

Spring 2018

The Specter of Caste

Kabir Raj Khanna
Bard College

Follow this and additional works at: https://digitalcommons.bard.edu/senproj_s2018



Part of the [Economic Theory Commons](#), and the [Macroeconomics Commons](#)



This work is licensed under a [Creative Commons Attribution-Noncommercial-No Derivative Works 4.0 License](#).

Recommended Citation

Khanna, Kabir Raj, "The Specter of Caste" (2018). *Senior Projects Spring 2018*. 200.
https://digitalcommons.bard.edu/senproj_s2018/200

This Open Access work is protected by copyright and/or related rights. It has been provided to you by Bard College's Stevenson Library with permission from the rights-holder(s). You are free to use this work in any way that is permitted by the copyright and related rights. For other uses you need to obtain permission from the rights-holder(s) directly, unless additional rights are indicated by a Creative Commons license in the record and/or on the work itself. For more information, please contact digitalcommons@bard.edu.

The Specter of Caste:

Assessing Theories of Economic Discrimination to Interrogate Caste-Based Inequality in Modern
India

Senior Project Submitted to
The Division of Social Studies
of Bard College

by
Kabir Raj Khanna
May 2018

Dedications & Acknowledgements:

It is difficult to believe that nearly four years have passed since I first stepped onto this campus. As my time here has progressed, Bard has revealed itself to me as a place of manifold possibilities and purposes, where taking academically rigorous courses, spending countless late nights having fun with my beloved friends, and exploring creative outlets were not mutually exclusive to one another by stretch of the imagination. Rather, this institution enables their students to follow any path they desire while maintaining a balance between their academic and social lives, which in my experiences have been intertwined in an incredibly rewarding way. During my time here, I've had the privilege of attending classes with some of the most brilliant professors in academia, who have utilized their unique brands of rigor, passion and sheer excellence to inspire and educate countless students. I'm lucky that I have found friends who are willing and able to discuss every aspect of our respective classes regardless of how our specific academic inclinations may differ. These friends, many of whom I've had for the entirety of my Bard experience and with whom I've experienced so much of what this college has to offer, are of paramount importance to me.

To Liam, Kevin, Natalya, Stephanie, Julia, Halina, Mary, Derek, Peter, Emma, Saskia, Ben – College would simply not have been the same without all of each and every one of you, and you all mean the absolute world to me. Words cannot express how much I treasure each one of you, the good times we've had, and the memories we've made. You all are among the most empathetic, intellectual, and driven individuals I have ever known, and I am beyond grateful that I was able to experience college with each of you at my side. I am confident that as we all move into the ensuing chapters of our lives, we will remain in each other's lives no matter the distance or time that separates us. To Jamie, Mark, Carlos & Keenan, who have remained constant fixtures in my life for just under eight years as of today, I cannot express how appreciative I am that our relationships have not only endured but have grown stronger despite the distance apparent between all of us. Your unwavering support, encouragement and friendship from the times we first met in high school continuing through my time in college have helped me foster a sense of self-confidence that has allowed me to succeed in many

areas of my life, my academic & creative pursuits in particular. Your continued presence in my life provides me with great comfort and happiness, and I consider myself blessed and proud to be able to hold you outstanding and inspiring individuals among my dearest friends.

This project is also dedicated to professor Olivier Giovannoni, whose clear instruction and unwavering passion the subject convinced me to become an economics major. I would like to thank professor Aniruddha Mitra, whose microeconomics class challenged me to become a better student and whose invaluable advice on my senior project saw it to fruition as well as professor Michael Martell, whose class on discrimination inspired a passion within me to interrogate the topic within the caste-context in India. Finally, I would like to thank professor Liudmila Malyshava, whose patience and guidance over the past year and a half enabled me to see my full potential as a student in the economics department.

To my brilliant and loving brother Surya, who has been there for me on countless occasions without a moment's notice to help me when I truly needed it over the past four years, I could not have made it through college without you. Among being the best brother a person could ask for, you are now and have always been my biggest inspiration. To my incredible, supportive, loving parents – thank you for seeing me through Bard, for being present every step of the process, comforting me when I needed it the most, and being proud of me when I succeeded. You two are the very reason I am who I am and have enabled me to succeed in ways I never thought imaginable.

Table of Contents:

Dedications & Acknowledgements	
Introduction	
<i>0.1 Motivation</i>	1
<i>0.2 A Brief History of the Caste System</i>	2
<i>0.3 This Project's Underlying Thesis & Goals</i>	5
Chapter 1: A Discussion on the Theories of Economic Discrimination	
<i>1.1 The Value of Economics in Discussing Discrimination</i>	8
<i>1.2 Pioneers of Economic Discrimination</i>	9
<i>1.3 Criticisms of Gary Becker's 'Taste-based' Approach</i>	13
<i>1.4 Outside the Neoclassical Paradigm</i>	19
Chapter 2: Discriminatory Economic Theory in the India Context	
<i>2.1 The Binary Nature of Caste Oppression</i>	26
<i>2.2 Taste-Based Discrimination's Questionable Relevance to the Caste Context</i>	27
<i>2.3 Enduring Social Stratification: Contextualizing the Caste System</i>	30
<i>2.4 Neoclassical Theoretic Conflicts & Discrepancies</i>	33
<i>2.5 The Necessity to Address Social Exclusion</i>	39
Chapter 3: Wage Differentials	
<i>3.1 Wage Discrimination: Definition & Parameters</i>	45
<i>3.2 Indicators of Wage Discrimination</i>	47
<i>3.3 Blinder-Oaxaca Decomposition Method & The Limits of Regression Analysis</i>	48
<i>3.4 Literature Analysis</i>	54
Chapter 4: Policy Suggestions & Concluding Remarks	
<i>4.1 The Reservation System in the Public Sector</i>	65
<i>4.2 The Problems with Private Sector Affirmative Action</i>	66
<i>4.3 Conclusion & The Path Moving Forward</i>	69
Works Cited	72

Introduction:

“Caste remains a key determinant of a person’s future. This is perfectly reflected in India’s labor market, which is more governed by laws of social origin than by statutory legislation. Moreover, violation of caste rules by Dalits seeking to break caste-related employment barriers is prone to severe punishment from dominant castes, including economic boycotts and even physical violence”

Taken from the India Exclusion Report 2014

0.1 Motivation

The discourse of caste discrimination in India is fraught with contentious debate and disagreements on the relevance of caste as an identity category in contemporary India. While the present state of abject poverty and poor quality of life standards among many scheduled and backwards castes is widely observed to be a result of past social stratification and exclusion, whether former stereotypes and prejudices continue to plague disenfranchised castes is disputed. There are those who believe that because India has passed laws that forbids discrimination based on caste, the generally destitute socioeconomic circumstances that backwards castes find can be described as an issue of skill gaps and human capital deficiencies. Many extoll the virtues of the competitive market in affording scheduled and backward castes an unprecedented level of mobility that, in combination with the reservation system, have led to increases in their overall literacy rates, likelihood to gain employment, and quality of life. Individuals such as Swaminathan S. Anklesaria Aiyar, from the Cato institute, who wrote in 2015,

“The arrival of the competitive market and its creative destruction broke old caste bonds and facilitated the shift of Dalits to new occupations. India’s socialist policies achieved only 3.5 percent annual growth for decades. Licenses and permits were required for all economic activity. Upper-caste networks monopolized these and kept Dalits out. But the 1991 economic reforms dismantled controls, accelerating growth and competition. Fierce competition soon ensure that the price of a supplier mattered more than his caste. This created opening for dalit entrepreneurs, who were able

to crack traditional upper-caste monopolies. The dalit revolution is still in its early stages, but is unstoppable.”¹

The inspiration for work undertaken in this senior project comes from a disagreement with the above statement, which implies that the caste system’s relevance in contemporary India is fading, and that the relative increases in backward caste economic position throughout much of the nation is indicative of the competitive market’s success in ‘leveling the playing field’ between castes. This paper finds problematic Aiyar’s insistence on caste’s supposedly increasing irrelevance as an identity category in the modern context, his belief that economic liberalization spurred unprecedented caste mobility, that the competitive market functioned to diminish upper-caste influence in a manner better than legislation. In the ensuing chapters, this paper seeks to undermine erroneous neoclassical frameworks developed to describe labor market discrimination that defend the competitive market’s ability to combat widespread identity-based inequality. These conceptualizations of caste’s relevance in India are deeply problematic as they frame caste-discrimination as a problem of the past, with current observed labor market inequalities thus implied to be the result of SC and OBC human capital variances. Consequently, the social order established by the caste system is largely ignored as a potential factor in producing these inequalities. With this framework in mind, this paper attempts to answer a three-part question, ‘how well do established neoclassical theories of economic discrimination apply to/explain the visible instances of caste-based labor market inequalities, do their results reflect reality, and is a capitalist competitive market truly the saving grace for backward castes as many have hypothesized?’

0.2 Brief History of the Caste System

To begin, it is important to understand that the caste system has existed, in various forms, throughout India for generations. Since the history of the caste system is not the focus of this paper, it will not be discussed at length. however, it is useful to note that caste has theological underpinnings

¹ Swaminathan S. Anklesaria Aiyar, *Capitalism’s Assault on the Caste System: How Economic Liberalization Spawned Low-Caste Dalit Millionaires*, 1.

in Hinduism, was utilized as a system of convenient social organization by the British colonizers during their occupation of India, and was widely practiced throughout the nation until its abolishment in the past century. It is generally understood that there are four castes, referred to as varnas, with thousands of sub-castes and communities within each of these varnas that are known as jatis. The caste system is hereditary, and there are many ways to identify an individual's caste identity – for example, an individual's last name, village of origin, clothing, or even occupation can be indicative, with varying degree of certainty, their caste. The four varnas are, in descending hierarchical order: Brahmin, Kshatriya, Vaisya, and Shudra. A simplified understanding of each of these varnas goes as follows: the Brahmin were the religious elite, Kshatriyas were warriors and nobility, Vaisya were “farmers, traders and artisans” and Shudras were “tenant farmers, and servants.”² The roles and responsibilities seen as sacrilegious or unclean were relegated to a caste outside of this hierarchy, referred to colloquially as “untouchables”. Untouchables, or Dalits to use a more general term, were subjected to perhaps the most severe societal marginalization among the caste groups. An individual's varna and jati determined their appropriate, religiously ordained societal role and, in many cases, their ability to engage in political activities. Since socioeconomic status is closely tied with one's societal role, caste often served as a determinant of quality of life. It follows that restrictions such as those related to access to land, public services, education, proper nutrition, health-care, credit, and other aspects that determine an individual's overall productivity are closely tied are historically tied to caste.³ Up until the latter half of the 20th century, the period when caste discrimination was made illegal and the Mandal commission introduced the reservation system, caste identity expressly determined these restrictions for most Indians. Discriminatory practices on the basis of caste background has been ostensibly outlawed throughout India for six decades. Article 15 of the Indian Constitution, ratified into law in the 1950s, in fact prohibits any sort of discrimination

² Kallie Szczepanski *History of India's Caste System*

³ Sukhadeo Thorat and Katherine S. Newman, *Caste and Economic Discrimination: Causes, Consequences and Remedies*, 4142

against those historically marginalized castes, and programs enforcing positive discrimination in hopes of equalizing the socioeconomic playing field have been instituted ever since the 1950s. Certainly, to a degree, these programs coupled with a generally widespread desire towards abolishing this archaic mode of inherited, hierarchical socioeconomic division have had their benefits on the untouchable caste. Within some urban environments, at the very least, it seems to hold true that most modern occupations are not strictly withheld to lower castes, and thus greater upward mobility exists in that regard. Untouchable castes, *Dalits*, and scheduled tribes have also experienced an increase in their access to education in part due to the affirmative action policies set in place and enforced with at least a modicum of regularity throughout the nation. Throughout this paper of discussion on caste, terms such as “backwards”, “lower”, “disadvantaged”, “scheduled” or “Dalit” will be used to describe the untouchable cast. It should be noted that these caste categorizations refer, for the most part unless specified differently, to castes that are historically branded as untouchable. It should be stated that this is done so both in this project as well as throughout much of the literature discussed partly for the sake of convenience as there are hundreds of caste sub-classifications that greatly complicate the task of extrapolating individual sub-caste experiences and treatment from one another. The markers of untouchability are vast, multi-faceted, and easily distinguishable, which allows researchers and professionals from various academic fields to classify castes in this homogenous manner without fear of undermining specific sub-caste struggles. Of course, this universalizing treatment of caste categories does not suggest there to be no inter-caste inequalities of note; rather, the implication is that even among these diverse sub-caste categories, overarching shared markers of untouchability persist such that the inter-group differences are of little import to their disproportionate treatment at the hands of the upper-castes. In other words, a prejudicial upper-caste Brahmin seeking to hire an employee would likely pay little consideration to the differences between two subsets of an untouchable caste as whatever distinctions may be apparent between these two sub-groups necessarily do not rid them of the shared negative religious and structural connotations that are ascribed upon the untouchable caste.

In regards to social stratification and prejudicial treatment, caste relations bare resemblance to the way in which black-white or male-female binaries are conceptualized. Within the United States, black individuals continue to suffer from the institutional racism that can trace much of its origin, at least in this nation's context, to their enslavement at the hands of white colonizers. Black individuals were routinely forced into both brutal physical labor or menial house work, with the occupational distribution of these positions itself determined by the dominant groups perceptions on skin-tone's relation to productivity. After slavery's abolishment, the racism and social order that determined black socioeconomic and political positionality did not cease to exist as some believe; rather, over time, they became ingrained in the societal ideology and political institutions present within the United States. It took centuries for integration to occur in the United States, both in regard to education and occupation, and even when legislation passed that expressly forbade discriminatory practices, racism simply adapted to the times. This is an incredibly simplified version of race relations within the United States, but for the purposes of this paper, racism's ability to persist through unenforced social codes derived from persistent historical social stratification is crucial to the discussion of caste. For centuries, Dalit life was restricted based on rigidly prescribed social codes that, once abolished, allotted them a greater degree of freedom, but in no way afforded them equal socioeconomic or political treatment with regards to higher castes. As racism became ingrained within the laws and institutions of the United States as well as outside of them, caste-discrimination can be understood as having followed a similar trajectory. These resemblances have allowed for economic theories of discrimination, written in large part to describe the black-white and female-male relations in the United States, to be utilized to better understand India's caste relations.

0.3 Thesis Statement

Therefore, to return to the central question proposed above, this paper's purpose is to critically analyze and assess previous economic inquiries into the subject of caste-based discrimination in the context of India after 1990. Through this analysis, it challenges many

neoclassical beliefs; the primary being that wage differentials and occupational segregation apparent between marginalized and privileged castes resolve themselves in the long-run. The first chapter is primarily concerned with outlining and deconstructing the various theories of economic discrimination, assessing their relevance and validity in the context in which they were developed. Chapter two proceeds with a discussion on those theories as they pertain to India's caste communities, assessing their ability to explain accurately both in and out-market inequalities. This chapter also provides evidence on the current state of Dalit socioeconomic well-being compared to that of the upper castes, showing that the material differences between the two groups persist despite competitive market forces. Chapter three focuses entirely on observed caste wage differentials produced by several economists over varying periods of time, regions, industries and markets with the goal of constructing a holistic view of the wage gap. This chapter also discusses the validity of regression analysis in analyzing discrimination. Finally, chapter four contains the project's conclusion as well as a brief policy suggestion predicated on the analysis done in the previous sections.

Ultimately, this paper argues that the standard neoclassical framework on economic discrimination, found in the logic of 'taste-based' or 'statistical' discrimination, is unproductive and counterintuitive in its treatment of discrimination, which is exemplified in the context of caste relations within India. It further argues that observed in-market inequalities between SC and OBCs throughout various regions of India are both a result of differences in endowments between the castes *as well as* the persistence of harmful socially exclusionary caste values outside the labor market that continue to affect in-market outcomes. Finally, in this vein, it concludes that, in order to combat labor market inequalities, affirmative action legislation, such as the reservation system, should be emboldened in the private sector as it has been shown to be beneficial in increasing Dalit socioeconomic and political agency; however, legislation must also adopt a focus on combatting the persistence of caste within the social order in order for it to be productive in the long-run.

