Head Start.

While my research details some of the potential benefits of Head Start, I never assess the program using a cost-benefit framework. Deming (2009) notes that a full analysis of the Head Start program would look at the future earnings of Head Start participants and compare them to the costs of the program.<sup>92</sup> Future research could further investigate Head Start's overall effects using my framework and compare them to the average cost of the program per child.

## **V. Conclusion**

Early childhood intervention programs represent promising opportunities to improve the outcomes of children who would not otherwise be able to learn at a young age. Head Start in particular is a large, national program that emphasizes a holistic education, including traditional learning activities as well as meal programs, health programs, and parental involvement. With more participants reaching adulthood, continued research can assess the program's benefits on participant earnings. With more research about Head Start's effects, knowledge of the benefits of early childhood intervention programs and public investments in education will improve.

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## **Bias in the Jury Box: The Sociological Determinants of Jury Selection for Capital Cases in North Carolina**

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**ABSTRACT:** An evaluation of four Wake County capital cases from 2014-2018 reveals the disparate effects that the jury selection process had on Black and female potential jurors and especially on Black female potential jurors. The requirement that capital jurors be willing and able to sentence death systematically excluded Blacks and females, with Black females excused for this reason at a rate over three times higher than White males. Black potential jurors not struck for death qualification were disproportionately excluded by prosecutorial peremptory strikes at a rate nearly two times greater than Whites. Final analyses conclude that Black females had significantly lower probabilities of being seated on account of their racial and gender identity. This research highlights how the jury selection process produces White male-dominant juries that undermine defendants' Sixth Amendment right to a jury of their peers.

### **Introduction**

The United States is one of the only democratic states that maintains capital punishment as codified law. This practice has fluctuated throughout American history, with historically high execution rates contrasted by modern-day lows. Capital punishment has been on the books since the country's founding and its constitutionality remained unquestioned until the Supreme Court case of *Furman v. Georgia* (1972), which concluded that the practice was "arbitrary and capricious" in part because of overreaching juror discretion that allowed extralegal factors to influence weighty decisions of life and death.<sup>1</sup> Consequently, the Court implemented a nationwide moratorium. States that intended to maintain their capital punishment statutes had to refine their procedures to protect against the vulnerabilities to bias that had concerned the Supreme Court's majority.<sup>2</sup> States scrambled to redefine their death sentencing parameters and established distinct statutes for capital cases to comply with the idea that sentencing death is different from other criminal punishments. However, states ignored the possibility that arbitrary and capricious influences in death sentencing may not be concentrated in the procedures a jury uses to sentence death, but rather in the procedures used to hand-pick jury members.

### **Research Questions**

Though the Sixth Amendment of the United States Constitution guarantees an impartial jury of one's peers to criminal defendants, the modern-day process of jury selection has been criticized for contributing to a lack of representation in the jury box.<sup>3</sup> This is especially true for capital cases, where jury selection is defined by the procedural requirement that jurors be "death qualified," or that they be admittingly willing and able to sentence death.<sup>4</sup> Death qualification

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acts as a stringent parameter for those who can be selected for a jury, excluding individuals who have religious or personal hesitations to impose death. Requiring that jurors hold similar opinions about the death penalty to sit trial defines the jury pool by a parameter that may be intrinsically related to other sociological factors, such as race, gender, religion, age, etc., which could perpetuate the very biases the Supreme Court has been concerned about. Nonetheless, jury selection has been overlooked by the Supreme Court as a foundational explanation for partiality in death penalty application in the U.S. To determine if this nuance of the capital jury selection process is burdening the diversification of jury members, I evaluate whether death qualification systematically excludes potential jurors of a specific race and/or gender.

The process of jury selection also has a long history of racialized effects perpetuated by prosecutorial strategies. This history begins with the original interpretation of the Sixth Amendment, which promised only a jury of White peers, given that many states prevented the service of Black jurors.<sup>5</sup> It was not until the 1879 ruling of *Strauder v. West Virginia* that the Supreme Court found these provisions unconstitutional, stating that Blacks must be allowed to participate as jurors in order to fulfill the Sixth Amendment's promise.<sup>6</sup> Prosecutors and local officials abided by this ruling on its face while continuing to ensure the exclusion of Black potential jurors through discriminatory tests requiring that individuals meet arbitrary standards of moral character or intelligence to be jury-eligible.<sup>7</sup> Though the Supreme Court has since ruled that race cannot be a determining factor for selecting jurors, the racialized manipulation of the jury selection process has become ingrained in case procedures.<sup>8</sup>

To determine whether modern-day jury selection practices are continuing to infringe upon the constitutional rights of capital defendants, I study the extent to which jury selection processes contribute to the disproportionate exclusion of potential jurors by race and gender. In particular, I evaluate the effects of death qualification on the final racial and gender composition of capital juries. I also evaluate whether the prosecution uses its limited number of peremptory strikes—or rejections from sitting on the jury—to disproportionately remove jurors of a particular race. Given data constraints, I narrow the scope of this project to North Carolina capital cases from 2014-2018.

## Literature Review

Social science research has examined biases in jury selection using a variety of methods, though the bulk of the literature has produced results through experiments and surveys. I evaluate these results in order to situate my study among existing theories about whether jury selection practices contribute to jury bleaching, or the process of making a jury more White. To do so, I first explain the procedural intricacies of jury selection for capital cases in North Carolina, relevant legal history, and overarching theories of race and gender.

### A. *Jury Selection: The Procedural Rules*

During jury selection, the State and the defense are presented with two options for striking potential jurors: they may employ a “for cause” exclusion, arguing that an individual is not legally qualified to serve on the jury, or they may use peremptory strikes to strike potential jurors for any reason, so long as these are not motivated by the individual's race, gender, or ethnicity.<sup>9</sup> Excusals for cause are unlimited and are used in capital trials against individuals who are not death qualified because they are unable to comply with the legal duty to sentence death even when the circumstances of the case warrant that punishment. They are also used to

eliminate individuals who express biases against the State or the defense, or the criminal justice system in general, if it appears these opinions may significantly influence their conduct as jurors.

Peremptory strikes, on the other hand, are limited by state statutes and are not associated with an explicit reason for their usage. In North Carolina, both the State and the defense are allotted 14 peremptory strikes, with extras provided for each alternate juror, amounting to three extra strikes for capital cases (North Carolina Code § 15A-1217). Peremptory strikes are free to be used as broadly as the prosecution or defense prefer, so long as neither side implicates race or gender in their decision to strike a juror. Peremptory strikes were adopted to ensure that all jurors are equipped to sit trial. However, social science research has since evaluated whether in practice they do more harm than good.

### *B. The Effects of Death Qualifying a Jury*

Death qualification was first questioned in the 1985 Supreme Court case *Wainwright v. Witt*, in which defendant Johnny Paul Witt argued that because the prosecutor weeded out potential jurors based on their opinions of the death penalty, his jury was hand-picked with the intent to sentence death.<sup>10</sup> The Supreme Court ruled against Witt, with the Court's majority arguing that the process of death qualification actually restrains the bias of venirepersons, or jurors, by preventing those who would never be able to sentence death—even if doing so would be justified given a state's criminal statutes—from sitting on the jury.<sup>11</sup> The Court also added that this logic can be applied in the reverse, such that potential jurors who express an affinity for sentencing death can be excluded from jury service because these individuals may be biased to sentence death even when doing so would not be proportional or in accordance with state statutes.<sup>12</sup> Despite the implementation of this safeguard, studies show that strong death penalty supporters are more likely to be deemed "fit to serve" than death penalty opponents because the strength of their opinions is less evident in questioning during jury selection than anti-death penalty sentiments.<sup>13</sup>

Even though the Court's logic in reaffirming death qualification has been explained by a desire to restrain bias in capital cases, studies show that death qualification *creates* a bias in those selected for jury service that is rooted in the differences in the demographics of those in support of the death penalty.<sup>14</sup> Though death qualification is not necessarily tantamount to a person's death penalty opinions, given that an individual may support the death penalty and refuse to personally impose it, the two are highly related.

Death penalty opinions of Americans are systematically differentiated by several demographic and sociological characteristics. Surveys indicate that Blacks, women, young liberal individuals, and those of certain religious denominations are more inclined to oppose the death penalty.<sup>15</sup> In turn, research has bridged the gap between death penalty opinions and death qualification by evaluating whether those more likely to be in opposition to the practice are also more likely to be struck from capital case trials. I am most interested in studying the effects of death qualification by race and gender because these characteristics significantly differentiate death penalty opinions.

#### *a. Racial Effects*

Death qualifying a jury complicates the ability to compose a jury of one's peers because of the systematic differences in how Americans of different races feel about the death penalty. There is a clear and consistent racial gap in support for the death penalty, such that the mean difference in favorable opinions of the death penalty between Whites and Blacks is 20%.<sup>16</sup> A

2019 North Carolina public opinion poll shows that when asked to choose an appropriate punishment for first-degree murder, 30% of White respondents opted for the death penalty, compared to only 11% of Blacks.<sup>17</sup> These differences in death penalty support have the potential for disparate effects during jury selection. A survey conducted by Lynch and Haney of a jury-eligible subject pool in California determined that over half of Black respondents were deemed excludable by death qualification, compared to only 30% of Whites.<sup>18</sup> A survey conducted by Summers and colleagues of 994 jury-eligible Nebraskans found similar results, with Blacks failing to meet death qualification at a rate two times higher than Whites, demonstrating how death qualification can contribute to the underrepresentation of Black jurors and may decrease their presence in the deliberation room.<sup>19</sup>

#### *b. Gender Effects*

Death qualification also has disparate impacts on the genders that comprise a jury, as there exists a relatively stable 12% mean difference in death penalty support between men and women that contributes to women being less likely to be death qualified than men.<sup>20</sup> A 2019 North Carolina public opinion poll showed congruence with these results, wherein 33% of males preferred the death penalty as a punishment for first-degree murder, compared to only 19% of females.<sup>21</sup> In the Lynch and Haney study, of those who would be excluded from the jury pool, 62% of women would be excluded for failing to be death qualified, compared to only 53% of men.<sup>22</sup> The Summers and colleagues study affirms these results, demonstrating consistency in the trends of gender-based exclusion due to death qualification.<sup>23</sup> Though I use the results of these studies to inform my research, rather than engineering a survey sampling jury-eligible individuals, I evaluate the actual jury pools summoned for a series of capital cases to determine the rate at which the death qualification process excluded Black potential jurors compared to Whites and female potential jurors compared to males.

#### *C. Death Qualification and Death Sentencing*

The racial and gender gaps in death penalty favorability create a jury pool that is demographically distinct: death-qualified jurors are more likely to be White, male, conservative, and middle-class.<sup>24</sup> Studies show that death qualification not only determines the sociological characteristics of who sits on the jury, but it also influences the perspectives in the deliberation room. This effect would be irrelevant if the formative beliefs of death-qualified individuals—who are majority White males—had little to no influence on deliberations, but that is not the case.<sup>25</sup> In a study by Thompson and colleagues, a jury-eligible subject pool watched footage of conflicting testimony by a prosecution witness and a defense witness. Death-qualified individuals were significantly more likely to favor the prosecution than were non-death-qualified individuals, suggesting that those sitting on capital juries may be predisposed to aligning with evidence presented by the State, which could impact the likelihood of both a conviction and of a death sentence.<sup>26</sup>

Importantly, existing literature goes beyond establishing a link between death-qualified individuals and their proclivity to hold biased opinions that *could* influence the decision to sentence death. Studies also demonstrate how death qualification directly impacts an individual's evaluations of the procedures used to determine a death sentence. For most death penalty practitioner states, including North Carolina, aggravating and mitigating circumstances define these procedures.<sup>27</sup> With this system, a death sentence is warranted if the aggravating factors, or the aspects of the crime that emphasize the offender's culpability, outweigh the mitigating

factors, or the personal and situational circumstances considered to offer grace to offenders. Butler and Moran show that death-qualified individuals from a pool of 450 people called for jury duty in Florida provided higher endorsements for aggravating factors, and lower endorsements for mitigating factors when presented with facts from a hypothetical capital case.<sup>28</sup> Though studying the effect of death qualification on death sentencing is beyond the scope of my study, discussing this research contextualizes the significance of my findings about the effects of death qualification on jury composition.

#### *D. Other Biases in Jury Selection*

In recent years, the use of peremptory strikes by the State and the defense have been named a potential source of bias that depletes diversity in the jury box, much like death qualification. Presumably, these strikes are to be used against a select number of individuals that either the State or the defense think represent a potential for bias and are thus not fit to serve, though they may be qualified to do so given legal parameters. However, because these strikes generally do not require on-the-record justifications, it is difficult for courtroom officials to parse whether they are used with discriminatory intent.

It was not until the 1986 *Batson v. Kentucky* case that the Supreme Court evaluated whether prosecutors could use an individual's race as a justification for peremptorily striking them from the venire, or the jury.<sup>29</sup> The Court ruled that this practice was in violation of the Equal Protection Clause and required that any strike by either the State or the defense be based solely on race-neutral and gender-neutral reasons—or reasons that are unrelated to one's race and/or gender.<sup>30</sup> In other words, striking potential jurors on the basis of race and/or gender was deemed discriminatory and unconstitutional.

Beyond this constitutional restriction, the use of peremptory strikes can be as arbitrary as calling into question the personal characteristics of a potential juror, making someone's marital status, employment history, or favorite pastimes valid reasons to prevent them from fulfilling their civic duty of sitting on trial.<sup>31</sup> Both the State and the defense can present *Batson* challenges against strikes that appear to have been motivated by race, which is the only instance in which either side is required to provide an explanation for their use of a strike. However, the Court's outlined evidentiary framework requires that *Batson* claims prove purposeful discrimination in the use of a peremptory strike. This is a difficult standard to satisfy, which has resulted in very few successful *Batson* challenges, despite trends of racialized jury selection supported by existing literature.<sup>32</sup> Thus, research evaluating biases in peremptory strikes adds to the discussion of whether the parameters for successful *Batson* challenges are too narrowly defined, or if the permissibility of peremptory strikes is too broad by allowing any race-neutral justifications that could simply disguise racialized motives.

When for cause strikes during the death qualification process do not sufficiently cleanse the jury pool of those who pose a threat to the success of the State, prosecutors can rely on their peremptory strikes to ensure that those who sit on their capital cases are more likely than not to secure a death sentence. This effectively translates to using these strikes against Black potential jurors, who pose the biggest threat to prosecutorial success on account of their death penalty opinions and empathetic viewpoints that favor the presentation of mitigating factors.<sup>33</sup> My study relies on a method existing literature has utilized to demonstrate these racial biases in peremptory strikes, which involves statistical analyses of juror questionnaires—questionnaires completed by individuals at the start of the jury selection process that provide basic personal information—to understand how the sociological characteristics of a venireperson impacted their chances of

being struck by the State. This information about potential jurors is also gathered from responses given during voir dire, or the pre-trial process of juror examination that occurs in the courtroom, where individuals are questioned either in groups or individually by the judge, prosecution, and defense about an array of personal characteristics to determine whether they are fit to sit trial.

Baldus and his colleagues pioneered this methodology by evaluating the racialized use of peremptory strikes in over 300 Philadelphia County capital cases over a 17-year period, when controlling for race-neutral characteristics about an individual that could present as reasons to strike them.<sup>34</sup> The study found that, on average, prosecutors peremptorily struck 51% of Black potential jurors, but only 26% of comparable non-Black potential jurors. Interestingly, defense strikes showed an opposite trend, striking only 26% of Black potential jurors, but 54% of comparable non-Black potential jurors.<sup>35</sup>

Existing literature shows that even beyond Philadelphia County, racialized rates of peremptory strikes persist. Grosso and O'Brien examined whether race influenced prosecutorial peremptory strikes in the jury selection proceedings of each death row inmate in 2010, representing more than half of the counties in North Carolina over a 25-year period. The results showed Black potential jurors were struck at a rate 2.5 times higher than their non-Black counterparts, when controlling for relevant sociological characteristics.<sup>36</sup> This study acts as the baseline for mine because it informs the context of jury selection in North Carolina. However, my study analyzes peremptory strike rates in North Carolina for a shorter time period and within just one county. My research aims to demonstrate the extent that the racialized trends identified by Grosso and O'Brien persist within the scope of my study.

### **Hypotheses And Theory**

Given the conclusions in relevant literature, there are several ways in which the jury selection process is vulnerable to racial biases that impact the final composition of the jury. My theory is that the jury selection process was designed to allow both the prosecution and the defense to excuse potential jurors who may compromise the impartiality of the jury. However, in practice, the exclusionary procedures of jury selection are subject to race and gender effects. I expect that these effects will align with the prosecution's motive to secure a jury that is more likely to favor their side by convicting and sentencing death. In other words, the prosecution will utilize these exclusionary practices by race and gender to ensure a pro-prosecution jury. A pro-prosecution jury is one that has more favorable opinions of the death penalty and is more likely to favor the State's presentation of evidence, which literature suggests are qualities more commonly held by White men.<sup>37 38</sup> Thus, I expect the identity-based effects of jury selection will influence who is eventually seated on a jury, benefitting the presence of White males on capital juries while significantly threatening the presence of Blacks and females. My theory suggests that within the scope of my study, the exclusionary practices of jury selection will differentiate removals of potential jurors by sociological characteristics, namely race and gender, to ensure that the final seated juries align with the State's pro-prosecution ideal.

For the purposes of my study, I evaluate how the processes of death qualification and peremptory strikes secure a pro-prosecution jury through disparate racialized and gendered effects on final jury pools. I expect that the requirement to death qualify a capital jury will systematically exclude jurors in accordance with current trends of public opinions on the death penalty. My hypotheses for the death qualification effect are as follows:



H1: Black potential jurors will hold more negative opinions of the death penalty than their White counterparts, which will contribute to higher excusal rates due to death qualification rates for Black potential jurors compared to Whites.

H2: Female potential jurors will hold more negative opinions of the death penalty than their male counterparts, which will contribute to higher excusal rates due to death qualification rates for female potential jurors compared to males.

The theory motivating these hypotheses is rooted in the public opinion gap between Whites and Blacks and men and women in support of the death penalty.<sup>39</sup> Because the jury pool should operate as a representative sample of the community, these public opinion trends should persist for potential jurors, which would cause the disproportionate exclusion of Black and female jurors on the basis of not being death qualified.

I expect that even beyond the effects of death qualification, prosecutors will continue to narrow potential jurors based on race by finding other ways to exclude Black individuals, as supported by consistent findings in literature. I expect to find the following:

H3: Black potential jurors will have a disproportionately higher share of their total share of the jury pool struck by the State than Whites. When controlling for what that is known about a potential juror (their sociological characteristics and potential for biases), Black potential jurors will still have a higher likelihood of being struck by the State than their White counterparts.

I expect that as a result of the processes of death qualification and peremptory strikes the prosecution will secure final juries that do not reflect the shares of race and gender in the original jury pool and thus cannot truly be considered juries of one's peers. The final juries will reflect the race and gender effects of these three components of the jury selection process such that:

H4: The final seated juries will be White male-dominant, overrepresenting the share of White males in the original jury pool and underrepresenting the share of Blacks and females.

Support for my hypotheses would suggest that the capital jury selection process systematically excludes individuals with specific sociological characteristics, calling into question whether the constitutional right to a representative jury is truly being upheld in capital trials.

### **Data Collection**

To conduct my analyses, I used jury selection data from the jury pools of the four capital case trials in Wake County, North Carolina between 2014-2018: *Devega v. State of North Carolina* (2014), *Smith v. State of North Carolina* (2016), *Holden v. State of North Carolina* (2017), and *Richardson v. State of North Carolina* (2018). The data I retrieved was publicly available via the Wake County clerk of court.

Wake County is a demographically diverse, heavily populated urban county, meaning the four jury pools should represent that diversity. Though courtroom practices for capital jury selection are somewhat standardized across North Carolina's prosecutorial districts, I cannot infer that my results apply to other geographical contexts given that different counties have

different prosecutors that may abide by individualized strategies for jury selection. Thus, I am bound by my case selection, which limits the generalizability of my results.

The jury pools of the four capital cases are defined by statutory procedures that outline who is jury-eligible and how North Carolina residents are randomly summoned to jury duty. In North Carolina, juror summons are created from the source list of registered voters (ROV) and licensed drivers registered with the Department of Motor Vehicles (DMV). Those who are unregistered or unlicensed are automatically excluded from the population that is used to draw jury pool samples. Studies show that this basis for exclusion disproportionately affects Black and transient individuals.<sup>40</sup> For this reason, the jury pools of the four capital cases may not accurately or wholly represent the demographic diversity in Wake County. The jury pool is further narrowed by the jury-eligible qualifications enumerated by the state: jurors must be U.S. citizens, 18 years or older, a resident of the county in which they were summoned, able to speak English, and had their civil rights restored if previously convicted of a felony. These parameters define the individuals in the jury pools of all four capital cases included in my analysis.

The jury selection data includes juror questionnaires completed by all venirepersons who responded to their jury summons by appearing in court, as well as a clerk report for each capital case that records whether individuals summoned for that case were subsequently seated on the jury or excused from the jury. If an individual was excused, the type of strike is listed in the report: defense peremptory strike, State peremptory strike, defense for cause motion, State for cause motion, Court strike—wherein the judge presiding over the case finds cause that an individual is unfit to sit trial—or hardship—wherein an individual was unable to sit trial because of personal conflicts, such as work or childcare. I also created a variable to note the explicit reason or reasons why each individual across the four jury pools was struck. This data is recorded during the voir dire for each type of excusal except for State and defense peremptory strikes, which do not require explanations. This variable was used to track how many individuals were explicitly struck due to death qualification.

A total of 490 individuals were summoned, appeared in court, and completed the initial juror questionnaire. Because the questionnaire did not contain inquiries of an individual's opinions of the death penalty, the judges presiding over these cases asked this question of potential jurors during voir dire, and both the State and the defense followed up with each individual's response. Thus, I used the voir dire to collect death qualification data for the venirepersons of all four capital cases. However, some individuals who completed a questionnaire did not undergo the voir dire process if they were excused for hardship at the beginning of the process, did not appear, or were sent home once the jury has been selected and there is no longer a need to continue questioning other individuals. This means I only collected data about death penalty opinions for individuals who made it to the voir dire stage.

All four questionnaires include the same inquiries: name, age, race, sex; marital status; employment status, spouse's employment status, children's employment status; highest level of education completed; whether or not an individual has ever served on a jury or been a witness or defendant in a criminal case; whether or not an individual been a victim of a crime or been convicted of a felony, or knows of anyone that has; whether or not an individual is a member of a church; whether or not an individual has close friends or family employed in law enforcement; what magazines/newspapers/or television shows an individual reads or watches. I converted this qualitative data for all observations who completed a questionnaire into quantitative binary and categorical variables that are compiled in a master dataset.

I created a categorical variable to represent responses to questions of an individual's death penalty opinions, which were used by the State and the defense to gauge death qualification. I applied this coding schema to the written responses of potential jurors in the Devega case, as well as the oral responses of potential jurors who reached the voir dire stage from the Devega, Smith, Holden, and Richardson cases. This variable is recorded as follows:

- 1: The respondent expresses an absolute inability to sentence death under any condition.
- 2: The respondent expresses a disinclination to sentence death, though acknowledges caveats to when and why they would choose to do so.
- 3: The respondent expresses an undecided or neutral perspective toward sentencing death.
- 4: The respondent expresses an inclination to sentence death, though acknowledges caveats to when and why they would choose not to do so.
- 5: The respondent expresses an absolute inclination to sentence death in all cases where the death penalty is an available punishment.

Because responses to the question of death qualification were incredibly varied, it was important that I created a measure that simplified and grouped these responses, while still capturing the nuances in individual opinions. For instance, many respondents expressed a hesitation to sentence death due to normative views but admitted that in exceptional cases a crime might warrant a death sentence. These individuals were coded in the second category. Another large sect of respondents expressed an ability to sentence death, but only when doing so would be proportional to the crime in question. These individuals were coded in the fourth category. Individuals who were coded as a 5 believed that the death penalty should be applied in all first-degree murder cases—as this is the only offense that is death-eligible in the state.

In order to accurately and efficiently record relevant information from all four capital case voir dire, which totaled to over 16,000 pages, I applied for and received funding from Honors Carolina to employ four undergraduate students to assist in the process. I trained these students on how to interpret responses in the voir dire and how to appropriately code them in accordance with the codebook. Though training these students and providing stringent protocols for measurement was one method to ensure reliability, I also conducted random tests of interrater reliability throughout the data collection stage. This involved randomly choosing a handful of data entries completed by Student A to be re-done by Student B. Without Student B seeing how Student A coded these entries, I requested that Student B complete the same set of entries in order to ensure that the data was being recorded identically between students. Each observation coded by a student on the team was not included into the master dataset without my review. This process detected and prevented human error, as well as instances where students may have interpreted a potential jurors' response in a way that biased their categorization or coding.

Despite these preventative measures, I acknowledge that the results of my analyses could have been threatened by human error in the data collection process. Though I reviewed the data for each observation in my dataset, I cannot confirm that there are no misalignments with the coding schema.

## **Methodology**

To evaluate my hypotheses H1 and H2, I first analyze the share of death penalty opinions by race and then by gender to determine whether Blacks and females are in fact less likely to favor the death penalty than their White and male counterparts. I utilize a multivariate regression

to test how an individual's sociological characteristics are associated with their score on the death qualification scale I devised. Then, I compare the rate of excusals for death qualification for Black potential jurors compared to White, as well as for females compared to males. This is how I determine whether there was a statistically significant difference in death qualification excusals by race or by gender. I then complete these analyses for a combination of both race and gender.

For H3, I emulate methodology by Baldus et al. and first evaluate the distribution of State strikes by race and gender. I then use a series of logistic regression models to analyze the relationship between an individual's race and gender and their likelihood of being struck by the prosecution, when controlling for other relevant information that could influence the State's decision to strike a juror. By controlling for what is known about potential jurors, I can uncover the extent to which the use of prosecutorial peremptory strikes is systematically differentiated by race.

The analysis of my hypothesis H4 includes several logistic regression models displaying the relationship between race and gender and one's likelihood of being seated, when holding constant what is known about a potential juror that could also impact their odds of being seated on a jury. I display a series of figures representing differences in the predicted probability of being seated by race and gender when holding constant what is known about a potential juror that could also impact their odds of being seated on a jury. These analyses reveal whether race and gender alone are the explicit targets of exclusion from the jury pool.

## Results

Across all the capital cases evaluated, 551 individuals were summoned, replied to their summons, and were assigned to either the Devega, Smith, Holden, or Richardson trial. Those who did not reach the questionnaire or voir dire stage are missing critical data, leaving only 490 observations with race data. Because race is critical to my analyses, observations missing race data are excluded from all analyses. Of the 490 observations that identify race, only 338 reached the voir dire. Of those, some were excused before answering questions about death qualification, which further limits my sample size for analyses including these variables. I recognize that these sample size restrictions could hinder the significance of my results.

**Table 1: Distribution of Race and Gender of All Potential Jurors**

Juror Race and Gender	White Male	White Female	Black Male	Black Female	Other Male	Other Female	Total
N	196	160	43	43	26	22	490
%	40.00%	32.65%	8.78%	8.78%	5.31%	4.49%	100.00%

Of the 490 observations in my dataset, 72.65% were White, 17.55% were Black, and 9.80% identified as another race. The small sample size for individuals of other races across all four jury pools is important to note, as it suggests that analyses of this population may not be statistically significant. The gender distribution reveals 45.92% of the jury pools were females compared to 54.08% males. Table 1 combines this information to show the distribution of both race and gender in the jury pool, with White men comprising the largest share.

Hardships were the leading cause for excusal. Many of the observations excused for hardship did not reach the questionnaire or the voir dire stage, so they comprise the majority of

the missing data. The next highest frequency of eliminations derives from State motions, which nearly quadruples the amount of defense motions. This is because the voir dire process is conducted such that the State is the first to question each potential juror, since they have the burden of proof. Before the defense is able to question a juror, the State has already had the opportunity to either make a motion for cause if the individual is unfit to sit trial, use a peremptory strike, or approve a potential juror to be seated. This table shows how the State’s advantage during voir dire significantly influences who is excused from the jury before the defense has a say.

**Table 2: Distribution of Excused Versus Seated Jurors by Race and Gender**

	White Male	White Female	Black Male	Black Female	Other Male	Other Female	Total
<b>Not Seated on Jury</b>	163 (83.16%)	143 (89.38%)	36 (83.72%)	42 (97.67%)	25 (96.15%)	22 (100.00%)	431 (87.96%)
<b>Seated on Jury</b>	33 (16.84%)	17 (10.62%)	7 (16.28%)	1 (2.33%)	1 (3.85%)	0 (0.00%)	59 (12.04%)
<b>Total</b>	196 (100.00%)	160 (100.00%)	43 (100.00%)	43 (100.00%)	26 (100.00%)	22 (100.00%)	490 (100.00%)
<i>p</i> = 0.017** * <i>p</i> < 0.10, ** <i>p</i> < 0.05, *** <i>p</i> < 0.00							

Table 2 represents the percent of individuals by both race and gender across all four jury pools who were either seated or excused. Excusals include all outcomes listed in Table 4 that are not “Seated.” The statistical significance indicates that there is a meaningful relationship between a juror’s race and gender and whether they are seated on the jury. This offers initial support for my theory that the jury selection process is subject to racial and gender effects that influence the final composition of the jury. Black females, females of other races, and males of other races were the least represented in the final juries across all four capital cases. Because the largest share of seated jurors were White males, there is also initial support for my expectation that White male jurors are seated at a rate that overrepresents their original share of the jury pools. Nonetheless, Table 2 does not confirm whether the two jury selection processes I have identified (death qualification and peremptory strikes) are contributing to the racial and gender composition of the final jury pools. Thus, to further gauge support for my hypotheses and understand jury selection significantly differentiates seated juries by sociological characteristics like race and gender, I begin by evaluating the extent to which death qualification led to the disproportionate excusal of Black jurors compared to White jurors.

*a. The Racialized Effect of Death Qualification*

An understanding of the distribution of race, gender, types of eliminations, and eliminations by race and gender is essential to contextualize the test of my first hypothesis regarding the differential impact of death qualification by race. To conduct my analysis, I first evaluated the distribution of death penalty opinions for those who made it to the voir dire, were asked this question, and had race recorded (totaling 304). A 1 on the death qualification scale was recorded for potential jurors who were always opposed to the death penalty, a 2 was recorded for those who were almost always opposed, a 3 was recorded for those who had neutral views, a 4 was recorded for those who were almost always in favor of the death penalty, and a 5 was recorded for those who were always in favor. The majority of respondents across all capital

cases were on the 4-5 end of the scale, indicating relative or full support for the imposition of the death penalty, respectively (see Table 3). I hypothesized that observations on the 1-2 end of the scale would disproportionately represent Black respondents, which would call for the excusal of Black potential jurors due to death qualification at a higher rate than Whites.

**Table 3: The Distribution of Death Penalty Opinions\***

Death Qualification Scale	N	%
<b>1 Always Opposed</b>	64	21.05%
<b>2</b>	64	21.05%
<b>3 Neutral</b>	2	0.66%
<b>4</b>	147	48.36%
<b>5 Always Favor</b>	27	8.88%
<b>Total</b>	304	100.00%

\*Note: Data was obtained for individuals who had race and death penalty opinions data.

Table 4 shows the distribution of death penalty opinions by race, (significant at  $p < 0.00$ ). Over 60% of White jurors expressed either conditional or full-fledged support for the death penalty, scoring either a 4 or a 5, respectively, whereas over 60% of Black jurors were either entirely opposed or almost always opposed to the death penalty, scoring a 1 or a 2, respectively. This differentiation in death penalty opinions by race offers initial support for my hypothesis H1.

**Table 4: The Distribution of Death Penalty Opinions by Race\***

Death Qualification Scale	White	Black	Other Races	Total
<b>1 Always Opposed</b>	38 (17.04%)	20 (35.71%)	6 (24.00%)	64 (21.05%)
<b>2</b>	44 (19.73%)	14 (25.00%)	6 (24.00%)	64 (21.05%)
<b>3 Neutral</b>	0 (0.00%)	1 (1.79%)	1 (4.00%)	2 (0.66%)
<b>4</b>	120 (53.81%)	20 (35.71%)	7 (28.00%)	147 (48.36%)
<b>5 Always Favor</b>	21 (9.42%)	1 (1.79%)	5 (20.00%)	27 (8.88%)
<b>Total</b>	224 (100.00%)	56 (100.00%)	25 (100.00%)	304 (100.00%)
$p = 0.001^{***}$ * $p < 0.10$ , ** $p < 0.05$ , *** $p < 0.00$				

\*Note: Data was obtained for individuals who had race and death penalty opinions data.

Model 1 shows the results of several multivariate regressions testing the relationship between an individual’s score on the death penalty opinion scale (1-5) and their race, where Black potential jurors and jurors of other races are compared to White potential jurors, who are the reference group. Controls include a potential juror’s level of education, level of religious involvement, whether they have previously served on a jury, whether they have friends or family in law enforcement, and whether they have had a negative criminal justice experience. Controls were chosen based on their potential to influence death penalty opinions, as informed by existing literature, and are consistent across all models.

**Model 1: Death Penalty Opinions and Race**

	(1) Reduced Model	(2) Education	(3) Religious Involvement	(4) Prior Jury Service	(5) Law Enforcement	(6) Criminal Justice Experience
	Death Penalty Opinions	Death Penalty Opinions	Death Penalty Opinions	Death Penalty Opinions	Death Penalty Opinions	Death Penalty Opinions
<b>Race (Whites are reference group)</b>						
<b>Black</b>	-0.760*** (0.000)	-0.854*** (0.000)	-0.718*** (0.001)	-0.717*** (0.002)	-0.711*** (0.002)	-0.630** (0.014)
<b>Other</b>	-0.228 (0.423)	-0.103 (0.722)	-0.047 (0.873)	-0.002 (0.995)	0.053 (0.870)	0.817* (0.051)
<b>Level of Education</b>		-.151* (0.082)	-0.123 (0.155)	-0.128 (0.167)	-0.127 (0.175)	-0.065 (0.515)
<b>Level of Religious Involvement</b>			-0.155*** (0.005)	-0.158*** (0.007)	-0.159*** (0.008)	-0.105 (0.110)
<b>Prior Jury Service</b>				.166 (0.505)	0.168 (0.503)	0.244 (0.384)
<b>Law Enforcement</b>					0.059 (0.735)	-0.016 (0.934)
<b>Criminal Justice Experience</b>						-0.0409 (0.155)
<i>N</i>	304	297	291	265	264	198
<i>R</i> <sup>2</sup>	0.045	0.051	0.075	0.077	0.077	0.112

Exponentiated coefficients; *p*-values in parentheses  
 \* *p* < .10, \*\* *p* < .05, \*\*\* *p* < .01

Throughout all six versions of Model 1, Black potential jurors scored significantly lower on the death penalty opinion scale compared to the average score of White potential jurors. In version 6 of Model 1, which accounts for all of the control variables, the average score on the death penalty opinion scale of Black potential jurors scored was .63 points lower than the average for Whites. Model 1 also identifies religious involvement as a sociological characteristic that is significantly related to death penalty opinions, wherein increased involvement in religion

indicates decreased favorability for the death penalty. It is important to note that given the  $R^2$ , the variables included in all versions of Model 1 have low explanatory power, suggesting that there are likely uncaptured variables that better explain differences in death penalty opinions. Nonetheless, the significant mean difference in the death penalty opinions between White and Black potential jurors lends initial support to my hypothesis that Black potential jurors have less favorable views about the death penalty than their White counterparts. My hypothesis suggests that because death penalty opinions are significantly related to race, there will also be a significant differentiation in death qualification excusals by race.

**Table 5: Death Qualification Excusals by Race\***

	White	Black	Other	Total
Not Struck for Death Qualification	168 (75.34%)	27 (48.21%)	16 (64.00%)	211 (69.41%)
Struck for Death Qualification	55 (24.66%)	29 (51.79%)	9 (36.00%)	93 (30.59%)
Total	223 (100.00%)	56 (100.00%)	25 (100.00%)	304 (100.00%)
<b><math>p = 0.000^{***}</math></b> * $p < 0.10$ , ** $p < 0.05$ , *** $p < 0.00$				

**\*Note:** Data was only obtained for individuals who had race and death penalty opinions data. The individuals captured in this table that were struck for death qualification were struck on account of unfavorable death penalty opinions (scoring a 1 or a 2 on the death qualification scale).

Table 5 represents the share of individuals by race who were explicitly excused due to not being able to sentence death, or not being death qualified (significant at  $p < 0.00$ ). All individuals who scored a 1 on the death qualification scale were excused for this reason, while 45.31% of individuals who scored a 2 were excused for this reason. Individuals who scored a 2 but were not excused for this reason expressed an ability to comply with the law, which rendered them ineligible to be excused by a for cause motion for death qualification. No observations who scored in the 3-5 range were excused because of an inability to sentence death. Overall, 30.59% of individuals who reached the voir dire stage were struck because of an expressed inability to sentence death, which demonstrates the significant role death qualification plays in whether a potential juror is seated or not. Of all the Black potential jurors who reached the voir dire stage and were asked about their death penalty opinions, 51.79% were subsequently excused because their views rendered them unable to sentence death, which is more than double the share of Whites excused for this reason (24.66%). This differentiation in death qualification excusals by race supports my hypothesis H1.