Chapter One: A Discussion on the Theories of Economic Discrimination

1.1 The Value of Economics in Discussing Discrimination

This chapter will explore the various economic theories of discrimination, offering briefly a timeline and analysis of the topic along with its prominent figures and their respective contributions. Unpacking Gary Becker's theories on discrimination will serve as a starting point, from which the following works within the discipline will be framed as a development from or response to the theories Becker initially espoused. It will delve into the criticisms levied against Becker, the validity of his arguments and their place in the context of their intended framework within the United States so as to set up the proceeding chapters' analysis of caste-based discrimination throughout India. This chapter ultimately serves to explain how economics traditionally treats discrimination in the labor market with the goal of discerning its value in the discussion of prejudicial treatment against marginalized peoples.

Conceptualizing discrimination through the lens of economic analysis provides perspectives unlike those offered by other disciplines. Sociological studies of discrimination are less concerned with the cognitive processes and individual preferences as they are with explaining larger, structural phenomena that result from or can be explained through prejudice. By contrast, many of economics' theoretical underpinnings hinge on understandings of the individual, their decision-making processes, and their value systems. The disciplines' similarities rest in their shared desire to understand social stratification, but their methodologies and subsequent results can differ dramatically. Similarly, psychology, while certainly integral to understanding the individual, holds a greater concern for these cognitive processes than economics. Political inquiry is frequently located within discussions on marginalized groups themselves with a focus on legality and impact as opposed to causation.

Each of these disciplines respectively inform economic analyses, which are centered on the larger debate of the existence of discrimination as well as where and how it can be observed. Of course, each of these fields address these questions in their own manner; however, economics is able to put forth tangibility to the notion of discrimination by demarcating it, at times, through monetary terms and within the context of various markets. Adopting and reformulating ideas, theories and metrics from these different academic areas, economists attempt to place discrimination firmly within the realm of materiality. In other words, through critically analyzing and discussing employer hiring criteria, wage differentials, and the effects of policy on curtailing unequal treatment, economics can offer a concrete dimension to the debate on discrimination as well as the ways in which it manifests itself in the lives of marginalized individuals.

1.2 Pioneers of Economic Discrimination

Gary Becker published his seminal piece on discrimination aptly titled “The Economics of Discrimination” in 1957, and in it provided an immensely prolific and hotly debated theory on how and why certain employers discriminate against individuals based on their race. Becker’s discussion focuses on the relationship between white employers and black workers within the United States in the 1950s, a time characterized by heavy racial tensions between a clearly oppressed minority and an explicitly prejudicial majority. Becker viewed racism “as an aversion towards cross-racial interaction” and formulated economic models that postulated employers as discriminatory if their desire to hire black workers was influenced by their racial predilections.⁴ In defining racism as such, Becker was able to characterize employers on a gradient whose bounds were, respectively, totally averse to racial comingling and, at the other end, entirely indifferent to the subject.

This model views discriminatory employers as desiring a great degree of distance between themselves and the race they hold prejudicial, non-pecuniary values towards. Desiring distance,

⁴ Kerwin Kofi Charles & Jonathan Guryan, *Prejudice and Wages: An Empirical Assessment of Becker’s The Economics of Discrimination*, 774

employers will sacrifice income in order to hire workers whose marginal productive value (MPV) is lower than their marginal cost (MC) instead of one whose MPV and MC are the same on the condition that the latter candidate is black and the former white. Discriminatory employers suffer a disutility from hiring black workers that is unrelated to their productive capacity, and since, in this model, the labor market features equally qualified prospective employees regardless of race, the aforementioned employers will make the conscious decision to suffer net production losses so as to satiate their prejudicial tastes. Becker defines this discriminatory employer's cost of hiring a black worker as $w(1+d)$ where "w" is the nominal wage and "d" is the employer's subjective disutility, which varies based on the value of their taste for discrimination. It should be noted that "d", also known as the discrimination coefficient, does not refer to how racist the employer is; rather, it indicates "the intensity of the disutility experienced by the individual discriminator."⁵ Becker's model assumes perfect competition, constant returns to scale as far as production is concerned, and further specifies two conditions.⁶ The first condition defines employer utility as $V_i = \pi_i - d_i L_b$, where π_i represents profit, and $d_i L_b$ describes the disutility felt by the employer as a result of their black portion of their labor force.⁷ The second condition outlines the utility maximizing choices as:

$$f'(L_b + L_a) - w_a \leq 0, \text{ with equality if } L_a > 0$$

$$f'(L_b + L_a) - w_b - d_i \leq 0, \text{ with equality if } L_b > 0^8$$

This second condition frames employer utility as a function of the combined black and white labor force minus the wage costs for the respective races as well as the discrimination coefficient in the case of black workers. Given that the workers are treated as perfect substitutes for one another, this condition utilizes the discrimination coefficient d_i to show the difference between those employers who hold prejudice against blacks and those who do not. For instance, an employer with

⁵ Deborah M. Figart & Ellen Mutari, *Rereading Becker: Contextualizing the Development of Discrimination Theory*, 476

⁶ Ibid

⁷ Kofi & Guryan, 777

⁸ Taken from Kofi & Guryan 778

a d_i will be forced to employ fewer black employees and more white employees than their less discriminatory competitor. Under the assumption of perfect competition, this act of discrimination would, in the short run, lead to a higher demand and subsequent wage for white workers than for their black counterparts. Consequentially, wage prices for black workers could be defined as $w_b = w_a - d_i$ as their demand would be lower and thus they would be willing to accept employment at a lower wage.⁹ This condition highlights the crux of Becker's argument in two manners. In one regard, it shows that discriminatory employers are to be treated as if they are not profit oriented in the traditional sense. While still maximizing their over-all utility, their profit suffers because they pay higher wages for white workers despite having the option to hire black workers at a lower cost. Next, this condition indicates that employers who suffer great disutility from employing black workers will, in the long-run, be pushed out of the market by employers with a lower discrimination coefficient. This prediction rests on the notion that, in this perfectly competitive market, employers who suffer less disutility from hiring black workers can minimize their cost of labor, and thus increase their profits. The latter group of employers would be able to pay less for effectively the same amount of labor, which would be to the short run detriment of black workers; however, in the long-run, Becker argues that the wage gap would decrease due to the lack of prejudiced employers.

In the short-run, Becker's theory predicts that the relative wages between black and white workers is contingent upon the marginal discriminator, supply of labor, and distribution of racial preferences. Figure 2 from Kofi & Guryan illustrates the relationship between each of these factors.

⁹ *ibid*

Fig. 2

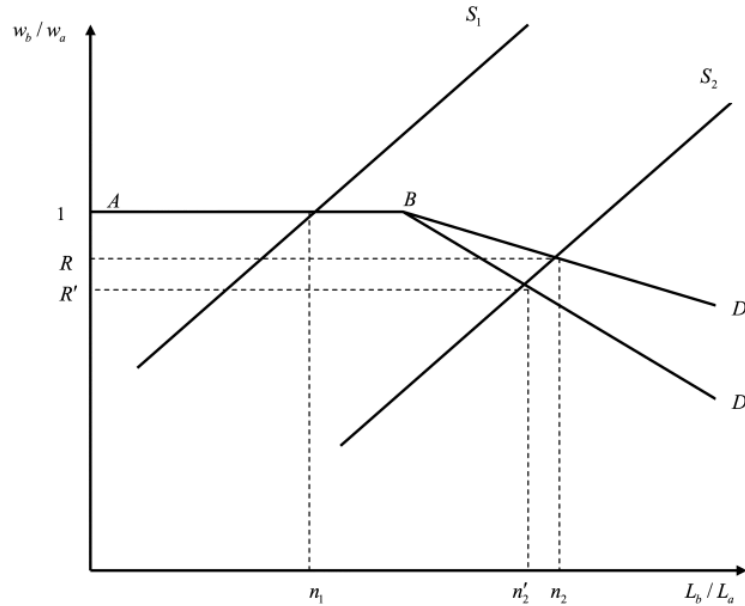


Figure 2 represents the ratio of black to white wages on the y-axis, and the ratio of black to white labor supply on the x-axis. At S_1 , the distribution of racial preferences is relative to the small black-white labor ratio, thus creating an equilibrium wherein there is no racial wage gap (i.e. $w_b/w_a = 1$).¹⁰ In other words, there are fewer black workers compared to white workers and the distribution of racial preferences is such that there are enough non-prejudiced employers hiring black workers to offset the need for prejudiced employers to hire them. The labor supply is distributed among the prejudiced and non-prejudiced employers in a manner ideal to black workers, who are being paid the same amount as their white counterparts. However, when the distribution of racial preferences does not change to accommodate an increase in the ratio of L_b to L_a , then the supply curve shifts to S_2 . This new labor ratio represents an increase in the supply of black workers relative to white workers in the market, forcing some of the prejudiced employers to hire the former, which in turn causes them to face greater disutility. As a result, the demand for black workers relative to white workers decreases, pushing the equilibrium wage-ratio to R' .¹¹ This model assumes that black workers are sorted to the least-prejudiced employers before being compelled towards those with higher propensity to discriminate. The key agent in determining the cut-off point between the two groups

¹⁰ Ibid 779. Figure 2 is taken from Kofi & Guryan, page 778

¹¹ Ibid

of employers is the marginal discriminator rather than the average level of prejudice among all employers. In essence, black workers will be hired such that the wage-ratio remains constant until the point where the marginal discriminator's prejudice is located at the percentile equal to the percent of the black workforce in the population.

In summary, Becker's argues that racial discrimination in the labor market hinges on there existing an inverse relationship between the ratio of black to white workers and black wages. He further indicates that that the marginal discriminator matters more in determining the wage gap than the average level of prejudice. Moreover, Becker contends that market pressures sort black workers away from prejudicial employers. Finally, the model holds that the concentration of prejudicial attitudes matter more to higher wage gaps in the left tail of the prejudice distribution, which is less discriminatory, than in the right.¹² The primary take-away from Becker's assertions is that discrimination poses a cost to employers, indicating that wage-gaps existing in the short-run will be eliminated in the long-run.

1.3 Criticisms of Gary Becker's 'taste-based' approach to discrimination

Despite its keen insights into the nature of employer discrimination, Becker's theory has become the subject of varied criticism since its publication. Many contend that Becker is too quick to construct discrimination as a desire to maintain distance between the privileged individuals and their marginalized counterparts. There also exists the issue of categorizing and measuring such an abstract disinclination in corporations, which are typically seen as impersonal as those who make hiring decisions are not likely to be working alongside their candidates in most cases.¹³ From a historical perspective within the United States, according to the historian William Sundstrom distance was not necessarily the qualifying factor in explaining labor market discrimination. Prejudiced Southern whites, despite opposing integration, for the most part maintained that blacks

¹² Ibid 781

¹³ Figart & Mutari 479

and whites could work together in close proximity as long as the former group “didn’t cross the line.”¹⁴ Of course, there are clear problems with this criticism, the first of which is that distance is inherently implied by virtue of there existing a metaphorical line that black individuals could not cross. More concretely, this argument also diminishes the role that deeply entrenched values espoused by many Southern white proponents of segregation, who, again by nature of their desire to keep the workforce divided by race, desired at the very least a certain degree of distance between themselves and their black counterparts.

However, as Figart & Mutari point out, Sundstrom’s argument lends credence to the notion that Becker has difficulty reconciling his theory with the existence of job roles that were traditionally associated with black individuals.¹⁵ In this regard, Becker’s theory falls short of explaining the overall nature of employer discrimination as the occupational structures of labor markets, even those outside of the United States, can be historically determined. Barbara Bergmann (1971) finds that there does exist a unique under and overrepresentation of black individuals in particular industries.¹⁶ In occupations that require vocational training (electrician, foremen, mechanics etc.), there is a distinct underrepresentation of black individuals, whereas those that do not have such requirements (Shipping and Receiving clerks, plasterers, truck drivers etc.) they are overrepresented. A compelling case can be made that this is the result of pre-market discrimination, discussed in the following sections; however, the fact that occupational segregation exists could also be related to historical standards. Positions that are more physically demanding and labor intensive were predominately filled by black men, which is a partial manifestation of the history of slavery and indentured servitude throughout the United States. Granted, Bergmann’s work concerned the state of affairs as detailed by the 1960s U.S Census. However, 1960s America was still characterized by heavy racial tensions, when such blatant occupational discrimination would be expected. Certain industries could present

¹⁴ Kenneth J. Arrow, *What Has Economics to Say about Racial Discrimination?* (2008), 95

¹⁵ Ibid

¹⁶ Barbara R. Bergmann, *The Effect on White Incomes of Discrimination in Employment* (1971), 297

unique barriers to entry for marginalized groups depending on their sociopolitical positionality within their nation. The opposite also applies, as certain industries could be preferential towards a marginalized group if they historically occupied that position or were culturally assumed to be innately built for the role. The nursing profession within the United States is a salient instance of this phenomena, as the industry is fairly dominated by women at a 9.5 to 1 ratio.¹⁷ Attempts to explain this divide typically refer to the culturally imposed maternalistic nature of the nursing profession, implying that women are more suited for the position than men who are seen to lack these qualities. Without going into detail regarding the exceptionally flawed detailed in this logic, the argument does serve to bolster Figart & Mutari's claim that occupational discrimination could have its roots in something beyond a desire for distance between two parties.

Another criticism of Becker lies in his characterization of employers, and subsequently corporations, as non-profit maximizing. Specifically, the problem in reimagining corporations in such a regard places a variable beyond profit into a corporation's operational scheme. Addressing this dilemma, Kenneth J. Arrow asks, "If employers have one variable other than their profit maximads, why not others?"¹⁸ While not violating rationale choice theory, Arrow contends that Becker confounds it by adding more variables to consider in understanding corporations' motivations.¹⁹ On its surface, Arrow's argument is valid in that neoclassical economics treats firms as profit-maximizing. However, to assume that employers and their respective corporations act with perfect cohesion of values in their hiring criteria is dubious at best. Moreover, this assumption would preclude the possibility of prejudiced hiring managers exercising their discriminatory preferences if doing so would go against the preferences of those who outrank them in their firm. Even if discrimination was uniformly distributed among the executives at a corporation and those who make the individual hiring decisions, their felt disutility would hardly matter to the stockholders since they

¹⁷ Emily Rappleye, *Becker's Hospital Review* (2015)

¹⁸ Arrow (1998), 95

¹⁹ Ibid

are presumably less concerned with no-profit maximizing related variables. This observation informs Arrow's, and many others', greater issue with Becker's theory. Under the assumption of perfect competition as well as a variable distribution of prejudice among employers, non-discriminatory firms would be expected to push out their discriminatory competitors as the latter firm operates with higher costs. Yet, as Becker himself claimed 11 years after his initial publication, this outcome has not been realized; he states, "Unfortunately, this has not yet taken place; discrimination exists, and at times even flourishes, in competitive economies."²⁰

In addition to its complications in the long-run, Becker's initial assumptions of perfectly substitutable labor between black and white workers, along with his assumption of perfect information, have garnered a great degree of criticism. Under Becker's theory, black and white workers have entirely equal productive capacities, which thus renders any wage differential between the two groups unproductive. By doing so, Becker reduces any discussion of the supply side to a point beyond the scope of his discussion of discrimination. This, in essence, ignores the potential for skill differences between black and white workers, which in turn could be explained by pre-market discrimination in access to and quality of education between the two groups. While this type of discrimination occurring outside of the labor market is difficult to measure, ignoring it necessarily creates a warped understanding of employer discrimination in the real world, where such differences are apparent. Opportunities for higher learning within the United States and in many countries abroad have been notoriously restricted to certain groups depending on their historical treatment. Moreover, as a result of segregation within the United States, the quality of education was and, in some cases remains to be, dependent on an individual's access to a well-funded schooling district. Historically, in the United States, many black and Latino individuals are relegated to lower income communities, which often results in underfunded schools. Furthermore, the assumption of perfect information assumes that employers are fully aware of this unrealistic equality in productive capacity among the

²⁰ Glen G. Cain, *The Economic Analysis of Labor Market Discrimination* (1986), 715

varying races, and, because of their racial predilections, are compelled to discriminate despite the supposed long-run costs of doing so. Perhaps some employers do not discriminate on the basis of wantonly exacting their prejudice against a particular race, but are instead compelled to do so because they legitimately believe there to be a productive difference between the two groups despite there being none. This opens up the discussion to the topic of statistical discrimination, wherein ignorance could perhaps be more directly to blame for wage differentials and occupational segregation rather than disutility. Realistically, however, the differences in productive capacity could also be a result of social stratification that have made access to resources such as education excessively difficult for marginalized communities in the United States. Social stratification as well as exclusion speak to the nature of both the skill disparities as well as the disproportionate rates of return on human capital that have been observed between marginalized communities and their socio-politically dominant counterparts in many nations.