Potential jurors who scored a 5 on the death qualification scale could have also been deemed not death qualified due to the fact that their beliefs favored the imposition of the death penalty for all first-degree murder cases, even when North Carolina statutes would suggest that a death sentence is not a proportional punishment. Like individuals who scored a 2 on the scale, not all who scored a 5 were the automatic subject of a death qualification excusal. Instead, only



individuals who expressed that they would be unable to set aside their views and follow the judge’s instructions were deemed not death qualified and subsequently excused. Individuals who scored a 5 but vouched for their impartiality were not eligible for a for cause death qualification excusal.

Of the individuals who were coded as a 5 on the death qualification scale, 48.15% were subsequently excused due to their bias in favor of sentencing death that deemed them not death qualified. The majority of these excusals for death qualification were by defense motions, whereas the State only excused one potential juror for cause for this reason. This follows my theoretical reasoning that the State is not incentivized to excuse potential jurors who strongly favor the death penalty even if they outwardly admit bias because these individuals could ensure prosecutorial success at trial. Thus, it is the defense’s burden to excuse these individuals.

It is evident that death penalty opinions as well as motions made for cause against non-death-qualified individuals are significantly differentiated by race, supporting my hypothesis H1 and suggesting that the death qualification process is inherently tied to identity-based characteristics. The relationship between race, death penalty opinions, and juror outcomes are analyzed further in later sections of this paper.

*b. The Gendered Effect of Death Qualification*

My hypothesis H2 expects that females will have more negative opinions of the death penalty than males, which will result in their disproportionate exclusion due to death qualification. Table 6 shows the distribution of death penalty opinions by gender for individuals who were asked about their death penalty opinions and had race data. The majority of both men and women scored on the 4-5 end of the scale. However, 48.51% of females scored on the 1-2 end of the scale, compared to 37.06% of males. Nonetheless, the difference in the distribution of death penalty opinions by gender is not statistically significant. Therefore, I cannot support the claim that the distribution of death penalty opinions across all four jury pools was significantly differentiated by gender.

**Table 6: The Distribution of Death Penalty Opinions by Gender\***

Death Qualification Scale	Female	Male	Total
<b>1 Always Opposed</b>	33 (24.63%)	31 (18.24%)	64 (21.05%)
<b>2</b>	32 (23.88%)	32 (18.82%)	64 (21.05%)
<b>3 Neutral</b>	0 (0.00%)	2 (1.18%)	2 (0.66%)
<b>4</b>	58 (43.28%)	89 (52.35%)	147 (48.36%)
<b>5 Always Favor</b>	11 (8.21%)	16 (9.41%)	27 (8.88%)
<b>Total</b>	134 (100.00%)	170 (100.00%)	304 (100.00%)
<i>p</i> = 0.254 * <i>p</i> < 0.10, ** <i>p</i> < 0.05, *** <i>p</i> < 0.00			

\*Note: Data was obtained for individuals who had race and death penalty opinions data.

Model 2 shows the results of a multivariate regression analyzing the relationship between an individual's score on the death penalty opinion scale (1-5) and their gender, when controlling for a potential juror's level of education, level of religious involvement, whether they have previously served on a jury, whether they have friends or family in law enforcement, and whether they have had a negative criminal justice experience. In all six versions of Model 2, the average death penalty opinion score for female potential jurors was significantly lower than the average for males, with females scoring about .34 points lower on average than males on the five-point scale in version 6 of Model 2. As in Model 1, which evaluated this relationship for race, higher levels of religious involvement were significantly associated with less favorable death penalty opinions.

The results of Models 1 and 2 confirm that average scores on the death penalty opinion scale are significantly different between White and Black potential jurors and female and male potential jurors. Thus, while the distribution of death penalty opinions was not significantly different between men and women (see Table 9), Model 2 suggests that average opinions of the death penalty do significantly differ by gender, which offers initial support for my hypothesis H2.

### Model 2: Death Penalty Opinions and Gender

	(1) Reduced Model	(2) Education	(3) Religious Involvement	(4) Prior Jury Service	(5) Law Enforcement	(6) Criminal Justice Experience
	Death Penalty Opinions	Death Penalty Opinions	Death Penalty Opinions	Death Penalty Opinions	Death Penalty Opinions	Death Penalty Opinions
<b>Gender (Males are the reference group)</b>						
<b>Females</b>	-0.293* (0.065)	-0.300* (0.062)	-0.331** (0.039)	-0.306* (0.072)	-0.308* (0.073)	-0.314* (0.092)
<b>Level of Education</b>		-0.041 (0.615)	-0.029 (0.725)	-0.030 (0.733)	-0.026 (0.763)	0.032 (0.735)
<b>Level of Religious Involvement</b>			-0.194*** (0.000)	-0.194*** (0.001)	-0.195*** (0.001)	-0.155** (0.017)
<b>Prior Jury Service</b>				0.186 (0.462)	0.188 (0.459)	0.354 (0.216)
<b>Law Enforcement</b>					0.054 (0.761)	-0.130 (0.499)
<b>Criminal Justice Experience</b>						-.620** (0.026)
<i>N</i>	304	297	291	265	264	198
<i>R</i> <sup>2</sup>	0.011	0.012	0.054	0.054	0.055	0.074

Exponentiated coefficients; *p*-values in parentheses

\* *p* < .10, \*\* *p* < .05, \*\*\* *p* < .01

Full support for my hypothesis H2 would require that differences in death penalty opinions by gender result in a greater share of females being excused on account of negative opinions of the death penalty than the share of men excused. Table 7 shows that individuals struck on account of unfavorable death penalty opinions is significantly differentiated by gender at  $p < 0.00$ . Of all the female potential jurors who were asked about their death penalty opinions and had race data, 38.81% were subsequently excused because their views rendered them unable to sentence death, whereas only 24.12% of male potential jurors were excused for this reason. It is important to note that this gap in excusals for death qualification is slimmer than the gap by race, suggesting race is more strongly related to removals for death qualification than gender.

**Table 7: Death Qualification Excusals by Gender\***

	Female	Male	Total
<b>Not Struck for Death Qualification</b>	82 (61.19%)	129 (75.88%)	211 (69.41%)
<b>Struck for Death Qualification</b>	52 (38.81%)	41 (24.12%)	93 (30.59%)
<b>Total</b>	134 (100.00%)	170 (100.00%)	304 (100.00%)
<b><math>p = 0.006^{***}</math></b> * $p < 0.10$ , ** $p < 0.05$ , *** $p < 0.00$			

**\*Note:** Data was only obtained for individuals who had race and death penalty opinions data. The individuals captured in this table that were struck for death qualification were struck on account of unfavorable death penalty opinions (scoring a 1 or a 2 on the death qualification scale).

Being that the distribution in death penalty opinions was not significantly differentiated by gender across the jury pools, this gendered difference in death qualification removals suggests female potential jurors may have been targeted for their negative death penalty opinions more so than men. This is evidenced by the fact that while the same number of men and women scored a 2 on the death qualification scale, nearly 60% of these women were excused for not being death qualified, which is nearly double the share of men scoring 2s that were deemed not death qualified. However, I cannot confirm that the death penalty opinions between men and women who scored 2s were identical. It could have been the case that women in this category expressed more unequivocal opposition than did men, which may not have been accurately captured in the data and could explain why they were excused at a higher rate. Nonetheless, Table 7 confirms that death qualification is significantly linked to gender and aids in allowing the prosecution to keep more males than females in the jury pool. This offers additional support for my theory that the death qualification process is intrinsically linked to identity-based characteristics, which allows the prosecution to secure a pro-prosecution White male-dominant jury without sounding alarms about explicit racial or gender biases.

*c. The Effect of Death Qualification by Race and Gender*

To further investigate the effect of death qualification excusals, I completed the analyses of hypotheses H1 and H2 for a combination of both race and gender. This analysis captures more

nuance than that for race and gender alone and informs whether death penalty opinions and death qualification excusals are related to specific race and gender interactions (see Table 8). Table 8 shows that more than 70% of White men who reached the voir dire stage and were asked about their opinion of the death penalty expressed favorable views, scoring a 4 or a 5 on the death qualification scale. A slimmer majority of the share of White females and females of other races also scored on the favorable end of the spectrum, which calls into question the extent to which gender alone is associated with negative death penalty opinions, rather than a combination of race and gender. Over 60% of both Black females and Black males expressed views in opposition to the death penalty, scoring a 1 or a 2 on the death qualification scale.

**Table 8: The Distribution of Death Penalty Opinions by Race and Gender\***

Death Qualification Scale	Juror Race and Gender						Total
	White Male	White Female	Black Male	Black Female	Other Male	Other Female	
<b>1 Always Opposed</b>	16 (12.80%)	22 (22.45%)	12 (38.71%)	8 (32.00%)	3 (21.43%)	3 (27.27%)	64 (21.05%)
<b>2</b>	20 (16.00%)	24 (24.49%)	7 (22.58%)	7 (28.00%)	5 (35.71%)	1 (9.09%)	64 (21.05%)
<b>3 Neutral</b>	0 (0.00%)	0 (0.00%)	1 (3.23%)	0 (0.00%)	1 (7.14%)	0 (0.00%)	2 (0.66%)
<b>4</b>	75 (60.00%)	45 (45.92%)	11 (35.48%)	9 (36.00%)	3 (21.43%)	4 (36.36%)	147 (48.36%)
<b>5 Always Favor</b>	14 (11.20%)	7 (7.14%)	0 (0.00%)	1 (4.00%)	2 (14.29%)	3 (27.27%)	27 (8.88%)
<b>Total</b>	125 (100.00%)	98 (100.00%)	31 (100.00%)	25 (100.00%)	14 (100.00%)	11 (100.00%)	304 (100.00%)
<b><math>p = 0.001</math>***</b> * $p < 0.10$ , ** $p < 0.05$ , *** $p < 0.001$							

\*Note: Data was obtained for individuals who had race and death penalty opinions data.

Model 3 replicates the analyses of Models 1 and 2 for race and gender to show how different race-gender interactions score on the death penalty scale on average, compared to White men. Across all six versions of the regressions in Model 3, there were significantly lower average death penalty opinion scores for White females, Black males, and Black females, when compared to the average scores of White men. Results from individuals of other races were not consistently significant, likely because their total sample size is too small to garner significant results. Version 6 of Model 2 controls for a potential juror's level of education, level of religious involvement, whether they have previously served on a jury, whether they have friends or family in law enforcement, and whether they have had a negative criminal justice experience. In this model, the average death penalty opinion score for White females was about .50 points lower than the average score for White men. In the same model, the average death penalty opinion score for Black females was .74 points lower than the average for White men. The greatest mean

difference is between White men and Black men, as the average death penalty opinion score for Black men was about .98 points lower than the average for White men.

**Model 3: Death Penalty Opinions and Race-Gender Interactions**

	(1) Reduced Model	(2) Education	(3) Religious Involvement	(4) Prior Jury Service	(5) Law Enforcement	(6) Criminal Justice Experience
	Death Penalty Opinions	Death Penalty Opinions	Death Penalty Opinions	Death Penalty Opinions	Death Penalty Opinions	Death Penalty Opinions
<b>Race and gender (White males are the reference group)</b>						
<b>White Females</b>	-0.500*** (0.006)	-0.514*** (0.005)	-0.544*** (0.003)	-0.509*** (0.009)	-0.506** (0.010)	-0.495** (0.021)
<b>Black Males</b>	-1.053*** (0.000)	-1.142*** (0.000)	-1.025*** (0.000)	-1.019*** (0.001)	-1.017*** (0.001)	-0.975*** (0.005)
<b>Black Females</b>	-0.888*** (0.003)	-1.019*** (0.001)	-0.887*** (0.004)	-0.881*** (0.005)	-0.872*** (0.006)	-0.741** (0.022)
<b>Other Males</b>	-0.694* (0.067)	-0.642* (0.089)	-0.556 (0.151)	-0.512 (0.231)	-0.447 (0.321)	0.346 (0.594)
<b>Other Females</b>	-0.135 (0.748)	0.121 (0.782)	0.077 (0.859)	0.083 (0.853)	0.092 (0.838)	0.779 (0.148)
<b>Level of Education</b>		-0.160* (0.062)	-0.133 (0.121)	-0.138 (0.135)	-0.137 (0.140)	-0.088 (0.376)
<b>Level of Religious Involvement</b>			-0.158*** (0.004)	-0.164*** (0.005)	-0.164*** (0.006)	-0.114* (0.081)
<b>Prior Jury Service</b>				0.149 (0.550)	0.150 (0.548)	0.199 (0.481)
<b>Law Enforcement</b>					0.038 (0.827)	-0.048 (0.801)
<b>Criminal Justice Experience</b>						-0.437 (0.127)
<i>N</i>	304	297	291	265	264	198
<i>R</i> <sup>2</sup>	0.073	0.082	0.108	0.105	0.104	0.140

Exponentiated coefficients; *p*-values in parentheses

\* *p* < .10, \*\* *p* < .05, \*\*\* *p* < .01

This gap in support for the death penalty between White men and White women, White men and Black women, and White men and Black men suggests that death qualification may have a stronger effect by a combination of race and gender than my analyses of hypotheses H1 and H2 revealed. These results by race and gender also confirm that White men have a significantly higher favorability for the death penalty on average than other potential jurors,

which my theory would suggest would make the prosecution more likely to seat these individuals. Later analyses regarding the final compositions of the four capital juries serve to either confirm or deny this logic.

The statistically significant results in Table 9 confirm that death qualification excusals for individuals with negative opinions of the death penalty (scoring a 1 or a 2) are not only differentiated on account of race and gender alone but are also disproportionately affected by the interaction between the two. The most prominent gap in death qualification excusals is between White males and Black females, as Black females were deemed not death qualified due to negative opinions of the death penalty at a rate over 3 times higher than the White men. Over half of Black females who reached the voir dire stage were struck due to negative views of the death penalty, which shows the significant impact this process has on this group of potential jurors. No other race and gender combination had a majority share of their representation in the jury pools struck for death qualification.

**Table 9: Death Qualification Excusals by Race and Gender\***

	White Male	White Female	Black Male	Black Female	Other Male	Other Female	Total
<b>Not Struck for Death Qualification</b>	103 (82.40%)	65 (66.33%)	17 (54.84%)	10 (40.00%)	9 (64.29%)	7 (63.64%)	211 (69.41%)
<b>Struck for Death Qualification</b>	22 (17.60%)	33 (33.67%)	14 (45.16%)	15 (60.00%)	5 (35.71%)	4 (36.36%)	93 (30.59%)
<b>Total</b>	125 (100.00%)	98 (100.00%)	31 (100.00%)	25 (100.00%)	14 (100.00%)	11 (100.00%)	304 (100.00%)
<b><math>p = 0.000</math>***</b> * $p < 0.10$ , ** $p < 0.05$ , *** $p < 0.00$							

\*Note: Data was only obtained for individuals who had race and death penalty opinions data. The individuals captured in this table that were struck for death qualification were struck on account of unfavorable death penalty opinions (scoring a 1 or a 2 on the death qualification scale).

H1 and H2 and suggest that within the scope of my analysis, the practice of death qualifying the juries systematically removed Black females and decreased their chances of being represented in the seated capital juries. Black males had the next largest share of their representation across the jury pools struck for death qualification, emphasizing the important role race plays in this trend.

*d. The Race and Gender Effect of Peremptory Strikes*

My hypothesis H3 expects the disproportionate use of prosecutorial peremptory strikes against Black potential jurors compared to the use of these strikes against White potential jurors. Table 10 shows significant results for the distribution of State peremptory strikes by race. Of all those summoned to jury duty across the four capital cases, Black potential jurors had the highest proportion of their total share across the jury pools struck by the prosecution (16.28%). The share of Black jurors struck by the State was nearly two times greater than the share of White

jurors. The share of females struck by the State was not significantly different from the share of males struck (9.51% and 7.64% respectively).

**Table 10: State Strikes by Race\***

	White	Black	Other	Total
Not Struck by the State	327 (91.85%)	72 (83.72%)	44 (91.67%)	443 (90.41%)
Struck by the State	29 (8.15%)	14 (16.28%)	4 (8.33%)	47 (9.59%)
Total	356 (100.00%)	64 (100.00%)	48 (100.00%)	490 (100.00%)
<p><math>p = 0.068^*</math>                      * <math>p &lt; 0.10</math>, ** <math>p &lt; 0.05</math>, *** <math>p &lt; 0.00</math></p>				

\*Note: Data was only obtained for individuals who had race data.

My hypothesis H3 expects the disproportionate use of prosecutorial peremptory strikes against Black potential jurors compared to the use of these strikes against White potential jurors. Table 10 shows significant results for the distribution of State peremptory strikes by race. Of all those summoned to jury duty across the four capital cases, Black potential jurors had the highest proportion of their total share across the jury pools struck by the prosecution (16.28%). The share of Black jurors struck by the State was nearly two times greater than the share of White jurors. The share of females struck by the State was not significantly different from the share of males struck (9.51% and 7.64% respectively).

Conducting this analysis by both race and gender also did not produce significant results (see Table 11). However, White women, Black women, and women of other races had higher shares of their population struck than their male counterparts. Black females were the most heavily targeted, with 18.60% of their total share of the jury pools eventually being struck by the State, whereas only 7.14% of the total share of White men were struck by the State. These trends show that Black potential jurors, especially Black women, are peremptorily struck by the State at higher rates than Whites, especially White men. Though there are no significant results in the distribution of State strikes by gender or by race and gender, I can confirm that the State used peremptory strikes disproportionately against Black potential jurors compared to their total share of the jury pool, offering initial support for my hypothesis H3.

**Table 11: State Strikes by Race and Gender\***

	White Male	White Female	Black Male	Black Female	Other Male	Other Female	Total
<b>Not Struck by the State</b>	182 (92.86%)	145 (90.62%)	37 (86.05%)	35 (81.40%)	24 (92.31%)	20 (90.91%)	443 (90.41%)
<b>Struck by the State</b>	14 (7.14%)	15 (9.38%)	6 (13.95%)	8 (18.60%)	2 (7.69%)	2 (9.09%)	47 (9.59%)
<b>Total</b>	196 (100.00%)	160 (100.00%)	31 (100.00%)	43 (100.00%)	26 (100.00%)	22 (100.00%)	490 (100.00%)
$p = 0.265$ * $p < 0.10$ , ** $p < 0.05$ , *** $p < 0.00$							

**\*Note:** Data was only obtained for individuals who had race data.



**Model 4: Odds of Prosecutorial Strikes and Race-Gender Interactions**

	(1) Reduced Model	(2) Death Penalty Opinions	(3) Education	(4) Religious Involvement	(5) Prior Jury Service	(6) Law Enforcement	(7) Criminal Justice Experience
	State Strike (0,1)	State Strike (0,1)	State Strike (0,1)	State Strike (0,1)	State Strike (0,1)	State Strike (0,1)	State Strike (0,1)
<b>Race and gender (White males are the reference group)</b>							
<b>White Females</b>	1.345 (0.445)	1.570 (0.287)	1.602 (0.270)	1.624 (0.259)	1.481 (0.385)	1.471 (0.395)	1.877 (0.186)
<b>Black Males</b>	2.108 (0.152)	2.186 (0.206)	2.468 (0.170)	2.224 (0.233)	1.879 (0.379)	1.863 (0.130)	2.198 (0.304)
<b>Black Females</b>	2.971** (0.023)	5.004*** (0.004)	5.457*** (0.006)	5.052*** (0.009)	4.982** (0.012)	4.863** (0.014)	3.804** (0.048)
<b>Death Penalty Opinion Scale (4 scores are the reference group)</b>							
<b>2 - Almost always opposed</b>		2.417** (0.020)	2.424** (0.021)	2.270** (0.034)	1.842 (0.135)	1.863 (0.130)	1.945 (0.128)
<b>5 - Always in favor</b>		0.292 (0.247)	0.290 (0.244)	0.283 (0.234)	0.261 (0.207)	0.259 (0.205)	0.317 (0.285)
<b>Level of Education</b>			1.015 (0.943)	1.010 (0.518)	1.027 (0.903)	1.029 (0.896)	1.063 (0.788)
<b>Level of Religious Involvement</b>				1.086 (0.518)	1.109 (0.437)	1.113 (0.424)	1.104 (0.490)
<b>Prior Jury Service</b>					0.849 (0.778)	0.839 (0.762)	1.234 (0.738)
<b>Law Enforcement</b>						0.897 (0.787)	0.964 (0.931)
<b>Criminal Justice Experience</b>							1.354 (0.666)
<b>N</b>	238	220	216	211	191	191	156
<b>Pseudo R<sup>2</sup></b>	0.092	0.095	0.098	0.097	0.089	0.089	0.085

Exponentiated coefficients; *p*-values in parentheses  
 \* *p* < .10, \*\* *p* < .05, \*\*\* *p* < .01

To further analyze my hypothesis H3, I ran a series of logistic regressions evaluating the relationship between a potential juror’s race and their likelihood of being struck by the State from 0 to 1, where 0 indicates an individual was not struck by the State and 1 indicates that they

were (see Model 4). Version 7 of Model 4 controls for an individual's death penalty opinions, level of education, level of religious involvement, whether they have previously served on a jury, whether they have friends or family in law enforcement, and whether they have had a negative criminal justice experience, as these variables have the potential to influence the State's decision to strike an individual. Given the results of previous analyses, I chose to exclude individuals of other races from Model 4, as their small sample sizes have produced consistently insignificant results. I also chose to narrow the death penalty opinion scale such that the only categories included were 2, 4, and 5, where 4 was the reference group. This is because all individuals who scored a 1 were excused for cause, which means they perfectly predicted failure to be struck by the State in Model 4. I also excluded 3 due to insufficient data. However, it is important to note that in excluding these categories from both race and death penalty opinions, I compromised the overall sample size.

Throughout all versions of the model, Black women had significantly higher odds of getting struck by the State compared to White men. In version 7 of the logistic regression model, Black females had 280% higher odds of being struck by the State than White males, when holding the other independent variables constant. No other race and gender combination had significantly higher or lower odds of being struck by the State in any version of Model 4, which emphasizes how the use of State strikes across all jury pools targeted these potential jurors. These results support my claim that Black potential jurors are disproportionately struck by the State and suggest that this is particularly true for Black females.

Model 4 also highlights the significant role death penalty opinions played in the odds that an individual was struck by the State, even when controlling for race and gender. I chose to make a death penalty opinion score of 4 the reference category to highlight the difference in excusal rates against individuals who were almost always in favor of the death penalty, as my theory would suggest the State would opt not to strike these individuals. Given the pseudo  $R^2$  calculations, the version of the model wherein the included independent variables have the most explanatory power over the variation in state strikes is version 3. In that version of the model, potential jurors who scored a 2 on the death penalty scale but were willing and able to sentence death had about 142% higher odds of being struck by the State than did potential jurors who scored a 4, which supports my theory. However, the difference in the probability of being struck between individuals who scored a 2 versus those who scored a 4 was not statistically significant as more controls were added and as the sample size declined. Nonetheless, the significant results in Model 4 point to the State's strategy to strike potential jurors on the basis of race and gender as well as by negative death penalty opinions. This finding supports my hypothesis H3 and my theory that the State excludes individuals from the jury who are not pro-prosecution, which includes Black females and those with unfavorable death penalty opinions.

It is important to note that across all four cases included in my analysis, 9 *Batson* claims were made by the defense against peremptory strikes used by the State. One *Batson* claim was made against a White man, who the defense suspected was unconstitutionally struck on account of his disability. However, the other 8 claims were made against White women and Black women. The defense argued these motions by stating that the State used peremptory strikes against Black or White female potential jurors in instances where White male jurors with similar juror profiles (death penalty opinions, employment status, etc.) were not struck by the prosecution. The *Batson* procedure called for the State to defend their use of peremptory strikes in these 9 cases with on-the-record explanations verifying that race and/or gender did not motivate their decision to strike these individuals. The justifications provided by the State to

strike these jurors included: age, education, marital status, employment status, death penalty opinions, biases against law enforcement, experiences with the criminal justice system, etc. All these explanations were accepted at face-value by the presiding judges as being both race and gender-neutral, which resulted in no successful *Batson* claims. Nonetheless, my results suggest that even when controlling for reasons that might justify the State’s decision to strike a juror—including some of the actual justifications the State provided during *Batson* motions—Black potential jurors and specifically Black females had significantly increased odds of being struck by the State compared to their White male counterparts. Although my results support the basis for these *Batson* claims, the procedure in place allowed the prosecution to evade consequences for the racialized and gendered effects of their peremptory strikes.

Though my hypothesis H3 is only concerned with State strikes, I conducted the same analyses for defense strikes to gauge whether the defense also utilized its strikes in a manner that had racialized effects. It is important to emphasize that by the time the defense had been able to question potential jurors during the voir dire, the State had already decided whether to make a motion for cause against a potential juror, strike them peremptorily, or accept them. In other words, by the time the defense had to make decisions on whether to strike a potential juror, the jury pools were already disproportionately White. At the start of the defense's stage of the voir dire, the combined jury pools consisted of 137 individuals with 86% Whites and 8% Blacks. The share of Black potential jurors at this stage was less than half of their original share of the combined jury pools. However, the share of White potential jurors at this stage had increased more than 10% from their original share of the combined jury pools, on account of the processes of death qualification and peremptory strikes that my results confirm contributed to the disparate exclusion of Black potential jurors compared to Whites.

**Table 12: Defense Strikes by Race\***

	White	Black	Other	Total
Not Struck by the Defense	309 (86.80%)	84 (97.67%)	45 (93.75%)	438 (89.39%)
Struck by the Defense	47 (13.20%)	2 (2.33%)	3 (6.25%)	52 (10.61%)
Total	356 (100.00%)	86 (100.00%)	48 (100.00%)	490 (100.00%)
<b><math>p = 0.008^{***}</math></b> * $p < 0.10$ , ** $p < 0.05$ , *** $p < 0.00$				

\*Note: Data was only obtained for individuals who had race data.

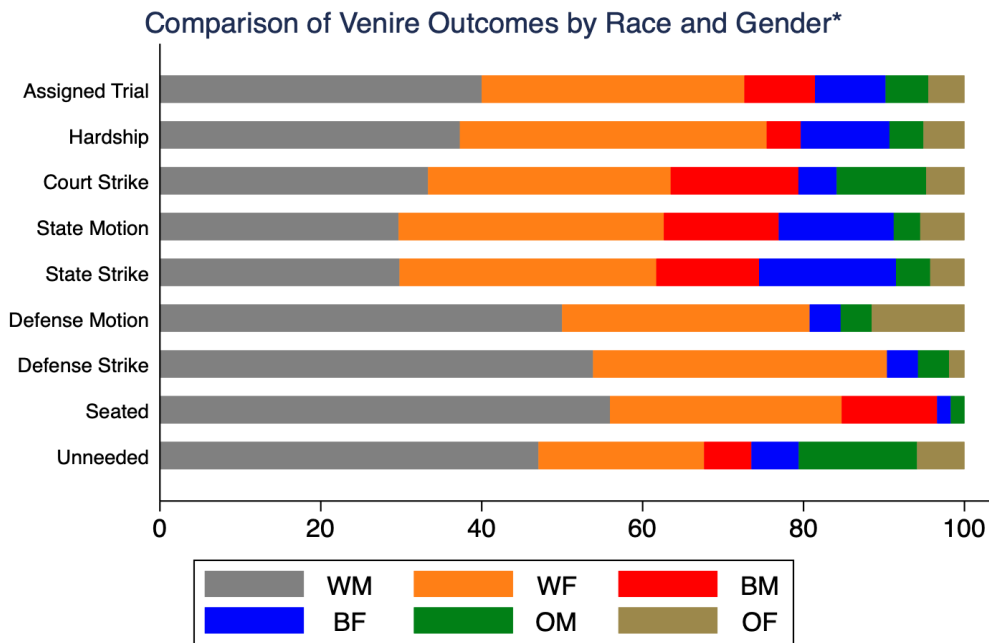
Table 12 shows that Whites were disproportionately struck by the defense. However, the fact is that by the time the defense was able to make decisions about potential jurors, there was an overwhelming share of White potential jurors and few Black potential jurors. Thus, the racialized difference in defense strikes could be the result of the defense’s careful decision to strike as few Black potential jurors as possible to increase their odds of being seated, rather than the result of bias against White jurors. When looking at defense strikes by both race and gender, White men had the highest share of their total population struck by the defense (14.29%), compared to all other race-gender interactions.

While analyses of State peremptory strikes confirmed my hypothesis H3 in revealing a significant difference in the odds of being struck between Black females and White males, the reverse was not true for defense strikes. Thus, the exclusion of Whites, and especially of White males, by the defense is likely in response to the actions the State took to disproportionately exclude Black potential jurors from the jury pools.

*e. The Outcomes of Potential Jurors by Race and Gender*

My final hypothesis H4 posited that White men would be overrepresented on seated juries compared to their original share across the jury pools because the jury selection processes of death qualification and prosecutorial peremptory strikes would have allowed the State the opportunity to construct a pro-prosecution jury, or one that is as White and as likely to sentence death as possible. Table 2 showed that White males and Black males had the highest share of their jury pool populations seated on the juries, followed by White females, males of other races, Black females, and women of other races. Figure 1 contextualizes that data in showing the original distribution of race and gender of all individuals that were assigned to one of the four capital case trials in my study as a proportion out of 100% (labeled “Assigned Trial”). This is compared to the share of race and gender across the four seated juries (labeled “Seated”). Figure 1 also shows the proportion of race and gender combinations excused by each type of excusal in the voir dire: hardship, Court strikes, State motion or strike, defense motion or strike, and unneeded—for surplus individuals that were not called to voir dire and were excused after the jury was seated. The y-axis is in order from top-to-bottom based on the sequential stages of the jury selection process.

**Figure 1\***



\*Data only obtained for individuals with race and gender data (N = 490).  
 WM is White Male, WF White Female, BM Black Male, BF Black Female, OM Other Male, OF Other Female.

Figure 1 confirms the significant overrepresentation of White males, whose share of the final juries was nearly 20% more than their original share across the jury pools. This is explained by the fact that the State excused small shares of White men. Even though the defense struck a

greater proportion of White men than their original share on the jury pool, this did not mitigate the effect of the State's actions, resulting in the disproportionate representation of White men on the final juries. This finding lends initial support to my hypothesis H4 and to my overarching theory that the State would seat as many White males as possible, as their generally pro-death penalty and pro-prosecution beliefs provide the best odds for a conviction and a death sentence.

White females, Black females, and females of other races were all underrepresented compared to their original share across the jury pools, albeit to varying degrees. Men were seated on final juries at a rate 2 times higher than females, confirming that seated juries were male-dominant. Interestingly, Figure 1 shows that Black males were overrepresented on the final juries compared to their original share of the jury pools, which contradicts my expectations. Even though the Court and the State moved to excuse a greater proportion of Black male jurors than were originally in the jury pools, the defense did not excuse any Black males that reached their stage of the voir dire. Thus, Black males had the opportunity to sit on final juries on account of the defense's careful actions. However, the overrepresentation of Black males on seated juries does not negate my findings that death qualification and prosecutorial peremptory strikes contributed to the disproportionate exclusion of Black potential jurors. Instead, it suggests that these exclusions did not significantly affect the likelihood that Black males were seated on final juries.

My results have confirmed that the sociological characteristics of race and gender are significantly linked to processes of jury selection. However, to further understand whether race and gender alone significantly affected the odds of being seated on a capital jury, I analyzed a series of logistic regression models testing the relationship between the odds of being seated on a jury from 0 to 1—where 0 indicates an individual was not seated on a jury and 1 indicates that they were—and a potential juror's race and gender, controlling for their death penalty opinions, level of education, level of religious involvement, whether they previously served on a jury, whether they have friends or family in law enforcement, and whether they have had a negative criminal justice experience (see Model 5).

**Model 5: Odds of Being Seated and Race-Gender Interactions**

	(1) Reduced Model	(2) Death Penalty Opinions	(3) Education	(4) Religious Involvement	(5) Prior Jury Service	(6) Law Enforcement	(7) Criminal Justice Experience
	Seated (0,1)	Seated (0,1)	Seated (0,1)	Seated (0,1)	Seated (0,1)	Seated (0,1)	Seated (0,1)
<b>Race and gender (White males are the reference group)</b>							
<b>White Females</b>	0.587* (0.096)	0.686 (0.296)	0.682 (0.302)	0.755 (0.455)	0.856 (0.693)	0.882 (0.752)	1.041 (0.927)
<b>Black Males</b>	0.960 (0.929)	1.433 (0.511)	1.576 (0.440)	1.571 (0.454)	1.573 (0.483)	1.572 (0.484)	1.136 (0.865)
<b>Black Females</b>	0.118** (0.038)	0.147* (0.071)	0.151* (0.079)	0.154* (0.083)	0.155* (0.088)	0.167 (0.104)	0.142* (0.090)
<b>Death Penalty Opinion Scale (4 scores are the reference group)</b>							
<b>2 - Almost always opposed</b>		0.361** (0.014)	0.384** (0.021)	0.379** (0.021)	0.362** (0.022)	0.344** (0.017)	0.520 (0.165)
<b>Level of Education</b>			1.010 (0.958)	1.004 (0.985)	1.030 (0.885)	1.023 (0.910)	0.981 (0.930)
<b>Level of Religious Involvement</b>				1.051 (0.671)	1.052 (0.684)	1.037 (0.776)	0.984 (0.909)
<b>Prior Jury Service</b>					1.257 (0.658)	1.319 (0.595)	1.423 (0.568)
<b>Law Enforcement</b>						1.491 (0.272)	1.582 (0.257)
<b>Criminal Justice Experience</b>							1.677 (0.528)
<i>N</i>	442	198	194	189	169	169	141
<b>Pseudo R<sup>2</sup></b>	0.029	0.063	0.061	0.061	0.064	0.070	0.055

Exponentiated coefficients; *p*-values in parentheses

\* *p* < .10, \*\* *p* < .05, \*\*\* *p* < .01

For this series of regressions, I further narrowed the death penalty opinion scale such that the only categories included were 2 and 4, with the first being compared to the latter. This is because all individuals who scored a 1, 3, or a 5 were excused, meaning they would perfectly predict failure to be seated in every version of Model 5. Only individuals who scored a 2 or a 4 were eventually seated on the juries, given that these were the categories that indicated an ability to sentence death within the scope of the law.

The difference in the probability of being seated between individuals who scored a 2—or were disinclined to sentence death—versus those who scored a 4—or were inclined to sentence

death—on the death penalty opinion scale was nearly always significant. In version 6 of Model 5, wherein the independent variables had the highest explanatory power over variation in a potential juror's odds of being seated, individuals who scored a 2 on the death penalty opinion scale had about 66% lower odds of being seated on the jury than those who scored a 4, when controlling for other sociological characteristics relevant to jury selection, including race and gender. However, as the sample size decreased in version 7 of Model 5, there was not a significantly different relationship in the probability of being seated between individuals who scored a 2 on the death penalty opinion scale and those who scored a 4. This decrease in significance could also be due to the fact that death penalty opinion scores and whether an individual had a negative criminal justice experience are negatively correlated at  $p < 0.05$ .

The models that show a statistically significant difference in the odds of being seated by death penalty opinions is an important finding, given that both individuals who score a 2 and those who score a 4 are qualified by North Carolina statute to sit on capital juries, yet individuals with less favorable death penalty opinions had a lower likelihood of being chosen to do so. Thus, seated capital juries are not representing the opinions of summoned jury pools. Though not significant, only 15.25% of seated jurors scored 2s on the death penalty opinion scale while all others scored 4s. The only seated jurors who scored 2s were White. All Black seated jurors scored 4s, even though this does not align with the distribution of death penalty opinions among the Black individuals summoned to jury duty (see Table 8). The lack of variation in death penalty opinions of seated jurors made it such that an overwhelming majority of those seated were in favor of the death penalty, which aligns with my theory that the prosecution would aim to seat jurors that are most likely to sentence death.

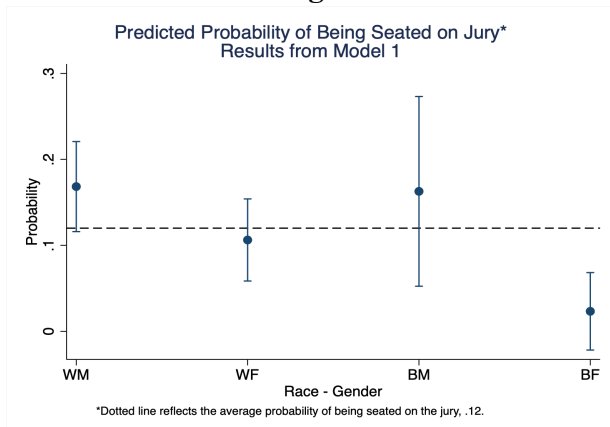
Version 1 of Model 5 shows that White females have a significantly lower likelihood of being seated than White males. However, this relationship was no longer significant after the inclusion of death penalty opinions as a control variable. Black males did not have a significantly higher or lower likelihood of being seated compared to White males in any version of Model 5. This finding is counter to my expectations, given that my results for hypotheses H1-H3 identified racialized effects of jury selection that I theorized would result in the disproportionate exclusion of Black men from final juries. However, Figure 1 shows that Black males were actually overrepresented on seated juries, which could mean that exclusions by race were disproportionately affecting Black females compared to Black males.

The results of Model 5 show that Black females had a significantly lower probability of being seated than White males. However, results for version 6 of Model 5 were slightly above the  $p < 0.10$  threshold for statistical significance. This is important to note given that this version of Model 5 included the most explanatory independent variables, and the additional control variable in version 7 of Model 5 did not contribute any new information to the model. Nonetheless, the significance consistently remains around the  $p < 0.10$  threshold throughout all versions of the model, supporting the idea that Black females have disproportionately lower odds of being seated. In version 7 of Model 5, significant results show that Black females had about an 86% lower likelihood of being seated on a jury compared to White males, when controlling for other sociological characteristics.