In any case, Becker's unrealistic assumptions and ideal long-run predictions indicate that he was less concerned with the question of why discrimination exists and was more focused on how it is both manifested within and resolved by a capitalist system. As Mats Lundahl & Eskil Wadensjö (2015) state on the topic of Becker's theory, "increased competition works against employer discrimination. If the aim is to decrease discrimination, attempts should be made to increase competition in different markets."²¹ Becker does not distinguish between employer prejudice and discrimination, which obfuscates the reality that employers do not necessarily act on their racial attitudes in their hiring or wage-setting decisions. In Becker's mind, a discriminatory employer is only characterized as such if they experience a disutility that factors into their utility maximizing function. Yet, this disqualifies as discriminatory those employers who either do not feel a disutility from working in close proximity with or are begrudgingly compelled to hire black individuals. In ignoring these potential areas of discrimination, the non-monetary modes of prejudice against black

²¹ Mats Lundahl & Eskil Wadensjö, *Unequal Treatment (Routledge Revivals): A Study in the Neoclassical Theory of Discrimination* (2015), 24

workers are ignored within the workplace. Becker's uniform view of racial preferences and the manner through which they are enforced are severely limiting as Ikeda (2017) points out, stating, “. . . for many people in real life it does matter, a lot, if your employer is racist but does not choose to discriminate in terms of wages or in a way that an outside observer could easily detect . . . because economically impactful things, such as whether her relationships with suppliers, employees, and customers will flourish over time, may depend on it.”²² The larger critique Ikeda (2017) refers to against Becker's theory is its reliance on this neoclassical understanding of choice, which, from his perspective, constrains the discussion of employer discrimination such that both causality and impact are not fully addressed. Neoclassical choice is predicated on utility-maximization, which employers adhere to fully within the standard models. An employer's indifference curve is tangent to their budget constraint such that it meets their ideal combination of black and white workers, which, according to both Becker and Arrow, varies based on the employer's discrimination coefficient. Moreover, in a competitive market with varying indifference curves and ideal combinations, the ratio of black to white workers varies from employer to employer. Ikeda (2017) takes issue with the notion that employers “choose” to discriminate, articulating that preferences and the compulsion to act on them are treated as equal in neoclassical theory.²³ “Choosing” to discriminate implies that there is some alternative path of action an employer can take other than the utility-maximizing option, which, under neoclassical theory, the employer will never elect to choose. Ikeda suggests that a definition of choice that is more grounded in the “real world” could remedy some of the problems that have arisen in Becker's work.

While Becker's theory of employer discrimination is not without flaws, it has provided many economists with an immensely valuable starting point on where and how one observes discrimination in the labor market. Cross-racial aversion may not explain the entirety of occupational segregation and wage differentials observed in both the United States and abroad, but many argue that it remains

²² Sanford Ikeda, *The Nature and Limits of Gary Becker's Theory of Racial Discrimination* (2017), 17

²³ *Ibid*, 21

a factor nonetheless. Additionally, Kofi & Guryan (2008) put many of Becker's assumptions and predictions to the test, and found that many of them hold up. Namely, the idea that the racial wage gap can be attributed more so to the marginal discriminator than the average level of prejudice, that the ratio of the black to white labor force is negatively correlated to wages, and that concentration of discriminatory preferences matter far more in the right end of the distribution than the left.²⁴ Regardless, many of the criticisms of Becker's underlying methodology remain valid, and have spurred new theories of understanding discrimination as a result.

1.4 Outside the Neoclassical Paradigm

Beyond his own work, Becker has spurred discussions and new theories in the economics world on the proper way to approach labor market discrimination. While the topic has been discussed and tested frequently throughout the years, most economists who attempt to formulate their own approach refer to Becker, with their sentiments regarding his work ranging from critical to supportive. Naturally, as the literature base has expanded in both authorship and volume, the diversity of approaches has grown in turn. Economists have utilized correspondence studies, extensive regression analyses, surveys and much more to make cases for or against labor market discrimination with varying degrees of success. This section will begin with a critical discussion of neoclassical economics' approach to discrimination, weighing its strengths against its weaknesses while also observing alternative methods. It will argue that analyzing wage-differentials through regression analysis and occupational discrimination through correspondence studies are beneficial means of assessing the magnitude of labor market discrimination. While these methods cannot produce outcomes that definitively prove the existence of employer discrimination in the mold that Becker and others have put forth, their results can offer significant insight into the phenomena's severity.

²⁴ Kofi & Guryan (2008), 805

Before discussing the validity of economics in understanding discrimination, it is crucial to delve into the discipline's shortcomings. Neoclassical economics tends to characterize human behavior, on both the group and individual level, as utility maximizing. Consumption and production decisions are rooted in marginal benefit versus marginal cost, the former defined by an essentialized understanding of human psychology and the latter determined by markets that are abstracted beyond an individual's control. Preferences and their subsequent variability among individuals are treated with a myopic uniformity, which facilitates the production of a neoclassical understanding of markets and their agents as rational as they place utility above all else. This framework leaves little room for moral and sociopolitical differences or for desires that go beyond this conception of rationality offered by the neoclassical paradigm. These assumptions are not necessarily formed by a malice against the differences apparent among humans; rather, they are constructed out of a desire for convenience. To create a scale that demarcates individual preferences such that it accounts for the manifold differences among humanity would be an exercise in futility. Thus the tradeoff between granular accuracy and total authenticity is made. As Cain (1986) states, "The economists treatment of tastes is, however, circumscribed. Tastes are fundamentally taken as given, and explaining their sources or how they may be changed tends to be left to the other social sciences. Instead, the economist's main objective is to determine certain behavioral outcomes that are the consequences of these tastes – specifically, the disparities in employment, wages, and so on."²⁵ This brand of exceptionalism proves problematic for economists tasked with rationalizing discrimination within the labor market. For those like Becker & Arrow, who ascribe to the neoclassical paradigm, discrimination can be explained through subtle deviations in the utility-maximizing function that accommodate these prejudicial preferences insofar as they fit within their understanding of market forces. Wage differentials would persist in the short-run, but given a competitive market, perfect information, and a seemingly arcane distribution of prejudice among employers, they would be

²⁵ Cain (1968), 698

eradicated in the long-run. The supply-side is largely ignored as pre-market differences among individuals is not seen as relevant to their discussion because this definition of discrimination would not necessarily persist if marginalized peoples were disproportionately unqualified.

In ignoring the potential discrimination that occurs outside the labor market, neoclassical economists analyzing wage differentials can misrepresent the influence that statistical discrimination, social stratification or occupational segregation has on producing circumstances surrounding a labor market affected by inequality. Two individuals, one belonging to a marginalized group and the other a dominant one, that differ in their productive capacities, and are subsequently compensated unequally, are not necessarily treated differently because of some inherent inferiority between them. Yet, if one were to apply the neoclassical understanding of discrimination bereft of sociopolitical awareness, this difference would be anomalous to the model and could only logically be explained by a difference in productivity. Does this mean that employers are justified in unequally compensating their marginalized employees? Ostensibly, their decision would be valid and not constitute discrimination according to the neoclassical paradigm. This correlation between productive capacity and justified compensation becomes problematic when it is deconstructed. Perhaps this employer chose to set the wage lower for their marginalized employee because of perceived difference in productive capacities rather than a concrete one. Edmund S. Phelps (1972) explores this link between employers, without a ‘taste’ for discrimination, who utilize race to extrapolate a candidate’s productive capacity.²⁶ Phelps’ theory of statistical discrimination provides a constructive lens through which employer behavior can be understood, as underlying assumptions regarding productivity based on identity have deep roots in the United States as well as in India. Yet, this focus on the more “liberal” employers, as Phelps constructs them, is intellectually problematic as it reifies the neoclassical tenant that employers are somewhat justified in their discriminatory hiring or wage-setting decisions rooted in profit-maximization because they lack an explicitly

²⁶ Edmund S. Phelps, *The Statistical Theory of Racism and Sexism* (1971)

prejudicial attitude. If that were the case, is our employer still discriminatory simply because their prejudice is more subversive and ingrained in their subconscious than the employer who experiences a great disutility from hiring marginalized workers? For the marginalized individual, the question is utterly irrelevant as its answer does nothing to change their material outcome of employment. They will still be paid less despite having the same credentials, which assumes they are fortunate enough to obtain the position in the first place. Many economists treat this employer as non-discriminatory simply because their prejudice is not explicitly stated, but to claim that their ignorance automatically exempts them from being characterized as discriminatory completely circumvents the reality of subconscious prejudice. Since this discussion does not concern the psychology of institutional as well as unconscious racism, sexism and more generally prejudice, it will not be explicitly articulated here. However, for a comprehensive briefing on these topics, see Baratz & Baratz (1980), Quillian (2008), and Moule (2009). Understanding prejudice as potentially subconscious, the employer would still be discriminatory even if they do not face a ‘great disutility’ from working with a marginalized individual. Thus, attributing wage-differentials to a felt disutility alone would not necessarily capture these phenomena; however, adding an understanding of statistical discrimination as an explanatory variable affords greater depth to the discussion. Wage-differentials alone also have the potential to overlook occupational segregation; perhaps the wage-gap between a minority and dominant group is non-existent or even extremely pronounced, yet, in either case, it is found that minority group is incredibly underrepresented in the industry at large. This crowding hypothesis, formalized by Barbara Bergmann (1974) argues that there are many industries segmented by gender and race, which adds another dimension to wage-differentials that suggests economists exercise caution before making sweeping claims regarding the wage-gap.²⁷

Although they do not reveal with complete accuracy the extent of labor market discrimination, wage-differentials should not be ignored as they point to material differences

²⁷ Bergmann (1974), 106

between marginalized and dominant groups that, in conjunction with other modes of analysis, provide compelling grounds for further investigation of the subject. As has been extensively fleshed out in the previous sections, wage-differentials alone do not imply discrimination. Rather, unequal pay for the same or similar positions imply that there exists some sort of discrepancy between two groups of individuals, which could be explained by perceived production differences, employer taste for discrimination, concrete production differences, or, as Loury (1999) argues, social exclusion. There are other methods beyond these that tackle discrimination, but these are the ones most relevant to this paper's line of inquiry. Chapter three addresses the specifics of how economists have been able to prescribe significance to their assessment of wage-differentials. To briefly state its relevance here, if wage-differentials appear in regressions that are extensively controlled to account for production differences, in industries that have a relatively qualified labor force that does not deviate by identity, then it is likely that some level of discrimination is apparent in the wage structure. Since the supply-side is still, for the most part, ignored here, correspondence studies that focus on the distribution of jobs among marginalized groups could add value to the outcomes attained by wage-differentials. For instance, perhaps it is observed that there exists a wage differential between two marginalized groups, but whether the marginalized group held the same credentials as the dominant group is uncertain. A study that follows equally qualified individuals of both the marginalized and dominant group differing only in their identity so as to assess their difficulty in acquiring the same position could provide further information on the topic. If the marginalized group, despite having the exact same credentials, is called back less frequently or offered lower wages than their dominant counterparts, the likelihood of discrimination's presence in the labor market becomes more compelling. This hypothetical, as specific as it may seem, speaks to the notion that assessing other sources of information on the sociopolitical climate that a marginalized group exists within is important as it provides necessary context. Even if either study finds that difference between the two groups is directly related to production, this does not necessarily prove that discrimination against the marginalized group is not actively occurring. While it may speak to the discrimination outside

the labor market, it is still worthwhile to know so that proper praxis can be developed to deal with the issue. Loury (1999), an economist from Boston University, contends,

There is, of course, a long history of justified concern that an approach to the problem of group inequality that focuses less on employer discrimination and more on skills differences could foster dangerous stereotypes, and undermine arguments for policies to narrow the racial wage gap. In the decade after the enactment of US anti-discrimination laws, researchers like Wilson (1978) who began to find evidence of a decline in labor market discrimination were sometimes criticized for giving aid and comfort to political conservatives. However, this reaction accepts the implicit normative assumption that racial inequality based on skill disparities is not as important a moral problem, warranting as vigorous a corrective intervention, as inequality based on wage discrimination in the labor market. That assumption is not compelling. It should be challenged.²⁸

While Loury takes a sharply critical standpoint on the role of economics in discriminatory studies, his notion that wage-differentials have their limits as well as their importance stands to reason. The racial wage gap itself should not be the only factor considered by policy makers in their deliberations because, as chapter three will address, it is a combination of discrimination, social stratification, skill differences and growing anti-caste sentiment that explain wage-differentials at least within the context of India. With Loury's criticism in mind, we proceed to a discussion of how to interpret caste-based discrimination as it pertains to India through the theory discussed above, which is focused on the black-white relationship within the United States.

²⁸ Glenn C. Loury, *Social Exclusion and Ethnic Groups: The Challenge to Economics* (1999)

Chapter Two: Discriminatory Economic Theory in the Caste Context

2.1 The Binary Nature of Caste Oppression

Dr. Babasaheb Ambedkar, one of India's earliest and foremost proponents for caste equality, once stated, "We must stand on our own feet and fight as best we can for our rights. So carry on your agitation and organize your forces. Power and prestige will come to you through struggle." Through what can only be categorized as an indefatigable resolve, Ambedkar fought to mobilize India's backwards castes to rise against an antiquated status quo that had, for generations, relegated them to the bottom rung of a hierarchy characterized by sociopolitical and economic disenfranchisement. As is the case in many nations whose population is partially comprised by a historically marginalized group, India's backward and scheduled caste populations continue to struggle in their goal to achieve equality. Only recently within the past century have these low caste communities managed to gain political clout sufficient enough to pressure the Indian government into passing legislation in deference to their struggle.

The discourse surrounding caste frames this resistance in an all-too familiar binary structure: black or white, man or woman, Dalit or Brahmin. Indeed, Ambedkar's inspiring sentiments feature rhetoric that is deeply reminiscent of Dr. Martin Luther King's speeches or Simone de Beauvoir's writings. Each of these figures sought to achieve equality for their respectively marginalized groups, and their similarities reveal a commonality in the nature of identity-based discrimination that allows for comparison. For black individuals in the United States and in many majority white nations, multifaceted identities have ramifications on their sociopolitical and material existence as a result of rampant discrimination, both past and present. Similarly, women, throughout the world and frankly for millennia, have suffered due to their identity and epochs of unrelenting misogyny. Further confounding these groups' marginalization are their myriad intersections and variances of identity, each of which warrants their own discourse and analysis. Caste relations can be thought of in a similar fashion to these other identity arrangements. Where these group struggles differ in historical

context, severity, and superficial identity traits, they find common ground in the binary nature of their oppression and its manifestations into their material lives.

Commonalties in the nature of discrimination across identity categories has allowed for economists to take theory applicable to a particular group and adapt it to explore the nature and reality of a differing group's struggle. This chapter will delve into the context of discriminatory economic theory, written in large part by economists concerned with either the relationship of black to white individuals or that of women and men, as it pertains to and has been applied to caste relations in India. It will begin with a critical analysis of 'taste-based' discrimination as it relates to forward and backward castes, discussing the extent to which it can reasonably be attributed to employer discrimination in India. Statistical discrimination will be explored to the same ends as the discussion on taste-based discrimination. Finally, it will conclude with an analysis of social exclusion as a prominent contributory factor in Dalit marginalization and unequal treatment both within and outside of the labor market. Ultimately, this chapter will contend that the current state of employer labor-market discrimination against backwards castes is best analyzed by weighing the results produced by each of these frameworks in conjunction with one another. This chapter will also take a critical stance against neoclassical economic theory in its understanding of discrimination as a labor market phenomenon, and will contend that in-market discrimination can also be attributed to the persistence of a social order that is propagated, perhaps even overtly exacerbated, by the competitive market. Thus, this chapter's end-goal is to show how applying the various theories regarding discriminatory economics to the relationship between backwards and forward castes can elucidate their disenfranchisement.