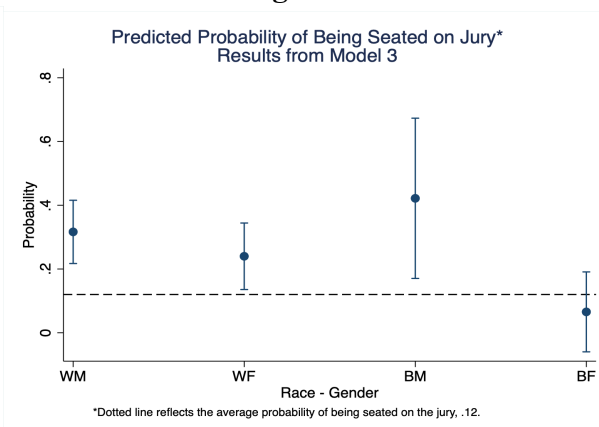
To further understand the relationship between race and gender and being seated on a capital jury, Figures 2 through 5 represent the predicted probability of being seated for versions 1, 3, 6, and 7 of the logistic regression models displayed in Model 5, respectively, where each displayed predictive probability by race and gender accounts for the control variables included in each model. The controls hold an individual's death penalty opinions, level of education, level of

religious involvement at mean value, whereas the binary control variables—whether an individual previously served on a jury, whether they have friends or family in law enforcement, and whether they or their friends and family had a negative criminal justice experience—are held at median value. Figures 2 and 5 are included to display the differences between the reduced model and the version of the model accounting for all controls. Figure 3 is included to show the change when controls are added. Figure 4 is included because the model it represents had the highest pseudo  $R^2$  value. The dotted line reflects the average probability that any individual across the four jury pools was seated on a jury, as shown in Table 5.

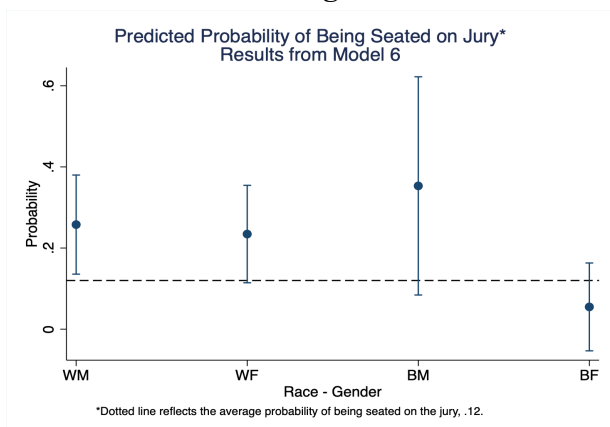
**Figure 2:**



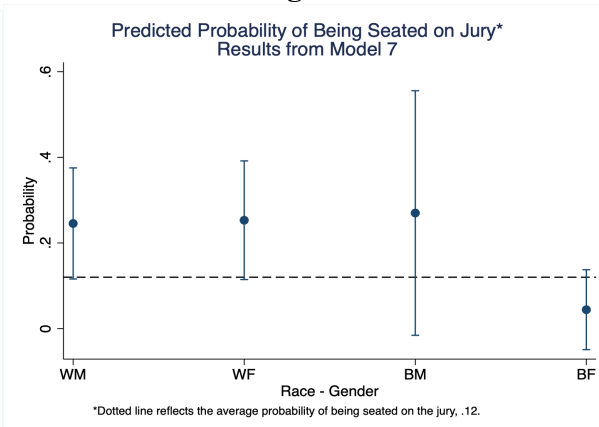
**Figure 3:**



**Figure 4:**



**Figure 5:**



The results from the reduced model displayed in Figure 2 show that Black females had a significantly lower predicted probability of being seated when no controls were included, compared to the overall average likelihood of being seated. The range of confidence intervals for Black females did not overlap with the average probability marker, though confidence intervals for all other race-gender combinations did overlap with the average. White men and Black men had estimations above the average, whereas White women and Black women did not. The figure most clearly displays the significant difference in the predicted probability of being seated between White males and Black females, with White males having a predicted probability of being seated about 5 times higher than that of Black females.



The display of Model 7 holds constant an individual's death penalty opinions, level of education, level of religious involvement, whether or not they had previously served on a jury, whether or not they had family or friends in law enforcement, and whether or not they had a negative experience with the criminal justice system. Figure 5 displays wider confidence intervals for race-gender combinations that all overlap with the average marker. In this figure, the estimation of the predicted probability of being seated is about equal for White males, White females, and Black males, while Black females maintained a significantly lower estimation. Thus, this figure shows that even when holding both death penalty opinions and experiences with the criminal justice system constant for all potential jurors, Black females are still likely to be disproportionately excluded from seated juries compared to other jurors. Though I expected these jury selection processes to be explaining racialized and gendered exclusions from seated juries, it can be deduced that for Black females, their race and gender alone is also negatively impacting their odds of being seated. This Black female effect furthers the racialized and gendered effects of death qualification and peremptory strikes, which have both been found to disproportionately exclude Black females.

In Figures 2 through 5, the predicted probability of being seated for Black females remained consistently below the average and significantly below the predicted probability estimations of other race-gender combinations, even when holding additional variables constant. These results suggest that the predicted probability of being seated is influenced by race and gender in isolation. However, these results do not negate the impact that the process of death qualification had on the composition of the final jury, but instead suggest that even when holding death penalty opinions constant, Black females would still have a significantly lower probability of being seated compared to other race and gender combinations. Thus, Black females bear the brunt of the racialized and gendered effects of jury selection, which systematically denies them from serving on capital juries.

### **Discussion & Conclusion**

The results of my analyses confirm that within the scope of my study, the defendants' Sixth Amendment constitutional right to a jury of their peers was not upheld. This promise was first targeted by the death qualification process, which systematically excluded Blacks and females, with disparate impacts for Black females. These results affirm that the death qualification process decreased the likelihood that seated jurors in the Devega, Smith, Holden, and Richardson trials were Black or female. Because the defendants in these trials were Black males, the representation of Black jurors was even more critical in the judgment of these men.

The death qualification process also impacted the opinions held by seated jurors. Since individuals can only be seated if they are willing and able to sentence death, the opinions in the deliberation room are inherently skewed. Thus, the death qualification process makes it such that seated jurors are differentiated in ways that make them more pro-prosecution and more inclined to sentence death. Eliminating the death qualification requirement would allow jurors to have different opinions of the death penalty, potentially increasing the diversity in the demographics of those seated and allowing more impartial and balanced deliberations. However, further research would benefit from evaluating whether not death qualifying a jury would present more threatening biases in opinions that could also affect the imposition of a death sentence.

Peremptory strikes furthered the racialized and gendered impact of death qualification and specifically resulted in the disproportionate removal of Black females. This further validates the claim that the Sixth Amendment is being undermined during jury selection, as Black females

are systematically denied the right to fulfill their civic duty when summoned for jury duty. Given the ease with which *Batson* claims are denied, there is essentially no safeguard in place to identify or prevent racialized or gendered prosecutorial peremptory strikes. Although my results confirmed biased peremptory strikes, the lack of successful *Batson* claims against these strikes suggests there must be serious consideration as to whether the *Batson* standard of purposeful discrimination is too difficult to satisfy. Though the motivation behind peremptory strikes is to give the State and the defense limited liberty in who they see fit to sit on the jury, the result is evidently counteracting the constitutional liberties of defendants.

My study affirms the fact that the jury selection process targets Black and female potential jurors, with an emphasis on the exclusion of Black females. The end result is a White male-dominant jury that denies the constitutional rights of criminal defendants. Though my results are bound by data from Wake County between 2014-2018 and thus subject to external validity constraints, existing literature has confirmed these trends in a slew of different contexts. Given the fact that jury selection is a quasi-standardized practice across North Carolina, there is reason to believe that these biases have impacted other capital cases across the state, which calls into question the fairness of the trials of the 134 current North Carolina death row inmates. To confirm that claim, further research would benefit from a state-wide analysis of how both death qualification and prosecutorial peremptory strikes have impacted the final composition of capital juries. A state-wide analysis would include a larger sample size, which would address the weaknesses my study had regarding generalizability and statistical significance.

My analyses demonstrated evident and consistent racialized and gendered biases in the jury selection practices of four capital cases in Wake County, North Carolina. This study adds to a breadth of existing social science research identifying jury selection as a detriment to defendants' Sixth Amendment constitutional right. The State of North Carolina should not wait for more research to confirm these results. These biases in capital jury selection pose a significant threat to the constitutionality of the death penalty application within the state, which begs the question: Is it time to do away with this antiquated criminal punishment?

## Endnotes

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## **Studying the Economic Impact of the Demonetization Across Indian Districts**

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**ABSTRACT:** This thesis studies the economic impact of the Indian demonetization which was a unique monetary event that made 86.9 percent of the total currency in circulation illegal tender overnight. The decision to demonetize high-value currency notes was taken by the Indian government on November 8th, 2016, leading to a severe shortage of cash. This thesis tries to analyze how the impact of the demonetization differed across districts in India and how the characteristics of those districts pertaining to education, electricity and tap water access, employment, and technology access can help explain these differences. The thesis uses satellite data on human-generated night light activity to quantify the impact of the demonetization on economic activity. It is found that districts that had a higher literacy rate and a higher percentage of households with access to electricity experienced a less severe economic impact of the demonetization. The economic impact due to the demonetization was more severe in districts with a higher percentage of marginal workers in their workforce. Amongst the various sectors of employment, agriculture, manufacturing, and construction were affected less severely by the demonetization compared to wholesale and retail trade. These insights have the potential to help policymakers minimize the negative economic impacts of a policy like the demonetization by understanding which districts or sub-geographical regions are more susceptible to these impacts.

### **Introduction**

On November 8th, 2016 the government of India decided to demonetize high-value currency notes of denomination Rupees 1000 and Rupees 500, which constituted 86.9 percent of the total currency in circulation. The decision was taken by the Government of India to eliminate corruption, black money, counterfeit currency, and terror funding. The decision was also guided by the aim of reaping potential medium-term benefits in the form of reduced corruption, greater digitization of the economy, and greater formalization of the economy.<sup>1</sup>

The Indian public could exchange the demonetized cash by either swapping the old currency with new currency (subject to daily limits) or they could deposit the old cash in their bank accounts. Between October (the last month before the demonetization) and December 31st, 2016, (the last date for exchanging the old bills for the new ones) currency in circulation in India fell by around 8.4 trillion rupees.<sup>2</sup>

India has traditionally been a cash-intensive economy. According to the Report of the Committee on Digital payments<sup>3</sup> (2016), around 78 percent of all consumer payments in India are effected in cash. Moreover, the informal sector in India is large, contributing 43.2 percent to Gross Value Added and employing more than 80 percent of the labor force.<sup>4</sup> Due to these reasons, the currency squeeze during the demonetization hurt economic activity.

The liquidity shock caused by the demonetization had an impact on the growth of gross value added (GVA) in India. This impact was the result of a decline in demand due to a shortage of cash for discretionary spending and disruption in productivity due to workers, who get their wages paid in cash, experiencing temporary loss of work. The gross value added (GVA) growth

for 2016-17 as a whole was estimated by the Reserve Bank of India at 6.9 percent, as against the 7.6 percent communicated by the Reserve Bank of India before demonetization.

The demonetization adversely impacted organized manufacturing leading to a decline in the sales of fast-moving consumer goods (FMCG), contraction in the manufacturing purchasing manager's index (PMI), and a deceleration in export growth. It also resulted in a slowdown in domestic demand for automobiles, consumer durables, and apparel, and textiles. The service sector was also affected, with the services PMI and service tax collection - an indicator for unorganized services- falling sharply. The impact of the demonetization on agricultural production, however, was muted and transient due to healthy progress in Rabi (crops are sown in winter) sowing with food-grain production increasing by 8.1 percent in 2016-17.

This thesis aims to understand the economic impact of the demonetization by using district-wise cross-sectional data. The objective of the thesis is to study how different characteristics of districts in India can help explain the economic impact of the demonetization in those districts. The thesis will analyze the characteristics of districts related to education, electricity and tap water access, employment, and technology access and will use satellite data on human-generated night light activity to quantify the economic impact of the demonetization.

The data for district characteristics are obtained from the NITI Aayog District Statistics and the Indian National Census of 2011. The nightlight intensity data is obtained using the Visible and Infrared Imaging Suite (VIIRS) Day Night Band (DNB) on board the Joint Polar-orbiting Satellite System (JPSS) satellites. A linear regression model is then used to identify how the change in night-light activity varies across districts and which characteristics of these districts help explain this change.

It is found that the total population of a district and the percentage of households with mobile phones are not statistically significant variables in the regression model. Districts with a higher literacy rate and a higher percentage of households using electricity or solar energy as the main source of lighting experienced a less severe impact of the demonetization. Surprisingly, districts with a higher percentage of households receiving tap water experience a more severe economic impact of the demonetization.

Districts with a higher percentage of marginal workers face a more severe economic impact of the demonetization, while the opposite holds for districts with a higher percentage of non-workers. Amongst the different sectors of employment, the economic impact of the demonetization is less severe in districts with a higher percentage of workers in agriculture, forestry, or fishing; manufacturing, and construction. Districts with a higher percentage of workers working in wholesale and retail trade faced a more severe economic impact of the demonetization.

## Literature Review

### *A) Past Experiences with Demonetization in India*

Demonetization as a tool of fighting crime, tax evasion, and activities in the underground economy has been advocated in the past, and analyzing literature about past experiences with demonetization in India is insightful.

In 1946, bills of denomination 500 rupees or above were demonetized in India to fight against black market money and tax evasion.<sup>5</sup> However, the scheme was generally regarded as a failure as 94 percent of the demonetized currency was returned to the Reserve Bank of India and it caused considerable hardship to the general public. The Indian government also demonetized currency bills of denomination 1000 rupees and above in 1978. This move was marginally more successful than the one in 1946 as 86 percent of the demonetized currency was exchanged for lower denomination bills.

The unique aspect of the demonetization in India in 2016 was that it was carried out during a period of economic stability, but with very little time given to the public to exchange their demonetized bills. This led to a cash shortage that hurt economic activity. Much like the previous instances of demonetization in India, people found ways to effectively and swiftly launder money, and 99.3% of the revoked currency was returned within the sixty-day window provided by the government.<sup>6</sup>

### *B) Descriptive Statistics and Time Series Methods*

The existing literature on the economic impact of the demonetization in India consists of research that analyzes the macroeconomic impact of the demonetization at the national level using descriptive statistics. The Reserve Bank of India's (RBI) preliminary assessment of the macroeconomic impact of the demonetization, for instance, states that the demonetization led to a transient disruption in nation-wide economic activity. RBI's assessment looks at nationally aggregated data and concludes that the impact of the demonetization on gross value added growth, albeit modest, was felt in November and December of 2016-17.

While this assessment gives a good picture of the macroeconomic conditions at the national level, it fails to capture regional variations in the economic impact of the demonetization. As hard data on the unorganized sector are collected infrequently, it also fails to accurately capture the impact of the demonetization on the unorganized or informal sector. This thesis will try to capture regional variations of the economic impact by using district-wise cross-sectional data. It will also better capture the impact on the unorganized sector by utilizing night light intensity data to quantify economic costs.

There have also been studies that use time series methods to analyze the macroeconomic impact of the demonetization at the national level. Aggarwal and Narayanan<sup>7</sup> estimate the impact of the demonetization on domestic trade in agricultural commodities. They analyze data on arrivals and prices from close to 3000 regulated markets in India for 35 major agricultural commodities. They use a combination of difference in differences techniques and synthetic control methods to identify the causal impact of the demonetization. They find that the demonetization displaced domestic agricultural trade in regulated markets by over 15% and the trade in perishables by around 23% in the short run.

The paper by Aggarwal and Narayanan<sup>7</sup> provides insight into the impact that the demonetization had on agriculture, which accounts for the largest share of the informal workforce<sup>8</sup>. However, national time-series aggregates cannot alone provide empirical evidence of the effects of the demonetization as the episode constitutes only a single observation and because other economic shocks occurred during the period<sup>9</sup>. This is one of the reasons why this thesis studies the consequences of the demonetization using cross-sectional data instead of time series aggregates.

### *C) Survey Based Methods*

Several studies also use survey-based data to examine the economic impact of the demonetization. Zhu et al.<sup>10</sup> analyze the short-run responses of poor rural households to the demonetization. They collect data from four villages in the Sundarbans region of West Bengal and estimate a household income loss of 15.5% over the two months after the demonetization. In a similar study, Krishnan and Siegel<sup>11</sup> survey around 200 families in urban slums in Mumbai and find that household incomes fell by about 10%.

Kurosaki<sup>12</sup> uses a panel dataset on registered and unregistered manufacturing firms to show that even after the demonetization shock, both types of firms remain cash-dependent. Karmarkar and Narayanan<sup>13</sup> use panel data on more than 100,000 households from the Consumer Pyramids (CP) survey of households carried out by the Centre for Monitoring the Indian Economy (CMIE). They find that the demonetization had a transient impact on

household income and expenditure with significant heterogeneity in the impact across households in different asset quartiles.

This thesis is similar to the above-mentioned papers in that it can capture the household level characteristics of different districts that led to the varied economic impact of the demonetization. However, unlike some of the above-mentioned papers, the data used in the thesis spans the entire nation and is not limited in terms of geographical scope.

#### *D) Using Cross-Sectional District-wise Data*

This thesis builds primarily on the paper written by Chodorow-Reich et al.<sup>9</sup> which uses district-wise cross-sectional data to analyze the impact of the demonetization on economic activity. Methodologically, this approach relates to a burgeoning literature using cross-sectional, regional variation to study macroeconomic topics as reviewed in Nakamura and Steinsson<sup>14</sup> and Chodorow-Reich.<sup>15</sup>

The paper by Chodorow-Reich et al.<sup>9</sup> uses data from the Reserve Bank of India to construct a local area demonetization shock which is the ratio of post-demonetization to pre-demonetization currency in an area. The paper also uses survey data on household employment and satellite data on human-generated night light activity to measure the demonetization's effects at the district level. Both household employment and night light activity reveal economically sharp, statistically highly significant contractions in areas experiencing more severe demonetization shocks.

This thesis builds on the paper written by Chodorow-Reich et al.<sup>16</sup> by utilizing data on characteristics of districts pertaining to education, electricity and tap water access, employment, and technology access. This will provide insight into what characteristics made certain districts more susceptible to the negative economic impacts of the demonetization.

In summary, the thesis builds on the existing literature by capturing regional variations despite being national in scope. It uses cross-sectional data instead of time series aggregates and analyzes the impact on the formal and informal sectors by looking at satellite data on human-generated night light activity. It builds on the paper written by Chodorow-Reich et al.<sup>16</sup> by taking into account data on district characteristics to examine what made certain districts more susceptible to the negative economic impacts of the demonetization.

#### **Night Light Intensity: A Proxy for Economic Activity**

Nightlight data serves as a good proxy for economic activity because consumption and production during the evening require some form of lighting.<sup>17</sup> The correlation between nightlight intensity, which is the sum of nightlights divided by the area, and GDP levels has been well established. Henderson et al.<sup>18</sup> introduce a comprehensive framework to help increase the reliability of GDP estimates for developing countries using nightlight data. One of their key findings is that the estimated elasticity between nightlight growth and measured GDP growth is roughly 0.3. Chen and Nordhaus<sup>19</sup> use a similar framework and find that nightlight intensity data is a good proxy for GDP especially for countries where no national economic information is available or the quality of statistical systems is poor.

The high correlation between nightlight intensity and GDP also holds at the subnational level. Doll et al.<sup>20</sup> find that nightlight intensity is correlated with the Gross Regional Product across eleven European countries and the United States. Bhandari and Roychowdhury<sup>21</sup> find that GDP at the district level in India is significantly explained by nightlight intensity.

The correlation between nightlight intensity and GDP captures the fact that access to electricity increases as countries develop and that electricity consumption increases with income levels.<sup>22</sup> It is also found that nightlight intensity in South Asia is more strongly correlated with economic activity in manufacturing and services than in agriculture.<sup>17</sup> This is



as access to electricity among farmers is low in South Asia and even when they do have access to electricity, they use it for activities such as water pumping which do not generate nightlight.<sup>22</sup>

Using nightlight intensity data as a proxy for economic activity is advantageous as it captures informal activity. Official GDP data cannot capture informal activity and there are several challenges to the collection of high-quality GDP data including the absence of standardized national income accounting methods, low levels of efficiency of surveyors, and the subjective response of responders in the ground survey.<sup>23</sup> Another issue is that in several countries, subnational estimates of GDP are not available at a reasonable frequency. Nightlight data is available at high levels of spatial disaggregation, can be obtained relatively easily in real-time, and is not subject to politically motivated interference.<sup>24</sup>

Nightlight intensity data have been used as a proxy for economic activity in several applications. Ghosh et al.<sup>25</sup> use nightlight data and find that the magnitude of Mexico's informal economy and the inflow of remittances are 150 percent larger than their existing official estimates in the gross national income. Min<sup>26</sup> uses nightlight data to study trends in rural electrification in India and Doll et al.<sup>27</sup> provide satellite-derived estimates of the rural population without access to electricity in developing countries. Pandey and Seto<sup>28</sup> use nightlight data to study the impact of urbanization on agricultural land loss in India and find that the land loss is concentrated in smaller cities and districts with high rates of economic growth.

Several other applications of nightlight data in economics are outlined in Donaldson and Stoneygard.<sup>29</sup> Donaldson and Stoneygard<sup>30</sup> also describe some unique challenges associated with using nightlight data. Nightlight data show spatial dependence and when using nightlight intensity as a dependent variable, the error term in a multivariate regression is not distributed independently. Potential measurement errors and the complexity of remote sensing datasets can also make them difficult to model using linear functions. It is important to keep these considerations in mind when using nightlight intensity data.

### **Data and Descriptive Statistics**

This paper utilizes a combination of the NITI Aayog district statistics,<sup>31</sup> Indian National Census (2011) data,<sup>32</sup> and nightlight intensity data provided by the Earth Observation Group.<sup>33</sup> NITI Aayog or the National Institute for Transforming India is the policy think tank for the Government of India and provides directional and policy inputs. The NITI Aayog and Census data are used to understand district characteristics and the nightlight data is used as a proxy for economic activity.

The district characteristics which are used in this paper are outlined in Table 1. The descriptive statistics for the district characteristics are provided in Table 2. Appendix A shows choropleth maps of India created using some of these district characteristics. The data regarding district characteristics were recorded in 2011. It is assumed that the district characteristics in 2016 (when the demonetization took place) are closely related to those measured in 2011.

Table 1: District Characteristics

Variable	Source	Notes
TotalPopulation	Census	-
PercentMarginalWorkers	Census	People who did not work for a majority of the previous year were classified as marginal workers
PercentNonWorkers	Census	People who did not work during the previous year were classified as non-workers
LiteracyRate	NITI Aayog	-
PercentHouseholdsWithMobilePhones	NITI Aayog	-
PercentHouseholdsWithElectricityOrSolar	NITI Aayog	Percentage of households with electricity or solar energy as the main source of lighting
PercentHouseholdsWithTapWater	NITI Aayog	Percentage of households receiving treated or untreated tap water within premises
PercentAgricultureForestryFishing	Census	Percentage of main and marginal workers working in these sectors
PercentManufacturing	Census	-
PercentConstruction	Census	-
PercentWholesaleRetailTrade	Census	-

Table 2: Descriptive Statistics

Statistic	Mean	St. Dev.	Min	Max
TotalPopulation	1,949,032.000	1,526,947.000	8,004	11,060,148
PercentMarginalWorkers	0.110	0.055	0.017	0.336
PercentNonWorkers	0.588	0.069	0.331	0.742
LiteracyRate	0.726	0.102	0.421	0.979
PercentHouseholdsWithMobilePhones	0.510	0.143	0.070	0.796
PercentHouseholdsWithElectricityOrSolar	0.661	0.282	0.061	0.997
PercentHouseholdsWithTapWater	0.238	0.202	0.004	0.929
PercentAgricultureForestryFishing	0.604	0.189	0.007	0.891
PercentManufacturing	0.081	0.067	0.006	0.707
PercentConstruction	0.055	0.033	0.004	0.237
PercentWholesaleRetailTrade	0.057	0.033	0.008	0.275

The nightlight intensity data are obtained using the Visible and Infrared Imaging Suite (VIIRS) Day Night Band (DNB) onboard the Joint Polar-orbiting Satellite System (JPSS) satellites. The data used in this paper are obtained from a product called the Monthly Cloud-free DNB composite. This product has an image resolution of 15 arc seconds and covers latitudes ranging from 75N to 60S and longitudes ranging from 180W to 180E. This paper uses a configuration of the product that includes data impacted by stray light if the radiance values have undergone the stray light correction procedure. The data can be downloaded in GeoTIFF format and monthly data from April 2012 onwards are available. Appendix B provides an illustration of what the nightlight data product looks like.

For each month, the average nightlight intensity is calculated for all districts in India. The data obtained are monthly in frequency and have substantial seasonality. This paper follows a procedure similar to the one outlined in Chodorow-Reich et al.<sup>34</sup> to obtain seasonally adjusted data. The data are seasonally adjusted by running a regression with the nightlight intensity (in levels) as the dependent variable and district-specific linear time trends and month

categorical variables as the independent variables. The regression is described in equation (1) where ‘*nightlight<sub>i,t</sub>*’ represents the nightlight intensity in the ‘i’th district at time ‘t’ with ‘t=1’ for April 2012. Nightlight data from April 2012 to March 2016 are used to run this regression.

$$nightlight_{i,t} = \beta_0 + \beta_{1,i} * Jan + \beta_{2,i} * Feb + \dots + \beta_{11,i} * Nov + \beta_{12,i} * t \quad (1)$$

Table 3: Seasonality and Trend Coefficients National Average

Coefficient Values	
January	-0.092
February	0.025
March	0.018
April	0.051
May	-0.130
June	-0.446
July	-0.561
August	-0.465
September	-0.232
October	0.059
November	0.167
Trend	0.008
Intercept	0.994

The national average of the coefficients obtained for the month categorical variables and the linear time trend is provided in Table 3. Appendix C graphs the values of nightlight intensity obtained using the seasonal and trend coefficients for four districts in India. The nightlight data from April 2016 onwards are adjusted by subtracting the nightlight intensity value predicted using the regression coefficients from the actual nightlight intensity value observed. Finally, the monthly data are aggregated to quarterly data to remove high-frequency volatility. The month of October is dropped from 2016Q4 so that 2016Q4 is almost entirely post demonetization.

To demonstrate that nightlight intensity can be used at the sub-national level as a proxy for economic activity, the following analyses are carried out. First, the correlation coefficient between the total nightlight intensity and total electricity supply<sup>35</sup> is calculated for states across

India using annual data from 2012 to 2017. The average value of the correlation coefficient is 0.48. The correlation coefficient between average nightlight intensity and Per Capita Net State Domestic Product<sup>36</sup> is also calculated for states across India using annual data from 2012 to 2017. The average value of the correlation coefficient is found to be 0.44. A table of correlation coefficients by state is presented in Appendix D.

The three datasets are merged by joining them on the basis of district names. After merging the three datasets and dropping out districts with missing data, data about district characteristics, and average nightlight intensity for 585 districts are available.

### Model and Results

To understand how the characteristics of a district affected the economic impact of the demonetization in that district, a regression model is run with the difference in nightlight intensity between 2016Q4 and 2016Q3 as the dependent variable and the district characteristics as the independent variables. The regression model is described in equation (2), where 'i' represents the 'i'th district and 'Q3' and 'Q4' represent the third and fourth quarters of 2016 respectively. The results of this regression are provided in Table 4.

$$\text{nightlight}_{i,Q4} - \text{nightlight}_{i,Q3} = \beta_0 + \beta_1 * \text{TotalPopulation}_i + \dots + \beta_{11} * \text{LiteracyRate}_i \quad (2)$$

To ensure that the model specification is robust, the correlation coefficients between the difference in nightlight intensity between 2016Q3 and 2016Q2 (pre-demonetization) and the district characteristics are calculated. The maximum absolute value amongst the correlation coefficients calculated is 0.29 (obtained for the variable PercentWholesaleRetailTrade). This shows that the pre-demonetization changes in nightlight intensity are not strongly correlated with the district characteristics. The correlation coefficients obtained are provided in Appendix E.

#### A) Total Population and Access to Mobile Phones

We find that the TotalPopulation variable is not statistically significant. The total population of a district is used as a control variable in this regression. We also find that the PercentHouseholdsWithMobilePhones variable is not statistically significant and this is somewhat surprising.

Chodorow-Reich et al.<sup>37</sup> find that districts that experienced sharper declines in money following the demonetization experienced sharp declines in overall economic activity and had faster growth of alternative payment mechanisms such as e-wallets. So, there should be a strong negative correlation between change in economic activity and the adoption of e-wallets. If we assume that the percentage of households with mobile phones in a district is strongly positively correlated with the adoption of e-wallets in that district, then there should also be a strong negative correlation between the change in economic activity and the percentage of households with mobile phones.

However, it is possible that districts that saw increased adoption of e-wallets had

Table 4: Results

	<i>Dependent variable:</i>	
	Nightlight Intensity	Difference 2016Q4 - 2016Q3
TotalPopulation (millions)	-0.054	(0.044)
PercentMarginalWorkers	-4.042***	(1.476)
PercentNonWorkers	3.564***	(1.322)
LiteracyRate	1.324*	(0.793)
PercentHouseholdsWithMobilePhones	0.194	(0.531)
PercentHouseholdsWithElectricityOrSolar	0.717*	(0.393)
PercentHouseholdsWithTapWater	-0.902**	(0.452)
PercentAgricultureForestryFishing	4.271***	(0.903)
PercentManufacturing	8.170***	(1.378)
PercentConstruction	15.090***	(2.735)
PercentWholesaleRetailTrade	-23.583***	(3.618)
Constant	-5.815***	(1.476)
Observations	585	
R <sup>2</sup>	0.250	
Adjusted R <sup>2</sup>	0.235	
Residual Std. Error	1.413 (df = 573)	
F Statistic	17.351*** (df = 11; 573)	
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01	

sharper declines in money post demonetization, but not necessarily a high percentage of households with mobile phones. The percentage of households with mobile phones may not be strongly positively correlated with the adoption of e-wallets post demonetization. This is a plausible explanation for why the variable is not statistically significant.

### *B) Literacy Rates and Electricity and Tap Water Access*

Prusty<sup>38</sup> finds that the overall literacy rate had a long-term impact on per capita personal disposable income in India during 1952-2006. Rao<sup>39</sup> finds that electricity access at mean supply levels is associated with at least 18 percent higher income for households in India. Therefore, districts with higher literacy rates and greater access to electricity and tap water should have households with higher incomes and a lesser percentage of workers working in the cash-intensive informal sector. The demonetization should have a less severe economic impact in these districts.

It is found that the LiteracyRate variable is statistically significant at the 10% level with a coefficient of 1.324, the PercentageHouseholdsWithElectricityOrSolar variable is statistically significant at the 10% level with a coefficient of 0.717, and the PercentageHouseholdsWithTapWater variable is statistically significant at the 5% level with a coefficient of -0.902. These results show that districts with higher literacy rates and greater access to electricity had a less severe economic impact due to the demonetization. The negative coefficient associated with the PercentageHouseholdsWithTapWater is surprising, as it indicates that districts that had a greater percentage of households with access to tap water faced a greater economic impact due to the demonetization. Apoorva et al.<sup>40</sup> find that household surveys in India do not reliably estimate household tap water use and this might be a reason why the surprising result associated with the percentage of households receiving tap water is obtained.

### *C) Marginal workers and Non-workers*

The Indian National Census of 2011 divides workers into main workers (who worked for a majority of the previous year), marginal workers (who worked for less than the majority of the previous year), and non-workers (who did not work during the previous year). The PercentMarginalWorkers and PercentNonWorkers variables are statistically significant at the 1% level with coefficients -4.402 and 3.564 associated with them respectively.

This result shows that districts with a higher percentage of marginal workers faced a more severe economic impact due to the demonetization. Marginal workers are more likely to be on the lower rungs of the economic strata and are mostly employed by the cash-intensive informal sector, which helps explain this result. Districts with a higher percentage of non-workers, however, faced a less severe economic impact. Non-workers consist of students, dependents, people performing household duties, pensioners, and rentiers. The result shows us that the impact that the demonetization had on non-workers was lesser compared to marginal workers.

### *D) Occupation Data*

The 2011 Census also provides data about the occupations of main and marginal workers in each district. The four categories of occupations chosen for this regression analysis - agriculture, forestry and fishing; manufacturing; construction; and wholesale and retail trade account for 80% of the main and marginal workers in a district on average. The PercentAgricultureForestryFishing, PercentManufacturing, PercentConstruction, and PercentWholesaleRetailTrade variables have coefficients 4.271, 8.170, 15.090, and -23.583 associated with them respectively, and are all statistically significant at the 1% level.

These coefficients show us that wholesale and retail trade was a sector that was heavily affected by the demonetization. Districts with a higher percentage of workers in agriculture felt a less severe impact of the demonetization. The impact of the demonetization on agriculture was muted due to healthy progress in Rabi sowing.<sup>41</sup>

Nationally aggregated statistics show that the index of industrial production which is a proxy indicator for unorganized manufacturing contracted by 1.7% in December 2016 and the

organized manufacturing sector was also adversely affected. They also show that the production of cement which is an indicator for the construction sector contracted by 13.3% in December 2016.<sup>41</sup> As a result, it is surprising to see that districts with a higher percentage of workers employed by the manufacturing and construction sectors were less severely affected by the demonetization. The manufacturing and construction sectors could have performed better compared to the wholesale and retail trade sectors and other sectors excluded from the regression such as services, accommodation, and food, etc. This might be a plausible explanation for the positive coefficients associated with these variables.

#### *E) Spatial Correlation*

The district characteristics used as independent variables in this regression model may be spatially correlated. According to Donaldson and Stoneygard<sup>42</sup> nightlight data also show spatial dependence when using nightlight intensity as a dependent variable. To account for spatial correlation, standard errors in the regression model are clustered by state, resulting in 35 clusters. The standard errors are adjusted by implementing the Imbens and Kolésar<sup>43</sup> and Bell and McCaffrey<sup>44</sup> degrees of freedom adjustments.

On accounting for spatial correlation, it is found that the PercentMarginalWorkers variable is statistically significant at the 10% level, the PercentManufacturing and PercentWholesaleRetailTrade variables are statistically significant at the 5% level and the other variables are not statistically significant. This method only adjusts the standard errors and the coefficient estimates for all the variables remain the same. This is a good check of the robustness of the model and even after accounting for spatial correlation, some of the district characteristics are statistically significant in explaining the economic impact of the demonetization. The p-values obtained for all the independent variables are presented in Appendix F.

### **Conclusion**

This thesis examines the economic impact of the demonetization in India, by using cross-sectional data at the district level. It adds to the existing literature by capturing regional variations in the economic impact of the demonetization while being national in scope. Satellite data on human-generated night light activity are used as a proxy for economic activity at the district level. The results provide insight into what characteristics made certain districts more susceptible to the negative economic impacts of the demonetization.

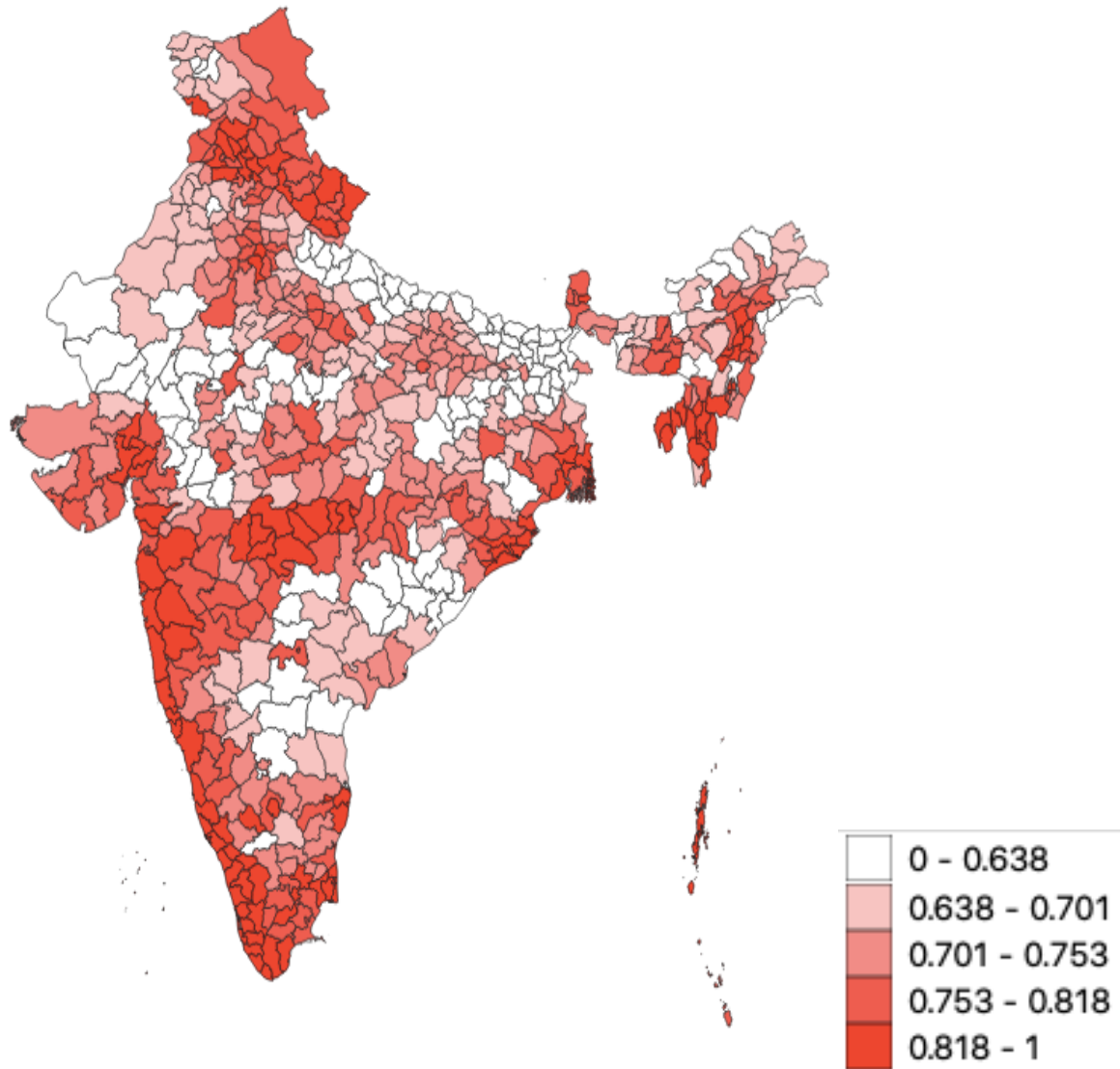
There are several opportunities to refine and expand the analysis presented in this thesis. The nightlight intensity data can be cleaned using more sophisticated techniques, before aggregating it at the district level. Individual nightlight observations below a certain threshold can be removed, outlier observations can be removed from each location, or observations from locations with background noise can be removed as described in Beyer et al.<sup>45</sup> Data about unemployment at the district level can also be used to examine the impact of the demonetization on economic activity.

It is also important to remember that there were other economic events and policies that affected the Indian economy during the period in which the demonetization took place. Some salient examples include the election of President Donald Trump on the same day as the demonetization was announced, a 60% rise in global prices of crude oil from January to October 2016 and a better monsoon rainfall than in the previous year.<sup>46</sup> While future improvements are possible, this thesis provides policymakers an understanding of what made certain districts in India more susceptible to the negative economic impacts of the demonetization. Hopefully, these findings will help policymakers in India and other countries make informed policy decisions in the future.

## Appendices

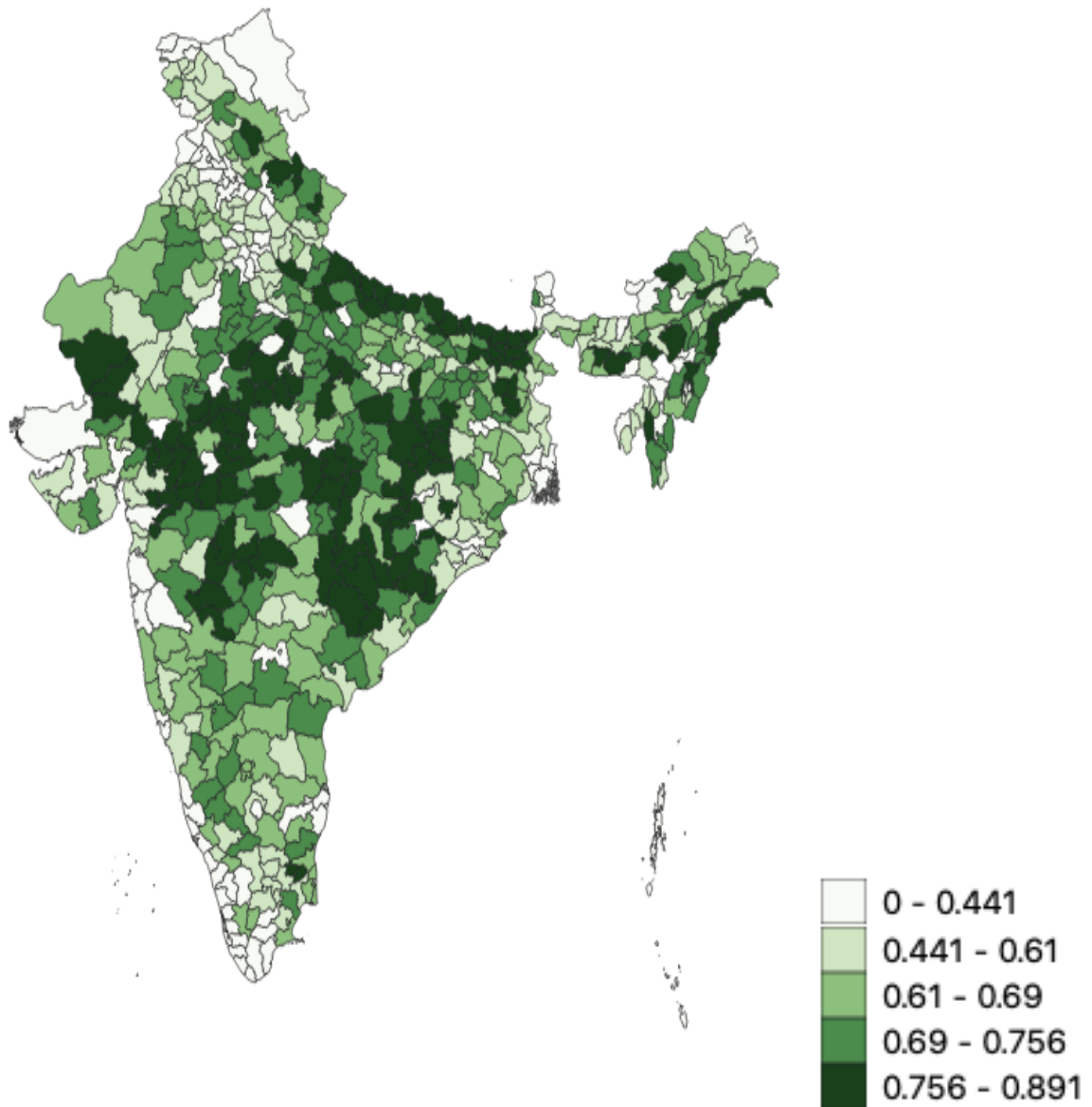
### Appendix A:

Figure A.1: Literacy Rate Choropleth Map

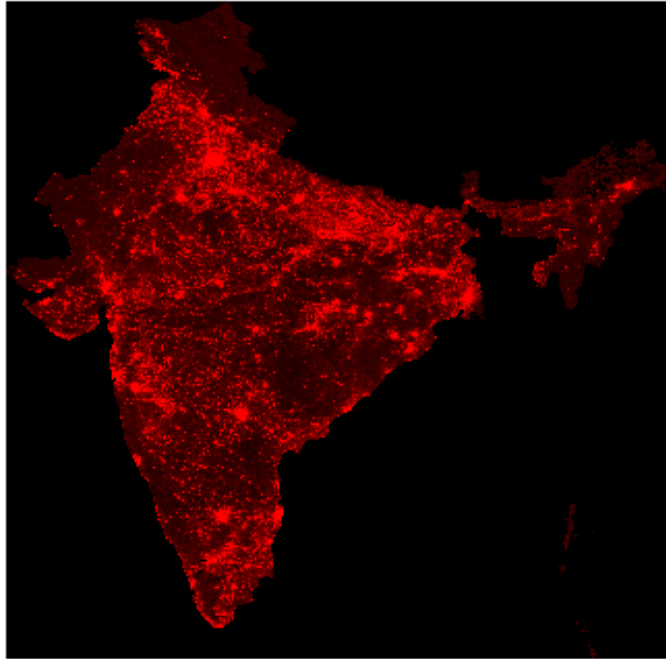




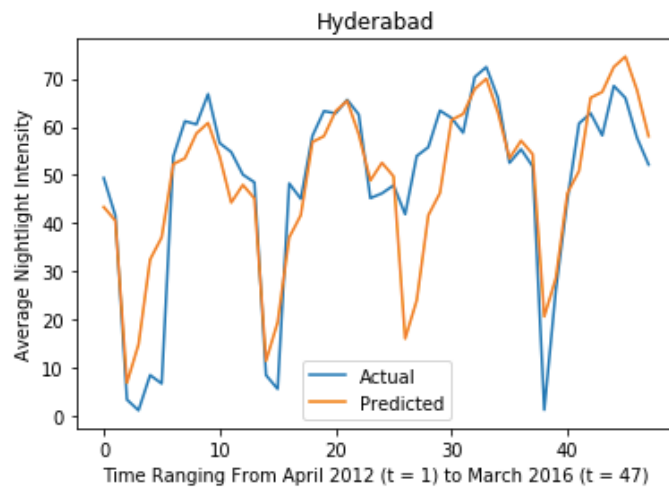
**Figure A.2: Percentage of Workers Employed in Agriculture/Forestry/Fishing  
Choropleth Map**

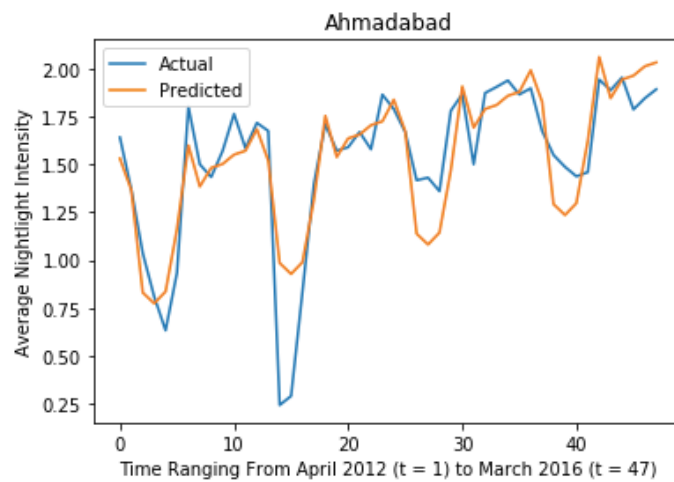
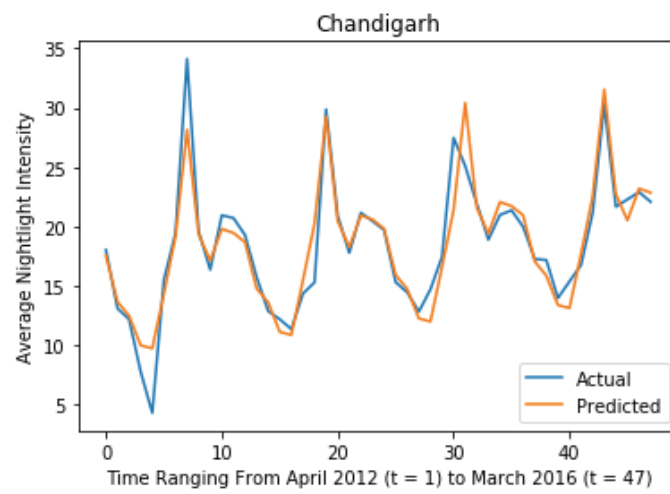
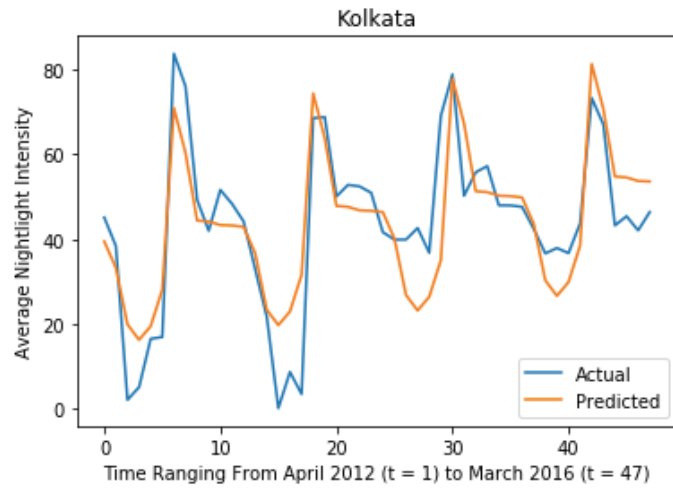


### Appendix B: Nightlight Data Example



### Appendix C: Regression Results Using Seasonality and Trend Coefficients





## Appendix D:

### Correlation Coefficients

State	Electricity Supply and Nightlight	NSDP and Nightlight
Andaman- Nicobar	-0.68	0.64
Andhra Pradesh	0.89	0.84
Arunachal Pradesh	-0.46	-0.02
Assam	0.92	0.66
Bihar	0.99	0.95
Chandigarh	0.16	0.86
Chhattisgarh	0.68	0.65
Dadra and Nagar Haveli	0.84	-
Daman and Diu	0.33	-
Delhi	0.61	0.46
Goa	0.83	0.62
Gujarat	0.86	0.94
Haryana	0.26	-0.18
Himachal Pradesh	0.25	-0.42
Jammu and Kashmir	-0.01	-0.36
Jharkhand	0.96	0.7
Karnataka	0.84	0.9
Kerala	0.99	0.97
Lakshadweep	0.55	-
Madhya Pradesh	0.86	0.86
Maharashtra	0.97	0.95
Manipur	0.28	0.61
Meghalaya	0.25	-0.65
Mizoram	-0.41	-0.47
Nagaland	0.06	0.32
Odisha	0.92	0.72
Puducherry	0.88	-0.07
Punjab	-0.02	0.04
Rajasthan	0.86	0.66
Sikkim	-0.48	-0.46
Tamil Nadu	0.97	0.93
Telangana	-	0.73
Tripura	0.27	0.79
Uttar Pradesh	1	0.98
Uttarakhand	-0.32	-0.43
West Bengal	0.98	0.84

**Appendix E:**

## Change in Nightlight Intensity Pre-Demonetization

Variable	Correlation with Nightlight Intensity 2016Q3-2016Q2
TotalPopulation	0.12
PercentMarginalWorkers	-0.07
PercentNonWorkers	0.12
LiteracyRate	0.07
PercentHouseholdsWithMobilePhones	0.1
PercentHouseholdsWithElectricityOrSolar	0.03
PercentHouseholdsWithTapWater	0.17
PercentAgricultureForestryFishing	-0.23
PercentManufacturing	0.01
PercentConstruction	0.06
PercentWholesaleRetailTrade	0.29

**Appendix F:**

## Accounting For Spatial Correlation

Variable	p-value
TotalPopulation	0.45
PercentMarginalWorkers	0.08*
PercentNonWorkers	0.18
LiteracyRate	0.13
PercentHouseholdsWithMobilePhones	0.65
PercentHouseholdsWithElectricityOrSolar	0.17
PercentHouseholdsWithTapWater	0.26
PercentAgricultureForestryFishing	0.11
PercentManufacturing	0.04**
PercentConstruction	0.11
PercentWholesaleRetailTrade	0.04**

*Note:* \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

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## **Conservatism, Collaboration, and Capacity: Political Explanations for Canada's Shift in Immigrant Admissions Logic**

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**ABSTRACT:** Canada is often regarded as the United States' friendlier neighbor to the north, but how welcoming is it really? A critical analysis of immigration and citizenship policy throughout Canadian history reveals that Canada may not be the inclusive member of the world community it is often conceptualized as. This paper examines some of the recent key changes in Canadian immigration policy and their broader contexts, while benchmarking the policies against two leading scholars' thoughts on how the relative presence of certain political ideologies in a country drives its immigration policies to the left or right of the political spectrum. As early 21st century policy changes are outlined, it becomes clear that the standard explanations for political parties as explanatory factors in immigration legislation do not hold entirely true in Canada. Instead, a broader, bipartisan political framework can be used to understand Canadian policy changes. The paper concludes by explaining that party politics do account for some of the reasoning behind changes in Canada, but that a surprisingly cooperative Liberal party, and a surprisingly lenient bureaucratic framework, should be used to reframe Canada as a less friendly, unquestioned welcomer of all than it is often seen as today.

### **Introduction: The Puzzle of Canada's Shift towards Human-Capital Citizenship**

Canada is one of the most popular destinations for immigrants worldwide. With one in five Canadians born abroad, it is estimated that by 2040 immigrants will be responsible for nearly 100% of Canadian population growth, ranking Canada among the top ten immigrant-receiving countries in the world.<sup>1</sup> In addition, rates of naturalization of immigrants in Canada are more than double those in the United States, regardless of national background and education levels, soaring as high as 79% in 2006, compared to just 30% in the United States.<sup>2</sup>

Since the 1962 termination of Canadian race-based citizenship requirements, the country's citizenship law has undergone numerous changes reflecting evolving cultural values. This policy engineering has, for the most part, been done with one of two goals at its core: increasing family immigration or increasing economic immigration with the hope of attracting newcomers who will provide a boost to Canada's skilled labor economy. In 1983, for example, family immigration accounted for 55% of all new arrivals, an increase from 34% just eight years prior. Furthermore, from 1971 to 1983, the percentage of economic immigrants plummeted from 73% to only 31% of all new Canadian arrivals.<sup>3</sup> Over the course of the past sixty years, policymakers have adjusted quotas, restated goals, and adapted their positions to temporal understandings of the ideal Canadian immigrant. Recently, these immigration and naturalization laws have taken a sharp turn away from family unification priorities, in favor of admitting profitable and capital-producing, highly educated new citizens. While family and refugee immigrants accounted for 55% of all immigration



in 1983, this number was down to 30% in 2010, as proportional rates of economic immigrants increased from 31% to 67% in the same time period.<sup>4</sup>

Antje Ellerman explains this change in terms of Canada's shift towards "human-capital citizenship," which understands citizens as economic assets and producers of their own capitalistic worth. Human capital, here, is the collection of hard and soft skills often associated with high-status, high-salary positions.<sup>5</sup> A country focused on human-capital citizenship would prove this focus by enacting policy changes that demonstrate a higher value placed on economic immigrants than family or humanitarian immigrants. These changes are certainly observable in 21st century Canada. Immigration policy changes have included making it more difficult for children to immigrate to Canada for reasons of economic dependence, awarding immigrants "points" for those with job offers in fields requiring high levels of education, and effectively removing for elderly relatives of Canadian citizens a path to permanent residency and/or citizenship.<sup>6</sup> Though there had been a precedent in Canada of prioritizing more highly educated and employable immigrants since the mid 1990s, the changes implemented in the first fifteen years of the 21st century created an especially challenging puzzle. These changes fast-tracked Canada's shift towards economic immigrant valuation, and human-capitalization. This observation prompts the question: "Why has Canada adopted the citizenship policy changes that Ellerman says it has?"

The Canadian government during this time had numerous policy priorities that can offer possible insight into their citizenship agenda. Goals were set for national financial growth, such as "establishing Canada's place in the world economically," reviving the country's "entrepreneurial spirit," and doubling foreign student recruitment.<sup>7</sup> There were also direct policy moves that addressed these economic aims, including requiring proof of economic worth and stability prior to obtaining permanent residency, granting work permits for humanitarian refugees less generously, and the further development of the immigrant point system to more highly value younger, more educated and employable applicants.<sup>8</sup> Evaluating the case of Canada in particular provides an example of a country highly sought after by immigrants, but with recent modifications to its immigration policy that exemplify the human-capital approach Ellermann introduces. In this paper, I investigate the hypothesis that the ideologies of the conservative political party in power can explain the shift towards human-capital citizenship that Ellermann observes. However, the findings on the changes observed by Ellermann refute Howard and Janoski's theories of party influence on citizenship policy, given that common goals between Liberals and Conservatives, as well as executive ministerial power, were more influential than the power of one party's ideology in human-capitalizing Canadian citizenship.

### **I. A Theoretical Explanation for Canada's Evolving Logic**

The aforementioned hypothesis makes sense given the timing of Conservative Prime Minister Stephen Harper's years in power, as well as common conceptions of conservatives' views on immigration. Multiple authors in the existing literature draw parallels between the power of political parties and the resulting policy changes, which present the basis for the hypothesis. Both Thomas Janoski and Marc Morjé Howard provide foundational knowledge for linkages between liberal political parties and certain types of immigration policy.

Janoski provides causal links between the relative power of a country's leftist party and higher rates of integration through naturalization. Janoski explains how Sweden, which has a greater degree of social democratic political party power than Norway, Denmark, and Finland, experiences the highest naturalization rate of the four countries. Following World War II, social democratic governments in Sweden established agencies that helped humanitarian-based

immigrants with the naturalization process, fought to lower language test requirements, and implemented a concerted national attitude reform project to decrease anti-refugee sentiment.<sup>9</sup> This evidence for the progressive, humanitarian immigration framework adopted in Sweden under liberal governments can then be weighed against Harper's government in Canada. Without a liberal government, let alone social democratic one, Canadian citizenship policy was left up to the discretion of a government that was not only conservative, but more conservative than recent Canadian precedent, opening the door for the country's leaders to take Canada in the opposite direction, immigration-wise, from the one observed by Janoski in Sweden.<sup>10</sup> In the case of Canada, this would mean naturalization and integration rates would be low under Conservative leadership, and that *any* type of immigration, whether economic or not, would be less likely with Conservatives in power.<sup>11</sup>

Howard finds additional evidence for the influence of political party leanings on citizenship policy and what the relative presence of a far-right movement means for a country's immigration law. Whereas Janoski provides evidence for the liberalizing power that social democratic political parties can have, Howard explains how the pressures of public opinion, when coming from the right in particular, influence immigration policy and prevent liberalization (which, in this case, would mean moving towards a view of immigrants not as producers of human capital, but as those in need of familial or humanitarian aid). Howard states that the presence of a far-right group in a state's political arena promises non-liberalization, but the absence of far-right mobilization does not guarantee liberalization. In other words, the presence of a far-right movement can prevent much more than its absence can facilitate.<sup>12</sup> Applying this school of thought to the case of Conservative Prime Minister Stephen Harper in Canada, the country would seem almost doubly guaranteed to have shifted right towards an economic system of immigration. First, the 2003 founding of the Conservative Party and Harper's 2006 election established the presence of a party that was further-right than any other recent Canadian political party that had possessed significant political power. Such a right-leaning party is thus more likely to support economic or human-capital immigration.<sup>13</sup> Second, for the second half of Harper's time in office, beginning in 2011, Conservatives held a parliamentary plurality that emboldened them to pull national policy to the right.<sup>14</sup> There existed then not only the non-absence, but the more real and genuine presence of a "further-right" stance in Canada than there previously had been, exemplifying a nascent apparatus for moving citizenship policy to the right.

Where Howard provides a theory of citizenship law and Janoski provides one of naturalization rates, I investigate a broader system of immigration that encapsulates a country's attitudes and politics at a certain point in time. The connection between my investigation and Howard and Janoski's theoretical frameworks is not perfectly congruent, but the comparison is apt nonetheless. The central hypothesis in my research is that certain party ideologies, rather than a specific metric like Howard's theory of law or Janoski's theory of naturalization rates in which those policies could be analyzed, lead a party to adopt certain citizenship or immigration policies. It is important, however, to explain how party ideologies are to be understood. In this paper, a party's "ideology" refers to the set of beliefs that provides their foundation as a political group. These ideologies can be exhibited, for example, as part of a campaign platform, or as talking points at major political events. Of course, the true individual desires of these policymakers may differ slightly, or even stray more drastically, from these openly espoused goals, but for the sake of this paper ideologies will be defined as what are more openly expressed in the public sphere.

If this hypothesis is correct, we would see through Canadian history only Conservatives (or conservative-adjacent politicians before the founding of the current Conservative Party)

pushing for economic-focused immigration, and only Liberals or liberal politicians pushing for increased family and/or humanitarian immigration policy. Proof of the theory would be strengthened if there were a dearth of evidence of parties working together on citizenship policy, signifying a logic of immigrant admissions in Canada that is divided entirely along party lines. In actuality, however, the opposite is evident.

## II. Early 21st Century Citizenship Policy Changes in Canada

In the 1990s, Canadian immigration quotas were adjusted to make much more room for economic admittances, and the cap on allowances of family immigration was subsequently lowered.<sup>15</sup> The policies and quota revisions adopted in the 1990s further opened an already-cracked door for the Canadian shift towards economic admissions, and changes in the early 2000s stepped through with full force. The most relevant, recent changes in Canadian immigration policy have been enacted as amendments to the Canadian Immigration and Refugee Protection Act, initially enacted in 2001. These changes were facilitated by the government of Conservative party Prime Minister Harper, who was elected in 2006 and remained in power until 2015. Harper's ideologies were much further to the right than recent Prime Ministers; he and his supporters were often deemed "Harper Conservatives" to express the shift to the right in their policies as compared with their other conservative predecessors. A new coalition, formed between more centrist political actors, gave Harper's government space to move to the right in immigration policy, which, in this case, meant greater prioritization of economic immigration. This tipping of the scale was intensified by the Harper Conservatives' focus on the liberalization of Canada's economy, particularly within the context of immigration.<sup>16</sup>

For Harper's first campaign in 2006, the official campaign platform of the Conservative Party makes explicitly clear their economic idealization of Canadian immigration. In the official platform statement released, Harper and the Conservatives write, "We need an immigration policy that responds to Canada's economic needs."<sup>17</sup> Harper and his government also made their ideas known at major political events. At the World Economic Forum in 2012, among top influential economic powers, Harper outlined a new economic plan for Canada that, in his own words, necessitated "significant reform of [Canada's] immigration system" and "mak[ing] economic and labour force needs the central goal of immigration efforts in the future."<sup>18</sup> In 2007, Immigration Minister Diane Finley stated that Canada was in a "global war for talent," and traveled to India with the *expressed purpose* of "send[ing] a message that Canada is looking for talented Indian people, looking for the best and brightest to come [to Canada]."<sup>19</sup> Though these cases by no means express all or even most of the Harper government's beliefs, they demonstrate forums through which "ideologies" can be conceptualized, examples of how Harper's government publicized their ideologies, and what those ideologies were.

Changes to immigration policy began within Harper's first term in office. The 2008 C-50 Bill was enacted with the primary goal of expediting the immigration application assessment process, which essentialized applicants based on country of origin, education, employment prospects, and age, among other factors intended to assess human capital.<sup>20</sup> This categorical reframing resulted in increased priority for economic immigrants and placed strict limits on who and how many people could apply for citizenship on humanitarian grounds. Since 2012, the Immigration Minister can designate certain countries as "safe," indicating that any refugee applicants from those regions have no legitimate reason to flee, and thus denying humanitarian appeals for admission.<sup>21</sup> The effects of these changes have been clear to see, as myriad federal worker admissions programs – for highly-skilled or highly-educated applicants – have been

reimagined in Canada since the start of the 21st century. Most notably, the points system (which was originally established with the intent of keeping “mentally defective” people out of Canada) moved in a more explicit career-driven direction, guaranteeing a higher point score for anyone with a job offer than anyone without, regardless of all other factors.<sup>22</sup> As a result, government support for family and refugee admissions has waned, bringing national civilian support down with it; across Canada, far fewer people in 2020 believed that refugees should be the most prioritized immigrant class when compared with years prior.<sup>23</sup>

In 2015, Harper’s final year in office, additional policy changes made the path to Canadian citizenship increasingly human-capital based. A system of permanent guaranteed residency for admitted foreign workers was scrapped in favor of a framework in which workers were first admitted on a temporary basis, and then had to prove the extent of their economic establishment before transitioning to permanent residency.<sup>24</sup> This adaptation favors workers in high-skill jobs who are more likely not only to retain one job consistently, but also to establish greater financial roots because of that job. The changes made by the Harper government in his three terms from 2006 to 2015 set heavy precedents for a new logic of immigrant admissions, as well as a revised understanding of who should have the power to make immigration decisions. At a glance, the Harper government’s modifications to immigration policy appear attributable to Harper’s and the Conservative Party’s aim to reconstruct the Canadian population of their nation as a more educated and wealthy group, especially given the aforementioned theoretical bases offered by Howard and Janoski. However, further research indicates a greater range of factors at play.

### III. Findings

Three primary causal factors stand out as influencing Canada’s shift towards more human-capital centered citizenship policy. As predicted, the rise of Harper and the Conservative Party was influential in the changes observed, but it was to a lesser degree than expected. Contrary to the theory presented, research shows that there was multi-party support for citizenship policy changes that prompted human-capital citizenship, or at least a lack of resistance from the left on the human-capitalizing mission that was led by the right. Findings also indicate that the precedent for executive ministerial power was furthered during Harper’s time in office, allowing immigration policy leaders to make their changes without the need for parliamentary approval, public opinion concurrence, or other roadblocks. While the changes enacted by a given administration’s Immigration Minister are dependent on the political party, and therefore ideologies, of the Prime Minister and their government, political party ideology alone is not the all-explaining variable it was hypothesized to be. The human-capital citizenship policies were passed under the regime of and with pressure from a Conservative government, but the influence of Liberal support, as well as ministerial power, cannot be overlooked in passing these policies.

#### *Conservatives: The Influence of One Political Party*

Harper’s government’s conservative ideologies aimed to reconform Canadian citizenship to be more human-capital focused. Harper’s government did not possess a parliamentary majority until 2011, meaning many of the changes it enacted to further its immigration ideology were passed outside the legislative sphere. Unfazed by this challenge, in 2008 Harper and his cabinet designated a Canadian Experience Class, which allows high-skill immigrants to more easily obtain permanent residency.<sup>25</sup> In order to apply for permanent residency with this option, an applicant must have at least one year of skilled work experience in a managerial, professional, or skilled trade field, as well as pass a more stringent language test than standard applicants.<sup>26</sup> The Harper regime also

enacted policy changes that moved to suppress family immigration, one of the biggest threats to their envisioned system whose admission of new immigrants was, as one scholar puts it, “premised on its economic utility.”<sup>27</sup> This suppression was aided with the introduction of a Super Visa program which admitted parents and grandparents of Canadian citizens only as long-term visitors for the foreseeable future, limiting family members to visitor status if they could not prove to be strong economic producers. Under the Super Visa, parents and grandparents had to re-apply every two years, with a ten-year cap, to stay in Canada as long-term visitors. The introduction of temporary policy by Harper Conservatives into a previously permanence-based system demonstrates a greater effort to welcome only those immigrants who were able, willing, and expecting to support Canada economically. This shift is also evident given the fact that the Harper government lowered the age maximum from 22 to 19 for children eligible for family sponsorship, thus limiting possibilities for family reunification admission at the upper and lower ends of the age spectrum.<sup>28</sup>

Finally, there is evidence of Harper’s regime steering immigrant application decisions from government workers to employers themselves, reflecting a clear increased valuation of immigrants who come for employment-based reasons. As Harper’s second Immigration Minister Jason Kenney said in a statement that bluntly expresses the Harper understanding of immigrant admissions, “[e]mployers are going to do a much better job at selection than a passive bureaucracy.”<sup>29</sup> Harper’s government rapidly expanded the scale of the Provincial Nominee Program (PNP), which allows Canadian provinces to request immigrants in a certain industry if they fill a specific, employment-based need in the province. Fewer than five thousand immigrants had been admitted under the PNP in each year from 2000 to 2005, but these figures shot up to 33,000 per year, a 550% increase, during Harper’s time in office.<sup>30</sup>

To understand the size of the effects brought on by these changes, in 2005, one year before Harper took office, Canada admitted 140,000 economic immigrants and 110,000 other immigrants. In 2014, Harper’s final full year in office, 165,000 economic immigrants and 92,000 other immigrants were admitted – an increase of only 7,000 total immigrants, but a proportional shift from 56% economic to 64% economic.<sup>31</sup> Furthermore, in this same time period the number of International Mobility Programs work permit holders in Canada increased more than threefold, from 74,000 to 257,000.<sup>32</sup>

It may seem logical to assume, especially given the theoretical groundings provided by Howard and Janoski about the effects of the political party on immigrant and citizenship liberalization, that these human-capitalization changes observed by Ellermann can be explained by the fact that a conservative politician was in power. However, it is necessary also to understand the institutional frameworks of multi-party policy agreement and non-parliamentary policymaking strategies that facilitated the changes enacted by Harper. To illustrate the insufficiency of party ideology in explaining Canada’s shifting logic, I turn now to discuss the power of Liberal cooperation.

### *Liberals: The Influence of Two-Party Cooperation and Collaboration*

Though many of the policies that moved Canadian citizenship law in the direction of human-capital valuations were passed while Harper and his Conservative government were in power, Conservatives were not the only group who facilitated these policy changes. The Liberals, Canada’s other major political party, actively supported or were complacent to many of the Harper Conservatives’ policies and also bore some of the responsibility for providing the economic admissions precedent that Conservatives expanded on. This means that it was not simply

Conservative political party members' ideologies that can be used to explain Canada's shift towards human-capital citizenship, but the consent and shared policy goals and ideologies of the Liberal party. Although Liberals and Conservatives in Canada are opposed to one another in many spheres, little compromise was required, among such high levels of agreement in immigration logic.

Facilitated by a Liberal Prime Minister in 1995, the Provincial Nominee Program was established. The program allows provinces to place requests for employment-based immigrants in a specific relevant industry.<sup>33</sup> Not only does this establishment reflect the goal in Canada of increasing economic immigrant admissions, but it also demonstrates the role Liberals played in giving employers more admission decision power than government workers. Moreover, at the end of the 20th century, with Liberals still in power and before the formation of the current Canadian Conservative party, provinces fought for, and were granted, the right to develop their own more targeted criteria for their provinces' PNPs specifically – evidence of not just the passive allowance, but the active commitment, on the part of Liberals to human-capitalize Canadian citizenship.<sup>34</sup>

Under that same Liberal Prime Minister in 1998, Citizenship and Immigration Canada's multiculturalism budget was cut in half. This budget supports action items such as anti-racist education, investing money in programs that welcome new humanitarian or family refugees and immigrants, and other work that would indicate the opposite of a human-capital agenda. These changes were not necessarily passed with the goal of shifting towards a human-capital logic of admissions, but they nonetheless provide an evidentiary basis for the fact that Liberals themselves passed policies that carved a more difficult path for non-economic immigrants toward integration. This action helped set the precedent for Harper's government to assume support from the "rival" Liberals across the aisle.

In 2001, a new Immigrant and Refugee Act was passed to justify the current immigration law paradigm, given that the most recent act of similar stature had come 25 years prior in 1976. There was multi-party support for the 2001 Act, despite the fact that the Immigration Minister who introduced it in the House of Commons was Liberal Elinor Caplan. Caplan said at the time, "The new century will belong to those who are best able to develop and expand their collective human capital... If Canada is to compete and succeed, we must continue to attract skilled workers from across the globe." This direct value statement of human-capital citizenship from a Liberal Immigration Minister counters my hypothesis that Conservative politicians' ideologies are responsible for human-capitalizing Canadian citizenship law, given that nearly identical ideologies were introduced before the modern Conservative party had even been formed.<sup>35</sup> This statement also counters the idea that it was Conservative action combined with Liberal permission that pulled Canada's immigrant admissions in an economic direction. Though there was not as much human-capitalizing action taken explicitly by Liberals following Harper's election in 2006, the events outlined above show how Harper inherited an admissions logic that, thanks to Liberals, was already moving in a more economic direction.

Not only is the Liberal government's introduction of the shift towards human-capital logic in the 2001 Bill salient, but the lack of opposition for the Bill from other parties is worth noting. Ellermann argues that paradigmatic changes, like the shift from a family-centered to an economically-focused national understanding of immigration in Canada, are often accompanied by serious political contestation. However, such contestation was not present at any level in Canada. Left-leaning Liberals and Progressive Conservatives adopted the 2001 Bill with enthusiasm and the right-leaning Canadian Alliance, a primary predecessor of the Conservatives, met the Bill with no real resistance. Furthermore, though they did not enthusiastically endorse the

Bill in 2001, members of the Canadian Alliance expressed goals similar to those of Liberals: to limit family and humanitarian immigration.<sup>36</sup>

In the previously mentioned 2008 Amendment to the 2001 Act, Conservatives spearheaded the categorization of Canadian immigrants by class and placing increased priority on fast-tracking the applications of those coming for economic reasons. However, in the process of voting on this amendment, most Liberals either abstained or voted with the Conservatives. Despite potentially having the power to stop this Conservative immigration move, depending on how smaller parties had cast their votes, the Liberals did not lead a movement to do so. A member of one of these smaller third parties, the Bloc Quebecois, accused the Liberals of their complicity in the process, saying “I find it a bit sad to see the Conservatives profiting from the fact that the Liberals don't really want to show their true colours -- that they're not ready to defeat the government.”<sup>37</sup>

A common theme begins to emerge, as research shows that many changes initially prompted under the government of one party actually appear to be much more bilaterally supported than may be expected given a party's known ideology. Multi-party support was influential again in Harper's final year in office, 2015, as a revamping of the Canadian points system was suggested. The points system is one of the crudest examples of human-capital citizenship, as it numerically evaluates applicants based on their employment prospects, education, and language skills. The Government of Canada's website suggests in plain terms that rejected applicants “may be able to get a higher score by... completing another degree.”<sup>38</sup> In 2015, a restructuring of the system made it so that anyone with a job offer would earn more points than anyone without, regardless of family, humanitarian, linguistic, or any other factors. Given typical thought on conservative immigration ideologies, and assumptions surrounding the human-capital-driven motives of the Harper Conservatives in particular, this policy may seem to support the hypothesis that the changes Ellermann observes are because of party power. However, further research reveals that there was “bipartisan agreement that the points system was in need of reform.”<sup>39</sup> This was largely due to employer complaints about trouble finding sufficient labor, and demonstrates how Conservatives and Liberals responded uniformly, even following nine years of Harper Conservatives' reign, on matters of immigration.