2.2 'Taste-based' Discrimination's Questionable Relevance to the Caste Context

The theory of 'taste-based' discrimination as Becker initially framed it neither accurately reflects the nature of caste-based employer discrimination nor does it offer a realistic prediction for the Indian labor market in the long run. There are those who have utilized Becker's framework to

argue against the need for anti-discriminatory legislation and instead for the propagation of policy that emboldens a competitive market.²⁹ Since taste-based models predict the eradication of discrimination in the long-run under perfection competition, it is obvious why there are those who believe the best recourse against labor market inequalities is to encourage a free market unperturbed by anti-discriminatory legislation. However, to build from the discussion on Becker in chapter one, the likelihood of the competitive market to solve discrimination alone is small. India has been, in large part, a capitalist nation with an open economy akin to the United States for well over a century. One would expect, according to those who laud the competitive market's ability to erode employer discrimination, that, at the very least, the wage-gap between Dalits and FCs would be on a steadily downward trend as the economy becomes more liberal over time. Yet, this is not the case in many sectors of the Indian labor market; rather, the rate at which the wage gap changes is erratic, even increasing in the past few years. Moreover, if a competitive market were to be lowering these wage gaps and contributing to the destruction of occupational 'glass ceilings', one would expect there to be a generous increase consumption occurring among the backwards castes as a result of their allegedly greater income. Again, this is not the case. NSSO data indicates that from 1999 to 2012, the expenditure gap between Dalit and upper caste households decreased by just 1% in rural areas and 5% in Urban areas. Given that the rural expenditure gap between 1999-2000 was a staggering 38% and the corresponding gap in urban areas was 65%, the magnitude of this decrease does not indicate any significant change to Dalit's overall economic position.³⁰ Additionally, those who support the competitive market framework such that they believe discriminatory firms would be pushed out due to the high cost of exercising one's taste cite the recent rise in Dalit millionaires as evidence of this change.³¹ However, while there has been a rise in Dalit millionaires and

²⁹ Rajeev Mantri, *India Must promote market competition to eradicate social discrimination* (2015)

³¹ Lakshmi Iyer, Tarun Khanna, Ashutosh Varshney, *Caste and Entrepreneurship in India*, (2011), 20

entrepreneurs over the past decade, the caste's overall representation as owners or proprietors of these firms is significantly small.³²

In the cases of the Indian rural informal & urban formal labor markets in particular, characterizing employers who exercise their taste for discrimination as costly contributes to the erroneous notion that upper castes do not benefit from the readily exploitable source of labor that Dalits are compelled to offer. Firstly, it is important to understand that Dalits have been historically relegated to jobs that are deemed sacrilegious or unholy, and, in many rural regions of India, these implied hierarchical organizations have persisted with varying degrees of severity.³³ Given the increased representation of Dalits in non-caste related industries that has occurred over the past fifty years or so, one can state that the occupational structure implied by the caste-system has moved away from its traditional rigidity. However, to then make the claim that the occupational structure of industries that require some degree of higher education have transformed into egalitarian spaces open to all regardless of caste identity would be to ignore reality. Many Dalits, either by virtue of their inability to access the means to afford them a better job or from experiencing pressure from upper-caste individuals to remain in their lowly position, still occupy the least paying and socially abhorrent jobs available. In recent years, stories have emerged of Dalits being subjected to extreme violence for attempting to break their caste roles in even the most miniscule of manners.³⁴ Clearly, since no forward caste wants to do the work of a Dalit, they also assume that their low caste status implies a certain responsibility and aptitude for that particular line of work. This manifests itself in difficulty attaining the same wage as their upper cast counter parts in lines of work that are either traditionally consigned to FCs or are thought of as inappropriate for Dalits due to their low position in society. In any case, offering Dalits lesser wages proportional to the FCs, discriminatory employers are

³² Ibid

³³ Human Rights Watch, *Discrimination and exploitative forms of labor* (1999)

³⁴ Alison Saldanha & Chaitanya Mallapur, *Crimes against Dalits rose 746% in 10 years & the police are half as likely to help* (2018)

experiencing the short-run benefit implied by Becker's theory of taste-based discrimination without incurring the long-run ramifications of being outcompeted by non-discriminatory firms.

2.3 Enduring Social Stratification: Contextualizing the Caste System

To better understand how caste has persisted as a dominant identity category among Indians, it is crucial to discuss the imbalanced power dynamics and social stratification the has plagued the nation for centuries. Firstly, while there are striking similarities, the Indian caste system is unique from marginalization as it is discussed in the context of black and white individuals in the United States. There is an explicitly defined hierarchy to caste codified in religious and cultural texts that have been in popular circulation throughout India for centuries.³⁵ One is born into their caste and is subjected to the burdens or luxuries circumscribed on them through the roles defined by this hierarchy. In the past, caste hierarchy was far more overt, pervasive, and enforced than it is today in that the occupational structure outlined by various cultural and religious bodies of work was rarely defied. In this regard, caste does not limit all Indians to an explicitly defined line of work or political representation to the degree it did so in the past. By law, it is illegal to discriminate on the basis of caste, and institutions of higher education as well as certain industries that were at one point exclusive to FCs are seeing higher representations of low caste groups than before. Yet, while the occupational structure itself has more or less broken down in recent times or is at least less relevant, low caste representation in white collar formal jobs is significantly lower than their forward caste counterparts. Data from the National Commission for Scheduled Castes and Scheduled Tribes survey conducted in 1996 indicates that SCs comprised 10% of the labor force among white collar professions, while Brahmins, Rajputs, and "other upper castes" accounts for, respectively, 34.7%, 21.3%, and 21.2% of the same industries.³⁶ In comparison, SCs, OBCs, and STs were far more represented in the "Artisan/Blue Collar Workers/ Service Provider" positions than their upper caste

³⁵Kavian Munshi, *Caste and the Indian Economy* (2017), 2

³⁶ Friends of South Asia, *Distribution of Different Communities in Various professions* (2006)

counterparts.³⁷ Moreover, there still exists a correlation between caste and economic inequality that persists in India despite the system's growing irrelevancy.³⁸ Das and Dutta (2007), utilizing data from the 61st round of the NSSO conducted in 2004, find that only 12% of SCs occupy "professional/technical" professions, 1% occupy "administrative" positions, 4% occupy "sales" positions, and 42% occupy "Production" and "Farmers, fishermen, etc." positions.³⁹ When compared to the general population, these figures indicate a dramatically disproportionate amount of representation of SCs in white-collar positions. Even in the public sector, where as a result of the Mandal commission, "mandates 27% representation for OBCs in central government jobs . . . less than 12 percent of employees of central government ministries, departments and statutory bodies are from OBCs as on January 1, 2015."⁴⁰ Of course, that there are disparities between the groups in occupational representation does not explicitly speak to the existence of discrimination. Partly to blame for these disparities is the historical social stratification that pushed many low caste individuals into low skill jobs. Moreover, empirically established wealth concentrations within the upper castes likely afforded their members not only the opportunity to pursue higher skilled and more lucrative positions, but also the expectation to do so.

However, the presence of disproportionate SC and OBC representation in white-collar industries alludes to a more sinister reality when one considers the prevailing perception of low-caste individuals throughout India as well as the steadily increasing rate of crimes committed against low-castes by upper castes over the past two decades. Growing agitation against caste-based discrimination has been a prominent feature of Dalit politics since the Mandal commission, and has intensified in present times. While Dalit advocacy has led to progressive reforms and gained traction within India's greater political sphere, it has also evoked an anti-low caste sentiment among numerous upper caste groups throughout the nation. Some upper-castes individuals take issue with

³⁷ Ibid

³⁸ Sukhadeo Thorat, *Graded Caste Inequality and Poverty* (2017), 5

³⁹ Maitreyi Bordia Das and Puja Vasudeva Dutta, *Does Caste Matter for Wages in the Indian Labor Market?* (2007), 13

⁴⁰ Siddharth Prabhakar, *20 years after Mandal, less than 12% OBCs in central govt jobs* 2015

increased Dalit representation because they believe that their chances of obtaining entry into a prestigious university or into a white collar industry are fairly lowered. More troubling are the vast amounts of non-Dalit individuals in areas such as Rajasthan, Uttar Pradesh, Delhi and Mumbai who still actively practice untouchability despite its explicit illegality. Coffey et. al (2018) found that in Rajasthan and rural Uttar Pradesh, which have a combined population of roughly 200 million individuals, over half non-Dalit Hindu households practice untouchability as of 2011.⁴¹ This study utilized survey responses to questions such as “Would there be a problem if someone who is from a Scheduled Caste entered your kitchen or used your utensils?”, and “Do you yourself practice untouchability?” that were featured in the IHDS 2011 survey.⁴² Historically, because low-caste individuals held occupations widely perceived to be dirty and sacrilegious, upper castes went to great extents to avoid interacting with them. Thus, the question regarding scheduled caste interactions with non-Dalit’s utensils was intended to reveal the degree to which that belief persisted. The amount of “yes” responses from Rajasthan and Uttar Pradesh, in both rural and urban environments, ranged from 48% to 66% of the individuals surveyed.⁴³ In Delhi and Mumbai respectively, 39% and 21% of respondents answered “yes” to one of these questions. These results correlate well with the notion that less urban environments are more likely to see the existence of caste-based discrimination than others. On the topic of supporting a law that forbids high and low caste inter-marriage, this study finds that, “the proportion of non-Dalit adults who support such a law ranges from 60% in rural Rajasthan to about 40% in Delhi.”⁴⁴ Marriage among castes in India was expressly forbidden in the past, and the desire to maintain it modern times vis-a-vis legislation speaks to a non-Dalit motivation to maintain the caste distinctions that have afforded many of them a favorable position in Indian society.⁴⁵ The results from this study aid our analysis of labor market discrimination in that lends

⁴¹ Diane Coffey, Payal Hathi, Nidhi Hurana, Amit Thorat, *Explicit Prejudice: Evidence from a New Survey* (2018), 50

⁴² Ibid, 50

⁴³ Ibid, 50

⁴⁴ Ibid, 50

⁴⁵ Ibid, 51

credence to the notion that a lack of Dalit representation in white-collar fields could feasibly be a result of the persistence of anti-low caste sentiment held by, in some cases, over half of the population of large Indian states.⁴⁶ Rather than pointing to the existence of discrimination existing within the labor market exclusively, it can be inferred from this study that caste system's overarching social order has yet to fully dissipate.

2.4 Neoclassical Theoretic Conflicts & Discrepancies observed in Caste Relations

Becker, Bergmann, and Phelps produce models that frame income inequality or underrepresentation as a labor market phenomenon that cannot last in the long-run; however, it appears that caste values persist beyond this context. These models treat the decision to discriminate as predicated on whether it is profitable to do so, yet, as the evidence above indicates, there could be a larger set of out-market circumstances to blame that are effectively ignored through these neoclassical frameworks. Discussions of in-market inequality as temporal, isolated or resulting from human capital variances between groups then force the conclusion that remediating the wage gap or underrepresentation in the labor market can be solved by making a marginalized group more profitable through affirmative action initiatives that reduce skill differences and promote equal access to resources. At least within India, this praxis is demonstrably insufficient. These policies do not address the anti-low caste sentiments entrenched in many upper caste enclaves, whose discriminatory hiring practices do not necessarily align with increasing profit margins as much as they are rooted in a desire to the maintain the caste distinctions that afford them unfettered socioeconomic mobility. Thus, a more solid theoretical approach to economic discrimination must not be limited to the labor market so as to not obfuscate the role that social stratification and historic exclusion has played in spurring in-market inequality. To better understand the scheduled caste position within a broader context, consider the following: In 2013, SCs had a wealth share of 7%, which, compared to their population share of 18%, indicates that the wealth inequality between the

castes remains somewhat consistent with historical standards. By contrast, high castes, who hold a population share of 21%, own roughly 45% of India's wealth. OBCs own 31%, which is 5% lower than their population share.⁴⁷ The ownership of wealth generating resources such as land, buildings, and financial assets are largely controlled by the upper castes. Land accounts for 56% of the total wealth in India, SCs control 7.3% of that wealth, while the upper castes account for 41.2%.⁴⁸ Upper castes own 53.1% of the wealth derived from buildings, with SCs accounting for 7.2% and OBCs 23.7%. The ownership of financial assets, in the same vein, is primarily in the hand of the upper castes, who control 48.5% of the wealth earned from these assets, while SCs control 8.7% and OBCs 26.3%. Upper caste population shares are, in all these instances, dramatically lower than their wealth ownership, while SC and OBC population shares are generally higher than their wealth share.⁴⁹ In other words, there is a massive concentration of ownership of productive assets to the historically privileged upper castes. Beyond ownership, gaps in educational attainment, occupations, income, and access to public resources are also readily apparent between SC/OBCs and the upper-castes. Literacy rates among the scheduled castes were, as of 2011, 56.50% for females and 75.20% for males.⁵⁰ By contrast, India's overall literacy rate, including all castes, was 65.46% for females and 82.14% for males in 2011.⁵¹ Despite the lower rates among SCs, the gap has been closing over the past decade, which speaks, in part, to the success of affirmative action programs that have aimed to increase educational attainment among the low-castes. Indeed, SC representation across all levels of education has increased, by varying degrees depending on the type of schooling, alongside this increase in literacy rates.⁵² Moreover income gaps, discussed in chapter three, are apparent between the castes but are also less extreme than they have been in the past few decades. Additionally, in the

⁴⁷ Ibid

⁴⁸ Thorat (2017), 5

⁴⁹ Ibid, 6

⁵⁰ MOSPI, *Literacy and Education*, 4

⁵¹ 2011 Indian Census, see "Mapsofindia" website source in the works cited section of this project

⁵² This is discussed at length in Desai & Dubey (2012) "Caste in 21st Century India: Competing Narratives", Dreze & Kingdon (2003) "School participation in Rural India", and in various other works. For the sake of brevity, I do not list these figures outright.

past, rates of Dalit concentrations in underdeveloped villages remain disproportionate to the upper castes but have also been found to decrease over time.⁵³

So, since the gaps in quality of life are decreasing over time as the gap in out-market characteristics are beginning to converge, does this indicate that labor market inequalities are primarily a result of material differences between the castes, and that caste values are losing salience throughout India? If social discrimination were to be viewed in the neoclassical context, perhaps this would be the case. However, it has been established that caste values remain prevalent in many regions of India and that the caste distinctions themselves provide an out-market benefit for the privileged group that incentivize a discriminatory labor market. Further damning is the fact that violent crime against scheduled castes has increased over the past few decades, which some researchers have found to be in response to the very fact that these caste gaps are converging. In other words, as low caste groups have begun to educate themselves at greater rates, hold positions that they traditionally were excluded from, move out of villages they historically inhabited, there has been a negative feedback effect that can be observed through the rate of crimes against them rising. These facts call into question the notion that statistical discrimination, the lack of perfect information, is to blame for the persistence of wage gaps or occupational segregation between the castes. In many cases, it is not simply the differences in characteristics that is to blame for discrimination, it is instead the explicit privileged group desire to maintain distance from the low caste because integration threatens favorable caste distinctions.

Statistical discrimination constructs employers as utilizing group identity markers, in lieu of perfect information, as a “signal that allows them to improve their predictions of a prospective candidate’s ability to perform.”⁵⁴ Darity & Mason (1998) point out that the problem with this mode of analysis is that it does not explain why discrimination seems to be apparent in the long-run. If the

⁵³ Sonalde Desai & Amaraesh Dubeh, *Caste in 21st Century India: Competing Narratives* (2012), section 4.2

⁵⁴ William A. Darity & Patrick L. Mason, *Evidence on Discrimination in Employment: Codes of Color, Codes of Gender* (1998), 83

characteristic differences between groups were based on misconceptions alone rather than explicit discriminatory preferences, employers “should learn that their beliefs are mistaken.”⁵⁵ Conversely, if those differences are found to be real, then in a world with anti-discrimination laws in place, employers would not need an additional identity signal to accurately predict “the future performance of potential employees.”⁵⁶ Darity & Mason’s criticisms stated above speak to the larger issue in statistical discrimination being the tacit assumption that human capital deficiencies, both real and perceived, occurring in the pre-market are to blame for wage differentials or occupational segregation throughout the economy. This stance further implies that market processes (hiring patterns, wage setting, productivity predictions etc.) are not responsible in “producing differential outcomes.”⁵⁷ They are instead framed as a utility-maximizing response to human capital deficiencies that supposedly corrects itself in the long-run if the conditions for closing the skill gap are met. Darity & Mason undercut this argument by pointing to the growth in Southern manufacturing industry in the United States prior to 1965 having little to no effect on the black labor market position despite there being no law prohibiting black employment in the textiles industry except in South Carolina. This industry-specific prejudice was not codified explicitly into law, yet the proportion of black workers in the textiles industry was small until the 1964 Civil Rights Act hindered the ability of racist employers to employ their “informally enforced codes” and “private practices.”⁵⁸ In this case, the unfavorable economic position of blacks was not necessarily or solely predicated on human capital deficiencies occurring outside the labor market. Rather, the prejudicial environment, existing and enforced outside legal institutions, directly contributed to their labor market representation, which itself was facilitated by the very market pressures that neoclassical economists view as bearing no culpability in this regard. This market, unfettered by explicit legal institutions until 1964, which is proposed to act in this utility-maximizing basis, consistently discriminated against black

⁵⁵ Ibid

⁵⁶ Ibid

⁵⁷ Ibid

⁵⁸ Ibid, 84

individuals for decades despite there being a concurrent decrease in the human capital gaps over the same period. This particular example offers a useful parallel in understanding the Dalit predicament; wherein their increasing literacy rates, educational attainment, and so on has not necessarily manifested in their increased representation in white-collar industries or their realization of equal compensation. In the case of caste, the informally enforced codes and social networks are arguably just as pervasive and observable within the labor market as they are outside of it. As Thorat & Newman (2007) state, “A community-based system of enforcement regulates caste privileges by means of social ostracism, violence, and economic penalties that find their justification in elements of Hindu religion.”⁵⁹ In this regard, it is unlikely that upper caste employers are discriminating against the SCs and OBCs because they perceive there to be some sort of human capital deficiency to justify their decision. The stronger argument to be made is that these employers choose not to hire low-caste individuals or offer them lower wages because doing so maintains caste distinctions within the labor market that are themselves a reflection of caste values outside of the market.

Ultimately, sections 2.1 – 2.4 have attempted to delineate the problems with neoclassical economics’ proposed understanding of discrimination as aberrant to the operations of a competitive market, with India’s current issues revolving around caste marginalization serving as an example of these shortcomings. Neoclassical economics frames the competitive market in a strangely egalitarian manner in the sense that it values productivity and utility above all else, where issues of discrimination must be based on perceptions of human capital deficiencies that resolve in the long-run. This framing implies that the market does not sustain discrimination; rather, “discrimination sustains itself against the pressures of a competitive market.”⁶⁰ If an employer discriminates, there must be some profit-oriented aspect to their decision; be it a result of imperfect information, legitimate characteristic differences, a ‘taste for discrimination’ or any other factor as long as it aligns with the notion that the competitive market is not to blame for discrimination. If anything, the

⁵⁹ Thorat & Newman (2007), 4121

⁶⁰ Darity & Mason (1998), 82

competitive market is supposed to naturally oust observed instances of discrimination in the long run primarily because neoclassical economics recognizes that the behavior as unproductive and non-utility maximizing. Perhaps economists reach these conclusions because they treat their inputs as perfectly substitutable, with employers acting on the basis of marginal profit and cost, all within a competitive market framework that constructs the extraction of productivity as the impetus for hiring decisions. Yet, what is readily apparent when one observes India's competitive market, is that human capital deficiencies, while they exist between caste groups, are not the sole cause for their underrepresentation in white collar industries. SC and OBCs' poor socioeconomic positionality is in part a result of competitive market forces that have allowed for the distribution of upper castes into the highest paying white collar jobs across the Indian labor markets to persist at the detriment of SCs and OBCs, who are relegated to the bottom rung of employment opportunities. Potentially as a result, wealth inequality persists among the SCs and OBCs. The caste system's social order has yet to dissipate from the collective Indian conscious, and the competitive market has, instead of erasing inequality, allowed for upper-caste enclaves to enact their discriminatory sentiments within the labor market unabated by legal institutions. Before proceeding to section 2.5, which discusses social exclusion as both a motivator and cause for discrimination, it is important to note that the preceding discussion of neoclassical economics should not diminish the benefits that come with increasing access to education and quality of life for SCs and OBCs. With better access to education in India, many SCs and OBCs have become more aware of the injustices committed against them over the past few decades, and have thus engaged in the political advocacy that has brought to light the persistence of caste values within India's social organization. What these sections simply tried to illuminate is these changes in the material lives of SCs and OBCs are not enough to address the widespread caste sentiments that still thrive throughout India, which exist both within and outside of the competitive market. This should serve both as the foundation for policy that targets SC and OBC treatment in Indian society rather than just their material position, as well as a discussion on why

competitive market forces alone are not enough to resolve labor market inequalities, partly because they allow for such discriminatory practices to continue.

2.5 The Necessity to Address Social Exclusion

Social networks are a particularly insidious remnant of the caste system that assists this paper's attempt to understand the persistence of economic inequality between the castes. Rather than discrimination functioning as a tool of utility-maximization within the labor market, perhaps it operates through external social networks, with upper caste individuals whose favorable positionality within the caste hierarchy have compelled them to maintain the status quo. This viewpoint is interesting for a variety of reasons. It insinuates that perhaps the underrepresentation and unequal payment of SCs and OBCs in certain industries within labor market results from their systematic restriction of access to resources that would increase their productive capacities. Moreover, the motivation for limiting these access to resources are closely tied to a desire to maintain distance between the castes regardless of the context. In the context of India, where untouchability has yet to be forgotten entirely, this narrative of social exclusion is valid to a certain degree.⁶¹ To this point, Thorat (2008) refers to the Action Aid (2000) study on untouchables in rural India where it was found that 36% of the 555 villages across 11 states exhibited instances of SCs being denied employment on the basis of their caste. Thorat states, "Belief in the notions of purity and pollution also affected the hiring of the SC wage labourers in housing construction—in about one-third of the villages, they were excluded from employment for the construction of houses."⁶² A similar study, (Shah, Mander, Thorat, Desphande and Baviskar, 2006) found that in a study of 565 villages across 11 states, 38% of government schools force Dalit children to sit separately during lunch from the rest of their peers, with 20% of government schools forbidding them to even drink from the same water fountain.⁶³ This study is rife with staggering figures; one third of health workers refusing "to

⁶¹ Ajay, *Caste Based Economic Exclusion: The Perpetuating Inequality* (2013)

⁶² Sukhadeo Thorat, *Labour Market Discriminations: Concept, Forms and Remedies in the Indian Situation* (2008), 39

⁶³ Rajan K. Panda, *Socially Exclusion and Inequality: Opportunities in Agenda 2030* (2016), 9

visit Dalit homes”, half of the Dalits surveyed “denied access to common water sources”, 14.4% of villages surveyed refusing Dalits entry into the panchayat building, and in 12% of villages surveyed, Dalits were denied the ability to vote.⁶⁴ The key word in these descriptions is ‘denied’ – it is not simply that Dalit children were unable to sit with their classmates or drink from the same fountain because of they did not want to do so, or that they were unable to vote because their proximity to a booth was particularly large, or that they did not want to be visited by health care workers. They were *denied* access to these resources by those in charge of the schools, health care providers, sanitation companies, and shop keepers *explicitly because* of their identity. On those grounds, labor market discrimination could be a result of a desire to maintain the purity of those upper caste individuals that would be marred by being forced to interact with a Dalit. Thus, in the long-run, there is no employer incentive within a competitive market for discriminatory preferences to shift in favor of the marginalized because to do so would be to threaten the established social order. Whether or not the laborer is qualified in the sense of their productive capacity is more or less irrelevant if the reason the reason they are restricted access to employment is on the basis that their caste identity implies a level of religious impurity that bars them from entry. One could say that this resembles ‘taste-based’ discrimination as it is formulated around the desire to maintain distance between the marginalized and privileged groups; however, in this case, the desire to maintain distance is productive outside of the labor market. Discriminatory employers are not losing profit by enacting their prejudicial beliefs as human capital deficiencies are not the inherent reason as to why low caste individuals are not being hired. Given that Dalits are routinely denied access to resources that would allow them to increase their human capital attainment, the fact that SCs/OBCs are, on average, less likely to be educated or literate than their forward caste counterparts should come as no surprise.⁶⁵ Thus, treating SCs/OBCs as perfectly substitutable labor inputs for the statistically better educated upper castes is not favorable. An alternative is to treat human capital deficiencies as well as labor

⁶⁴ Ibid, 9

⁶⁵ Desai & Dubey (2012)

market inequalities as predicated on the system of social exclusion that is likely to discriminate against low castes despite their qualifications. Considering that the private sector in India is not subject to any concrete anti-discriminatory caste laws, and that there are also higher instances of discrimination there than in the public sector, this alternative seems to make more sense.⁶⁶

Referring to the figures on Dalit treatment in government schools, it is important to also consider unequal treatment in the pre-market i.e being systematically denied access to myriad resources ranging from basic ones (water, food, health care) to those that offer or indicate mobility (voting, education, well-paying jobs). What neoclassical economics fails to account for is that routine discrimination outside of the labor market could have a feedback effect on the amount of Dalits who choose not to seek out opportunities that would enfranchise them out of a fear of upper-caste reprisal. Additionally, Dalits may not seek out those opportunities because their unfavorable group position within the labor market forces them to believe that trying to get a position outside of their caste identity would be an exercise in futility.⁶⁷ The fear of upper caste reprisal is certainly one that is corroborated by the state of upper-caste crime against Dalits. Sharma (2015) find a particularly distributing correlation, “that changes in relative economic position between the lower castes and upper castes are positively correlated with changes in the incidence of crimes, such that a widening of the gap in expenditures between the lower and upper castes is associated with a decrease in crimes committed by the upper castes against the SC/STs.”⁶⁸ These results show that as Dalits gain more traction in improving their economic situation, seen in this study as an increase in household expenditures, the number of violent crimes committed against the *by* upper castes increase. Sharma (2015) does not suggest that this data should dissuade policy prescriptions that focus on ameliorating inter-caste inequities, but rather that the larger issue of social perception and agitation against Dalits must be addressed in tandem. It is difficult to conceptualize how the operations of a competitive

⁶⁶ Ajay (2011)

⁶⁷ Thorat (2017), 14

⁶⁸ Smriti Sharma, *Caste-Based Crimes and Economic Status: Evidence from India* (2015), 220

market unabated by legislation could possibly address such a nuanced social and psychological issue. Moreover, the Dalit position in Indian society is further proven to be an issue relating to the social order when one considers that their very access to justice is deterred on the basis of their caste.⁶⁹

While the previous study is limited to villages in rural India, throughout urban areas the form of social exclusion still exists in less explicit forms, and has been observed by various studies on job discrimination. Thorat & Attewell (2007) attempts to dispel the belief that persistent caste discrimination only exists within rural India, and that the urban, modernized India suffers from these issues as well. This study, which began in October of 2005 and spanned two years, responded to hundreds of newspaper advertisements for white collar industries (banking, IT, pharmaceuticals, accounting, sales, marketing, etc.) with three identical resumes in English, specific to each position, but differing *only* in the name of the applicant. All educational qualifications and background information was exactly the same across the resumes so as to assess the impact of having a low caste name versus a high caste name in the job process.⁷⁰ In their analysis of callbacks, they found that “appropriately qualified applicants with a dalit name had odds of a positive outcome that were 0.67 the odds of an equivalently qualified applicant with a high caste Hindu name.”⁷¹ They further speculate that this overt discrimination so early in the hiring process indicates that equitable hiring decisions in more advanced stages of the process are “unlikely.”⁷² Jodhka and Newmann (2007) find through their interview studies of human resource managers in various industries, that very low caste members are subjected to a degree of caste based stereotypes that make their ability to find jobs difficult, with preference being allotted to the middle castes.⁷³ Ultimately, the studies and literature discussed above point to social exclusion as well as favoritism as the key factor in explaining the

⁶⁹ Discussed at the end of chapter 3

⁷⁰ Sukhadeo Thorat and Paul Attewell, *The Legacy of Social Exclusion* (2007), 4142

⁷¹ Ibid, 4144

⁷² Ibid

⁷³ Thorat and Newmann (2007), 4124

observed labor market inequalities rather than an explicit in-market discrimination predicated on productive differences.

Chapter Three: Wage Differentials

3.1 Wage Discrimination: Definitions & Parameters:

Engaging with the topic of wage-discrimination in the Indian labor market requires segmentation and clear delineation of categories such as region, occupation, sector and, in this discussion, caste. Significant opposition to the notion of wage-discrimination exists within the discourses surrounding caste socioeconomic positionality, many of which feature arguments predicated on sparse quality of life improvements in disparate regions and without substantial evidence to justify their sweeping declarations on caste's eradication as a form of marginalization or ordering. Swaminathan S. Anklesaria Aiyar's paper, "Capitalism's Assault on the Indian Caste System: How Economic Liberalization Spawned Low-Caste Dalit Millionaires" is a prime instance of this problematic argumentative logic. While Aiyar specifies Uttar Pradesh as his primary region of focus, his argument against the continuance of caste-based discrimination erroneously relies on the competitive market's propensity towards the broader economic liberalization of Dalits. This paper will delve into Aiyar's faulty reasoning and the overarching issue of job discrimination that it entails in later chapters; however, it is important to note certain aspects of his logic before moving forward with a discussion on wage-based discrimination. At many points in his paper, Aiyar alludes to caste-based discrimination as a construct of the past undergoing a gradual eradication partly due to competitive market forces giving way to a subset of Dalit millionaires. On these grounds, Aiyar argues that this concentration of wealth within the Dalit caste indicated to and contributed towards their greater social acceptance and economic mobilization on the village level. The notion that wealth concentration to a select few low-caste individuals somehow alleviates disparate treatment towards all Dalits is dubious at best. While these competitive market forces coupled with progressive policies seeking to mitigate caste-based discrimination has led to certain increases in job access and quality of life provisions among Dalits, there still exists the force of wage-discrimination that places a ceiling on the efficacy of these measures intended to foster scheduled caste socioeconomic mobility.

To understand effectively the socioeconomic landscape wherein India's scheduled and backward castes are relegated, it is imperative to understand precisely what constitutes wage-discrimination within the existing economic literature base. For our purposes, we will define wage-discrimination as the unequal labor compensation of those employed in similar or the same positions or fields based on their individual caste identity. Most articles discussed in this paper utilize a similar definition when engaging with the topic of wage discrimination, typically controlling for variables such as gender, residence within the region discussed, social group, and state policies. Individuals and households are stratified across caste lines either as Scheduled Tribes (ST), Backwards Castes (Dalits), Other Backward Castes (OBC) and compared to groups of higher castes. Given that discrimination against the Dalits, OBCs and STs is historically far more pernicious than that faced by the upper castes, delineating and demarcating discrimination within the upper castes such as Vaishya, Kshatriya and Brahmin are unnecessary tasks within the context of this discussion.