This uniformity of Canadian immigration values has outlived Harper's years as Prime Minister. Research finds that, from 2016 to 2020, the percentage of Canadians who think refugees should be the most highly prioritized immigrant category plummeted from 35% to 22%. This could of course be for a variety of other reasons, including worldwide refugee crises, the Coronavirus pandemic, or statements made by Harper's successor, Liberal Justin Trudeau. Whatever the reason(s), however, the findings suggest a more pro-economic immigrant attitude in Canada that transcends Harper's government as well as party lines, refuting the hypothesis presented in this paper that the changes Ellermann observed in Canada were because of the power of one party. The research also draws into question Howard and Janoski's theories, given that neither the presence of a social democratic left nor a far-right, which Howard and Janoski implicate in immigration policy de-liberalization, pushed Canada in a human-capital direction.

### *Streamlining: The Expansion and Reliance on the Power of the Executive Branch*

One final causal factor contributing to the shift to human capital immigration policy is the precedent of deferring to ministerial executive power (here, the Prime Minister and/or Immigration Minister) and their aims and voting patterns, without putting policy up to vote or debate in the legislative branch. This practice was brought to new levels during Harper's regime, as the political ideologies of certain actors came to be less influential than the strategies used by those actors to

enact policy they wanted to see. Findings on the furthering of ministerial executive power complicate Howard and Janoski's theories. Howard explains the presence of the far right as a limiting factor in citizenship law liberalization, while Janoski understands the presence of leftist parties to have the opposite effect. When ministerial executive power is considered, however, the perspective widens to highlight the significance of enactment methodologies in addition to party ideologies. These methodologies were introduced to Canada under the rule of Harper Conservatives, meaning potential links could reasonably be made between conservative ideology and streamlined policymaking, but the salient point here is that political party power as a freestanding ideological variable is not sufficient to explain Canada's policy shifts. Newfoundland methods of policymaking are a separate and significant variable entirely.

In 2008, the Canadian government passed amendments to a 2001 Immigration Act that allowed federal lawmakers to make changes to the categories of immigrants who would be prioritized, giving the Immigration Minister the authority to make these decisions without consulting Parliament. This change was not only influential in the arena of immigrant admissions, as has been previously discussed, but was a watershed moment for Canadian immigration policy administration as well, laying the groundwork for a system that has increasingly been controlled much more at the executive level than the legislative. The change endowed immigration officials with decision-making freedom that nearly dashed any hopes of parliamentary resistance to executive powers' immigration goals, as later evidence will show.

It is important, however, to recognize the wider context within which these amendments were passed. Though they were indeed passed without Liberal pushback, indicating a possible link to the aforementioned variable of Liberal cooperation, evidence shows that it was the methodology of the passing of these key amendments that explains the lack of Liberal resistance. Pushed through in an omnibus bill about the more menial topic of budget implementation, the amendments that first enhanced ministerial power were passed because the bill needed to pass in order to structure Canada's budget for the coming year. Thus, the bill separating parliamentary debate from the field of immigration was itself passed without parliamentary input, establishing a precedent for the years to come.<sup>40</sup>

The initial use of this omnibus bill to alter political protocol established a trend of Conservatives sneaking larger points of immigration legislation into bills that had to be passed for reasons of bureaucratic maintenance. Indeed, policymaking came to be conducted frequently in ways that made the road to public and/or parliamentary discussion or resistance more challenging.<sup>41</sup> For instance, when Harper's Immigration Minister Jason Kenney was in charge of Canadian citizenship and immigration, his office did not issue statements about their comprehensive immigration goals and did not hold public or parliamentary forums.<sup>42</sup> Kenney and Harper were able to build a structure so protected from Parliament that one expert claimed it was common "for immigration practitioners to jokingly refer to the Immigration and Refugee Protection Act as the 'Jason Kenney Immigration and Refugee Protection Act.'"<sup>43</sup>

In 2008, a formal Ministerial Instruction was passed that limited skilled worker immigrant applications to those only with an arranged offer of employment in specific, high-skill occupations.<sup>44</sup> This change meant that even the most highly-educated and employable applicants would be barred from entry without a job in a pre-approved field. In 2010, Minister Kenney took this policy further, putting forth a more narrowly refined list of acceptable occupations and cutting in half the number of these permits available. He cut this number in half again a year later.<sup>45</sup> In addition to the formal use of ministerial power, additional workarounds were used in order to limit the chance of parliamentary debate over immigration policy. For example, the Department of



Immigration often produced annual immigration statistics on the last day of a session of parliament, leaving no time for debate.<sup>46</sup>

The changes listed above have multiple implications for understanding human-capital citizenship and the theories put forth by Howard and Janoski. The enhancement of ministerial executive power in Canada as a means to human-capitalize challenges the theory initially presented in this paper, as human-capital citizenship policy can clearly be implemented outside of party lines, and may depend more on two-party cooperation or simply the means that exist in a country for laws and executive orders to be passed. It may be true that Canadian immigration policy required the presence of the further-right Harper in order to introduce these human-capitalizing changes, but enough evidence of multiple alternative factors exists to disprove my initial theory as the only salient explanatory variable.

These findings also indicate that Howard's theory that the presence of a stronger far-right party will lead to less liberal immigration policy does not hold. At least in Canada, enough causal links exist between Liberal-Conservative cooperation and ministerial executive power to disprove the idea of the far-right as an impetus for de-liberalization. The right, in addition to the left and the Immigration Minister, all enacted restrictive citizenship policies that placed Canada firmly in the human-capital camp.

Janoski's theory is based more on the effects of right party power on naturalization rates, while this paper looked at types, rather than quantity, of naturalized immigrants as a measure of Conservative influence. Nonetheless, Janoski's findings discuss liberal party power as fostering liberal immigration logic. This paper conceptualizes liberal and conservative logic as family versus economic immigrant admissions, rather than Janoski's more-versus-fewer idea of immigrant admissions. Janoski, however, still makes an argument centered around political party power as the *explanation* for a shift in immigration systems. This paper refutes this theory by suggesting that a combination of party influence, multi-party support, and ministerial power has aided Canada's shift towards human-capital logic. These refutations are not to say that party power plays no role, but they do indicate that Howard and Janoski overstate, in the case of Canada, the extent to which immigrant admission policy changes can be attributed to political parties.

If Howard's theory held true against Ellermann's observations in the case of Canada, the influence of the far-right would have been observed as a stronger factor in the shifting of admissions logic. Though multiple human-capitalizing changes were enacted under the presence of the right-wing Conservatives, it would be remiss to consider party power as the strong factor that Howard posits it to be. Conservative ideologies may have prompted Harper's government to enact these changes, but the changes could only be actualized either with the support of Liberals or, when unable to acquire Liberal support, through the sphere of executive power.

In applying Janoski's theory to the changes Ellermann notices, we would expect to see a Conservative-led push towards an economic frame of immigrant admissions, given the absence of a social democratic party that Janoski associates with more humanitarian-based admissions logic. However, similar to the application of Howard's theory, party alone does not paint a full picture of the changes Canada made, even under the Harper Conservatives. The lack of a legacy of social democratic parties in Canada may have made the Harper government more optimistic about their ability to push immigration in an economic direction, but the help it received from Liberals' shared goals, as well as strategic policymaking through executive pathways, is important to recognize in gaining a full understanding of Canada's policy shift.

#### IV. Conclusion

Given the recent shift in Canadian immigration policy towards an economic logic of admissions, Ellermann observed and classified these changes as moving Canada in the direction of human-capital citizenship, defined as the valuation of potential immigrants according to their ability to be economic producers. In order to better understand the reasons for these changes, I asked the question, “Why has Canada adopted the citizenship policy changes that Ellerman says it has?” Grounded in the theories posited by Howard and Janoski, and given the common logic about conservative parties’ approach to immigrant admissions, I hypothesized that the ideologies of the conservative political party in power can explain the shift towards human-capital citizenship that Ellermann observes.

At first glance, Prime Minister Harper and the ideologies of his Conservative party are evidence of the further-reaching effects of the human-capitalization of citizenship laws that a highly conservative Prime Minister can have. Many of the policies that pulled Canadian citizenship most extremely in a human-capital direction were during Harper’s nine-year reign, and from this fact assumptions can be made that these changes were solely, or mostly, his or his party’s doing. And, to some extent, findings indicate that party ideologies in Canada did influence agenda setting and mechanisms that parties can use to pass their policies. However, stronger evidence of other factors is available which shows the ways in which Harper Conservatives’ policies passed.

Ultimately, my hypothesis, along with Howard and Janoski’s theories, is refuted. Party power certainly played a role in deciding which policies Harper and his Conservatives would pursue in terms of immigration, but we see stronger evidence that policy goals shared by Liberals, as well as strategic expansion of ministerial power and strategic workarounds to avoid parliamentary discussion processes, go a long way toward explaining Canada’s changes. Further evidence against my hypothesis, and against Howard and Jansoki’s theories, is provided by the fact that the Canadian Liberal party initially enacted many of the laws that Conservatives then expanded on in their human-capitalizing changes; this expansion was often done with either the support or lack of resistance from Liberals.

These findings prompt broader questions about the actual influence of political parties on immigration policies. Harper and the Conservatives undoubtedly pushed for many of the human-capitalizing policies in Canada, but future research should examine a wider range of factors before positing that political party pressure (from the left or the right) *explains* changes in immigration or citizenship logic. More critical investigations should be done on confounding factors, such as multi-party agreement or the use of non-legislative policymaking avenues, before making claims about the actual observable effects that any one political party can have.

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## Identifying Potential Pork-Barrel Legislation Using Machine Learning: A Preliminary Analysis

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**ABSTRACT:** Pork-barrel legislation has been criticized by some as an excessive and potentially corrupt use of Congressional appropriations. The task of finding the specific parts of legislation that have been “pork-barreled”, however, requires many hours of labor by policy researchers. Using data from government watchdogs and machine learning algorithms, the research explores the idea of creating a model to flag specific line items of appropriations bills for policy researchers to further explore as potential pork-barrel legislation. The model constructed uses data from the *Earmark Database* by Taxpayers for Common Sense, and the *Congressional Pig Book* by Citizens Against Government Waste to attempt to identify line items in appropriations bills as either “potential pork” or “not potential pork”. Criteria for the model are based upon Citizens Against Government Waste’s seven criteria for pork-barrel legislation as well as their identification of egregious examples of pork-barrel projects. The research focuses on the fiscal years of 2008-2010 when Congressional rules required the disclosure of earmarks. The first prototype of a machine learning model was trained on fiscal year 2008 data and showed limited effectiveness at differentiating pork and non-pork in the 2008 Consolidated Appropriations Act.

### Introduction: Defining “Pork-barrel” and “Earmark”

Pork-barrel legislation is a phenomenon in political science that has been fairly well studied<sup>1,2</sup>. The specific term, “pork-barrel” has a dark history, and arose by comparing the way slaves rushed towards salted pork with how members of Congress rushed to secure federal funding for projects for their constituencies<sup>3</sup>. This hyper-localized appropriations legislation is often viewed as corrupt, has a long history in American discourse, and has drawn the ire of many politicians over time. Similarly, the term “earmark” often has been used synonymously in much political science literature, and American political discourse with “pork-barrel” to refer to potentially corrupt hyper-local appropriations.<sup>4</sup>

Despite a fair amount of research on pork-barrel politics, and despite the existence of multiple watchdog groups who criticize the earmarking process, there is some disagreement as to what each term means. Both terms have been used in the literature and discourse rather loosely. Of the many groups and institutions that research government spending or provide data about it, three bodies largely influenced this research’s definition of “earmark” and “pork-barrel”. The government watchdog and nonprofit *Citizens Against Government Waste* (CAGW) commonly uses both terms synonymously and provides their definition of what is an earmark or pork-barrel project in many of their reports as well as on their website.<sup>5</sup> *CAGW* identified seven criteria that it believes describe a “pork-barrel project” (or any earmark in their view), of which only 1 is needed for it to be classified as so:

- Requested by only one chamber of Congress;
- Not specifically authorized;
- Not competitively awarded;
- Not requested by the President;
- Greatly exceeds the President's budget request or the previous year's funding;
- Not the subject of congressional hearings;
- Serves only a local or special interest

While CAGW may use both terms interchangeably, CAGW's Director of Research, Sean Kennedy, was quoted as making some small but important distinctions regarding pork-barrel spending. In an article for *FiscalNote*, Kennedy was reported as saying, "Pork barrel spending is in the eye of the beholder, but it can really be any spending that's added in order to win votes."<sup>6</sup> The discrepancies between the CAGW's official definition of both pork-barrel and earmark and Mr. Kennedy's quote are very important. Whereas pork-barrel projects carry with them the connotation that they are used for the purpose of winning votes, every earmark in a piece of legislation may not have been added explicitly for the main purpose of winning a vote. Operationally then, "pork-barrel" and "earmark" should not automatically be treated as synonyms. Furthermore, according to Kennedy pork-barrel is a broad "nebulous" term<sup>7</sup>. As such, it has been used differently by different people and organizations.

*Taxpayers for Common Sense* (TCS), another nonprofit government watchdog, provides different definitions and a clearer distinction between what it believes constitutes pork and an earmark. TCS, like CAGW, advocates for the abolishment of earmarks and criticizes how the process used to fund an earmark is not as competitive as the processes federal or state agencies use to award a project. In an article explaining earmarks and the earmarking process, however, the group distinguishes what it believes constitutes pork from an earmark. TCS writes that:

An earmark is not necessarily pork. The term 'pork' is often applied to government spending, especially spending done by way of earmarking. But 'pork' is a loaded term, associated with waste, fraud, or abuse. Many representatives bristle at the notion that their earmarks are pork, pointing out how their earmarks fund roads, support schools, or create jobs.

The article further elaborates, explicitly stating, "Anything that meets our definition of an earmark is included as an earmark in our databases. Our databases do not separate earmarks for 'good' projects from earmarks for 'bad' projects."<sup>8</sup> What separates a "good" project from a "bad" project is the focus of this research. Taking into consideration the implications of the term "pork-barrel" as being wasteful and corrupt, this research classifies instances of "pork-barrel" as those projects that TCS classifies as "bad." Because of the increased specificity of their definition, this research adopts the TCS standards for separating pork from an earmark.

### **Research Question**

The goal of this research project is to use machine learning to build a model that identifies earmarked projects that are blatant examples of pork. According to CAGW, nearly all pork-barrel projects are specified in the appropriations bills (or Omnibus spending bills depending on the year) created during the budgeting process.<sup>9</sup> It is important to note that some studies have looked at earmark line items in other bills.<sup>10</sup> Even with an overbroad definition of pork, however, it is clear

that the focus should be on the earmark data, and not the text of the bill itself. Simply put, the nature and characteristics of an earmark determine whether a given provision is or is not pork.

Additionally, a specific change in congressional rules made a focus on earmarks even more analytically compelling. In fiscal years 2008-2010, Congress passed earmark disclosure rules that allowed for large amounts of data to be collected regarding earmarks. In 2011, earmarks were banned via an “earmark moratorium” imposed by the Republican leadership at the time.<sup>11</sup> Of significant note is that in 2021 the earmark moratorium in Congress was lifted<sup>12</sup>. Given the large amount of potential data available and the unique nature of pork as hyper-local legislation with specific characteristics, the topic lent itself to be explored as a classification problem in machine learning. Accordingly, I ask “to what extent can the identification of pork-barrel legislation be automated, and how?” It is important to note that this research makes no normative claims as to the purported evils of pork-barrel projects compared to other earmarks. It simply aims to build a classifier that can help distinguish between the two.

### **Significance of Analysis and Tentative Explanations**

While the pork-barrel legislation phenomenon has been documented by researchers before,<sup>13,14,15</sup> only one other paper could be found that tried to use machine learning to study earmarks and pork<sup>16</sup>. Most research regarding pork has used conventional social science research methods rather than data science approaches. Many studies in the field, including the one that built its own machine learning model, have also viewed pork as largely synonymous with the term earmark. As noted above, the current research adopts the more specific TCS definitions of pork and earmark in the construction of its classifier, thereby reducing the likelihood of false positives resulting from automatically equating all earmarks as instances of pork.

There are at least two reasons why machine learning classifiers and the combination of technology and social science research is limited for this topic. First, the fields of machine learning and data science are themselves new and emerging. Consequently, many social science researchers are not yet fully trained in data science methodologies. The potential for research combining these fields remains high, as there exist many other problems that could use classifiers or other machine learning algorithms to help advance research on the topic. Second, although the research problem is ripe for the application of a machine learning approach, the fact is that data on the subject are not standardized, hard to find, and oftentimes inconsistent. These data limitations will be discussed in greater detail below.

### **Literature Review**

Research on pork-barrel projects has been consistently pursued in political science over the past few decades, with studies dating back as early as 1979 and continuing to the present day.<sup>17,18</sup> Much of the research itself focuses on either the history of pork-barrel politics or on the application of pork-barrel politics to other theories in political science. A 2007 paper on pork includes an in-depth study on earmarks found in the 2005 highway bill and its relation to theories about legislative malapportionment.<sup>19</sup> The research asserts that smaller states are overrepresented in the Senate and therefore receive more pork in Senate versions of bills as opposed to House versions. A Cambridge study published in 2018 provides an in-depth overview of the presence of pork-barrel politics in American history and analyzes data regarding early local congressional projects<sup>20</sup>.

There is also disagreement in the literature as to whether pork-barrel projects have the effect that they are thought to have. One notable paper broke with the body of research in the field by showing statistically significant results that bringing home pork increased a Congress member’s vote share.<sup>21</sup> Many earlier papers lacked evidence for this idea. The effectiveness of “pork” for

members of Congress is therefore thought to be somewhat unclear. Regardless, evidence suggests that members of Congress do actively seek out federal funding for hyper-local projects in the hopes of securing their re-election.<sup>22</sup>

Other researchers have used machine learning classifiers and models to solve problems found in the field of political science. Taiwanese researchers used machine learning models to classify the large amounts of documents from The Parliamentary Library of Taiwan's Legislative Yuan.<sup>23,24</sup> The scope of the problem those researchers faced was far greater than that in this research. Much of the data used in their models had more than two categories. Thankfully, pork-barrel legislation is a simple binary classification problem with categorical independent variables and a discrete binary dependent variable.

The most similar research on this topic emerged from a group called *Data Science for Social Good*. Researchers working in a Carnegie Mellon fellowship were able to identify earmarks using text analysis methods and data from the Office of Management and Budget.<sup>25</sup> They then ran analysis on the characteristics of the earmarks and were able to achieve some success in doing so. Like others who have studied this topic, however, they viewed earmarks and pork as synonymous or nearly synonymous. The current paper uses both different data and a different set of definitions regarding "pork-barrel" and "earmark."

The current state of knowledge regarding the automation of the identification of specifically pork-barrel legislation is virtually nonexistent. While research has been done on the pork-barrel as a political phenomenon, and while some analysis has been conducted on earmarks, no research could be found that uses a machine learning model to separate pork from other earmarks. A number of reasons are likely to blame for this lack of research, including the specificity of the problem, the lack of clear standardized definitions for this issue, and the infancy of the application of data science to the field of political science.

## Quantitative Analysis

As noted above, the objective of this analysis is to use machine learning to construct a classifier to identify pork from data describing a set of earmarks. More specifically, an earmark's state and specific appropriations bill were used in constructing a model that attempts to separate earmarks from pork. The Classification and Regression Trees algorithm (CART) was chosen to build the classifier model. It uses a measure called the Gini impurity to try to differentiate between positive samples and negative samples.<sup>26</sup> It was hypothesized that using an earmark's state and appropriations bill would be able to improve the CART algorithm's classification accuracy.

## Data

The earmark disclosure rules that were implemented in Congress from fiscal years 2008-2010 provided watchdogs and researchers with special conditions upon which much data on earmarks could be collected. Members of Congress were required to disclose details regarding any "Congressionally directed spending project" (earmarks) that they requested to be added to the appropriations bills.<sup>27</sup> As such, data from this time are excellent for the study of the history and use of earmarks in American politics.

Two main sources were used in the collection of data to train and test a machine learning algorithm. CAGW's yearly *Pig Book Summary* details the earmarks—which they view as synonymous with pork—that they find in each year's budget and spending bills.<sup>28</sup> The book summarizes what they view as the most blatant examples of pork and compares these data to previous years. The projects explicitly mentioned in the Pig Book do not constitute all projects that



members of Congress were required to disclose. Rather, the projects constitute a subsection of earmarks that CAGW views as “the most egregious and blatant examples of pork.” The current project derives its data from the *2008 Pig Book Summary* and TCS’s comprehensive earmark database for 2008.<sup>28, 29</sup> That 2008 was the first year that comprehensive earmark data were made available makes it a logical starting point for the analysis; furthermore, additional research will examine the next few years.

### Data Collection

Data from the *2008 Congressional Pig Book Summary* were not available for automated electronic entry. Consequently, a manual data coding process was used. Each item mentioned in the *2008 Congressional Pig Book Summary* was subsequently searched for in the 2008 TCS dataset. If it was found, it was labeled as a positive pork sample. The criteria for identifying a positive pork sample were as follows:

1. A project that matches the bill section, contains keywords in the description, and has **one** earmark that matches the dollar amount (or is within 2% of the total cost)

*or*

2. A project that matches the bill section, contains keywords in the description, and has **multiple** earmarks that when summed together match the dollar amount (or is within 2% of the total cost)

Note: All earmarks associated with the project are added to the positive pork data, a sample may pick out a specific earmark from that project

It is important to note that in the data collection process, a few notable observations and exceptions were made. First, each project mentioned in the CAGW data did not always correspond to exactly one data point in the TCS data, and some CAGW projects contained many TCS earmarks. Furthermore, some groups of rows of earmarks in the TCS data corresponded to one singular project, regardless of whether CAGW identified that project as positive pork. CAGW claimed that 1,188 projects out of the 11,146 projects they identified as being disclosed were included as blatant examples of pork. By manually counting the number of projects detailed in the *Pig Book’s* paragraphs for each appropriation bill, a total of 1229 projects were found to have been mentioned by CAWG as being blatant pork, contradicting the number they reported.

Projects were separated by each congressional member with approximately one paragraph per member of Congress. CAGW only mentioned a select few of each member’s projects, further complicating and reducing the number of positively labeled pork projects. CAGW did not provide the original full data, which would have aided greatly in the collection of training data needed to build the CART decision tree model.

**\$15,115,446** for 17 projects by Senate Appropriations Committee Ranking Member Thad Cochran (R-Miss.), including: \$3,723,750 for a Natural Products Lab; \$2,780,400 for the Jamie Whitten Delta States Research Center; \$1,075,419 for the Agricultural Wildlife Conservation Center; \$849,015 for genomics for southern crop stress and disease research; \$511,395 for biotechnology research; and \$229,383 for rural systems research.

**\$14,038,041** for 12 projects by Senate Agriculture Appropriations Subcommittee Ranking Member Robert Bennett (R-Utah), including: \$5,560,800 for the Agricultural Research Center in Logan; \$2,616,555 for a Utah conservation initiative; \$1,191,600 for function genomics research; \$559,059 for high performance computing; and \$186,684 for pasture and forage research.

Example data that had to be manually copied from CAGW's *2008 Pig Book Summary*

In total, only 420 line items in the TCS dataset could be matched with all the projects described in the *2008 Congressional Pig Book Summary*. All other items in the TCS dataset were regarded as not being positively labeled pork. It bears noting that inconsistencies in the data could potentially weaken the model's accuracy and ability to generalize.

### **Sampling**

A stratified random sampling approach was used to find training data for the model, with the strata being each type of appropriation bill. The number of projects CAGW claimed to find in each bill was used in a ratio with the percent of total earmarks per bill found in the TCS data. A sample size of  $n=30$  was used, and bills that contained very small ratios of pork to earmarks were rounded up so that at least one data point could be included in the model.

**Table 1: Pork-Barrel Projects Distribution Across 2008 Appropriations Bills**

Bill	# of Pork-Barrel Projects Found in CAGW Data	% of Total Earmarked Projects Found in TCS Data	Number of Samples for n=30	Rounded Ip (to include all types of bills)
Ag-Rural Development-FDA	123	10.01	3.00	4
Commerce, Justice & Science	171	13.91	4.17	5
Defense	234	19.04	5.71	6
Energy & Water	147	11.96	3.59	4
Financial Services	7	0.57	0.17	1
Homeland Security	98	7.97	2.39	3
Interior	70	5.70	1.71	2
Labor-HHS-Education	260	21.16	6.35	7
Legislative Branch	2	0.16	0.049	1
Military Construction	10	0.81	0.24	1
State-Foreign Ops	3	0.24	0.07	1
Transportation and Housing & Urban Development	104	8.46	2.54	3

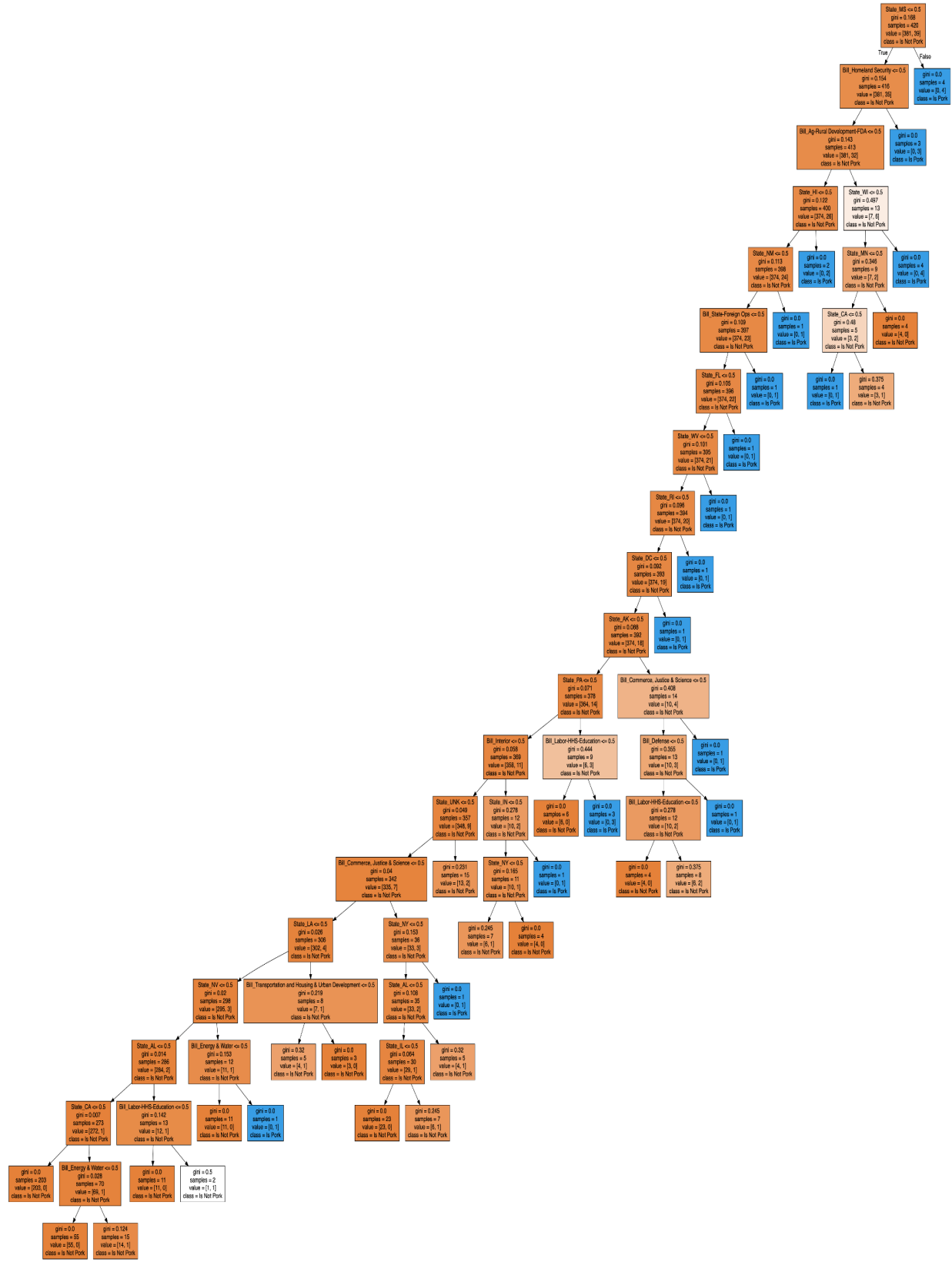
Note: Numbers rounded to 2 decimals places.

### Data Cleaning

Many challenges were also faced in cleaning the data to prepare it for the training of a machine learning model. Due to a breakdown in the pipeline that cleaned the data and then sampled it randomly for the machine learning model to be trained, the positive pork data and TCS earmark data had to be manually merged. After the complete dataset was merged, the categorical data had to be encoded such that CART could run on it. To do so, each possible value for each column was broken out into a separate column and coded as 0 or 1 depending on whether a row contained that value. This also had to be done somewhat manually, as the data pipeline for cleaning and sampling data was not fully functional.

### Operationalization of Variables and Creation of the First Model

Had there not been a breakdown of the original data pipeline, more than two independent variables (state and appropriations bill) would have been used in the creation of a preliminary model. They were the state that the earmark was from and the specific appropriations bill to which it belonged. The dependent variable used in the model was whether or not CAGW classified the earmark and its data as pork (1 = yes).



The first decision tree produced by the CART algorithm

While the selected independent variables were hypothesized to improve classification accuracy, as data was collected it was also hypothesized that the specific appropriation bill would be the largest indicator used by the model to classify an earmark as pork. This is because the ratios of pork to earmark projects for bills such as Financial Services, Legislative Branch, Military Construction and State-Foreign-ops were much smaller compared to the other types of bills.

## Results and Discussion

The model itself surprisingly used Mississippi as its primary classifier of pork. This is likely due to the large amount of pork from Senator Thad Cochran identified by CAGW.<sup>30</sup> Testing of the model on unclassified earmark data proved to be a difficult task. Like the creation of training data, testing data had to also be manually sampled and created. Using a stratified random sample of 30 rows that were not used for training, the model was able to predict 26 of the 30 samples given. If the model were to predict every sample given as not being pork, it would have predicted 24 out of 30 samples correctly. Because the sample was stratified, only three of the data points were positive pork, and the model correctly identified two of them. A much larger testing size is needed in order to get an accurate estimate of the model's accuracy. A baseline can also show that high accuracy may not always result in a model that is effective. The results of the model's ability to classify pork suggest that states and appropriations bills may be useful in classifying earmarks, but the model is otherwise inconclusive. Further work on the model is needed before any conclusions can be drawn. It is of the utmost importance to obtain far larger amounts of training data before the hypothesis can be definitively accepted or rejected.

## Conclusions

With an inconclusive model being generated, the original hypothesis was not proven correct. That being said, the process of undertaking this research produced other notable findings. Notably, data regarding pork-barrel legislation remains scant and hard to analyze. More efforts in analysis of the original legislation would aid greatly, as the data from CAGW was not easy to analyze or use. Also of note was a lack of data available from multiple previous administrations' Office of Management and Budget. The archived sites of the former Presidents did not have downloadable data, which could've aided greatly in this research. A cause for concern would be the lack of preservation of that important public policy data in a centralized source. The limited research done in the past regarding automating the process of earmark analysis uses said data. Future work on the model will focus on restoring a reliable and automated data pipeline to clean and create large amounts of training and testing data. Without the full automation of this component, the model is limited to analysis on only a few variables, and testing on only a small dataset. This provided a model that was not a truly effective identifier of pork-barrel appropriations.

Future research on the issue should also think carefully about the difference between the terms pork-barrel and earmark and the different uses of those terms. Standardization of the terminology in the field of political science would greatly benefit future scholars attempting to study the budgeting processes, especially with the return of earmarks in the most recent Congress. What makes pork-barrel legislation objectively bad is not clearly defined. Critiques levied on the entire earmarking process itself by groups like CAGW are broad, and specific research on the varying levels of how bad pork-barrel legislation is and its relation to the degree of effectiveness for politicians should be considered. CAGW may also not be the best source to identify pork-barrel

projects. They are one of only a few groups who study the issue in-depth, and they take a stance that labels all government projects created through the earmarking process as pork. As such they are inherently biased against all earmarks, which may not necessarily be “bad” pork. It should also be noted that they are incredibly biased against government spending in general. Much of the work in their “Pig Book” focuses on name-calling politicians and critiquing all spending.

Future planned technical work on the project includes (upon restoration of the data pipeline) the inclusion of more data sets. Should the OMB earmarking data be found, its inclusion into either testing or training data will be considered. The OMB, as a component of the executive branch, took a cynical stance on earmarks and their data may be valuable in identifying other pork-barrel projects (especially ones which they especially took issue with). Other years of TCS data will likely be taken into consideration as well, especially if a classifying model for earmarks in the current Congress is to be built. There are many ways in which data from other years may be used, including but not limited to the use of a random forest algorithm, which would effectively be a combination of decision trees.

For any researcher interested in this project, for which work is ongoing, the code base for the project can be found online.<sup>31</sup> It is in the interest of the field of political science for technical and non-technical scholars alike to collaborate on open source projects. Assistance could be used in the identification of pork-barrel projects from FY 2009 and 2010, as well as in programming the actual code itself. Collaboration is encouraged and the code will remain open source.

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## **Econometric Analysis of the Relationship Between Domestic Economic Growth and Levels of Inflow of Remittances in Developing Countries**

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**ABSTRACT:** The international global migration has produced an exponential growth of remittances, which can be defined as the transfer of funds from one country to another. This study will inspect the macroeconomic impact of remittance inflow on economic growth using panel regression, covering the period from 1981 to 2020 and focusing on a sample of 152 countries, then filtered by 4 geographical regions for additional analysis. Like many studies before, a consensus about an overall effect of the flows on global level could not be reached from his study following the analysis of the general sample. However, on a more specific regional analysis like this study intended to provide, the results have given slightly clearer answers. Finding a positive significant coefficient in the sample regression of the African nations pushes forward the claim of remittances playing an important role for increasing the cap of savings and thus investment options in developing nations. On the other hand, a negative significant coefficient for the Caribbean, Central, and South American countries' sample suggests support for the claim that higher remittance inflows are probable reaction to, not an actual reason for, decreasing domestic output i.e., provides support for their counter-cyclical nature.

### **Introduction**

International economic development has been often specified as the global challenge to alleviate massive poverty in the developing world and reduce disparities between the Global North and Global South in terms of standards of living. Macroeconomic processes suggested to national economies for this mission have often included establishment of foreign direct investments, private capital inflows, trade liberalization, or receiving foreign aid packages. However, a globalization of the national economies into a more connected international market is pointing to a newer, more robust trend of realizing an intertwined economic development. This trend is based on the multi-decade expansion of the freedom of movement for migrant and capital across the globe.

Defining the exact concept of remittance inflow among scholars has been a consequence of using the only well-established method of generating macroeconomic data on the topic:

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analyzing data from international data aggregators such as the World Bank and International Monetary Fund, which work depends on aggregating the often complex and diverse categories of capital flows from the national balances of payments. As pointed out by Chami et al. (2008)<sup>1</sup>, the usual balance of payments includes three categories that seem very similar to one another: employee compensation, migrant transfers, and workers' remittances. Employee compensation is defined as funds that have come to the country recipient from seasonal labor only, an example being seasonal agricultural workers. Migrant transfers, on the other hand, are reallocation of entire funds of a current first, second, or third generation migrant to the country of origin due to change of residency status. This is not necessarily associated with a willingness to send this capital to, for example, family members, but more so to establish a residential life in their country of origin. Finally, worker remittances are funds that are specifically sent to the county of origin by a migrant that currently lives and works permanently in the host country. Many studies that have analyzed the impact of the remittances have used either the sum of all three categories, or just a specific combination of them. Chami et al.<sup>2</sup> and Barajas (2009)<sup>3</sup> point to a diversity in the data sets used by every researcher. With the inclusion of every other category except the workers' remittance, the chance for ending up with different interpretations of the data is highly likely.

It should be also noted that the values for remittance inflows differ in transparency from country to country. Informal channels of remittances are estimated to present a significant proportion of unreported inflows, which reach families and probably influence the aggregate demand in a society without a visible effect and acknowledgement of the transferred funds from abroad. In these instances, macroeconomic studies lack an advantage over microeconomic surveys that focus on interacting with families who are recipients of remittances<sup>4</sup> (Clemens and McKenzie, 2018).

The international global migration has produced an exponential growth of remittances, which can be defined as the transfer of funds from one country to another. Remittances have grown due to the increasing labor migrant population's ability to send surplus of funds from their current country of residence and work to their homeland, often referred to as country receiver. The notable fact in this global wave is that majority of these funds have been reallocated from high-income countries to low-income ones, which practically could be defined as a reallocation of funds from wealthier to poorer states. According to the World Bank Remittance Data, the total remittances flow of 2019 reached an all-time high value of \$689 billion<sup>5</sup> (Financial Times, 2019), as \$558 billion of these transactions ended up in low- and middle-income countries (LMICs)<sup>6</sup> (The World Bank, 2021). These inflows remained consistent even during 2020, a year of a global pandemic, with \$550 billion towards the low- and middle-income economies<sup>7</sup> (The World Bank, 2021). The last two annual values surpassed the total amount of foreign direct investment, private capital flow, or foreign aid, all of which are still more popularized as the main methods of reducing global disparities and promoting economic growth in the developing world. In relation to economic development, numerous studies have found that remittances serve as a robust tool for boosting domestic spending on essential needs such as nutrition, education, and other necessary life standards, reducing poverty vulnerability, and acting much faster than any other capital flow due to the agents' own decision-making.