Data from the National Sample Survey, the Indian Human Development Survey along with a variety of other region-specific surveys will be featured throughout the literature discussed in this paper. Both the NSS and the IHDS are household surveys that feature broad sample sizes and collect data relevant to caste among other pre-market characteristics that range in levels of their impact on explaining wage differentials. Studies that focus on the IHDS will be incorporated in the ensuing chapter on occupational discrimination, as they shed more light in that context. We will focus on discrimination against Dalits as well as OBCs in the regions within these surveys and their subsequent analyses, compare and contrast results so as to come to the conclusion that despite a general increase in the overall-wealth and wages throughout the regions discussed, there exists evidence for caste based wage discrimination in both the Indian urban and labor markets substantiated by various different models and decomposition methods on similar data sets

3.2 Indicators of Wage Discrimination

Generally, wage equations consist of characteristics thought to influence an individual's earning propensity such as education, age, sector, location, formality of employment, and experience level.⁷⁴ Empirically, these are factors employers consider during the hiring process when evaluating a candidate to ascertain their productive capacity. In a profit-maximizing context, which we assume to be the prevailing mentality of firms we analyze and is not inherently discriminatory, employers have a hierarchical understanding of these characteristics and value their candidates based on what they believe to be an ideal combination of these factors. For instance, it can be reasonably assumed that a profit-maximizing steel manufacturer would want employees with some vocational training in the industry, experience within other plants so as to minimize costs as well mitigate the risk of an employee causing damage to machinery or other workers, and the capacity to work full-time. While these are all reasonable employer expectations, one can begin to establish discriminatory tendencies within firm behavior if, after regressing along these characteristics to determine the greatest influence on the log monthly wage, one finds that adding and regressing upon group identity in the equation yields significance when contrasted to other explanatory variables.⁷⁵ In the case of this fictitious steel manufacturer, if one regresses upon the monthly wages of a large sample size of workers at this plant and find that wage is primarily based on experience, but upon addition of and regression upon a male-female group identity reveals that male workers on average are, when controlling for other characteristics, paid higher than their female counterparts, the possibility of discrimination as an explanatory factor increases in likelihood. However, at this point in the steel manufacturer's scenario, discrimination is not yet proven as this wage equation assumes a uniform wage structure among all group identities. Implied within this assumption is that the labor market values all factors of productivity in the same manner for all the group identities in question, which is, according to Deshpande, "untenable in the presence of discrimination."⁷⁶ Deshpande continues,

⁷⁴ Ashwini Deshpande, *The Grammar of Caste: Economic Discrimination in Contemporary India* (2011), 151.

⁷⁵ Ibid.

⁷⁶ Ibid.

“The gap could be due to differences in education or skill levels or simply due to the fact that groups might be concentrated in different segments of the occupational spectrum . . . thus, it is necessary to separate the effects of the differential educational or skill levels from the discriminatory component, which could be, of course, zero.”⁷⁷ Applying this logic to the steel manufacturer scenario, perhaps the difference between male and female worker compensation could be attributed to a difference in their educational and experience levels, thus justifying a decomposition method that would separate these factors from an unexplained component that one could reasonably attribute to discrimination.

3.3 The Blinder-Oaxaca Decomposition Method & The Limits of Regression Analysis

Conveniently, the Blinder-Oaxaca decomposition method separates the wage-effect of pre-market characteristics such as education and experience from a discriminatory ‘unexplained’ variable. As most of the literature base discussing wage-discrimination among caste groups features this decomposition, it is imperative to make note of the process before delving into a qualitative analysis of each text.

Firstly, advantages in characteristics such as education, age and experience will be referred to as endowments, and their effects can be ascertained by regressing upon a standard wage equation between two or more groups. In a situation where discriminatory practices exist, for instance in the hypothetical steel manufacturing firm referred to above, the regression results for male and female wages can be compared to one another, and the difference between the two values will be attributed to a combination of endowments and, potentially, discrimination. To ascertain that difference, the Blinder-Oaxaca method would substitute the regression coefficients from the wage equation for women and place them into the equation for men to see what their yield would be had women been treated in a similar capacity to men. The difference between this substitution value and the original wage equation value gives a number that equates to a value that indicate the degree to which

⁷⁷ Ibid, 152.

discrimination exists as it “pairs the estimated rates of return for one group with the characteristics of the other group.⁷⁸”

The Blinder-Oaxaca decomposition method is by no means perfect in its assessment of wage-discrimination; however, a few correctional methods have been implemented to account for selection bias, omitted variable bias, as well as included or diverting variable bias. Moreover, the decomposition method remains an invaluable tool for garnering at the very least a rough estimation of the magnitude of wage discrimination between castes. When regressing on wage equations to account for discrimination along the Blinder-Oaxaca method, the decision to substitute the coefficients of the marginalized group into the equation of the presumed advantaged group is not mutually exclusive. In the scenario built around the steel manufacturer, one could easily substitute the coefficients ascertained for men into the wage equation for women to see to what degree the former benefit from being treated as the latter as far as their wages are concerned. Deshpande summarizes a potential correction for this utilized by researches, stating, “Some calculate both estimates and treat the two as upper and lower bounds, within which the ‘actual’ estimate of discrimination lies.⁷⁹” In essence, the upward bound could be considered nepotism whereas the lower would be discrimination, and within the distance between the two bounds, as Deshpande contends, would contain an appropriate magnitude for understanding the actual level of discrimination present in the firm. From my perspective, this seems ideal as the existence of nepotism could at the very least substantiate the claim that a group of people experience preferential treatment based on group or identity preferences.

There is still the issue of omitted variable bias, wherein it is possible that the unexplained gap between wages could be attributed to a variable not considered in the wage equation. In our steel manufacturing plant, it could be possible that hiring agents happen to value employees who have

⁷⁸ Ibid, 153

⁷⁹ Ibid 153

previously worked in competitors' plants. If most employees who meet that qualification happen to be male, a regression excluding this control could overestimate the discriminatory coefficient for women.⁸⁰ However, the only true correction for this is to be particularly tedious and inclusive with variables utilized. Moreover, it seems that within the hiring process, pre-market characteristics such as education and experience are judged fairly consistently by hiring managers. In other words, it does not seem outlandish to assume that there are certain characteristics that a profit-maximizing firm, discriminatory or not, consider universally when selecting the ideal candidate for a particular position. Excessively cautious statisticians that include too many irrelevant non-race controls in their analysis of disparate treatment could certainly reduce the results' statistical significance and precision.⁸¹ In a similar vein, it is also possible that controlling for too many non-race factors could create an included variable bias wherein the effect of discrimination is underestimated as a regression could mistakenly attribute discriminatory behavior to an unrelated control.⁸² Unlike the omitted variable bias that concerns itself with disparate treatment, included variable bias is an issue within analyzing disparate impact; if the financial records of our steel manufacturer clearly showed that women were paid a salary distinctly lower than their male counterparts, disparate treatment has already been established. Including non-race controls that are "Plausible Business-Justified Influences" could skew analysis of the coefficient produced in that they would attribute discrimination to factors deemed acceptable to base wage upon.⁸³ Correcting for self-selection is a less strenuous process; using Heckman's solution, one would simply calculate a probability of working in a firm and then transform the outcomes into the wage equation.⁸⁴ Ultimately, it is apparent that there exist modes of correcting, albeit imperfectly, for these various biases, all of which are

⁸⁰ Assuming that barriers to entry in the competitor firms are entirely non-discriminatory

⁸¹ Ian Ayres *Testing for Discrimination and the Problem of "Included Variable Bias"*, 12.

⁸² Ayres, 2

⁸³ Ibid, 17

⁸⁴ Deshpande (2011), 155

reliant on economists' scrutiny in their control selection and coefficient analysis as well as on the amount of potentially wage-impacting characteristics within a data set.

Despite the possibility of implementing bias corrections, Richard J. Butler's critique points out a fundamental issue with regression analysis' ability to accurately determine labor-market discrimination given that the reduced-form equation ascribes demand-side discrimination to that which is produced on the supply-side.⁸⁵ Identical levels of pre-market characteristics between two groups such as education could vary in quality if one group is discriminated against within the schooling system, thus rendering this marginalized group a smaller productive capacity than their equally educated outer-group counterparts.⁸⁶ This situation causes a difference in capital-labor elasticities between the two groups as one group has a higher return on a productive, profit-determining characteristic than the other. Suppose that both women and men are more likely to be hired by our steel manufacturing plant if they attend and perform well in a vocational program that provides them with skills they need to increase their productivity on the plant floor. If instructors within that vocational program happen to favor men over women believing in a higher potential productive capacity in the former than the latter, and this misogynist attitude skews the distribution of training quality and performance judgement, women who graduate the program would be at a disadvantage given that they were denied access to a fair and balanced education. An employer in this perfectly competitive, profit maximizing firm would likely determine a wage for women based on their productive capacity, which is assumed to be inherently skewed due to pre-market discrimination. Subsequent variances in labor demand elasticities would exist; whereas the male demand curve is likely to remain inelastic due to their higher return on capital, the female demand curve would be elastic as their pre-market discrimination causes their marginal productivity and thus return on capital to be less than their male counterpart. Subsequently, under Butler's logic, the reduced form wage equations for men and women within this factory would be expected to have

⁸⁵ Jeremiah Cotton, *On the Decomposition of Wage Differentials* (1988), 238

⁸⁶ Deshpande (2011) 157

differences in their beta coefficients not attributed to labor-market discrimination; rather, they would be the results of a profit-maximizing firm compensating their employees based on their marginal productivities, which differ. Jeremiah Cotton (1988) criticizes Butler's thinking on the subject of these coefficients' existence in the absence of discrimination, stating:

Butler is correct in questioning the comparisons of black and white regression coefficients. He is not correct, however, to assume that these are the coefficients that would prevail in the absence of discrimination. For without discrimination we would not expect differences in the black and white B1 's to persist. Perhaps in the short run just after discrimination has been eliminated one might observe blacks and whites with different average skills because of different opportunities in the past, but in the long run as blacks are assured of competing on equal terms in the same markets as whites the differences in supply characteristics can be expected to diminish along with differences in the demand for black and white labor. Indeed it is this very expectation of continuing convergence of black and white skills that is heralded by the proponents of the vintage hypothesis

The crucial take-away from Cotton's assertion is that the task of mitigating discriminatory practices within firms is not a fruitless endeavor in the long-run despite Butler's apt criticism of regression analysis' relative inaccuracy in capturing statistically significant and logically sound coefficient values. Given that an imbalance in beta coefficient values for two groups differ due in part to prejudice, it can be assumed that if discrimination were to disappear from the labor market, the short-run result could be an elimination of disparate treatment as there would be no incentive to discriminate by identity.⁸⁷ If, in the absence of discrimination, the reduced form beta coefficients for men in the steel manufacturing firm were to be higher than their counterparts', female short-run supply-side characteristics would certainly remain an issue factoring into their wage differences. However, from the perspective outlined above, in the long-run, since women would be assured of a level playing field within their occupation, their demand and subsequent wages would increase. This logic also shows that, in a discriminatory environment, "the undervaluation of one group subsidizes the overvaluation of the other group."⁸⁸ From a profit-maximizing perspective, Beckerian analysis indicates that discriminatory firms have no real incentive to cease prejudicial behaviors if they are able to offset the increase in wage-prices for their preferred group through paying the discriminated

⁸⁷ Deshpande (2011), 158

⁸⁸ Ibid

group less for the same labor inputs. Yet, as discussed in previous chapters, the problems in these methodologies of ignoring the pre-market almost entirely persist. Discrimination outside of the labor market, in access to education or deleterious notions about the roles of a marginalized groups in the society in question must also be considered in this discussion. To not address this form of discrimination would be to ignore the potential circumstance that a marginalized group is unable to enter or be treated fairly within the labor market because their expectations of success may limit their entry into the labor market. Moreover, if this marginalized group is historically disadvantaged and typecast as intrinsically unqualified to hold socioeconomically advantageous occupations, their underrepresentation in the labor market could represent a feedback effect where they choose or are compelled not to participate in a certain industry because they either fear reprisal or are pessimistic about their odds of success.

Ultimately, the Blinder-Oaxaca decomposition method certainly has its problems in accuracy; however, taking all the appropriate and available corrections as well as understanding the limitations of regression analysis, it still provides economists with a general understanding of the degree to which discrimination plays a role in the labor market. For a more in-depth understanding of the demand-side factors that remains a question, it is imperative to also consider job-discrimination, which was addressed in the previous chapter. At the time being, having established a general understanding of the decomposition method, its issues and benefits, an analysis and comparison of articles concerning wage-discrimination within certain regions of India, specifically attempting to observe the changes-over-time in beta-coefficient values of similarly structured reduced-form equations, is appropriate.⁸⁹

3.4 Literature Analysis

Many economists conducting studies of caste-based wage-discrimination have established that in India's rural and urban labor market, among full-time workers in varying sectors, a statistically significant portion of the wage gap between low-caste Dalits and their upper caste counterparts is attributed to discrimination. These authors' findings and analyses diverge when discussing the proportions of the wage-gap that can be attributed to endowment variances as opposed to identity based discrimination. In other words, the question one must ask themselves here is not *does* discrimination exist, it is *to what degree* can we attribute employer discrimination as opposed to the endowment effect to the wage-gap. Moreover, many of the authors that will be discussed in this section have found wage-discrimination is far more prevalent in the private sector, which is not entirely subjected to the reservation policy, than in the public sector where the policy is actively enforced. While econometric analysis yields figures indicating that the endowment effect outweighs discrimination on average, the treatment effect's stability over time is emblematic of caste's persistence in certain regions of India.⁹⁰

To limit the scope of this discussion, the articles discussed in this section will focus on the regions encompassed by the NSS as well as the IHDS. While these two surveys do not offer data that amount to a holistic perspective of the Indian labor market, its various segmentations and industries, it is nevertheless useful in constructing patterns of discrimination throughout certain regions of India. As has been articulated before, the purpose of this paper is not to prove that caste-based discrimination accounts for wage-differentials throughout all of India; rather, it is to investigate and apply a critical lens to the work that has already been done on the subject. In assessing the outcomes reached by economists studying wage-differentials in different industries across multiple years, this section concerns itself with the degree to which consensus on caste-based discrimination can be drawn. Moreover, extending the theoretical work done in chapter one, this section seeks to locate these findings within the discussion of labor-market discrimination so as to

⁹⁰ These "certain regions" are those encompassed by the NSS

assess their overall accuracy. It is imperative that these factors are taken into consideration as to simply state these author's findings without delving into their fidelity, the extent to which economic analysis offers insight into discrimination is stifled.

Firstly, a competitive market framework does not alleviate the problems leveraged against the Dalits in a manner that many of its proponents believe it to accomplish. To understand precisely why a competitive market framework cannot solve the issues of India's caste inequity, it is important to understand the specific caste-based discrimination that exists as a result of a inherited social hierarchy that places Dalit's at the bottom. In Tamil Nadu, Dalit children are regularly chased out of their classrooms for simply being in attendance and attempting to acquire an education that would not provide them a monetary return similar to that of their upper caste peers (Basu 2011). In Bihar's capital city of Patna, government public distribution shops systematically refuse to exchange goods with Dalit's on the basis of their "untouchable" caste identity (Basu 2011). These instances of discrimination are not solely based on the lack of a stable economic mobility for Dalits within India, although that is a particularly telling sign of inequality; rather, they are indicative of an overwhelmingly unreceptive attitude towards Dalits on their caste identity. Whereas a competitive market framework can potentially erode discrimination under a Beckerian model where ones taste for discrimination, depending on a variety of variables, is not economically efficient for firms, within India the caste system functions despite its clear inefficiency. Competitive markets have existed in India since its liberalization in 1991, and yet few positive tangible changes to the material existence of Dalits have occurred.

Multiple studies that regress upon NSS data indicates that caste plays a significant factor in determining wage within both rural and urban labor markets throughout the region encompassed by the survey. However, to make an accurate assessment of the state of discrimination in the context of the most recent data, it is imperative to ascertain yields from regressions over time. If discrimination values fluctuate over time, one could start to make a qualitative analysis as to the effect of affirmative

action policies on the Indian labor market. Granted, fluctuations in the discrimination values would not necessarily be the result of affirmative actions failures or successes. Nevertheless, increases or stability in the level of wage-discrimination over time would lay the basis for the argument of caste persistence as a social marker that partially determines wages.

Despite discrimination based on social identity's illegality under Indian labor laws, the evidence above would suggest that in both the private and public sector, varying degrees of the wage-gap in the urban labor market is predicated on prejudicial behaviors. Focusing on the urban labor market, Attewell & S. Madheswaran (2007) analyze the differences in the treatment and endowment effects among Scheduled Castes (SCs), Other Backwards Castes (OBCs) and Non-Scheduled Castes (NSCs) between the 38th (1983), 50th (1993-94) and 55th (1999-200) NSS round. Caste is divided along these lines to allow for comparisons to be made between the surveys as, prior to 1993, the distinction between Forward Castes and OBCs was not made⁹¹. At that time, caste was delineated within the survey as either SCs/STs or "Others", the latter category containing members of both forward and backwards castes. Any comparison of SCs/STs to "Others" before the 50th round survey, which distinguished between these categories, assumes a certain uniformity of privilege, or lack thereof, among OBCs and FCs that did not necessarily exist. Thus, if OBCs experienced a high degree of discrimination and FCs experienced little to none, a wage-differential decomposed through the Blinder-Oaxaca method to analyze the treatment effect between SCs/STs and "Others" could erroneously project a lower discrimination coefficient or a smaller wage-gap overall. Attewell & S. Madheswaran (2007) find that, utilizing "age, level of education, gender, marital status, sector, job tenure, union status, and occupation" as predictors, the discrimination coefficient values for the 38th, 50th and 55th rounds encompass 13.45%, 30.4%, and 21.4% of their

⁹¹ Paul Attewell & S. Madheswaran, *Caste Discrimination in the Urban Labor Market: Evidence from the National Sample Survey* (2007), 4149

respective wage-differentials⁹². In other words, discrimination in 1983 accounted for a mere 13.45% of the wage gap, yet ten years later that figure rose dramatically to 30.4% and then fell to 21.4% in 1999. When occupational variables were included in their analysis, the figures in 1993 and 1999 fell to 24% and 20% respectively⁹³. Despite this decrease in the treatment effect, what is clearly evident is that the percentage of the wage-gap related to discrimination, while falling between 1993 and 1999, was still significant. This study utilized the Blinder-Oaxaca decomposition method “extended to incorporate selectivity bias [Reimer 1983, 1985], and to overcome the index number problem]⁹⁴. However, that the endowment values were falling between 1983 to 1999 indicated that affirmative action policies were successful, but that disparate treatment primarily in the private sector as well as unequal returns on human capital investment were working against the policy measures. A hiring manager in either the public or private sector with imperfect information who happens to believe that the productivity of an individual is predicated on caste-identity would likely set wages lower for the caste they do not prefer. The likelihood of this practice’s occurrence within the urban labor market is justified by the significant variance in returns on caste-based returns on education calculated in Attewell & S. Madheswaran (2007). Table 1.1A, taken from Attewell & S. Madheswaran (2007), provides further insight into this topic.⁹⁵ For nearly all education levels above Middle (Primary, HSC, Graduate Professional, Graduate General) and in every survey round, returns on education are lower for scheduled castes when compared to their forward caste equivalents⁹⁶. This implies that, in urban labor market firms that determine wages largely based on education level, scheduled castes would be discriminated against in that they could have the same education as an upper caste counterpart, yet be paid less

⁹² Ibid 4150

⁹³ Ibid 4150

⁹⁴ Ibid 4151

⁹⁵ Ibid 4151 – to clarify, the table here (1.1A) is taken from another author and brought into this paper for the sake of analysis. It is not the original work of this senior project.

⁹⁶ Ibid 4150

based on discriminatory assumptions. This could also be in instance of explicit social exclusion; Max Weber claimed that individuals within upper echelons are likely to monopolize “valued economic opportunities” and Collins (1979) affirmed this theory to a degree within the United States by showing how “educational credentialism allows status groups to claim that lucrative occupations require certain degrees, thus limiting competitions of privileged positions.⁹⁷” In this particular instance, rather than education serving as a means of increasing one’s hire ability based on their merits and skill-sets, it functions as an indicator of a particular status that allows one to attain a lucrative occupation. This line of analysis speaks to the notion that perhaps taste-based discrimination, as conceptualized by Becker, may not sufficiently explain the wage-gap. It is unlikely that employers face an explicit disutility from hiring low-caste workers, but perhaps it is their underlying assumption that low-caste workers are less capable despite being similarly qualified for a particular line of work that contributes to their unequal compensation. Within the United States, affirmative action programs are perhaps more beneficial from this perspective because a degree, once earned, could be perceived by companies as a sufficient indicator of status. However, in India, affirmative

Table 1.1A: Average Private Rate of Return to Education by Caste (in per cent)

Educational Level	1983		1993-94		1999-2000		
	NSC*	SC	NSC*	SC	Others	SC	OBC
Primary	4.21	4.48	3.26	1.39	3.10	1.92	3.55
Middle	5.05	6.43	3.54	3.19	2.56	4.31	3.83
Secondary	16.95	16.28	9.86	4.77	11.26	8.16	8.22
HSC	NA	NA	5.21	12.92	6.46	8.80	5.88
Graduate professional	9.61	7.47	9.67	7.23	12.62	9.32	11.61
Graduate general	8.08	5.98	7.87	4.65	9.60	5.30	8.21
Professional degree compared to general degree	12.66	10.44	12.37	11.10	17.15	15.34	16.71

Note: NSC * includes OBCs and Others.

⁹⁷ Thorat & Attewell (2007), 246

action programs that target education cannot, or simply have not, ensured that firms will compensate these degrees of education equally⁹⁸. In the context of both the urban and rural labor markets, Das & Dutta (2007), observing the more recent NSS round from 2004-5 estimate the wage gap to be .37 log points with a treatment effect of 59%, part of which is determined to be a result of discrimination in both the labor market and in allocation of pre-market characteristics.⁹⁹ Table 1.1(B) is taken from Das & Dutta (2007) and illustrates this difference. There are some differences in the models utilized by Das & Dutta (2007) and Thorat & S. Madheswaran (2007); Das & Dutta restrict their sample size to ages 20 – 65, they look at both the urban and rural labor market, correct for selection bias, and utilize a few different controls to account for religion, settlement type, occupational attachment and industry affiliation. Although the studies are different, it is worthwhile to note that the wage-gap in 2004 as well as the discrimination value has increased according to Das & Dutta (2007). Granted, the scopes are varied; however, the persistence of wage-discrimination over time in this instance affords a better understanding of the effects of affirmative action at large. Furthermore, in the context of the wage-gap that they too calculated based on the 2004 survey round, Mukherjee & Majumder (2011) state, “The gap has also increased over time along with a fall in the endowment effect and a rise in the remuneration effect. Remarkably, it is only in the case that the effect of endowment was higher than that due to discrimination in the initial years, although in recent period the remuneration effect has marginally outweighed the endowment effect here too.” Their work looks at earning disparities between various social groups beyond castes to determine inter and intra-group disparities as well as the endowment and discrimination effects in wage-gaps.

⁹⁸ Thorat & Attewell (2007), 4121

⁹⁹ Das & Dutta 2007, 16 – to clarify, the table here (1.1B) is taken from another author and brought into this paper for the sake of analysis. It is not the original work of this senior project

Table 1.1(B): Unadjusted Wage Gap

	Regular workers			Casual workers		
	SC	OBC	GC	SC	OBC	GC
Mean hourly wages (log)	2.71	2.76	3.08	2.00	2.05	2.10
	(0.81)	(0.80)	(0.81)	(0.44)	(0.49)	(0.47)
Unadjusted wage gap	0.374	0.328	..	0.096	0.050	..
	(0.0002)	(0.0001)	..	(0.0001)	(0.0001)	..

Mukherjee & Majumder (2011)'s emphasis on the remuneration effect brings up a key insight; given that public sector jobs are subject to a higher degree of scrutiny in terms of ensuring fair pay than those in the private sector, the discrimination coefficients, treatment and remuneration effects are lower in the public sector than in the private.¹⁰⁰ Thorat & S. Madheswaran (2007) find that when separate wage functions are estimated for the public and private sector for the NSS survey rounds from 1993-4 and 1999-0, the public sector discrimination coefficient is not only less than the private sector's, it is also decreasing over time.¹⁰¹ Although caste-based discrimination exists in the public sector, its decreasing size over the period of time encompassed by the survey indicates the efficacy of increased labor market wage regulation. While the private sector's discrimination

Table 1.1(C): Blinder-Oaxaca Decomposition Results

Year→	1993-94		2004-05		2011-12	
Components↓	Public sector	Private sector	Public sector	Private sector	Public sector	Private sector
Endowment difference	85.4	70.4	70.1	67.4	75.8	67.6
Discrimination	14.6	29.6	29.9	32.6	24.2	32.4

Source: Author's Calculation

¹⁰⁰ Dipa Mukherjee & Rajarshi Majumder, *Occupational Pattern, Wage Rates, and Earning Disparities in India: A Decomposition Analysis* (2011), 147

¹⁰¹ Thorat & Madheswaran 2007, 4151

coefficient is decreasing, its size relative to the public sector's indicates the it's greater likelihood to discriminate based on caste. Table 1.1(C), taken from S.Madheswaran & Singhar (2016) provides more recent analytical work on the discrimination coefficients as well as the endowment effects.¹⁰² Utilizing data from the 2011 NSS round survey. they comes to similar conclusions in more modern data sets, displaying a trend towards decreased discrimination in the public sector from 2004-5 to 2011-12.

Table 1.1C's data is calculated through a standard Blinder-Oaxaca method that, while not accounting for occupational segregation, provides insight into the trend of the endowment effect versus the discrimination coefficient over time and by sector. Between 2004-5 and 2011-12, both the public and private sector see a decrease in the discrimination coefficients, yet the magnitude of change is drastically different between the two. Firstly, in the private sector the decrease in the discrimination coefficient is by a mere .2 points, and the endowment effect increases by that very same margin. This negligible change specifies a lack of equal pay legislation enforcement in the private sector, and constructs a viewpoint of a labor market free of affirmative action policies, the effect of which is visible in the public sector. By contrast, the public sector sees a decrease in discrimination by 5.7 points between 2004-5 and 2011-12, which makes sense given the increased enforcement of equal pay legislation, and points towards the quota system's partial efficacy. In order to attain a better understanding affirmative action's specific role in curtailing the discrimination coefficient and leveling the playing field per se within the public sector, Das (2014) examines the 1999-2000 NSS data against the 2004-5 data and comes to the conclusion that

¹⁰² S. Madheswaran & Smrutirekha Singhar, *Social Exclusion and Caste Discrimination in Public and Private Sectors in India: A Decomposition Analysis* (2016), 188 -- to clarify, the table here (1.1C) is taken from another author and brought into this paper for the sake of analysis. It is not the original work of this senior project

ST/SCs certainly have benefited from these policies.¹⁰³ Estimating Mincerian wage equations based on the experience of wage-earners pre and post-entry into a labor market affected by certain affirmative action policies, she finds that, when comparing SC/STs and OBCs to FCs, there exists as substantial effect of affirmative action policies on decreasing the wage gap. However, as she notes and as will be a subject of chapter four, these affirmative action policies have not accomplished enough, and the discrimination coefficient's consistently high value shows that employers still have the room to discriminate after affirmative action.¹⁰⁴

These wage-differentials provide insight into the persistence of a material imbalance between upper-castes and SCs by indicating the amount of the gap that can be attributed to discrimination. Taken alone, however, this proportion of treatment to endowment does not elucidate the cause of discrimination as socially exclusionary, taste-based, or statistical. However, to obtain a clearer perspective, one must consider increase of the rates of crimes against Dalits, both violent and non-violent, as well as the increased agitation against SCs by the forward castes that has increased dramatically in intensity over the past twenty years. From 2006 to 2016, the National Crime Records Bureau finds that crimes against Dalits has increased by 764%, with the highest increases located in Goa, Kerala, Delhi, Gujarat, Bihar, Maharashtra, Jharkhand and Sikkim “where rates rose over 10 times.”¹⁰⁵ This article also finds that, between 2006-2016, there were 422,799 reported crimes against Dalits or SCs. Compounding the issue, while the number of crimes against Dalits has increased rapidly, the conviction rates remain below 30%. This has led to some figures estimating the amount of acquittals to be over 74% depending on the year in question, and, with the amount of false cases staying the same, indicates an apparent inequity in the ability of a Dalit

¹⁰³ Soumitra Das, *Effect of Affirmative Policies on Wages in India* (2014), 288

¹⁰⁴ Ibid

¹⁰⁵ Saldahna & Mallapur (2018)

to seek justice through the criminal court system. While this article does not detail the nature of these crimes, nor does it differentiate between crimes against Dalits by Dalits versus those committed by Forward castes, this increase stands in stark contrast to the claim that general agitation against Dalits is on a downward trend.

Chapter 4: Concluding remarks & Policy suggestions

4.1 The Reservation System in the Public Sector

The evidenced marshalled primarily in chapter three points to the persistence of a wage gap despite the reservation system, and the crux of chapter two demonstrates that differences in endowments are not enough to explain unequal compensation and under representation of SCs/OBCs in the labor market. Thus, the natural conclusion is that the efficacy of the reservation system itself, as well as of affirmative action initiatives at large, must be called into question. Its success in the public sector as evident by smaller wage gaps is promising in that it indicates that decreasing the skill gap has led to tangible benefits in Dalit compensation. By contrast, within the private sector, which is unaffected by the reservation system, the portion of the wage gap related to discrimination is higher. Ostensibly, the reservation system's success within the public sector implies that there could be some tangible benefits to its extension into the private sector. However, despite the less severe barriers to entry and discrimination apparent within public sector positions, such as those in the central government, it would be a stretch to claim that the reservation system is offering SCs and OBCs occupations that would significantly alter their socioeconomic mobility. For instance, Desai & Dubey (2012) find that "SCs form nearly 60% of sweepers in central government compared to only 18% of other Class D workers."¹⁰⁶ Jobs that require a higher degree of education often go to the upper castes, which, as has been discussed at length in this project, is both a result of the better qualifications as well as their caste identity offering them an advantage over SCs and OBCs. This suggests that, at least as far as the occupational structure is concerned,

¹⁰⁶ Desai & Dubey (2012) section 1.2

the reservation system's employment quotas provide SCs and OBCs jobs that do not necessarily require a high degree of education and whose menial nature align closely with stereotypes regarding appropriate backward caste labor market positions. Herein lies a fundamental issue with quota systems as a mode of either increasing a marginalized group's representation in a particular market or as a method of increasing their economic livelihood. Even with the introduction of reservations predicated on caste population share, there is no guarantee that the marginalized groups will, as a result, have a greater chance of attaining employment that advances the group's overall socioeconomic mobility. Of course, decreasing unemployment rates among the SCs and OBCs is undeniably beneficial to their quality of life. However, if these SC and OBC quotas primarily consist of low skilled or undesirable jobs with little room for upward mobility, then can the reservation system be considered effective in its goal of addressing labor market discrimination as a whole? Given that the quota system, as observed in India's public sector, has not produced and does not seem likely to foster an occupational structure that features both high and low skilled positions appropriately distributed among the castes, the reservation system, as it currently stands, has not been entirely successful in its goal.