With the increasing levels of remittances across the globe, the new trend begs the questions: could a continual massive increase of money transfers from the Global North to the Global South be the development success that the globalized economy has aimed to achieve? Founded on understanding the current academic consensus and disagreement on the topic of remittances, this study will inspect the macroeconomic impact of remittance inflow on economic growth using

panel regression, covering the period from 1981 to 2020 and focusing on a sample of 152 countries, ~~then~~ filtered by 4 geographical regions for additional analysis.

First, this paper provides an overview on the definition of remittance inflows to narrow down the available data, further analyzing proposed theoretical frameworks that include the impact of remittances on Gross Domestic Product growth. The goal of establishing a relevant econometric model continues with highlighting the adoption of control-variables needed for specifying the effect of the inflows, as well as recognition of the endogenous nature of remittances and other econometric challenges from the available data sets. The paper then proceeds in defining the methodology and data used for the econometric analysis, followed by the model results. Conclusion and further research suggestions are provided by the end of the paper.

## Literature Review

### *Theoretical Frameworks Incorporating Macroeconomic Impact of Remittances*

The impact of remittances on growth in a domestic economy has been hypothesized via changes in multiple macroeconomic indicators. The idea to include remittances in the macroeconomic model is built on the claim that remittances act as an additional savings inflow account to households in the recipient countries. Families transition their savings account in investment activities and thus accumulate capital that was not possible to be financed from the household's other income sources<sup>8</sup> (Eggoh, Bangake, and Semedo, 2019). Furthermore, in the role of savings accounts, remittance inflows could directly support the removal of numerous obstacles for financing activities in the given country<sup>9</sup> (Barajas, 2009). Remittances can also prevent output volatility<sup>10</sup> (Chami, Hakura, and Montiel, 2009) as they act as safety net for many consumers, maintaining positive expectations in aggregate demand that would on its own condition indirectly prevent fear of financial instability on macroeconomic level. Still, there has been an opposition that this argument is an all-round assessment of impact of remittances on investment. Scholars have argued that remittances indeed alleviate poverty and reduce the lack of consumption levels. However, these effects have been argued to not have any direct links to increase of investment and capital accumulation boost<sup>11 12</sup> (Barajas, 2009; Sutradhar, 2020) as the ratio of marginal propensity to consume is very high in the developing world.

On the impact on growth through labor force dynamics, remittances have again been seen as polarizing factor of economic growth. On one hand, remittances have been hypothesized as a substitute to earning labor income for some household members. If a recipient obtains funds that are enough to satisfy their basic necessities for life or even more, some economists argue that these individuals accept to trade their ability to gain more wealth to spending more time on leisure activities<sup>13</sup> (Barajas, 2009). On the other hand, using the previous argument centered around lowering the opportunity cost for foregoing active participation in the labor force, many economists indicate that remittance inflows support family youth in focusing longer time on schooling<sup>14 15 16</sup> (Yang, 2008; Hanson and Woodruff, 2003; Cox and Ureta, 2003). The tendency described could give rise to perhaps shorter lifespan of labor participation, but of a much more highly skilled, highly productive labor force overall.

Another theoretically established concern for remittance inflows relates to their impact on the trade dynamics established in a domestic economy. According to Clemens and McKenzie (2018), there is a significant claim that the transactions occurring with the transfer of funds can appreciate the value of the currency of the recipient country<sup>17</sup>. Eggoh, Bangake, and Semedo further point out to reduction of the optimized total factor productivity and technological

innovation that the country has invested for specialization in certain trade sectors<sup>18</sup> (2019).

Finally, aside the different impacts explained, it must be noted that the flows and effects of remittances have a very endogenous nature in the macroeconomic model of determining the domestic output. The most apparent connection is perhaps the one relating the inflows to its source: the migrant labor population of a country recipient. Funds arrive in the domestic economy from abroad, from a portion of the domestic population that has decided willingly or forcefully to not participate directly in the domestic economy by remaining in the country recipient. Therefore, the same emigration that makes remitting possible for the households back home is in a way an opportunity cost for the country recipient as the country cannot rely on that part of its total labor force<sup>19 20</sup> (Sutradhar, 2020; Clemens and McKenzie, 2018). The claim has been supported by empirical evidence from panel data that suggest strong significant negative value for the relationship between logs of GDP per capita and a certain annual level of remittances-to-GDP ratio<sup>21</sup> (Dujava and Kálovec, 2020). With this theoretical framework, one can easily conclude how remittances magnitude of flow can be already easily defined and assumed to exist in the economic model by referring to the net export of human capital that an economy undergoes, or in the way of representing the mentioned opportunity cost of emigration of the labor force.

#### *Overview of Past Econometric Study Results*

A significant amount of the research done on the impact of remittances have used different econometric techniques. Although rarer, cross-sectional data sets have been used by Abdih, Chami, Dagher, and Montiel (2010) on a macroeconomic scale<sup>22</sup>, and more often on microeconomic scale<sup>23 24</sup> such as studies by Hanson and Woodruff (2003) and Cox and Ureta (2003). Macroeconomic analyses have included even a time-series for a single case country<sup>25</sup> like the study by Javid et al. (2012). Still, a big portion of research has been completed by establishing a cross-sectional panel data of numerous countries from different regions<sup>26 27 28 29</sup> (Dujava and Kálovec, 2020; Zghidi, Sghaier, and Abida, 2018; Williams 2018; Giuliano and Ruiz-Arranz, 2009) or data sets from specific regions such as Latin American countries<sup>30</sup> (Ekanayake and Moslares, 2020), Sub-Saharan African countries<sup>31</sup> (Olayungbo and Quadri, 2019), or Western Balkans<sup>32</sup> (Bajra, 2021).

#### *Overview of Used Control Variables in Econometric Models*

Consumption, savings, and investment levels throughout time periods have served as insightful control variables of the econometric model in numerous studies. In economic theory, these variables are regarded as one of the main potential channels of remittance's exogenous growth effect<sup>33</sup> (Barajas, Chami, Fullenkamp, Gapen, and Montiel, 2009). Many scholars have also established the development level of the financial system in a developing economy as an essential variable for the inflows' effect on output growth<sup>34 35 36</sup> (Giuliano and Ruiz-Arranz, 2009; Olayungbo and Quadri, 2019; Aggarwal, Demirgüç-Kunt, and Martínez Pería, 2011).

Another significant control variable to keep the remittances' endogenous nature out of the objective analysis is setting up the trade openness of the studied cases. Lueth and Ruiz-Arranz (2006), Barajas, Chami, Fullenkamp, Gapen, and Montiel (2009), have argued that development of bilateral remittance flows often follow the development of trade flows<sup>37 38</sup>. Often used variables for this goal include the trade-to-GDP ratio<sup>39 40 41</sup> (Olayungbo and Quadri 2019; Eggoh, Bangake, and Semedo, 2019; Javid, Arif, and Qayyum, 2009), which represents the total exported and imported goods and services as a share of GDP. Indicators such as Foreign Direct Investment and Foreign Aid have been also added to econometric models in numerous studies as control variables,

although many studies have confirmed their lack of correlation with remittances due to their higher volatility and pro-cyclical nature compared to the flow of remittances<sup>42 43 44</sup> (Dujava and Kálovec, 2020; Gammeltoft, 2002; Ratha, 2003).

Essential control variables in eliminating the bias in the regression for economic growth are also the size of country's economy, population, and migrant stock. A study needs to control the values of one country's specific geographic and demographic characteristics to level out the field between economies with larger absolute numbers of work force, and consequently absolute number of migrant stock abroad. Finally, remittance effect has been studied not only with control variables that limit the remittances' endogenous nature, but also with an addition of an interaction effect. An example is the interaction between remittances' impact and quality of institutions in a country recipient<sup>45 46 47 48 49</sup> (Abdih et al., 2010; Tyburski, 2014; Zghidi, Sghaier, and Abida, 2018; Ebeke, 2013; Williams, 2018).

### Data and Methodology

Analyzing the effects of remittances on economic growth should involve observing the latest data trends, being inclusive to the questions of endogeneity, as well as differentiating the specific impacts of remittances in different regions in the global economy. With these principal objectives in mind, this study would inspect the macroeconomic impact of remittance inflow on economic growth using panel regression, covering the period from 1981 to 2020 and focusing on a sample of 152 countries, then filtered by 4 geographical regions for additional analysis. The sample covering all 152 cases is referred as the general sample, while each regional sample is noted under the names of the areas covered. Table 1 provides a sum description of the variables used and their data sources.

Upon the collection of the complementary data, a robust merging process of the indicators for each country followed in the software R. Combining existing data for all indicators meant also organizing them in the specific longitudinal format to prepare the sample for direct panel data recognition in software like STATA. Once imported in STATA, the dataset was declared as a panel one, with the variable "ISO" (Country Code) being the identification component for the countries i.e., defining every country as a unique group of observations, while the variable "year" being recognized as the time period. Numerous nations have not provided specific data for the variables for every year. The lack of the dependent variable  $gdp\_growth_{it}$  in some cases therefore caused the general panel of the whole sample to be recognized as unbalanced, where those cases for certain years were excluded.

### *Specification of Model, Variable Description, and Data Wrangling*

With the specified research question, the following model establishes a function of economic growth:

$$gdp\_growth_{it} = \beta_0 + \beta_1 remittance\_ratio_{it} + \beta_2 trade\_GDP\_ratio_{it} + \beta_3 investment\_rate_{it} + \beta_4 savings\_rate_{it} + \beta_5 fdi\_ratio_{it} + \beta_6 financial\_development_{it} + \beta_7 econ\_freedom_{it} + \beta_8 administration_{it} + \beta_9 migrant\_stock_{it} + \alpha_i + \epsilon_{it}$$

**Table 1: Variable Description and Data Sources**

<b>Dependent Variable</b>	<b>Description</b>	<b>Source</b>
<i>gdp_growth<sub>it</sub></i>	Annual percentage change rate of GDP (measured by PPP standards) by country receiver, expressed as a percentage.	International Monetary Fund - World Economic Outlook Database <a href="https://www.imf.org/en/Publications/WEO/weo-database/2021/April">https://www.imf.org/en/Publications/WEO/weo-database/2021/April</a>
<b>Explanatory Variables</b>	<b>Description</b>	<b>Source</b>
<i>remittance_ratio<sub>it</sub></i>	Annual Amount of Remittance Inflow to each country, expressed as a percentage of annual GDP.	The World Bank - Migration and Remittances Data <a href="https://www.worldbank.org/en/topic/migrationremittancesdiasporaissues/brief/migration-remittances-data">https://www.worldbank.org/en/topic/migrationremittancesdiasporaissues/brief/migration-remittances-data</a>
<i>trade_GDP_ratio<sub>it</sub></i>	Annual aggregate value of imports and exports divided by the gross domestic product. Measure for trade openness of a country. Expressed as a percentage of annual GDP.	International Monetary Fund - Direction of Trade Statistics (DOTS) <a href="https://data.imf.org/regular.aspx?key=61013712">https://data.imf.org/regular.aspx?key=61013712</a>
<i>investment_rate<sub>it</sub></i>	Annual ratio of total investment (the total value of the gross fixed capital formation and changes in inventories and acquisitions less disposals of valuables for a unit or sector) in current local currency to GDP in current local currency, expressed as a percentage of annual GDP.	International Monetary Fund - World Economic Outlook Database <a href="https://www.imf.org/en/Publications/WEO/weo-database/2021/April">https://www.imf.org/en/Publications/WEO/weo-database/2021/April</a>
<i>savings_rate<sub>it</sub></i>	Annual ratio of gross national savings (gross disposable income less final consumption expenditure and adjustment for pension funds) in current local currency to GDP in current local currency, expressed as a percentage of annual GDP.	International Monetary Fund - World Economic Outlook Database <a href="https://www.imf.org/en/Publications/WEO/weo-database/2021/April">https://www.imf.org/en/Publications/WEO/weo-database/2021/April</a>
<i>fdi_ratio<sub>it</sub></i>	Annual ratio of foreign direct investment net flows (change in assets minus the change in liabilities in each country's balance of payments, where net FDI outflows are assets and net FDI inflows are liabilities) to GDP in current US dollars. Expressed as a percentage of annual GDP. Positive values signify greater quantities of inflows, while negative values signify greater quantities of outflows.	The World Bank Database <a href="https://data.worldbank.org/indicator/BN.KLT.DINV.CD">https://data.worldbank.org/indicator/BN.KLT.DINV.CD</a>

$financial\_development_{it}$	Financial Development Index is defined by the IMF as “a combination of depth (size and liquidity of markets), access (ability of individuals and companies to access financial services), and efficiency (ability of institutions to provide financial services at low cost and with sustainable revenues, and the level of activity of capital markets)” (IMF, 2016). Annually measured from 0 to 1, with 0 representing no financial development to 1 being highest financially developed environment in country.	International Monetary Fund – Financial Development Index Database <a href="https://data.imf.org/?sk=F8032E80-B36C-43B1-AC26-493C5B1CD33B">https://data.imf.org/?sk=F8032E80-B36C-43B1-AC26-493C5B1CD33B</a>
$econ\_freedom_{it}$	Economic Freedom Summary Index by Fraser Institute measures economic freedom, ranking countries based on five areas—size of government, legal structure and property rights, access to sound money, freedom to trade internationally, regulation of credit, labor, and business. Measured from 1 to 10, value of 1 being least amount of freedom, while value of 10 signaling most amount of freedom. Data between 1980 and 2000 is available only as estimators of 5-year periods (data for 1980, 1985, 1990, 1995), while most countries have annual data from 2000 onwards.	Fraser Institute Database <a href="https://www.fraserinstitute.org/economic-freedom/dataset?geozone=world&amp;year=2019&amp;page=dataset&amp;min-year=2&amp;max-year=0&amp;filter=0">https://www.fraserinstitute.org/economic-freedom/dataset?geozone=world&amp;year=2019&amp;page=dataset&amp;min-year=2&amp;max-year=0&amp;filter=0</a>
$administration_{it}$	The Impartial Administration Index is part of IDEA’s Global State of Democracy Indices, measuring absence of corruption fair public administration. Annually measured from 0 to 1, with 0 representing no performance to 1 being highest performance of democratic and responsible institutional frameworks in a country.	IDEA, Global State of Democracy Indices <a href="https://www.idea.int/gsod-indices/#/indices/world-map-table?attr=%5B%22A_04%22%5D">https://www.idea.int/gsod-indices/#/indices/world-map-table?attr=%5B%22A_04%22%5D</a>
$migrant\_stock_{it}$	Number (“stock”) of international emigrants by country, expressed in millions. The data is presented only as estimates of 5-year periods, therefor only value for 1990, 1995, 2000, 2005, 2010, 2015, and 2020.	United Nations - Population Division <a href="https://www.un.org/development/desa/pd/content/international-migrant-stock">https://www.un.org/development/desa/pd/content/international-migrant-stock</a>
$\alpha_i$	time-invariant error term	
$\varepsilon_{it}$	time-varying error term	
$i$	country observed (1 - 153)	

### *Optimizing Robustness of Estimators*

Initial panel regressions pointed to a significant decrease of observations included in the results, namely due to the absence of data for many cases, specifically for the variables  $econ\_freedom_{it}$  and  $migrant\_stock_{it}$ . Although this first regression model would have been the most comprehensive one, regressing for only handful of years of entire data due to the limit of the above-mentioned variables does not provide the best insight for a panel data. Thus, the initial model needed to be further edited by excluding the two challenging variables and thus creating the following function:

$$\begin{aligned} gdp\_growth_{it} = & \beta_0 + \beta_1 remittance\_ratio_{it} + \beta_2 trade\_GDP\_ratio_{it} + \beta_3 investment\_rate_{it} \\ & + \beta_4 savings\_rate_{it} + \beta_5 fdi\_ratio_{it} + \beta_6 financial\_development_{it} \\ & + \beta_7 administration_{it} + \alpha_i + \varepsilon_{it} \end{aligned}$$

After the model was reiterated, the Hausman Test - determining the best estimation technique - was used on the general sample as well as on all 4 regional subsets. The Hausman test helped establish whether a preferred regression model is a fixed effects model or a random effects model, based on the presence or absence of a correlation between the errors and the regressors in the model. The null hypothesis states that the preferred model is random effects where there is no correlation between the errors and the regressors. The alternative hypothesis claims the opposite, where the preferred model is a fixed effects one, in order to adjust to the present correlation. The test results suggested that the general sample, as well as the sample covering the African countries, South/South-East Asia, and Europe should proceed being regressed with the fixed-effects approach, while the subset for countries in the Americas should proceed being regressed with a random-effects approach. Thus, with the adoption of fixed-effects estimation for majority of the samples, the Hausman Test showcased that there is significant statistical evidence to reject the null hypothesis that the unobserved time-invariant component is unrelated to the regressors. On the contrary, for the sample covering the Americas, the assumption that the unobserved time-invariant component is unrelated to the regressors was supported by the test, leaving the random-effects estimation as the better technique.

To further eliminate the possible unequal variance of the residuals, an occurrence referred to as heteroskedasticity, the regression techniques also include cluster robust standard errors for controlling the unevenness of residuals. Serial correlation can also pose a problem in panel data, as the error terms in our model could be correlated either along a time period for each individual group observation or across numerous groups of observation. With the use of robust standard errors in the estimation, autocorrelation is aimed to be eliminated as well.

## **Model Results**

### *Summary Statistics*

The summary statistics unveil the challenges of merging complementary data for numerous cases. As seen from Table 1, which describes the general sample, the presence of data (“Observations”) for each variable is very diverse. While the more established variables have more total observations (N) and more unique groups of observations (n) for a longer average time period (T-bar) overall, other complimentary variables lack the same presence and frequency. For example, the total observations for the dependent variable  $gdp\_growth_{it}$  is 5395, with every country being present (n = 152), while the average amount of years of present data -T-bar - standing

at 35.4934 years. The essential independent variable  $remittance\_ratio_{it}$  is accounted less, but with still significant presence, with every country being accounted ( $n = 152$ ) in total of 4489 observations ( $N = 4489$ ) and significant average amount of years being recorded (29.5329) for the general sample. On the other hand, variables  $econ\_freedom_{it}$  and  $migrant\_stock_{it}$  have a significantly lower presence, with  $econ\_freedom_{it}$  being observed only in 2298 cases and average amount of years for every case being 18.5323, while  $migrant\_stock_{it}$  having only 981 observations with average of 6.49669 years. These variables have lacked data as both include multiple or only 5-year estimators instead of an annual data, leaving the model to be optimized further below in the next section.

Regarding the dispersion of data, insight from the overall, between, and within variations for the general sample need to be noted. The overall approach includes all datapoints for a variable for every case. The estimation of between variation focuses on calculating the variation among the means of every unique group of observations. By focusing on plotting the means of each of these unique groups, between variation controls the potential significance of time and inspects only the variation coming from the uniqueness of the cases themselves. On the contrary, the within variation of the sample controls for the differences between every group of observations and focuses on explaining the variation of the data regarding the passing of the time period.

**Table 2: Summary Statistics for Variables' Value of General Sample**

Variable	Mean overall	Std. Dev	Min	Max
$gdp\_growth$	5.809728	6.27037	-55.78	85.16
$remittance\_ratio$	2.246202	4.24623	0	69.49
$trade\_GDP\_ratio$	38.0772	198.088	0	7726.02
$investment\_rate$	23.83878	10.6233	-8.629	116.063
$savings\_rate$	18.71393	11.7941	-93.872	120.552
$fdi\_ratio$	1.619819	3.89698	-56.66	92.7
$financial\_development$	0.202232	0.13877	0	0.8
$econ\_freedom$	6.440283	1.00701	2.52	9.02
$administration$	0.426453	0.14104	0	0.84272
$migrant\_stock$	1.078889	1.90377	0.0012	17.8695

Although the sample mean of response variable  $gdp\_growth_{it}$  is approximately 5.8 % change of domestic output, a significant variability exists among the 152 countries for the 40-year period. This is evident by the overall standard deviation value, which simply puts 68 % of the data between approximately -0.5 % and 12.1 % change, a large space for interpreting between economic stagnation and growth for the developing world for large time period. The within estimation showcases similar results with 68 % of the data located between -0.20 % and 11.8 % change of output. On the other hand, plotting each country's mean of growth rates across the time period and thus holding time constant, the between deviation indicates a lesser spread. Its value puts 68 % of the data approximately between 3.7 % and 7.91 % change. By comparing the three deviations, the variation of data for economic growth is higher across time rather than across the countries



observed. The standard deviation of all cases along the time period is also higher compared to the between deviation for the variables  $investment\_rate_{it}$ ,  $fdi\_ratio_{it}$ , and  $savings\_rate_{it}$ .

The opposite trend is present for the remaining variables. The statistics for the main exploratory variable  $remittance\_ratio_{it}$  show that the average percentage of remittance inflows to GDP is approximately 2.25 %, while the overall deviation approach calculates that 68 % of the data is located approximately between 0 % and 6.5 %. However, the between estimation is higher in comparison to the within one, with the values of the standard deviation being 3.71 % and 2.26 % respectively. Thus, remittance data variability across countries has been greater than the one organized along the time period covered. Although very general, this finding can be explained by the steady change of remittances over time in many countries, while the inflows not becoming a significant portion of domestic output in all cases due to different developments of economies.

Furthermore, the data on the variable  $remittance\_ratio_{it}$  was able to be analyzed when extracting 4 specific regions out of the general sample: a. South/South-East Asia, b. Caribbeans, Central, and South America c. Central, Eastern, and South-Eastern Europe and d. majority of African countries. It is firmly noticeable that the variability in the newly created data subsets is often significantly lower than the one in the general sample across all types. The finding strengthens the idea to proceed investigating the remittance effect individually for each region. The only exception is the data of majority of African countries, where the deviation is higher than the general sample. This result confirms that although many African countries may share similar economic conditions for remittances to appear significant, there is still a large variability among states in terms of remittance’s portion of domestic output. A run of the Hausmann test in optimization of the model would continue this claim similarly by basing some of the samples on random-effects regression, while the others on fixed-effects estimation.

**Table 3: Summary Statistics for Variable  $remittance\_ratio_{it}$  Across Samples**

Region	Variable	Mean overall	Std. Dev.	Min	Max
General Sample	$remittance\_ratio$	2.246202	4.246228	0	69.49
South/South-East Asia	$remittance\_ratio$	1.229389	1.436916	0	8.31
Caribbeans, Central, and South America	$remittance\_ratio$	1.807569	2.472924	0	10.87
Central, Eastern, and South-Eastern Europe	$remittance\_ratio$	1.978725	2.076645	0	12.09
Africa	$remittance\_ratio$	2.074159	5.822346	0	69.49

### Regression Results

Regression results came in with great variability in size of observation, coefficients’ values, and significance levels, depending on the sample discussed. Namely, the fixed-effects regression of the general sample included ultimately only 3080 observations from 109 countries that consisted of the entire data analyzed. Overall R-squared value is significantly low, with a value of 0.0413. Regarding the coefficient for the essential independent variable  $remittance\_ratio_{it}$ , value of 0.0054628 is positive yet very small. This would suggest that with a 1% increase of remittance’s ratio in the domestic output, there might be an approximately 0.006 % increase in GDP. Aside the minimal value, the coefficient of this regressor is not suggested to be significant, as the p-value is far greater than even the 10% level of significance with 0.867. On the other hand, significant coefficients were suggested for  $investment\_rate_{it}$ ,  $savings\_rate_{it}$ , and  $financial\_development_{it}$ , all of which p-values were below the 1% level of significance. While

results for  $investment\_rate_{it}$  and  $savings\_rate_{it}$  suggested positive coefficient values, the value for the variable  $financial\_development_{it}$  implied a strongly negative impact on GDP growth when this variable increases.

Significant values for the main explanatory variable  $remittance\_ratio_{it}$  were suggested in the fixed-effects regression on the sample of the chosen African countries, as well as in the random-effects regression on the sample with Caribbean, Central, South American countries. In the case of former, number of total observations was 1109 with 41 countries included, though with once again small R-squared value of just 0.0162. The coefficient value for the  $remittance\_ratio_{it}$  was 0.0680714 and had a p-value of 0.014, thus significant at 5% level of significance. The result suggests that with an increase of 1% of remittance's ratio to domestic product, a country's GDP would grow by approximately 0.07%. Positive significant coefficient on 1% level was also present for  $savings\_rate_{it}$ , while a negative significant coefficient on 1% level was again suggested for  $financial\_development_{it}$ .

The random-effects regression of the sample with Caribbean, Central, South American countries included 721 observations from 21 countries. Overall R-squared value is higher than other regressions but still low with value of 0.1172. The coefficient for the variable  $remittance\_ratio_{it}$ , value is -0.23383, which would suggest that with a 1% increase of remittance's ratio in the domestic output, the country of the sample might be met with an approximately 0.23% decrease in GDP. On the other hand, significant positive coefficients were suggested for  $trade\_GDP\_ratio_{it}$  and  $investment\_rate_{it}$ , while a negative significant sign was provided once again for the variable  $financial\_development_{it}$ . All three significant coefficients' p-values were taken on a 1% level of significance.

Regarding the fixed-effects estimations for both the samples covering Asian and European countries, there was no sign of significance for the coefficients for the main explanatory variable presenting remittance inflows. The regressions continued the trend of results with low R-squared values, with 0.0707 for the estimation of the sample with the South/South-East Asian countries, while 0.1666 for Central, Eastern, and South-Eastern Europe. Aside the big p-values for the most important regressor, the former estimation suggested a positive coefficient of 0.329909 while the latter yielded a negative sign and a value of -0.51954. Other significant coefficients for the first sample were present for  $investment\_rate_{it}$  (positive, 5% level),  $savings\_rate_{it}$  (negative, 10% level),  $fdi\_ratio_{it}$  (negative, 5% level), and  $financial\_development_{it}$  (negative, 1% level). As for the second estimation, significance was suggested for  $trade\_GDP\_ratio_{it}$  (positive, 5% level),  $investment\_rate_{it}$  (positive, 1% level),  $savings\_rate_{it}$  (positive, 5% level),  $fdi\_ratio_{it}$  (positive, 1% level), and  $financial\_development_{it}$  (negative, 1% level).

## Conclusion and Further Research Suggestions

The regression results point to a continuation of the current status quo in the debate about remittance inflows. With the basic econometric models analyzed in this study, their impact seems to shape a diverse range of outcomes with different set of conditions established. Like many studies before, a consensus about an overall effect of the flows on global level could not be reached in this study following the analysis of the general sample. However, on a more specific regional analysis like this study intended to provide, the results have given slightly clearer answers. Finding a positive significant coefficient in the sample regression of the African nations pushes forward the claim of remittances playing important role for increasing the cap of savings and thus investment options in developing nations. On the other hand, a negative significant coefficient for the Caribbean, Central, and South American countries' sample suggests support of the claim of higher

remittance inflows being a probable reaction to, not an actual reason for decreasing domestic output i.e., provides support for their counter-cyclical nature. Nevertheless, the other two regions in Asia and Europe are leaving the conclusion without significance in their estimation of remittances, thus opening space for understanding the ways how the regional studies can be improved.

Despite an inclusion of the most recent time period and unique analysis for different regional economies, it has to be pointed out that the investigation ran into challenges for providing significant amount of observations for two potentially important variables: *econ\_freedom<sub>it</sub>* and *migrant\_stock<sub>it</sub>*. The two variables could have assessed further the engine of international flows by providing an additional interacting microeconomic understanding of a remittance receiver by the former variable, and a macroeconomic labor flow in the domestic economy by the latter. Still, the variables' estimates of 5-year cycles turned out to reduce the sample observations significantly, nullifying the potential analysis of longer time period and more cases for the remaining variables. A strategy to include these two conditions more successfully in future studies should thus be one priority.

Finally, the current use of only the basic panel-data regression estimation techniques leaves space for conducting an even better econometric model with even the same status of observations and variables. An application of specific dynamic models providing differences and lags of the dependent and independent variables could possibly suggest results whether one year's remittances are indeed impacting the growth rate of a domestic output in subsequent years. Estimation techniques such as the Arellano–Bond dynamic panel-data model could not only provide intertemporal aspects of effects of remittances but also strengthen the instruments used to control for external factors on economic growth and thus specify the remittance impact on domestic output increase. A detailed process of creating this kind of a dynamic model with the goal of resolving potential endogeneity and crystalizing further the correlations between the variables studied should be a follow-up to this research.

## Appendix

Table A1: Summary Statistics for Variables' Value of General Sample

Variable		Mean	Min	Max		Obs.
gdp_growth	overall	5.809728	-55.78	85.16	N	5395
	between		-8.63333	11.63075	n	152
	within		-56.9766	81.40382	T-bar	35.4934
remittance_ratio	overall	2.246202	0	69.49	N	4489
	between		0.01	26.94075	n	152
	within		-18.9046	44.79545	T-bar	29.5329
trade_GDP_ratio	overall	38.0772	0	7726.02	N	5373
	between		2.331154	2060.687	n	152
	within		-1932.16	5703.41	T-bar	35.3487
investment_rate	overall	23.83878	-8.629	116.063	N	4504
	between		9.830075	46.05158	n	132
	within		-12.2458	94.30711	T-bar	34.1212
savings_rate	overall	18.71393	-93.872	120.552	N	4625
	between		-3.39608	48.47083	n	134
	within		-99.7948	117.9687	T-bar	34.5149
fdi_ratio	overall	1.619819	-56.66	92.7	N	4418
	between		-1.663	15.1025	n	148
	within		-53.3772	85.30597	T-bar	29.8514
financial_development	overall	0.202232	0	0.8	N	5076
	between		0.033846	0.635385	n	143
	within		-0.20469	0.44454	T-bar	35.4965
econ_freedom	overall	6.440283	2.52	9.02	N	2298
	between		4.239545	8.853636	n	124
	within		2.12801	8.380737	T-bar	18.5323
administration	overall	0.426453	0	0.842724	N	4386
	between		0.147012	0.765463	n	124
	within		0.149963	0.634249	T-bar	35.371
migrant_stock	overall	1.078889	0.0012	17.8695	N	981
	between		0.002586	11.18094	n	151
	within		-4.13278	7.767446	T-bar	6.49669

**Table A2: Summary Statistics for remittance\_ratio in General and Regional Samples**

Region	Variable		Mean	Std. Dev.	Min	Max	Obs.
General Sample	remittance_ratio	overall	2.2462	4.2462	0.0000	69.4900	N 4489
		between		3.7049	0.0100	26.9408	n 152
		within		2.2557	-18.9046	44.7955	T-bar 30
South/South-East Asia	remittance_ratio	overall	1.2294	1.4369	0.0000	8.3100	N 475
		between		1.0974	0.1565	3.8757	n 15
		within		1.0068	-2.4663	5.6637	T-bar 32
Caribbeans, Central, and South America	remittance_ratio	overall	1.8076	2.4729	0.0000	10.8700	N 835
		between		1.8691	0.0104	6.1150	n 23
		within		1.6414	-3.6174	7.8386	T-bar 36
Central, Eastern, and South-Eastern Europe	remittance_ratio	overall	1.9787	2.0766	0.0000	12.0900	N 408
		between		2.1075	0.4752	6.6062	n 17
		within		0.8594	-0.7978	7.6222	T-bar 24
Africa	remittance_ratio	overall	2.0742	5.8223	0.0000	69.4900	N 1284
		between		4.4614	0.0100	26.9408	n 44
		within		3.3779	-19.0766	44.6234	T-bar 29

**Table A3: Hausman Test on General and Regional Samples**

b = consistent under Ho and Ha; obtained from xtreg  
 B = inconsistent under Ha, efficient under Ho; obtained from xtreg  
 Test: Ho: difference in coefficients not systematic

General Sample	$\chi^2(7) = (b-B)'[(V_b - V_B)^{-1}](b-B) = 48.17$ <b>Prob&gt;chi2 = 0.0000</b>
Africa	$\chi^2(7) = (b-B)'[(V_b - V_B)^{-1}](b-B) = 16.72$ <b>Prob&gt;chi2 = 0.0193</b>
Caribbeans, Central, and South America	$\chi^2(7) = (b-B)'[(V_b - V_B)^{-1}](b-B) = 10.17$ <b>Prob&gt;chi2 = 0.1794</b>
Central, Eastern, and South-Eastern Europe	$\chi^2(7) = (b-B)'[(V_b - V_B)^{-1}](b-B) = 135.84$ <b>Prob&gt;chi2 = 0.0000</b>
South/South-East Asia	$\chi^2(7) = (b-B)'[(V_b - V_B)^{-1}](b-B) = 55.41$ <b>Prob&gt;chi2 = 0.0000</b>

**Table A4: Estimated Coefficients From Linear Regressions on General and Regional Samples**

Explanatory Variable	Dependent variable: $gdp\_growth_{it}$				
	General Sample	Africa	Caribbeans, Central, and South America	Central, Eastern, and South-Eastern Europe	South/South-East Asia
	Fixed-effects	Fixed-effects	Random-effects	Fixed-effects	Fixed-effects
rem_ratio_percent	0.005 (0.17)	0.068 (2.58) **	-0.234 (-2.37) **	-0.520 (-0.85)	0.330 (1.44)
trade_gdp_ratio_percent	0.021 (2.59) **	0.018 (1.3)	0.020 (2.78) ***	0.050 (2.84) **	0.035 (1.32)
investment_rate_percent	0.105 (3.24) ***	0.012 (0.29)	0.168 (3.3) ***	0.414 (4.54) ***	0.242 (2.53) **
savings_rate_percent	0.091 (4.09) ***	0.073 (2.75) ***	0.061 (1.33)	0.177 (2.63) **	-0.108 (-1.89) *
fdi_ratio_percent	0.050 (1.29)	0.002 (0.12)	0.100 (0.44)	0.447 (3.03) **	-0.945 (-2.81) **
financial_development	-12.241 (-6.16) ***	-16.347 (-2.82) ***	-5.608 (-2.71) ***	-20.919 (-5.92) ***	-13.391 (-3.31) ***
administration	-0.490 (-0.19)	7.496 (1.52)	0.589 (0.27)	-5.004 (-1.03)	-7.039 (-0.79)
_cons	4.377 (3.1) ***	3.536 (1.72) *	1.715 (1.16)	-1.205 (-0.44)	10.157 (1.85) *
Observations	3080	1109	721	342	383
Countries	109	41	21	14	12
R <sup>2</sup>	0.0413	0.0162	0.1172	0.1666	0.0707

Note: The table presents the panel data regressions' results, reporting their t-statistics in parentheses and respective significance levels (if any) of  $\alpha = 0.01$  (denoted as '\*\*\*'),  $\alpha = 0.05$  (denoted as '\*\*'), or  $\alpha = 0.1$  (denoted as '\*')

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## **Triple (Identity) Threat: Multi-Layered National Identity Appeals in Republican Political Narratives During the 2016 and 2020 Presidential Elections**

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**ABSTRACT:** National identity, as a broadly constituted social identity category, has been shown to hold power both as a source of political mobilization and as an enforcer of democratic stability. In recent years, Republican voters have reported stronger national attachments than Democrats, perhaps due to national identity's longstanding implicit associations with white racial identity – and the rising prominence of multiculturalist and globalist ideologies in recent decades.<sup>1</sup> In light of such findings, I propose that the rhetoric of Republican political elites may function to further exacerbate a stronger sense of national identity among their base by appealing to conjoined national *and* racial identities. This project investigates if and how Republican presidential candidates in the 2016 and 2020 elections employ national narratives in ways which have the potential to activate *both* sources of social identity when compared to the narrative elements employed by their Democrats counterparts. Through both “thin” and “thick” social narrative analysis, I found that Republican politicians were indeed more likely than Democrats to employ narratological techniques that implicitly affirm the notion of an ancestrally continuous and racially homogenous (white) nation. Such techniques may further raise the salience of both national and white racial identities among receptive audiences, and thus – given the associations between racial and partisan identities – may both reflect and exacerbate the growing association of national identity with Republican partisan identity and the growing power of Republican “identity politics” writ large.<sup>2</sup> This social identity alignment may benefit the GOP's political mobilization efforts while also perpetuating political polarization, threatening to distort the democratic function that national identity has been shown to perform.

### **Introduction**

The idea of the “nation,” and the power it holds, has long been a source of confusion and fascination for scholars. Why do people unquestioningly, even enthusiastically, display the national flag, celebrate national holidays, and voluntarily enlist in their country's military – in short, why are we willing to declare solidarity with millions of people we have never met? While political thinkers have long struggled to make sense of nationalism, its potential as a collective mobilizing force has been appreciated across time and cultures. That “nation-building” has long been understood as a crucial part of the state formation process, that political actors of all persuasions have weaponized nationalism for their objectives, and that we bitterly debate which values “the nation” stands for, demonstrates its unequivocal power. Particularly when compared to other potential forms of political community (such as religious or ideological coalitions), the national unit is notable for how it “can attract so much support with so little by way of organization,

doctrine and continuous mobilization.”<sup>3</sup> As both a driver of political mobilization and a necessary bulwark of democratic function and state stability, nationalism is commonly understood as a crucial, yet often invisible, political force.<sup>4</sup>

Recent political science research has empirically affirmed the importance of national cohesion to the function and capacities of the state – especially in the realm of public goods provisions. Across a diverse array of countries, scholars have demonstrated a correlation between strong national unity and more progressive tax policies (Lieberman, 2003), greater civic participation and interest in government (Reeskens and Wright, 2012), and greater public funding for education and infrastructure (Miguel, 2004).<sup>5</sup> In the United States specifically, a stronger sense of national identity has been shown to boost voting rates and other forms of civic involvement;<sup>6</sup> other research has demonstrated that in some cases, appeals to national identity can even supersede internal racial divisions, increasing white Americans’ support for enhanced educational opportunity for minorities.<sup>7</sup> Such cases demonstrate that even outside of policy areas where appeals to nationalism would seem directly applicable (such as immigration or foreign policy), its salience – and just as critically, how it is conceptualized by both elites and the public – is an important influence on policy outcomes.