4.2 The issues with Private Sector Affirmative Action

Even if quotas, as they have been structured in the public sector, were imposed in the private sector, it is likely that they would fall short of actualizing the type of change necessary to ensure a more favorable, less discriminatory labor market position for SCs and OBCs. Quotas enforced in the private sector are not necessarily exempt from the fundamental issues apparent in their lack of success in the public sector. Namely, the issue of SC and OBC overrepresentation in unskilled jobs would not certainly be alleviated if the private sector were simply required to maintain a relevant quota. Considering that, in the public sector, the reservation system affords

backward caste individuals employment in jobs that are disproportionately unskilled and low-paying, it is conceivable that private enterprises, which are decidedly less affected by anti-discriminatory legislation, would simply meet their SC or OBC quotas in the same manner. Additionally, perhaps an imposition of quotas in the private sector, given the current state of agitation against SC/OBC politics within India, observed in part through increasing rates of crime committed against them, could have a counterproductive effect on Dalits taking the form of increased upper-caste backlash. Given that the Indian corporate structure is largely dominated by established upper caste networks, translating the reservation system as it currently stands into the private sector would not necessarily promote change. It is important to note that this statement is not made to undermine the potential for affirmative action to remediate the current state of caste inequality. Rather, this paper makes this argument in regards to the reservation system as it currently stands, which is problematic because it simply requires that a percentage of positions within certain public sector organizations must go to SCs and OBCs without specifying a particular distribution of skilled and unskilled jobs. Ajit, Donker and Saxena (2012) provide evidence on the nature of caste-based social exclusion among corporate boards in India that offer insight into why private sector affirmative action may not work. Their study observed 4,000 Indian firms on the stock exchange, which accounted for 4/5ths of the market capitalization of companies on the National Stock Exchange as well as on the Bombay Stock Exchange, with the purpose of discerning the level of diversity among corporate board members. In discussing their findings, they state, “The empirical results show that caste diversity is non-existent in the Indian corporate sector and nearly 65% of the Indian corporate board members are from one caste group – the forward caste -indicating that it is a small, and closed world. In the corporate world, social networking plays an important role. Still, Indian corporate boards belong to the ‘old boys club’ based on caste

affiliation rather than on other considerations (like merit or experience).”¹⁰⁷ Sukhadeo Thorat’s “Reservation and Efficiency: Myth and Reality” reaches a similar conclusion: that upward mobility among skilled positions in both the urban and rural labor market relies heavily on shared caste identity, which can potentially supersede the importance of an individual’s credentials.¹⁰⁸ Both studies acknowledge that increasing access to education indisputably ties to the betterment of SC and OBC positionality both within and outside of the labor market, but their evidence suggest that the domination of forward caste social networks in the upper rungs of many firms’ corporate structure diminishes the role of merit and credentialism. Satish Deshpande’s “Exclusive Inequalities: Merit, Caste and Discrimination in Indian Higher Education Today” addresses partially the differences in the treatment of merit along caste lines. Deshpande states that, “The idea of merit is particularly important as it bears the heavy ideological burden of legitimizing a system explicitly based on exclusion by discrimination. However, despite the extensive domain of beliefs, values and norms that merit invokes, in concrete practice it depends on the mundane mechanism of the examination or some variant thereof.”¹⁰⁹ This understanding of merit frames educational attainment in the context of India as a form of upper caste credentialism wherein the ability to obtain a secondary school or university degree served to distinguish the castes from one another. Requiring a particular level of education for certain occupations served to legitimize caste distinctions in a manner that was ostensibly neutral. While discriminating against individuals on the basis of caste is illegal, demanding that all applicants for a lucrative occupation meet a standard of education is not. This becomes problematic when one considers that upper caste individuals are far more likely to not only to meet the basic educational requirements for higher paying positions

¹⁰⁷D Ajit, Han Donker, Ravi Saxena, *Corporate Boards in India: Blocked by Caste?* (2012), 42

¹⁰⁸ Sukhadeo Thorat, *Reservation and Efficiency: Myth and Reality* (2005), 809

¹⁰⁹ Satish Deshpande, *Exclusive Inequalities: Merit, Caste, and Discrimination in Indian Higher Education Today* (2006), 2439

than the backwards castes, but the quality of their education is also likely to be superior to others. Thus, this form of credentialism can be seen as the upper caste desire to maintain the social order and power dynamics that have given them a superior socioeconomic position, which can only survive on the basis of exclusion. Ultimately, the reservation system as it currently stands – loosely enforced, restricted to the public sector, misguided, and counterintuitive – is not enough to address the evidently complex issues that face SCs and OBCs in modern India.

4.3 Conclusion & The Path Moving Forward

With all the evidence on caste inequality presented throughout this project in mind – from the persistent wage differentials to the apparent occupational segregation along with rampant wealth inequality between the forward and backwards castes, taking into account their origins, catalysts, agents, and theoretical considerations, this project has evoked a difficult question: what is to be done? Firstly, with consideration to the theories of economic discrimination, this project has provided ample evidence against the neoclassical economic doctrines that extoll the competitive market's ability to eradicate discrimination in the long run. It has deconstructed extensively the notions of taste-based and statistical discrimination, arguing that the framework they are conceptualized within are both unproductive in their treatment of caste relations as well as inaccurate in their long-run predictions. This project assessed the validity of these frameworks in describing the situation of caste-based discrimination in the Indian labor market, finding their approaches to be myopic, restrictive, and restrictive as a whole. Moreover, this project asserts, as a result of the shortcomings embedded within the neoclassical theories of discrimination, that a more productive and honest manner in which to delineate and describe observed labor market inequality is to treat the phenomena as the persistence of social exclusion. Chapters two and three present extensive evidence that, while certainly not conclusive, labor market inequalities between

the castes seem to be a result of socially exclusionary forces that operate, persist, and thrive through in and out-market interactions. In other words, the social order of the caste system, while certainly less pronounced than in other periods of India's history, seems as though it remains a prominent determinant of a backward caste's socioeconomic positionality. Furthermore, the underrepresentation of various backward castes in white collar industries and educational institutions, as well as the various wage gaps they experience, result from both an imbalance in pre-market credentials as well as widespread desires to maintain caste distinctions. In this regard, to observe labor market discrimination alone does not adequately capture the full extent to which SCs and OBCs are routinely marginalized against. Ultimately, on these grounds, this project argues that the issues of caste exclusion and mistreatment in the labor market cannot fully be addressed by solely affirmative action or anti-discrimination laws. A successful policy agenda would take into account the ideas purported throughout this project. Legislation should focus on increasing equality of rights as well as access to public resources between the castes and doubling efforts in providing SCs and OBCs better education so that the skill gap decreases. Additionally, the reservation system must be reformed so that it reflects not simply a disadvantaged caste's population share, but also the skewed distribution of jobs within relevant industries. Finally, and perhaps most crucially, extensive anti-discriminatory legislation as well as widespread policy initiatives designed to uproot antiquated caste values from India's present-day culture are absolutely necessary to allow for the reservation system to act as it is intended. Ultimately, change will only occur when deleterious social attitudes regarding caste as well as the structural imbalances that have led to average group productive capacities are dealt with in tandem, not as separate issues.

Works Cited

- Aiyar, Swaminathan S. Anklesaria. "Capitalism's Assault on the Indian Caste System." *Capitalism's Assault on the Indian Caste System: How Economic Liberalization Spawned Low-Caste Dalit Millionaires*, 21 July 2015, object.cato.org/sites/cato.org/files/pubs/pdf/pa776_1.pdf.
- Ajay. "Caste Based Economic Exclusion: The Perpetuating Inequality." *The Lex-Warrier: Online Law Journal*, 1 Dec. 2013, www.lex-warrier.in/2013/09/caste-based-economic-exclusion-perpetuating-inequality/.
- Ajit, D, et al. "Corporate Boards in India Blocked by Caste?" *Economic and Political Weekly*, vol. 47, no. 31, 11 Aug. 2012, pp. 39–43., www.dalits.nl/pdf/120811.pdf.
- Ayres, Ian. *Testing for Discrimination and the Problem of "Included Variable Bias"*. www.law.upenn.edu/live/files/1138-ayresincludedvariablebiaspdf.
- Arrow, Kenneth J. "What Has Economics to Say About Racial Discrimination?" *Journal of Economic Perspectives*, vol. 12, no. 2, 1998, pp. 91–100., doi:10.1257/jep.12.2.91.
- Asia, Friends of South. *Distribution of Different Communities in Various Professions in India*, 2006, www.friendsofsouthasia.org/caste/reservations/data.html.
- Attewell, Paul, and S. Madheswaran. "Caste Discrimination in the Urban Labor Market: Evidence from the National Sample Survey." *Economic & Political Weekly*, vol. 42, no. 41, 13 Oct. 2007, pp. 4146–4153., www.jstor.org/stable/pdf/40276549.pdf.
- Bergmann, Barbara R. "The Effect on White Incomes of Discrimination in Employment." *Journal of Political Economy*, vol. 79, no. 2, 1971, pp. 294–313., doi:10.1086/259744.

- Cain, Glen G. "Chapter 13 The Economic Analysis of Labor Market Discrimination: A Survey." *Handbook of Labor Economics*, 1986, pp. 693–785., doi:10.1016/s1573-4463(86)01016-7.
- Charles, Kerwin Kofi, and Jonathan Guryan. "Prejudice and Wages: An Empirical Assessment of Becker's The Economics of Discrimination." *Journal of Political Economy*, vol. 116, no. 5, 2008, pp. 773–809., doi:10.1086/593073.
- Cotton, Jeremiah. "On the Decomposition of Wage Differentials." *Review of Economics and Statistics*, vol. 70, no. 2, pp. 236–243.,
scholarworks.umb.edu/cgi/viewcontent.cgi?article=1025&context=econ_faculty_pubs.
- Darity, William A, and Patrick L Mason. "Evidence on Discrimination in Employment: Codes of Color, Codes of Gender." *Journal of Economic Perspectives*, vol. 12, no. 2, 1998, pp. 63–90., doi:10.1257/jep.12.2.63.
- Das, Maitreyi Bordia, and Puja Vasudeva Dutta. "Does Caste Matter for Wages in the Indian Labor Market." 18 Dec. 2007,
pdfs.semanticscholar.org/80e1/df1a3ff589534f9250b7a9d91d12abc30a3d.pdf.
- Desai, Sonalde, and Amaresh Dubey. "Caste in 21st Century India: Competing Narratives." *Economic and Political Weekly*, U.S. National Library of Medicine, 12 Mar. 2012,
www.ncbi.nlm.nih.gov/pmc/articles/PMC3379882/.
- Das, Soumitra. "Effect of Affirmative Policies on Wages in India." *Asia-Pacific Journal of Management Research and Innovation*, vol. 10, no. 4, 2014, pp. 279–289.,
journals.sagepub.com/doi/10.1177/2319510X14553698.
- Deshpande, Ashwini. *The Grammar of Caste: Economic Discrimination in Contemporary India*. Oxford University Press, 2017.

Deshpande, Satish. "Exclusive Inequalities: Merit, Caste and Discrimination in Indian Higher Education Today." *Economic and Political Weekly*, vol. 41, no. 24, 17 June 2006, pp.

2438–2444. *JSTOR [JSTOR]*,

www.jstor.org/stable/4418346?seq=1#page_scan_tab_contents.

"Discrimination and Exploitative Forms of Labor." *Discrimination and Exploitative Forms of Labor - Broken People: Caste Violence Against India's "Untouchables" (Human Rights Watch Report, 1999)*, 1999, www.hrw.org/reports/1999/india/India994-09.htm.

Figart, Deborah M., and Ellen Mutari. "Rereading Becker: Contextualizing the Development of Discrimination Theory." *Journal of Economic Issues*, vol. 39, no. 2, 2005, pp. 475–483., doi:10.1080/00213624.2005.11506825.

Ikeda, Sanford. 2017,

pdfs.semanticscholar.org/3091/e2b6f76cecbe23261e19e8caed7b1a1dcebc.pdf.

Iyer, Lakshmi, et al. "Caste and Entrepreneurship in India." *Harvard Business School*,

www.hbs.edu/faculty/Publication%20Files/12-028_0e6e69ba-da4d-4abc-b66a-9611dc07c53b.pdf.

"Literacy Rate in India." *Literacy Rate in India, Census 2011*,

www.mapsofindia.com/census2011/literacy-rate.html.

Loury, Glenn C. "Social Exclusion and Ethnic Groups: The Challenge to Economics." *Annual World Bank Conference on Development Economics*, 28 Apr. 1999. Boston University.

Lundahl, Mats, and Eskil Wadensjö. *Unequal Treatment: a Study in the Neo-Classical Theory of Discrimination*. Routledge, 2015.

- Madheswaran, S., and Smrutirekha Singhar. "Social Exclusion and Caste Discrimination in Public and Private Sectors in India: A Decomposition Analysis." *Indian Journal of Labor Economics*, 16 Mar. 2016, pp. 175–201., doi:10.1007/s41027-017-0053-8.
- Mantri, Rajeev, and Gupta. "Opinion." <https://www.livemint.com/>, Livemint, 4 June 2015, www.livemint.com/Opinion/hxfvT5IeW1OmhkfgNdWy5O/India-must-promote-market-competition-to-eradicate-social-di.html.
- MOSPI. *Literacy and Education*.
www.mospi.gov.in/sites/default/files/reports_and_publication/statistical_publication/social_statistics/Chapter_3.pdf.
- Mukherjee, Dipa, and Rajarshi Majumder. "Occupational Pattern, Wage Rates, and Earning Disparities in India: A Decomposition Analysis." *Indian Economic Review*, vol. 46, no. 1, June 2011, pp. 131–152., www.jstor.org/stable/pdf/23266420.pdf.
- Munshi, Kavian. "Caste and the Indian Economy." *Joint Centre for History and Economics*, June 2017, www.histecon.magd.cam.ac.uk/km/Munshi_JEL2.pdf.
- Panda, Rajan K. *Socially Exclusion and Inequality: Opportunities in Agenda 2030*. A Position Paper on State of Socially Excluded Groups (SEGs) and Framework of Action, whiteband.org/sites/default/files/Social%20exclusion%20and%20Inequality%20in%20India%20Report.pdf.
- Phelps, Edmund S. "The Statistical Theory of Racism and Sexism." *The American Economic Review*, vol. 62, ser. 4, Sept. 1972, pp. 659–661. 4, www.researchgate.net/profile/Edmund_Phelps/publication/4728049_The_Statistical_Theory_of_Racism_and_Sexism/links/5494a5de0cf2ec1337581a8f/The-Statistical-Theory-of-Racism-and-Sexism.pdf.

- Prabhakar, Siddharth. "20 Years after Mandal, Less than 12% OBCs in Central Govt Jobs - Times of India." *The Times of India*, India, 25 Dec. 2015, timesofindia.indiatimes.com/india/20-years-after-Mandal-less-than-12-OBCs-in-central-govt-jobs/articleshow/50328073.cms.
- Rappleye, Emily. "Gender Ratio of Nurses across 50 States." *Becker's Hospital Review*, 29 May 2015, www.beckershospitalreview.com/human-capital-and-risk/gender-ratio-of-nurses-across-50-states.html.
- Saldanha, Alison, and Chaitanya Mallapur. "Crimes against Dalits Rose 746% in 10 Years & the Police Are Half as Likely to Help." *ThePrint*, 8 Apr. 2018, theprint.in/governance/over-a-decade-crime-rate-against-dalits-rose-by-746/47516/.
- Sharma, Smriti. "Caste-Based Crimes and Economic Status: Evidence from India." *Journal of Comparative Economics*, vol. 43, no. 1, 2015, pp. 204–226., doi:10.1016/j.jce.2014.10.005.
- Szczepanski, Kallie. "What to Know About India's Caste System." *ThoughtCo*, 26 Jan. 2018, www.thoughtco.com/history-of-indias-caste-system-195496.
- Thorat, Sukhadeo, and Katherine S. Newman. "Caste and Economic Discrimination: Causes, Consequences and Remedies." *Economic and Political Weekly*, vol. 42, no. 41, 13 Oct. 2007, pp. 4121–4124. *JSTOR [JSTOR]*, www.jstor.org/stable/40276545.
- Thorat, Sukhadeo, and Paul Attewell. "The Legacy of Social Exclusion: A Correspondence Study of Job Discrimination in India." *Economic and Political Weekly*, vol. 42, no. 41, 13 Oct. 2007, pp. 4141–4145., www.jstor.org/stable/40276548.

Thorat, Sukhadeo. "Graded Caste Inequality and Poverty Recent Evidence on Role of Economic Discrimination." 2017, blogs.lse.ac.uk/inequalityandpoverty/files/2017/12/Graded-Caste-Inequality-and-Poverty.pdf.

Thorat, Sukhadeo. "LABOUR MARKET DISCRIMINATION: CONCEPT, FORMS AND REMEDIES IN THE INDIAN SITUATION." *The Indian Journal of Labour Economics*, vol. 51, no. 1, 2008, www.isleijle.org/ijle/issuepdf/a894fabe-5e92-4ab9-8957-dc0ec430224d.pdf.