Clearly then, the nation, as collectively imagined, is not just significant in abstract, but acts as a critical mediating force in the function of democracy, facilitating the recognition of common interests among citizens, and the reciprocal obligations between the citizenry and their country. Understanding the nature and strength of these bonds is then essential to making sense of the limits and capacities of the state – in its ability to provide public goods as well as in its long-term stability.

### **Nationalism in a Social Identity Frame**

Research in social identity theory provides critical insight into the nature of national attachment. As classical studies have demonstrated, individuals can quickly develop an affinity to any social group that they feel a subjective attachment towards (even those formed on the basis of extremely minimal differentiation), favoring in-group over out-group members past any rational assessment of intergroup conflict.<sup>8</sup> According to social identity theory, individuals strive to make their in-group “positively distinct” (in comparison with others), because one’s *individual* self-esteem can be increased by a positive evaluation of one’s in-group.<sup>9</sup> Such research in social identity coheres neatly with the consensus in classical nationalism scholarship that the origins of the nation as a political unit coincided with the demise of the dynastic realm and widespread religious uniformity – perhaps rising in prominence to provide a new source of group-based identity as another fell apart.<sup>10</sup>

When group-based social identities become salient, they can be potent enough to overpower self-interest, prompting individuals to act altruistically or make drastic sacrifices to increase the welfare or status of their in-group, especially when it is perceived to be under threat.<sup>11</sup> As Kramer and Brewer write, “inclusion within a common social boundary acts to reduce social distance among group members, making it less likely that they will make sharp distinctions between their own and others’ welfare.”<sup>12</sup> In other words, individual and group identities can become *fused* together to the point where the well-being of the group becomes indistinguishable from the well-being of the individual – insights which go far in explaining why, for example, citizens will willingly risk their lives in wartime to defend their country. Such instances of extreme identity fusion are most likely when one perceives their in-group to be under threat from an out-group, but even the mere *presence* of an out-group is enough to prompt in-group favoritism.<sup>13</sup>

These patterns of behavior highlight another notable feature of group identity, which is its inherently exclusive nature. While the nature of in-group bias can certainly be expansive (in the case of the nation, conceptually flexible enough to include millions of unknown fellow in-group members) and is not necessarily accompanied by hostility towards out-group members, positive affect with the in-group does require some subjective comparison with some relevant out-group. That is, the altruism associated with social identities cannot be universally extended, but rather is predicated on an (either real or imagined) shared characteristic as the basis of in-group favoritism. This form of in-group bias can be so potent that even when distinct groups share superordinate goals, they may develop rivalries based on the *mere fact* of their differentiation.<sup>14</sup> In the context of national identity for example, individuals would likely be much more supportive of policy actions that would directly benefit U.S. citizens rather than foreigners – even if those foreigners come from allied countries or are perceived as sharing common values. In other words, the goodwill associated with in-group favoritism will always be limited, predicated as it is on the recognition of a comparable outgroup.

Such findings go far in explaining the often-ugly nature of nationalism. As a potent form of in-group bias, extreme nationalism has historically manifested in horrific and violent acts of nativist, anti-immigrant hostility, on both interpersonal and structural levels (e.g., anti-Catholic and anti-Semitic driven hate crimes against European immigrants in the late 19th century, the Chinese Exclusion Act of 1882, and the 2018 zero tolerance immigration policies resulting in immigrant family separations). Particularly when the nation is conceptualized from a socially essentialist perspective – as categorically impermeable, with membership predicated on certain ascribed characteristics – nationals are much more likely to partake in extreme acts to eradicate perceived out-group threats.<sup>15</sup> The political implications of national identity must then be taken quite seriously.

Still, despite nationalism's potential as a source of hostility or violence, it is also worth emphasizing that national identity can function as an important stabilizing mechanism for democratic function by fostering a sense of unity and interdependency. When considered through frameworks like Gaertner and Dovidio's Common In-Group Identity Model (CIIM), one of the possible strengths of broad and abstract group identities like the nation is its potential to *supersede* other arbitrary intergroup distinctions and expand the sphere of in-group bias to include the welfare of former outgroup members.<sup>16</sup> Salient national identity could potentially be capable of mitigating inter-societal prejudice and conflict by prompting individuals to recategorize themselves as part of a larger, overarching group.<sup>17</sup> In other words, CIIM suggests that when *national identity* is salient as an identity category, individuals will reconceptualize their in-group to include Americans at large and extend their capacity for altruistic behavior to a much larger, demographically diverse group of people – a process which has at least some external validity in the U.S.<sup>18</sup>

Frameworks like CIIM also illuminate the fact that, despite the frequency with which national attachment is deployed in manipulative or exclusive ways, it can also be used to foster a sense of societal responsibility and solidarity and deployed for progressive projects as well – especially those aimed at improving collective welfare through provisional and redistributive policies. That is, when individuals understand their national community as socially meaningful, it intensifies their concern for the wellbeing of their fellow national in-group members and can prompt collectively oriented, rather than self-interested, political behavior. As Canovan writes, “If...justice is to be achieved by relatively consensual means, social justice will be feasible only in a polity with a high degree of communal solidarity.”<sup>19</sup> Put differently, our potential for collectively

oriented actions increases when we perceive ourselves as members of a collective. Clearly, then, national identity is a nuanced and multifaceted social category which escapes easy definition.

### **The Growing Partisan Split on National Attachment**

Such questions are especially important in the current political climate, where the strategic deployment of national identity, once used widely by political actors regardless of party, has fallen into a partisan alignment. Although national identity has formerly been shown to be independent of ideology, it has become increasingly associated with the Republican Party in recent years.<sup>20</sup> A 2019 poll found that approximately 80 percent of Republicans described patriotism as a “very important” American value while only about 40 percent of Democrats said the same – about a 10 point drop overall from two decades ago.<sup>21</sup> Particularly in the context of the heightened political protest of the past several years, national identity has been evoked in strikingly conflicting ways; while a Black Lives Matter chapter recently declared the American Flag “a symbol of hatred,” far-right activists stormed the U.S. capital adorned in American flag garb and echoing President Trump’s marching orders to “stand strong for our country.”<sup>22</sup> While protesters may represent two extreme ends of the U.S. ideological poll, the intonations of such associations resonate with the broader public; 66% of Republicans associate the American flag with their party, while only 34% of Democrats feel the same.<sup>23</sup> Such trends appear to demonstrate a growing partisan conflict in not merely what American national identity represents, but whether such an identity is valuable at all.

But although recent polls demonstrate an increasingly extreme split, Republicans have long been advantaged in their ability to effectively appeal to national identity. By examining how Americans conceive of their imagined political community through the lens of social identity theory and related research, we can begin to understand why the political pressures of the past 15 years have pushed the forces of national identity far into the Republican corner. And although ideology and other factors have certainly played an important part, the racial implications of American national identity are central to understanding its contemporary partisan undertones.

### **American Identity and Racial Identity**

The Republican coalition today is striking in its racial homogeneity. The partisan realignment that began in the New Deal era and accelerated during the Civil Rights era (and accelerated yet again following the election of President Obama) has resulted in a Democratic Party defined by its multiracial coalition, and a Republican Party defined by its whiteness.<sup>24</sup> In 2020, 57% of white voters cast their ballots for President Trump (up from 54% in 2016) – the only racial group that (twice) supported him by a majority.<sup>25</sup> Compared to Biden, whose winning coalition was comprised of nearly 40% voters of color, only 15% of Trump’s voter base was non-white.

At first glance, the demographic make-up of each party’s coalitions would seem to have no bearing on their respective relationships with national identity, which is almost always explicitly discussed in non-racial terms. When asked outright what criteria is most important for national belonging, most Americans overwhelmingly favor value and civic-based nationhood rather than nativist or ethnocentric criteria. Adaptive traits like “feeling American,” having U.S. citizenship, and valuing egalitarianism and tolerance are considered significantly more important to *being* an American than ascribed characteristics such as being born in the U.S. or being Christian.<sup>26</sup> Such civically determined conceptions of national belonging also seem to have reached a broader consensus in recent years. Since 2016, Americans have come to consider criteria like Christianity and being born in the United States as less important for national belonging – and

although the shift has been more concentrated among liberals (whose views shifted by 28 points compared to 13 among conservatives), the embrace of an increasingly inclusive American identity is notable in its bipartisanship.<sup>27</sup> The implication from such findings would be that entry into the U.S. political community is simple – all that is needed is the embrace of certain values (mostly based in liberalism) and willingness to participate in U.S. civic society.<sup>28</sup>

However, even as egalitarian values have been explicitly embraced as foundational to American political membership in recent history, majorities of both white and non-white Americans demonstrate an implicit association of the “American” label with whiteness. That is, research has shown that Americans (of all races) are more likely to instinctively categorize generic white faces as “American” – and are also more likely to associate generic black and brown faces with foreignness.<sup>29</sup> To put this in terms of the CIIM model, the superordinate group identity of “American” does not seem capable of transcending racial intergroup distinctions in the U.S. because the superordinate category of group identity is already implicitly associated with a subgroup. As Dach-Gruschow and Hong propose in their research, the possibility of reconceptualizing an expansive, multiracial “American” category is limited by how firmly entrenched racial divisions are in the U.S.<sup>30\*</sup>

\* Centuries of structural exclusion and segregation has created what CIIM theorists label a *boundary condition* in the minds of many Americans, leaving them incapable of imagining a racially inclusive national community.<sup>31</sup>

Social dominance theory (SDT), developed by Sidanius and Pratto, also provides a helpful framework for making sense of the limited accessibility of the superordinate “American” identity.<sup>32</sup> This framework is especially compelling because it accounts for the larger socio-historical patterns of racially predicated exclusion and subordination that have traditionally defined American belonging. Echoing a long lineage of Critical Race theorists, Sidanius and Pratto argue that although the basis for formal citizenship is more racially inclusive today than ever before in history (and that the American political community is explicitly predicated on universalist, liberal principles, rather than ascribed ethnic traits), the most stable and long-lasting markers of national belonging are founded in racial hierarchy. Even as racial minorities have been successively granted the formal rights of citizenship, institutional and cultural systems remain designed to hinder the civic and cultural participation of racial minorities in the American national community.<sup>33</sup> At its core, the United States remains “a white nation, a Protestant nation, a nation in which true Americans were native-born men with Anglo-Saxon ancestors,” demanding assimilation and subordination from those who do not fit the criteria for inclusion.<sup>34</sup>

Because of these historical patterns of dominance and subordination, SDT suggests that white Americans will have a much simpler relationship to national identity because of their hegemonic position in American society; that is, white Americans will feel greater ownership over conceptions of the “nation,” because such conceptions have long been synonymous with white belonging. For racial minorities, on the other hand, national belonging is less straightforward, because national identity (in a nation which has long invalidated the political and human worth of people of color) is inherently incongruent with other forms of group-based identity they hold. These theorized relationships between competing identities are largely born out in the data. While there is a positive correlation between a strong sense of racial and national identity for white Americans, the inverse is true for non-white Americans – the more strongly one identifies with

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\*But, see also: Transue, J. E. (2007). Identity Salience, Identity Acceptance, and Racial Policy Attitudes: American National Identity as a Uniting Force. *American Journal of Political Science*, 51: 78-91. <https://doi.org/10.1111/j.1540-5907.2007.00238.x>.

their racial minority group, the weaker their national identity.<sup>35</sup> National belonging has thus long been a quietly racially coded project, with evocations of national identity speaking not just to white Americans' sense of national belonging, but their racial identity as well.

### **Nationalism in the Age of Globalism**

This relationship between national and racial identity, long apparent, has become particularly pertinent in this political moment, where both sources of identity have grown increasingly salient through the ascendance of globalist and multiculturalist ideologies. Over the past decade and a half, the credibility and purpose of once commonly respected American values and institutions have increasingly been called into mainstream debate, destabilizing the political and moral bedrock of U.S. society. Much of this is non-specific to the United States; as Western societies have grown more prosperous and politically stable, liberal democratic values – which deny the validity of particularistic attachments of exclusive group identities – have become almost universally accepted in mainstream political discourse, while values once taken for granted – like the special status of the national community – have increasingly been derided.<sup>36</sup> For some white Americans, many of the events which have defined this period (the election of Barack Obama, the increased cultural visibility of people of color, the Black Lives Movement, ongoing national conversations about structural racism, police violence, and xenophobia) have registered as a fundamental attack on the intricately linked racial and national groups with which they identify. As the joint identities of whiteness and American-ness rise in saliency together in response to the perceived threat of political change, they have grown increasingly associated with one another under cyclical patterns of rising globalism and reactionary populism – creating what is essentially a feedback loop. That is, as right-wing leaders have conflated national pride with white supremacy in increasingly flagrant ways, many on the left have written off patriotism altogether as a dangerous form of racism, coming to deny particularistic national attachments ever more vehemently.<sup>37</sup> And as the left increasingly avoids evoking national identity, the more closely it becomes associated with ethnocentric rhetoric of the right.<sup>38</sup> In other words, the political conditions created by ascendant globalist and multicultural values have brought racial and national identity into an especially close alignment over the past decade and a half.

Such a dynamic has noteworthy implications for the potency of social identity appeals on either side of the aisle, particularly for voter mobilization. Republican elites can use nationalist rhetoric to simultaneously raise the saliency of *both* national and racial identity for their predominantly white base, motivating them to act on the basis of multiple in-group loyalties. Instead of appealing to one form of group identity that is cross-pressured with another, Republicans' use of national rhetoric can potentially appeal to *two* coherent sources of identity simultaneously. And since racial identities have become conflated with partisan identities in recent years, as Sides Tesler and Vavreck have demonstrated, the conflation of white racial and national identities could *also* cause national identity to become increasingly associated with the Republican Party.<sup>39</sup> This layering of social identities may then provide a stronger foundation for political mobilization of the GOP base.

On the other side of the aisle, national identity is less likely to be considered an effective social identity appeal for Democratic elites. Not only might national identity appeals be cross-pressured with non-white racial identities as they have become increasingly associated with whiteness under contemporary political pressures, but its racialization may have also increased its associations with Republican partisan identity as well. Because of the various identity cross-pressures associated with national identity for the Democratic base, appeals to national identity

may not function as a tool for mobilization as effectively for Democrats as they do for Republicans. This could be potentially problematic for Democrats. While voters can of course be motivated by a number of elite tactics (and not merely rhetorical social identity appeals), the fact that Republicans are able to rely on such layered identity appeals and leverage the power of in-group behavior (group-motivated behavior which is likely more extreme due to the lack of identity cross-pressures) undoubtedly presents a political advantage.<sup>40</sup>

Such a development might also pose a challenge on the linguistic level. Especially in national-level politics, the language of nationalism has long been a default; politicians align themselves with their audience and evoke a sense of unity and shared purpose by calling on shared national identity (i.e., when politicians in national contexts talk about “us” (“our” interests, “our” values) they are almost always talking about “us” as *Americans*). Even as it has become increasingly associated with white identity, “the nation” continues to be the most common and familiar basis for collective identity in the United States; it is not at all obvious that there exists another linguistic framework for capturing the collective interests of American society in a political setting. As such, the partisan and racial associations of national identity matter immensely to a Democratic politician’s ability to deliver any sort of effective or appealing political narrative.

With this in mind, I intend to investigate if Republican elites are indeed using national narratives which have the potential to speak to national *and* racial sources of identity, when compared to their Democratic counterparts. To do this, I analyze the narratological techniques undertaken by presidential candidates during the 2016 and 2020 election cycles. The electoral context is particularly well-suited to the aims of this investigation, since the candidates address a broad national audience in these contexts (transcending the more particularistic constituent communities, such as state or congressional districts, or specific demographic appeals to racial voting blocs) and are thus more likely to make appeals to a unifying national identity. At the same time, they are also largely operating within the expectations and ideological norms of their respective parties and largely appealing to their parties’ respective base coalitions. While the partisan relationships to national identity likely shifted even in the four-year period between 2016 and 2020, both election cycles took place in a deeply polarized political climate where race was a salient and contentious factor.<sup>41</sup> It is also important to note that the parties’ base coalitions shifted in only marginal ways between 2016 and 2020; while the share of different racial voting blocs shifted by a few points in either partisan direction (most notably in the form of an eight-point shift towards the GOP among Latinos), the Republican base was still overwhelmingly white (and the Democratic coalition significantly multi-racial) for both elections.<sup>42</sup>

### **A Note on Research Design: Assessing National Identity through Narrative**

There has been considerable contention among nationalism scholars over how, and indeed if, it can be satisfactorily measured. As Huddy and Khatib write, “research on patriotism has been marred by a confusing array of terms, definitions, and expected consequences in which patriotism is variously defined as a sense of national loyalty, a love of national symbols, specific beliefs about a country’s superiority, and as a crucial ingredient in the development of civic ties to a mature nation.”<sup>43</sup> Even as I take their definition of national identity (derived from social identity theory) as the “subjective or internalized sense of belonging to the nation” as my starting point, it remains difficult to evaluate how it becomes externally activated by political actors (within the confines of their already limited power to influence their audience’s individual identity construction).<sup>44</sup> Because the nation, as a site of social identity, is an *imagined* entity, it is constantly being reconceived in ever-changing historical conditions. The ways that individuals are likely to relate

to their national identities are thus not stagnant, but rather highly layered and contextually contingent. In other words, to the extent that politicians *can* raise the salience of national identity in their speech, they do so not through a simple “cause-and-effect” mechanism (for example, simply evoking a national symbol, like the flag, does not on its own automatically raise the saliency of national identity), but through more complex rhetorical means.

Social narrative analysis provides one promising framework with which to examine the more nuanced means by which national identity is constructed. This methodology is predicated on psychological findings that human beings are natural storytellers; because we are predisposed to conceive of the world in narrative form, “stories have a vital a priori role as cognitive constructs, or even as cognitive scripts.”<sup>45</sup> Psychological research on transportation theory provides some insight into this phenomenon; when individuals are “transported” into a particular “story world,” they may become less able to “counter argue assertions or events in the story because [their] cognitive capacity is committed to imagining story events.”<sup>46</sup> In other words, compelling national narratives can “move” us, increasing our identification with the nation, in ways which other rhetorical techniques (reciting the Pledge of Allegiance, for example) may not. In absence of any concrete interaction within such a widespread community, national stories can provide a common sense of who we are and how we came to be, linking our own lives to those from distant places and times, “creating a sense of familiarity, and probably emotional attachments between people...who have probably never met and never will.”<sup>47</sup> National narratives are then a key site for the construction of national identity – and as such, a crucial tool for politicians as they attempt to wield its power in political speech.

To examine partisan uses of national narrative, I will be adopting Prince’s minimalist structural definition of a narrative, as “the representation of at least two real or fictive events in a time sequence, neither of which presupposes the other”; this definition helps to account for the inherent, multiplicitous nature of national narrative as something that is communicated not in a singular telling, but which exists in relation to a larger body of narrative “versions.”<sup>48</sup> This is particularly important when considering the narrative elements found in political speech, which is almost always sparse and non-adherent to a progressive time-sequence. The limits of political narrative, however, ensure that the narrative elements which *are* incorporated are necessarily meaningful, because they have been *chosen* by the speaker as worthy of inclusion.<sup>49</sup> In other words, the way in which politicians choose to rhetorically map the historical trajectory of the nation, or characterize its population or values, matters immensely for who or who is not included within it.

For this investigation, I will be looking primarily at two narratological elements: the use of temporality in narrative and the characterization of the nation as racially diverse. I predict that the Republican presidential candidates will be more likely to use temporally richer narratives and less likely to reference diversity in their political speech than Democrats, both of which would seem (in drawing from past findings in social narrative analysis and social psychology) to exacerbate or confirm linkages between national and white racial identities for reasons discussed below. To gauge partisan patterns in narratological construction both broadly and in depth, I employ both a “thin” level analysis of generalized partisan patterns, and a more detailed, “thick” level comparative study of two partisan speeches.



## Part One: Thin Narrative Analysis of Closing Remarks in Primary Debates

### *Data Sample*

To gain understanding into how Democrats and Republicans as partisan blocs employ national narratives, I will first be conducting a broad analysis of closing statements in the 2016 and 2020 primary debates. Closing statements are often rich with narratological elements; politicians are compelled to make a generalized, compelling appeal to their electorate, usually laying out their vision for the country, drawing on personal and historical anecdotes, resonant symbols, and values to communicate what their candidacy represents.<sup>50</sup> Rather than advocating for specific policies, closing statements are often emotionally-based attempts to mobilize supporters and can be powerfully leveraged by candidates; as Shenhav has shown, there is a positive correlation between the relative narratological strength of presidential contenders' closing statements and their ultimate electoral success.<sup>51</sup>

The contexts of these speeches (nationally broadcast electoral primary debates) already share some degree of similarity, but to control for potential differences further, I also predominantly selected closing statements from the beginning of the election for analysis (those from the first, second, third or fourth debates), though there were some exceptions (i.e., the samples from 2020 Democratic candidates Tom Steyer and Micheal Bloomberg, who joined the race later).

The wide field of candidates in both parties (particularly the Democratic field in 2020 and the Republican field in 2016) also provides a solid foundation for an analysis of generalized partisan behavior by accounting for the diverse range of ideology within each party. For the purposes of this investigation, I will consider “major” candidates as those who qualified for at least one debate. To that end, the set of closing statements analyzed for this investigation includes those from the 15 GOP candidates in 2016; and the five Democratic candidates in 2016 and the 22 Democratic candidates in 2020 (including Bernie Sanders, who was a primary contender both years). In total, I analyzed 94 closing statements (43 from Republicans and 51 from Democrats), examining the following narratological elements.

### *1. Temporality*

Temporality, in its basic narratological definition, is a measurement of the time-sequence over which a narrative takes place.<sup>52</sup> As Prince's definition suggests, it is an integral aspect of narrative; speech without any temporal variation (i.e., a speech that takes place entirely in the present, without any references to past or future events) cannot be defined as a narrative.<sup>53</sup> Past research has shown not only how national narratives with denser time-sequences are more likely to deepen the audience's feelings of resonance with a historically continuous community, but also that the *belief* in historical continuity is itself correlated to socially-essentialist formulations of the nation.<sup>54</sup> Thus, if politicians present “the nation” as a historically continuous entity (for example, framing the contemporary U.S. as continuous with the U.S. of the Revolutionary era and the U.S. of the future), they may be implicitly lending credence to the belief of ancestral continuity in the nation-state, strengthening the linkages between national and racial identities – even if they themselves do not use socially essentialist narrative constructions.<sup>55</sup> Another way to understand the racial implications of a historically continuous narrative is in its assumption of a uniformly shared history. American history is thoroughly racialized; certain historical events carry conflicting emotional associations for different racial groups in America, which can make the work of navigating its meanings difficult for politicians who are addressing a multiracial audience. Using American history to affirm both national and racial sources of identity may then be a more

accessible – and thus more common – project for political elites addressing an audience who can resonate with the empowered white perspective from which dominant understandings of American history have always derived.<sup>56</sup> In other words, because Republican elites largely need not confront the complex racial connotations of certain historical events or figures (i.e., the Civil War, Thomas Jefferson), they may be able to navigate American history in their narratives more freely – and thus more frequently.

To measure temporality, I adopted Shenhav’s “relative narrativity” metric, adapting it slightly to control for variation in speech length:<sup>57</sup>

1. The total number of temporal references in each speech were counted and sorted into four temporal categories: distant past (before the birth of the speaker), past experiences (within the lifetime of the speaker), near future (within the next 10 years), or distant future (beyond the next 10 years). Temporal references were counted by clause within each sentence (to account for the fact that sentences oftentimes contain multiple and different temporal ranges).
  2. Time periods furthest from the present (distant past and distant future) were doubled and counted as two references to improve the representation of relative temporal range.
  3. The total sum of temporal references for one candidate were divided by total word count.
- a. Hypothesis 1a: The closing statements of Republicans will have a higher relative narrativity (i.e., they will be more temporally rich) than those of Democrats, because Republicans, in addressing their predominantly white base, have more reason to evoke the themes of historical and ancestral continuity which speak to both national and racial identities (and both parties will likely reference past experiences and the future at relatively equal rates) (H1a).

## 2. Racial References

Here, I attempt to measure how much politicians allude to racial diversity as a positive or neutral characteristic of the national in-group, compared to how often racial difference is treated as an out-group threat. To understand the significance of racialized references, I draw on Shenhav’s definition of narrative “characters,” and his rationale for inherent importance in political narrative. Shenhav argues that “characters” (which he defines as anything which can be rhetorically personified, including “the nation, firms, institutions, organizations, political parties, the government, our world, or our planet”) are intrinsically significant within the constraints of public political speech.<sup>58</sup> That is, references to certain figures or populations are strategically selected by the speaker, and thus are inherently meaningful in the values and communities they are symbolically representative of.<sup>59</sup> I can thus assume that racial references in contexts like primary debates are not random (particularly in this age of the increased racial salience), but a purposive attempt to communicate one’s values, rhetorically broadening the American community. Because of the longstanding conflation of whiteness and American identity, racial references can be understood as an attempt to challenge dominant American narratives, incorporating historically excluded populations in a new American story.<sup>60</sup> In other words, because American identity is often equated with white identity, the mere reference to racial diversity can cognitively disrupt the implicit conclusion that the United States is a “white” nation.<sup>61</sup>

For the purposes of this investigation, I examine how often presidential candidates use the following racialized terms in positive or neutral ways (measured with Linguistic Inquiry and Word Count analysis [LIWC]):

- i. Racial references (neutral): “African-American(s),” “Asian(s)” “Asian American(s),” “black(s),” “brown,” “Caucasian(s),” “color(s),” “country(ies) of origin,” “creed,” “diverse,” “diversity,” “ethnic,” “from all walks of life,” “Hispanic(s)” “Hispanic-American(s),” “immigrant(s),” “Indigenous,” “inner city(ies),” “Islam(ic),” “Jew(s),” “Judaism,” “Latino/a/x(s),” “Mexico(an/ans),” “Native-American(s),” “race(s),” “racial,” “refugee(s),” “religion we practice,” “religion you practice,” “white(s).”

As a means of comparison, I also examined how often politicians referenced racial dog-whistles in an apparent attempt to “other” minorities, distinguishing them from “normal” (i.e., white) Americans. That is, since evoking racial identity can be a subtle way to reinforce the implicit whiteness of the American label, and exclude racial minorities from that identity, I also measure the frequency with which politicians use terms that clearly frame racial minorities as national outsiders – most of which are well-established as racial dog-whistles.<sup>62</sup>

- ii. Racial references (negative): “criminal alien(s),” “criminal(s),” “drug dealer(s),” “extreme Islam(ic),” “gang(s),” “ghetto(s),” “illegal alien(s),” “illegal immigrant”(s), “inner city(ies),” “jihad(ist/s),” “law and order,” “looter(s),” “moocher(s),” “radical Islam(ic),” “religious extremist(s),” “rioter(s),” “sharia,” “states’ rights,” “terrorist(s),” “thug(s).”
- b. Hypothesis 1b: Republican candidates will be less likely to reference race overall but will be more likely to use negative racial terms than Democrats (H1b). As opposed to Democrats, who may be more likely to reference racial diversity to recognize or affirm the demographic make-up of their coalition, Republicans may instead use narratological framing which does *not* challenge the implicit associations between American identity and white identity. The Republican candidates also may be more likely to use language that frames racial minorities as malignant outsiders to the American community, in ways that could raise the saliency of both national and white racial identities to their base by evoking an out-group threat.<sup>63</sup> In contrast, these terms with such negative racial connotations are very unlikely to be used by Democrats as they address their multiracial base.

### 3. Nationalist Language

As a final supplementary metric, I measure how often Republicans and Democrats reference national symbols. Although merely referencing national symbols (appealing to *symbolic patriotism*) is itself not synonymous with fostering a sense of *national identity* (the subjective sense of belonging one feels with the nation), prior research has shown the two to be closely correlated – and thus they may be capable of evoking social identity sentiments or behaviors.<sup>64</sup> While national symbols can thus serve as seemingly race-neutral indications of national identity appeals, it is still worth noting that their evocation of traditional markers of national glory and pride adhere to dominant (white) constructions of national identity.<sup>65</sup> As such, how politicians use them – and in particular, how their usage of nationally symbolic language compares to their usage of racialized language – remains worthy of interrogation.

I examine how often presidential candidates use the following nationalist symbolic terms (measured with Linguistic Inquiry and Word Count analysis [LIWC]):

- i. nationalism dictionary: "all men are created equal," "American dream," "American people," "Bill of Rights," "Constitution," "Declaration of Independence," "e pluribus unum," "eagle," "flag," "Founding Document(s)," "Founding Father(s)," "God Bless America," "greatest country", "In God we Trust," "Lady Justice", "Lady Liberty," "Liberty Bell," "life liberty and the pursuit of happiness," "most powerful nation in the world," "national anthem," "one nation under God," "patriot(s)," "Pledge of Allegiance," "protect our troops," "sea to shining sea," "stars and stripes," "Statue of Liberty," "this great nation," "White House."
- c. Hypothesis 1c: Republican candidates will more frequently reference national symbols than Democratic candidates (H1c). Because national symbols are associated with a particularly traditional, dominant national narrative, they may covertly resonate with more racially exclusive forms of nationalism.

### Findings and Analysis

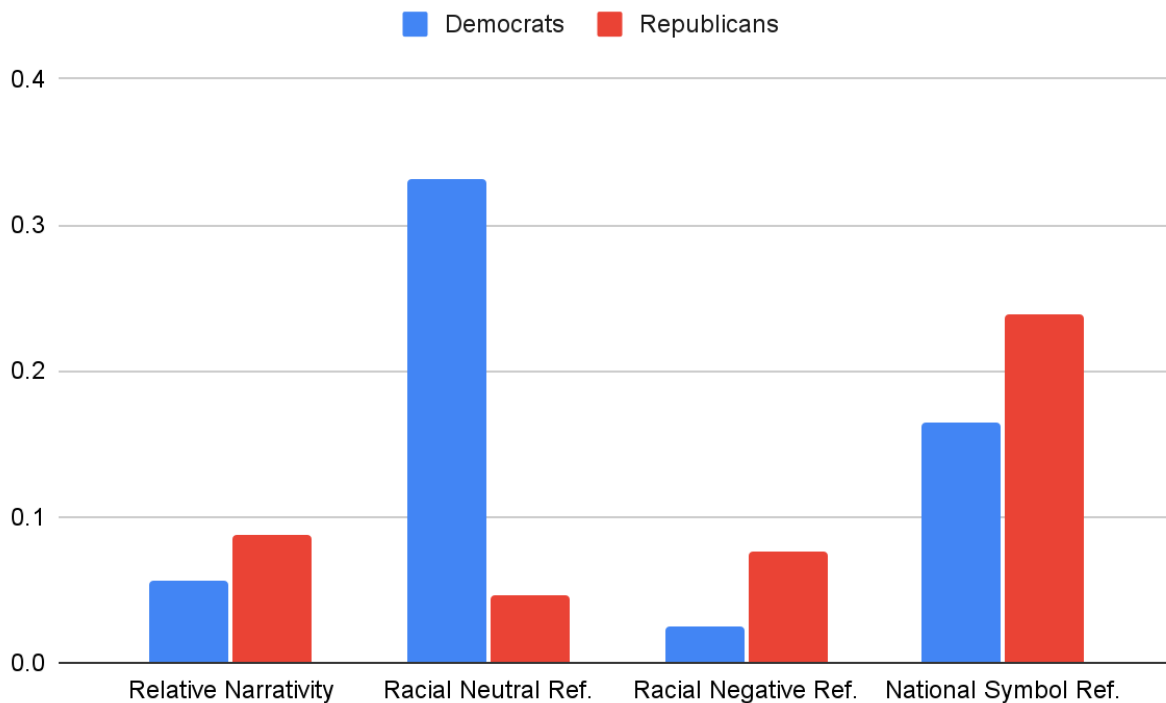
As stated above, I expected that Republican closing statements would be more likely to contain narratological elements which could activate both national *and* racial identities by rhetorically constructing the nation as a historically continuous, racially homogenous entity. More specifically, I expected that Republican closing statements (when compared to those of Democrats) would have a higher average relative narrativity score (H1a); would contain fewer racialized references in general but would be more likely to contain negative racial references (H1b); and that they would be more likely to employ symbolic national language (H1c). The average scores for each dimension of the party's closing statements adhered to each hypothesis; however, only the differentiation in racial neutral references reached statistical significance.

While Republican statements did have a slightly higher relative narrativity score of 0.0627, as opposed to the average for Democratic statements of 0.0574, the difference was not statistically significant. While Republicans in general *may* have been slightly more likely to evoke temporally richer narratives and more frequently reference the "distant past," this is not captured by the relative narrativity metric, which equally weighs references to both the distant past and distant future. It also seems likely that differences in narrative temporality were more so due to differences in individual rhetorical style, rather than generalized partisan modes of communication; a large set of both Democrat and Republican candidates evoked the distant past and distant future in compelling ways to situate their candidacy in the broader American story, but not all (especially Democrats) did so in ways that aligned with dominant American examples. For example, in the second debate, Julián Castro provided a compelling historical narrative which includes traditionally marginalized populations; "...we stand on the shoulders of folks who have made beds and made sacrifices, people that fought in wars and fought discrimination, folks that picked crops and stood in picket lines, and they helped build the wonderful nation that we live in today."

**Chart 1a: Narrative Elements in Democratic and Republican Closing Statements**

	Temporality	Racial References	Nationalist References
	Relative Narrativity:	Racial Neutral	Racial Negative
DEM AVG:	0.0574	0.332	0.025
GOP AVG:	0.0627	0.046	0.077

**Figure 1a: Narrative Elements in Democratic and Republican Closing Statements**



The difference between partisan use of racially neutral references was the only variable which met statistical significance, with Democrats making racialized references 0.332% per word count, compared to Republicans, who on average referenced them only 0.046% per word count. The use of these racial references often were utilized in calls for unity or justice (“For the last three years, we’ve watched Donald Trump pit working people against each other, black versus white, citizen versus immigrant” [De Blasio, second debate]; “They’ve tried to divide us, who’s white, who’s black...” [Ryan, first debate]; “We can tell our kids that...[we] deliver[ed] a society where race has no bearing on your health or your wealth or your relationship with law enforcement” [Buttigieg, second debate]).

In comparison (and in keeping with my hypothesis), Republicans made racialized references quite minimally, although they were slightly more likely to use racial negative language that framed non-white populations as national outsiders (0.077% of racial negative references per

word count, compared to 0.046% of racial neutral references per word count) than to use racial neutral language associated with celebrating America's diversity. Notably, Republicans almost exclusively used negative racial language in reference to *foreign policy threats*, rather than American citizens; the more frequent phrases used were "terrorists" (Christie [first debate], Cruz [second debate]) and "radical Islam" (Cruz [second debate], Graham [second debate]). While this sort of language is then not directly applicable to the ostracization of racial minorities within the U.S., it is worth noting that this sort of Islamophobic language has been shown to generate animosity and increase hate crimes towards Muslim citizens, and thus, cannot be completely disentangled from the broader project of racialization of American identity (Lichtblau, 2016). It is also worth noting that some of the words in my dictionary, coded either as "racial neutral" or "racial negative" may have been evoked by candidates in ways that did not carry the connotations I expected and could have distorted the results.

Finally, as hypothesized, Republicans evoked national symbols slightly more frequently than Democrats, with an average of 0.239% of references per word count, compared to 0.165% references per word count, though again, this differentiation failed to reach statistical significance –perhaps not surprising, given the general nationalist atmosphere of federal elections. While again, the use of symbolic nationalist language has not been shown to have a direct bearing on the strength of national identity, it is still notable that Republicans were slightly more likely to employ it in their rhetoric, especially when compared to the frequency with which they employed racialized rhetoric.

There are also interesting insights to be found in comparing rhetorical trends *within* each party; Democrats were significantly more likely to use racially neutral language than either racially negative language or nationally symbolic language. In contrast, Republicans were more likely to use nationally symbolic language than racially neutral language, and significantly more likely to use nationally symbolic language than racially negative language. These narratological patterns in Republican closing statements (frequently employing symbols of national glory or pride, while infrequently and non-explicitly referencing race) could very well function to further promote the notion of the U.S. as a white nation – or at the very least, accommodate pre-existing associations of whiteness with national identity.

The overall inconsistency of narrative deployment within the partisan blocs could be in part due to the inconsistency in the data set itself; while many candidates' closing statements *were* rich with narrative elements, relating their candidacy or personal history to the broader sweep of American history and describing the U.S. and its values in vivid ways, others used their closing statements to advocate for a single policy or state why they were more viable candidates than their competitors. As such, the temporal range of narrative as well as quantity of racialized or nationally symbolic references may be more largely contingent on the candidate's specific rhetorical strategy *in that moment* (to alleviate voters' doubts about a potential weakness they may have as a candidate or to re-emphasize a point they made earlier in the debate), one which may not involve raising the saliency of national identity.

That being said, in examining the potential cumulative effect of each partisan grouping of closing statements, the degree to which the Democratic narratives place racial diversity as a key American characteristic is significant when compared to that of Republicans, which notably does *not* challenge the links between American identity and whiteness – and thus perhaps implicitly affirms it, given the pre-existing relationship between the two. Because Republican narratives evoke themes of historical continuity and racial homogeneity (with higher measures of relative narrativity, fewer allusions to race, and the frequent use of dominant and recognizable national

symbols), it appears that they could in fact function to appeal to white racial identities in addition to national identities.

## **Part Two: Thick-level Narrative Analysis of Trump and Biden’s 2020 Convention Speeches**

To complement the relatively surface-level analysis of how national narratives are broadly structured as a function of partisanship, I also performed a more detailed narrative analysis of two political speeches – at full length – to gain deeper insight into relative narrative strength and impact. I chose to do a comparative study of Joe Biden’s speech at the closing of the 2020 Democratic National Convention and Donald Trump’s speech at the closing of the 2020 Republican National Convention, in which each candidate accepted their party’s nomination for President. The full transcripts of Biden’s speech and Trump’s speech can be found in Appendix 4 and Appendix 5 respectively. I chose these speeches because they are symmetrical; each takes place in the same political moment at the beginning of the 2020 general election (Biden spoke on August 20th, and Trump spoke on August 24th), with both candidates formally assuming the responsibility of representing their party in the coming months. It is worth noting that the timing of these speeches (immediately following the national racial reckonings of the summer of 2020) could offer further insight into how each partisan interacts with national identity’s relationship to race, not captured from the Part One dataset, which analyzed GOP statements only from 2016.

Biden and Trump’s addresses are also tailored for their respective audiences in similar ways; while the conventions are themselves partisan events, these final speeches represent a pivot towards the general election, where each candidate must begin to make a broader appeal to the country and speak to potentially undecided voters, as well as members of their own party. Beyond this symmetry in context, these speeches are a particularly appropriate venue for assessing and comparing the use of national narrative. Like closing statements, closing convention speeches are often heavily symbolic, drawing on certain conceptions of American history and values to ground each candidate’s campaign in a larger national story and mobilize voters on its behalf. There are also meaningful similarities between the narrators themselves; both Donald Trump and Joe Biden are white men in their 70s and well-established political actors. The shared characteristics of the narrators and the context of their speech lends credence using solely the narratives’ story elements as the basis for comparing their ultimate strength and effectiveness towards raising the salience of national identity.

Because Trump’s speech (which ran for 1 hour and 1 minute) was much longer than Biden’s (running for 25 minutes), I controlled for length in some contexts. However, doing so did not always feel appropriate for every metric of assessment, as discussed below. Particularly given the fact that the speeches took place in a symmetrical context, and that both candidates presumably had equal freedom to speak for as long as they wanted, there is certainly value on evaluating both on their own terms, especially as I consider the relative richness of each candidate’s narrative construction.

### **My framework for assessing these narratives was three-fold:**

#### *1. Temporality*

First, as in Part One, I assessed each narrative’s relative temporal density and racial references, to capture how thoroughly each narrative respectively appeals to themes of historical continuity and racial homogeneity. My analysis is predicated on the same definitions of temporality and characters elaborated above.<sup>66</sup>

To assess each narrative's appeals to historical continuity, I again used the relative narrativity metric.<sup>67</sup> But to get a deeper sense of *how* exactly each narrative's time sequence is populated, I also counted and coded each character according to predefined temporal categories and calculated the total number of references of all characters in each time period. Characters referenced in multiple time periods were counted for all relevant time categories. For the organizational purposes, I coded the temporal locations of characters in the following categories: Ahistorical, Pre-Founding, American Founding, First half of 1800s, Second half of 1800s, First half of 1900s, Second half of 1900s, Unspecified Past Experience (if the time frame was not identifiable in the narrative), and Present Day (2000-2020).

- ii. Hypothesis 2a: Trump's speech will contain a more temporally rich national narrative, with a higher relative narrativity and references to more historical periods than Biden's, in accordance with the same rationale that led to my predictions for H1a in Part One (H2a).

#### 1. Racial References

I also further interrogated to what extent each narrative appealed to racial diversity, assessing how each character is racialized, and how prominently they appear in the narrative – or how many times they were referenced in proportion to the total number of references to characters, with references counted by sentence. As explicated before, references to racial diversity are intrinsically notable within political narrative, as they have been strategically included by the speaker. Specifically, I asked; Which speaker more frequently mentioned characters who were overtly racialized as non-white, implicitly racialized as non-white, overtly racialized as white, implicitly racialized as non-white, or not racialized?

- iii. Hypothesis 2b: Biden will more frequently reference overtly non-white characters (and a greater number of distinct racial or ethnic groups) and Trump will more frequently reference non-racialized characters, implicitly racialized characters, and overtly white characters, this in accordance with the same rationale that led to my predictions for H1b in Part One (H2b).

#### 2. Discussion of Narratological Themes

To complement this, I will also discuss each of the candidate's respective narrative styles, rhetorical motifs, and general characterizations of America, assessing how each elucidates the interplay of national and racial identities.

### Findings

For the purposes of analysis, I did not count the speaker's references to himself, as to better understand the significance of the frequency with which other characters were mentioned. Not including self-references, Biden referenced 54 characters (363 character references total), and Trump referenced 96 characters (629 references total). They mentioned 24 of the same characters, with Trump making a greater number of references to almost every character, except for "women" and Franklin Roosevelt. Because the personal, political, and historical cannot easily be separated within political narrative, all characters (regardless of if they are evoked in the context of personal relationship, historical reference, or as a contemporarily salient political actor) were counted indiscriminately.<sup>68</sup>

#### 1. Temporality and Historical Dispersion of Characters

As hypothesized (H2a), Biden's speech takes place within a much narrower narrative realm, with a relative narrativity score of 0.048 as opposed to Trump's relative narrativity 0.079.



It is particularly notable how much more of Trump’s speech takes place in the *distant past* (78 references compared to 10 in Biden’s speech) evoking past American history more than four times as frequently as Biden when controlling for word count (see Chart 8.2).

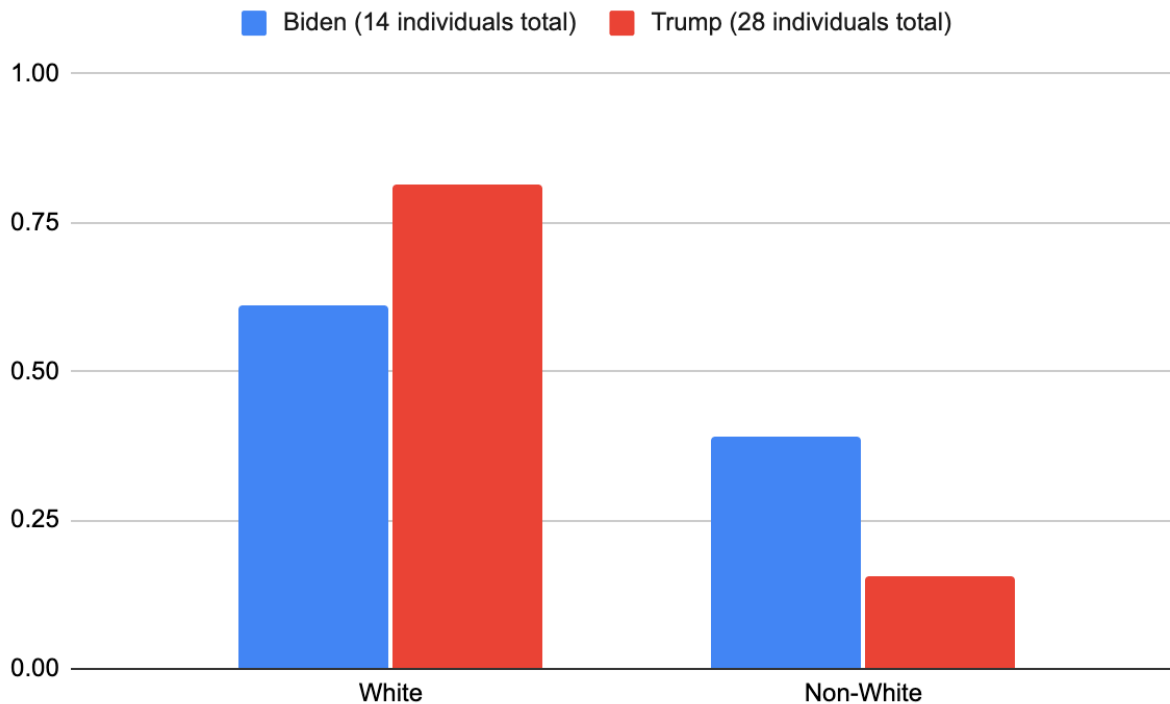
**Chart 2a. Temporal Dispersion of Characters (percentage and raw reference count)**

Time Period	Ahistorical	Pre-founding	American Founding	First half of 1800s	Second half of 1800s	First half of 1900s	Second half of 1900s	Unspecified Past Experience	Present Day
Trump	11.45% (3)	0.16% (1)	0.32% (2)	0.16% (1)	2.70% (7)	0.96% (4)	1.27% (4)	1.76% (4)	81.22% (72)
Biden	8.32% (6)	0%	.28% (1)	0%	0%	1.11% (3)	.56% (2)	3.31% (4)	86.42% (42)

The differentiation between the two speakers' character lists and their distribution over time again reinforces Biden’s relatively limited temporality. Although most of each speaker’s narratives are situated in the present (here, defined as including recent political history of the 21st century), there is significant variation in how often each speaker references historical events. As opposed to Biden, who makes only one reference to American history before the early 20th century (the writing of the Constitution), Trump makes at least one reference to every temporal category, including most epochs (the Pilgrims’ arrival, the American Revolution, Westward expansion, the Civil War, and abolition of slavery, both World Wars, the Civil Rights era) that are traditionally thought of as foundational in U.S. history. Trump also speaks in ahistorical terms (in reference to God, America, and a generalized “we”), more frequently than Biden does.

## 2. Character Racialization

Apart from differences in time sequence, Biden and Trump’s speeches also differed significantly in the extent to which they incorporated themes of racial diversity. Looking at the relative racialization of each speech (see Chart 8.4), Biden made significantly more overt non-white racialized character references (11.29%) than Trump (4.29%), although both made roughly the same proportion of references to explicitly white characters (individuals and groups of people), with 12.21% and 12.56% respectively. Notably, Trump made a significant number of *implicitly* racialized references (racial dog whistles) to characters such as “criminals” (speaking of the racial uprisings of that earlier summer), “immigrants,” “the China virus” and “extreme jihadists”, as well as groups acting in opposition to those groups such as “immigration enforcement,” and “law enforcement.”<sup>69</sup>

**Figure 2a: Racial References (individuals and groups of people only)**

Although Trump did not then reference race overall as frequently as Biden (14.3% as compared to 23.5% of total character references), he did do so in covert terms significantly more, echoing the pattern found in Part One. Biden also referenced a greater number of overtly racialized characters (see Chart 8.5), referencing Black characters at almost three times as often as Trump, and referred to Hispanic Americans, Native Americans, and Asian Americans once each. In comparison, Trump referenced only Hispanic Americans once and Arabs (from outside the United States) twice.

When looking only at *individuals* and *groups of people* referenced (that is, discounting references to racial demographics like “African Americans”), Biden continued to reference non-white characters more frequently; 39% of individuals and groups of people named were non-white, as opposed to 15.46% of Trump’s references (see Chart 8.10, and also Figure 2a above). These findings mostly cohere with my predictions (H2b), except for the fact that both speakers reference overtly white characters roughly the same amount. For findings on how each frequently each speaker references diversity pertaining to nationality, gender, and ideology refer to Chart 8.6, Chart 8.7 and Chart 8.8 respectively. To see how the rationale for inclusion of each of the speaker’s characters, see Chart 8.9.

Overall, Trump’s speech does seem to contain stronger themes of historical continuity and racial homogeneity when compared to that of Biden’s. His narrative is temporally thicker, and more densely saturated with American history, which would seem to evoke the sense of historical continuity correlated with socially essentialist themes.<sup>70</sup> And with only 4.29% of references as overt allusions of non-whiteness, it is also evident that Trump’s narrative adheres to historically *dominant* American self-conception and traditional markers of national belonging – evoking white racial hegemony while largely ignoring racial diversity.<sup>71</sup> In comparison, Biden’s narrative was much more situated in the present, harkening back to American history relatively little. His more

frequent references to racial minorities (11.01% of total references) point to his efforts to structure a more modern, inclusive American narrative. As will be expanded on below, the historical and racial themes found in Trump's speech are quite effective at pairing national and white racial identity when compared to Biden's.

### *3. Discussion of Narratological Themes*

#### *Biden*

Biden's DNC address is founded in urgency. Throughout the speech, he consistently situates the 2020 election as a political crossroads which will have far-reaching consequences for the country's long-term stability and prosperity. Describing America at a historic "inflection point," simultaneously engaged in four moral-political crises (the coronavirus, the resulting economic fallout, climate change, and a racial reckoning) that are challenging America on an unprecedented scale, he nonetheless is optimistic in his message; "in this dark moment, I believe we are poised to make great progress again. That we can find the light once more."

This rhetorical motif of lightness and darkness is recurrent throughout Biden's entire speech; he speaks of the country as being in a "season of darkness," with Trump being its perpetrator, the one who "has cloaked America in darkness for far too long." For the most part, the motif of darkness is vague, and (besides specifically framing Trump as the cause of the darkness), he discusses it mostly in terms of non-quantifiable, moral descriptors like "anger," "fear," "division" and "unfairness." Which events and phenomena this darkness specifically constitutes, and what other actors may be perpetuating it, is left largely unanswered. Throughout the entirety of Biden's address, only Trump, Russia (for its foreign interference in U.S. elections), and the white supremacists who protested in Charlottesville are framed as malignant actors. Biden thus draws a delineation between Trump, the irredeemable creator of America's darkness, and the majority of his supporters who have only been "cloaked" in darkness (although he frames the white supremacists of Charlottesville as similarly irredeemable). The "anger," "fear," and "division" that have defined this season of darkness is only a temporary infection of the American public, who, at their core, are "a good and decent people," capable of returning to a "path of light." In this way, he frames the American public as a mostly passive entity, not *creating* political or moral outcomes but enduring them.

This motif also carries a strong religious undercurrent, one that is cohesive with some of the other language Biden uses in his speech, as well as a broader rhetorical tradition of evoking an "American civic religion" a device that likely makes his speech more compelling to some listeners by drawing on familiar national narrative elements.<sup>72</sup> Particularly in Biden's frequently recurring call to "win the heart and soul of America," America is personified as a sinful but redeemable entity (particularly in regard to its racial history, as will be discussed below), challenged by dark forces of evil but ultimately capable of being "reborn." Biden thus implicitly frames *himself* as the deliverer of redemption, capable of restoring "hope over fear, facts over fiction, fairness over privilege." He evokes the Christian belief in the power of "love and light" to ultimately prevail over "darkness and evil," optimistic that he and his campaign (an "ally of the light") will overcome the darkness of the Trump era. As he says, "May history be able to say that the end of this chapter of American darkness began here tonight as love and hope and light joined in the battle for the soul of the nation. And this is a battle that we, together, will win." Biden also raises the stakes of this moral battle by calling on America's responsibilities as a global leader; part of our "great purpose as a nation" is to "be a light to the world once again."

Though Biden predominantly uses ahistorical, moralistic terms to describe his campaign's vision, he also grounds his message through appeals to American history and iconographic language. Most directly, he links himself to Franklin Roosevelt, another Democrat who met a dark era of economic and public health crises with progressive reform. Using the historical era of the 1930s as an example, Biden suggests that contemporary problems must be met in the same fashion; not only with similarly bold, progressive policies but also through the reunification of the American people. He utilizes iconic, Constitutional language to sacralize the importance of unity, calling for "We the People to come together.... I believe there is only one way forward. As a united America. United in our pursuit of a more perfect Union." In this way, he does not explicitly acknowledge the divisive nature of progressive, New Deal-scale policies which he is advocating for, but instead treats them as part of a larger existential project that transcends party lines; "America isn't just a collection of clashing interests of Red States or Blue States....We're so much better than that." By deriding the "clashing interests" of each party, Biden then seems to bestow his campaign with a higher moral purpose that rises above partisan battles and seeks to return America to an era of *light*, the return of fundamental moral values; "Character is on the ballot. Compassion is on the ballot. Decency, science, democracy are on the ballot." Biden further signals the moral gravity of his campaign by quoting Civil Rights activists Ella Baker and John Lewis, covertly aligning his campaign with a larger historical battle for social justice in the United States.

However, Biden's message of moral redemption is complicated by a rhetorical confusion in his argument about *how* morally worthy the United States in fact is. In some parts of his speech, he suggests that America has historically been a site of moral good. The "darkness" of the Trump era is just a temporary "season," inhibiting America's potential to be a "generous and strong, selfless and humble" society; the next president's job will be to "*restore* the promise of America to everyone" [italics added]. Yet, in other moments, Biden frames the "promise of America" as something which has yet to be achieved, suggesting that America has never been a truly moral society. He speaks of the historical quest "to finally live up to and make real the words written in the sacred documents that founded this nation that all men and women are created equal." This discrepancy is particularly glaring when Biden discusses racism; using language suggestive of religious absolution, he asks "will we be the generation that finally wipes the stain of racism from our national character?" In this characterization, the sin of racism has been an enduring attribute of America's national character, inseparable from it since its founding. He similarly frames the lived American experience as one of exclusion and oppression in reference to his running mate Kamala Harris; "Her story is the American story. She knows about all the obstacles thrown in the way of so many in our country. Women, Black women, Black Americans, South Asian Americans, immigrants, the left-out and left-behind."

In this way, then, Biden contradictorily characterizes America both as a fundamentally "good and decent" nation, but also as a site of racism, economic and social obstacles, where full equality has never been realized; the lived American experience has not yet caught up with American values. Biden extols the "idea" of America, something that has yet to be historically achieved. And while he is optimistic about the potential of finally uniting them, of "mak[ing] history and hope rhyme," this characterization of America makes for a much more confusing conception of what the *nation is*, and as an extension of this, what constitutes membership into it—something which becomes problematic from a social identity theory perspective.

Biden's speech contains zero explicit discussion of what makes someone an American; this is significant in itself, but the vagueness of his conception of the nation becomes particularly clear when following the implicit logic of the rhetorical constructions he *does* employ. If the legitimacy

of being an American is definitively *not* predicated on historical inclusion (if the “American story” is one of the “left-out and left-behind”), Biden seems to be suggesting that the basis for being an American is respect for certain values, to be “generous and strong, selfless and humble.” And yet, this characterization is weak, not only because he himself discusses how these values have not yet been incorporated into American life (they are theoretical), but also because such so-called American values are not characterized as *distinctly* American; using a globalist framework, he pledges to “stand always for our values of human rights and dignity...work[ing] in common purpose” with U.S. allies. The confusion is furthered because the refusal to adhere to certain “American” values isn’t grounds for exclusion from the American in-group; Biden is extremely reticent to ostracize any subpopulation in the U.S. except for Trump and Neo-Nazis, likely because of his broader rhetorical mission to “unite” America again. For example, even in his discussion of inequity, he speaks of the wealthy (a common villain in liberal political speech) in fairly neutral terms; “I’m not looking to punish anyone. Far from it. But it’s long past time the wealthiest people and the biggest corporations in this country paid their fair share.” From a social identity theory perspective, then, Biden’s in-group construction is fairly weak, with nebulously determined boundaries and unclear norms of group membership.<sup>73</sup>

### *Trump*

Most notable in Trump’s RNC speech is his discussion of threat. Whereas Biden’s central motif of “darkness” is vague and non-personified, Trump’s speech is defined by his much more concrete descriptions of the dominant threats facing the American people -- all of which are tenuously linked or aligned in some way -- and his own role in “defend[ing] America against all threats and protect[ing] America against all dangers.” This is particularly notable in comparison to Biden, who specifies only Trump, Russia, white supremacy, and the pandemic as explicit threats to the nation.

The entities which Trump most often references in terms of threat are the pandemic (36), criminals (15), socialists (13), China (13) immigrants (11) and the political establishment (9). In almost every case, he presents the threat as existentially urgent, and like Biden, frames the 2020 election as determinative of the United States’ long-term stability and prosperity; “... everything we have achieved is now endangered. This is the most important election in the history of our country.” The threats Trump describes play out on a multitude of dimensions, but all ultimately pose a threat to the American way of life, often in converging ways. For example, China poses both an economic threat (“stealing our jobs [and] ripping our country blind”) and a public health one (for the “pandemic [they] allowed to spread around the globe”). Immigrants (often referred to as “criminal aliens”) also pose both economic and national security threats (by “stealing YOUR healthcare dollars” and violating U.S. borders) but are also heavily criminalized, labeled as “gang members” and “human traffickers” and conflated with the larger criminal population of “anarchists, agitators, rioters, looters, and flag-burners.” From his discussion of criminals more broadly, with repeated references to the June racial uprisings of that year, it is clear Trump’s conception of criminality is heavily racialized; he frames the “rioters and criminals” as unleashing a state of violence into American streets and neighborhoods, dehumanizing them as “monsters” and dismissing their aims as destructive and chaotic. The far left (often not clearly differentiated from Democrats in general, nor with the “political establishment”) has not only enabled and supported this chaos and threat, but also are aiding its destructive mission in the ideological and religious spheres. Whether by their critique of Christian institutions or perpetuation of cancel culture (“The far-left wants to coerce you into saying what you know to be FALSE, and scare you

out of saying what you know to be TRUE”), Trump argues that “in every case, the attacks on American institutions are being waged by the radical left.” Trump also makes frequent references to the specific dangers facing women and children (such as foreign “human traffickers who prey on women and children” and pro-choice liberals “who have no problem with stopping a baby’s beating heart in the ninth month of pregnancy”), raising the stakes of his threat construction by evoking populations commonly seen as vulnerable and in need of protection.

At the nexus of all these sources of threat is Biden, who is a central figure in Trump’s speech (referenced most frequently after “America” and Trump himself). Trump frames Biden not only as a “weak” and incompetent leader, but one aligned with all the forces which are fundamentally threatening American life. He is an ally of China (“Joe Biden’s agenda is Made in China”), immigrants (“He also supports deadly Sanctuary Cities that protect criminal aliens”), criminals (“During their convention, Joe Biden and his supporters remained completely silent about the rioters and criminals spreading mayhem...”), and the far left (“Biden is a Trojan horse for socialism”). The time Trump spends speaking about and construing Biden as a threat is particularly notable when compared to Biden’s speech, which references Trump about half as much (not controlling for length) and never mentions him by name. Trump also provides a much more detailed account of the threat that Biden represents (linking him to specific and pre-established forms of danger), as opposed to the vague “darkness” that Trump represents in Biden’s speech. Biden then poses the most direct threat to the American people, representing the potential unleashing of a multitude of malignant forces, which, until this point, Trump has deterred. By framing the 2020 election as the final stand against these looming dangers, Trump raises the saliency of out-group threat and provides a clear action (supporting Trump) to protect one’s in-group.<sup>74</sup>

In this way, as Trump rhetorically constructs this plethora of threats, he simultaneously works to present himself as a guardian of the “law-abiding” and “decent” American citizens, who value the United States as it currently exists and are content to abide by its law and social practices. Implicitly, he seems to suggest that these “real” Americans are Christian (“during the Democrat Convention, the words ‘Under God’ were removed from the Pledge of Allegiance...The fact is, this is where they are coming from”), and, by casting the heavily racialized criminal and immigrant subpopulations as oppositional to America, also implicitly suggests they are white. This racialization project remains *implicit* though (although tenuously so) because Trump does evoke minority populations (African Americans and Hispanic- Americans) more favorably, primarily as groups in need of his protection from a dangerous Democratic agenda (“Thousands more African-Americans are victims of violent crime in these communities Joe Biden and the left ignore...”). He also references two Black law enforcement officials (Miosotis Familia and David Dorn) who were killed by anti-police protestors, muddling the liberal argument that law enforcement and the Black community are fundamentally in conflict through anecdotal means. Here, Trump avoids overt racism by differentiating “bad” minorities (the “rioters” and “criminals”) and “good” minorities (those that unquestionably accept the current American order, especially law enforcement, and by extension, are aligned with Trump himself), and in doing so, again construes the left’s racial justice demands as illegitimate.

This rhetorical use of “good” African Americans is just one example of how Trump politicizes what it means to be a “true” American as one who is loyal to current American institutions. Simply put, to be a “good” American, in Trump’s rhetorical framework, is to love America. Trump frames patriotism as the key to building national unity (“We will rekindle... a new spirit of unity that can ONLY be realized through love for our country”), but also as an

enduring source of strength for Americans across history when faced with adversity; “What united generations past was an unshakable confidence in America's destiny, and an unbreakable faith in the American People...It is that conviction that inspired the formation of our union, our westward expansion, the abolition of slavery, the passage of civil rights, the space program, and the overthrow of fascism, tyranny and communism.” Under this construction of American identity, the out-group status of Democrats is again reinforced, because they do not love their nation; “How can the Democrat Party ask to lead our country when it spends so much time tearing down our country?... they do not see America as the most free, just, and exceptional nation on earth. Instead, they see a wicked nation that must be punished for its sins.” The premium Trump places on American patriotism also fits clearly into historically dominant practices of American exceptionalism and raises the moral status of Americans above all other foreign entities – as opposed to Biden, who unfavorably compares the United States to the countries which have surpassed it in their COVID-19 response (“It's not this bad...almost anywhere else in the world” [Biden, 2020]).<sup>75</sup>

Trump is also responding directly in the above quote to Biden's rhetorical use of religion in his DNC speech, and rhetorically reverses his religious metaphor. While Biden frames the nation as a historical being seeking salvation for its past sins (a redemption that he as a leader can provide), Trump frames America as itself an immortal, quasi-divine source of moral strength, providing guidance for various mythical American figures (Trump names Presidents Jefferson, Lincoln, and Franklin D. Roosevelt, among several others) as they met the challenges of history. The abstract “America” is then not in need of redemption from mortal actors but is itself a quasi-religious guiding light. Biden's rhetorical positioning of himself as a redemptive figure then becomes almost sacrilegious; “in this country, we don't look to career politicians for salvation... Joe Biden is not the savior of America's soul.” In Trump's rhetorical project, America is not in need of moral redemption, but of *moral protection* from a variety of evil forces. From a social identity theory perspective, this construction of America is useful in bolstering in-group solidarity; we are more likely to identify highly with our in-group if we perceive them as morally *good*.<sup>76</sup>

Throughout his entire speech, then, Trump constructs a heavily partisan framework of what it means to be American. He builds an extensive and multidimensional dichotomy of *who* is American (law-abiding, patriotic, implicitly Christian, implicitly white citizens) and who is not (implicitly non-white, immigrants, amoral “criminals and anarchists,” and non-patriotic liberals) – framing himself as an exemplar and protectorate of the former, and all his dissenters (and Biden in particular) as proponents of their demise. As opposed to Biden who frames national identity as above partisan division, Trump's notion of who is “American” and who is a threat to it is thus drawn directly along party lines, constructing the national boundary around “law-abiding,” “decent,” and “obedient” Republican voters and situating liberals as an external threat. Even his calls for national unity are predicated on the *assimilation* of Democrats and Independents into a more ideologically correct form of patriotism; “The Republican Party...goes forward united, determined, and ready to welcome millions of Democrats, Independents, and anyone who believes in the GREATNESS of America.” In other words, Trump rhetorically brings national identity into alignment with a set of other identities (racial, religious, and partisan), which have already become increasingly associated with one another in this age of extreme polarization through a “social sorting” process.<sup>77</sup> Groups which many of Trump's viewers may already feel at odds with (dissident minorities, immigrants, liberals in general) are thus presented as a threat across multiple dimensions of group identity (not only as a *partisan* threat but as a *national* one as well), which is likely to tighten in-group solidarity and heighten out-group hostility even further.<sup>78</sup>

This rhetorically powerful reduction of the national in-group and out-group is further intensified by Trump's more straightforward account of America's moral worth. While Biden speaks of America's *potential* to become morally worthy once its practices and institutions come into alignment with its proclaimed values (drawing nuanced distinctions between American values, American history and American contemporary values), Trump provides a cohesive, historically continuous narrative of America's moral worth as an eternal "torch that enlightens the world," connecting the historical figures who have exemplified its values to the "decent" contemporary American public—and himself. Like Biden, Trump also relates himself to past American leaders, but instead of referencing a specific political moment (Franklin Roosevelt's leadership in the Great Depression), Trump frames himself as the inheritor of a much more generalized and longer history of Americans (Teddy Roosevelt, Andrew Jackson, Thomas Jefferson, Abraham Lincoln, Ulysses Grant, Dwight Eisenhower, *and* Franklin Roosevelt) who persevered and protected the sanctity of the country in the face of adversity; "Like those brave Americans before us, we are meeting this challenge." The common link between them, in Trump's words, is again, an enduring love of country, the "towering American spirit [which] has prevailed over every challenge." In facing contemporary political threats, then, Trump presents a strong case for optimism in America's eventual victory over forces of evil, one which rests in a rich historical legacy (as opposed to Biden, whose optimistic vision for America's eventual redemption takes place in an uncharted future).

This evocation of the enduring role of American perseverance is intensified by Trump's outright appeals to essentialist visions of America as an ancestral descendancy – a form of nationalism linked to increased identity fusion and out-group hostility.<sup>79</sup> Trump repeatedly uses familial language to describe the national community, speaking of "our nation and its children," "our American ancestors," and describing the U.S. as "one national family." The history of "American Ancestors" that Trump most strongly evokes is one of settler-colonialism, referencing the age of "pioneers" more frequently than any other historical epoch (8 times). America is then, at its core, a "nation of pilgrims, pioneers, adventurers, explorers and trailblazers who refused to be tied down, held back, or reined in." In glorifying America's colonialist past, Trump evokes long-standing Manifest Destiny narratives, which have historically grounded the American exceptionalist self-conception.<sup>80</sup> This obviously has potent racial implications; the history that Trump extols is one of indigenous genocide, religious conversion and slavery, a history only white Americans could see themselves descended from or draw pride from.<sup>81</sup>

In considering how each speech may be received through a social identity theory lens, Trump's narrative construction of America would then seem to speak to compounded sources of social identity (national, racial, *and* partisan) when compared to Biden's. Trump's narrative style also seems particularly likely to mobilize supporters through its frequent evocations of out-group threats, conflating racial, national, *and* partisan outsiders into a single source of danger – and framing Trump's reelection as paramount to the in-group's protection. In other words, Trump frames support for his candidacy as a normative American in-group behavior; and, because his construction of the American in-group is so clearly delineated and cohesive with *other* salient forms of social identity (especially race and partisanship), he quite effectively utilizes national identity constructions for his political benefit.

## Conclusion

In this investigation, I set out to examine how Republican political elites rhetorically appeal to national identity in the current political moment, where both the meaning and the value of "being



American” has become increasingly polarized and contentious.<sup>82</sup> Because of longstanding associations between whiteness and American identity – an association that has become increasingly overt in this era of heightened globalism and racial reckoning – and the racial homogeneity of the Republican party, I predicted that Republican presidential candidates would be more likely to evoke national narratives which appeal to both national and white racial identities.<sup>83</sup> I employed both “thin” and “thick” narrative analysis techniques to assess the nature and strength of each party’s appeals to national identity and found that the Republican candidates were indeed more likely to evoke themes of ancestral and historical continuity and racial homogeneity in their political narratives than Democratic candidates. More specifically, Republicans were significantly more likely than Democrats to reference traditional national symbols more frequently than racial diversity; more likely to frame non-white populations as out-group threats; and (at least in the case study of 2020 presidential convention speeches), were more likely to use temporally rich and socially essentialist narratives of American history. Overall, it appears that the rhetoric of Republican politicians in this sample both reflects and could in fact work to exacerbate national identity’s contemporary associations with whiteness, as well as its increasingly partisan connotations.<sup>84</sup>

To say with certainty how much the alignment of national identity with Republican identity matters is impossible from just the findings of this project – which itself could be considerably expanded upon. To gain a more comprehensive sense of the partisan relationship to national identity on a “thin” level, the sample size could have been increased and the scale of inquiry could have been expanded beyond the 2016 and 2020, to account for discrepancies in the sample sizes (which accounted for two electoral cycles for Democrats, but only one for Republicans) -- as well as to better gauge exactly how much partisan discrepancies in national narratives have shifted between the elections. More controls also could have been added to account for the race and gender (factors that have been shown to alter public perception of politicians) of the speakers in question.<sup>85</sup> Perhaps most crucially, to understand exactly how these social identity appeals from political elites are received by the public, future investigations that directly examine voter responses are needed; such investigations would also help capture the effect of non-quantifiable elements (like the rhetorical gravitas of the speaker) that are central to narrative analysis and cannot be adequately captured by this analysis of written transcripts.<sup>86</sup> Findings from this investigation would also be well complemented by research on the relative saliency of national identity when compared to other social identity categories and by updated research on the extent to which the public now associates national identity with racial identities (i.e., updating studies such as those from Dach-Grushow and Hong [2006] and Devos and Banaji [2005] for the post-Trump era).

That being said -- to the extent that the alignment of national identity with white racial and – by extension – Republican identities found in this investigation of political elite speech points to a larger change, there are several important implications to consider. First, as findings in social identity theory would suggest, the growing alignment of multiple social identities on the right lends a powerful advantage to the Republican elite’s capacity to mobilize their base. As Mason and Wronski write, “the convergence of social identities along partisan lines makes in-party preference [ever] more powerful.”<sup>87</sup> That is, the layering of multiple social identities (especially in this era in which partisan, racial, and national identities are all extremely salient) leads to more extreme adherence to the norms of one’s in-group.<sup>88</sup> As such, it may be significantly easier for Republican elites to mobilize their base (to vote or to participate in other political projects) through social identity appeals than it is for Democrats – whose comparatively diverse base prevents them from capitalizing on multi-layered social identity appeals to the same degree.

This phenomenon may also have important implications for broader trends of polarization and democratic stability. Along with increasing adherence in-group norms and behaviors, the increasingly overt alignment of national identity with partisan and racial identities could likewise function to increase out-group hostility, taking current processes of polarization to new extremes. Republicans may come to perceive Democrats as an even more serious “out-group” threat, one external to the borders of even the broadest common in-group, provoking even greater political hostility than is currently being seen today. The legitimacy of left-wing politicians may be increasingly undermined by right-wing perceptions of Democrats as *foreign* -- perhaps generating greater skepticism about the integrity of democratic institutions, as was seen following the 2020 presidential election. Taken to its far extremes, if national identity is no longer perceived as a non-partisan basis for shared interests and solidarity, democratic function could become infeasible altogether.<sup>89</sup>

Such a possibility is predicated on the globalist-nationalist feedback loop discussed above. The more national identity is conflated with partisan and white racial identity, the more disenchanted the left is likely to feel with it; and the more the left avoids evoking national identity, the more prominent ethnocentric conceptions of the nation become (Lepore, 2019). This not only has serious implications for democratic function in a multicultural (and currently deeply polarized) state, but for the interpersonal and systemic treatment of racial and religious minorities, immigrants, and foreigners. If the distinction between civically based patriotism and white nationalism becomes gradually obscured, normative in-group behaviors associated with American national identity (formally non-partisan and civically determined, such as voting) may be replaced by more partisan, nativistic and overtly racially hostile behaviors.<sup>90</sup> In other words, racist intolerant behavior may gain renewed legitimacy if white nationalist conceptions of what it means to be an “American” gain dominance.

Democratic national narratives thus serve important purposes that should not be hastily disregarded. While evoking a sense of national pride and narrativizing a common history will always be a more complex project for Democrats -- and one that will always stand in some degree of tension with globalist liberal values -- ignoring the psychological predisposition toward in-group favoritism will not make it go away.<sup>91</sup> For better and worse, as long as the “nation” exists, at least some portion of the American electorate will feel drawn to it as a source of group belonging and purpose; but whether there exists an alternative to ethnocentric and outwardly hostile forms of national identity is not necessarily a given.<sup>92</sup> Democratic national narratives can then serve an important democratic function, holding the potential to decouple white and national identity and challenge the rising legitimacy of white nationalist rhetoric.

Democrats also may have a political interest in continuing to produce compelling, inclusive national narratives. Collectively oriented, redistributive political projects (especially the large-scale, progressive proposals which have been centered in the Biden era) become much more politically feasible where national solidarity exists, where people feel the obligations and altruism associated with in-group identification.<sup>93</sup> And although Democrats may have a more complex relationship with national identity (because of the greater identity cross-pressures intrinsic to their coalition), they are not necessarily inhibited from producing compelling national narratives (such as Barack Obama’s compelling narratives which center the quest for social justice and racial unity in the American story), given the ever-fluctuating nature of national identity-construction.<sup>94</sup> While Republicans have been advantaged in large part from adhering to a historically dominant national narrative that centers whiteness and ancestral continuity, such a narrative is not predestined to

remain dominant forever. National identity is malleable and arises historically and national narrative remains a particularly promising site for reshaping its meaning.<sup>95</sup>

If anything, now — in this moment of contention over American history and values, with rapid demographic change and racial upheaval — there may be an unprecedented opportunity to center a new national narrative, to recalibrate civically derived national norms and standards of belonging. As debates over Critical Race Theory in public schools have illustrated, dominant national-historical narratives, which adhere to Manifest Destiny rhetorical traditions and smooth over America's troubled racial history, are becoming existentially challenged as they begin to ring false for growing segments of the American public.<sup>96</sup> With the proper utilization of narrative, the American self-conception could be fundamentally transformed, deriving ulterior forms of pride and purpose by incorporating new perspectives and characters into the national story – finding coherency in our multiracial national identity by confronting racial trauma, rather than smoothing it over.<sup>97</sup> The key to ultimately overcoming white nationalism may not lie in renouncing the idea of the nation altogether, but rather in the process of reimagining it.

## **Appendices**

The appendices for this paper can be found in the individual page for this paper.

## Endnotes

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