Symbolic discrimination and material deprivation of historically disadvantaged groups in India

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Abstract

In contemporary India, Dalits still endure extreme forms of symbolic discrimination and social exclusion rooted in the ritual origins of caste. I develop two indices to measure the intensity of discrimination against Dalits and, more broadly, adherence to caste norms across geographical locations. I then investigate how the index capturing discrimination against Dalits relates to the evolution of this group’s living standards over the long term. While the prevalence of symbolic discrimination was not predictive of economic disadvantage for Dalits in the past, this link has become notably closer over the last four decades. States with the highest level of prejudice against Dalits have witnessed slower poverty reduction overall and have not seen improvements in the relative standing of Dalits. This implies that Dalits suffering from material deprivation and symbolic discrimination account for a growing share of India’s poor.
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1 Introduction

At least since Adam Smith’s proverbial linen shirt, notions of freedom from poverty have emphasised that economic resources should be enough not merely for the purpose of guaranteeing physical subsistence, but also to enable individuals to fully participate in society and receive the sympathy and respect of others. It is indeed widely understood that the ultimate goal of eliminating material deprivation through broadly shared economic development is giving people the means to lead lives they have reason to value, as formulated in Amartya Sen’s capability approach. However, while sufficiently high material living standards are a necessary prerequisite for leading a dignified social existence, they are far from a sufficient condition, since on many occasions identity-based discrimination stands in the way. For the case of India, it is critical to keep in mind when evaluating progress in poverty reduction that, for historically disadvantaged groups, economic disadvantage is compounded by the persistence of various forms of derogatory treatment based on their caste identity.

Caste is an ascriptive, hereditary characteristic that formerly articulated occupational segregation within the structure of traditional agricultural production and is linked to Hindu notions of purity and pollution. A vast literature in economics (Munshi, 2019) and other social sciences (Mosse, 2018) has studied the ongoing relevance of caste in contemporary India, painting a mixed picture of change and persistence. Scholars have highlighted how the resilience of this ancient institution is linked to its adaptability to new circumstances, which allows it to transform its meaning and way of operating (Mosse, 2018). For instance, Desai and Dubey (2012) argue that caste has evolved from status hierarchy into elite capture through opportunity hoarding, while Deshpande (2013) describes the process by which upper castes manage to transform their advantages into credentials that can be framed in the modern language of merit. Economists have often embraced the characterisation of caste as a network, which emphasises the mutual support that individuals with a shared caste background provide to each other, and they have applied this perspective to study how caste influences a wide range of economic activities and outcomes, such as risk-sharing (Rosenzweig and Stark, 1989; Mazzocco and Saini, 2012), credit flows (Banerjee and Munshi, 2014), educational investments (Munshi and Rosenzweig, 2006) and occupational mobility (Munshi, 2011).

However, it is undeniable that hierarchical elements rooted in the ritual origins of caste continue to be a part of caste’s influence over contemporary India. The most blatant expression of such hierarchical elements is the persistence of extreme forms of derogatory treatment and social exclusion imposed on those in the lowest rank of the ‘traditional’ Hindu social order, Dalits (referred to as Scheduled Castes in administrative data sources, and formerly called ‘Untouchables’). As documented by Shah et al. (2006), discriminatory practices against Dalits, commonly summarised under the head ‘untouchability’, were still prevalent in most of rural India around the turn of the twenty-first century. They have also been found to be common even in large cities like Delhi and Mumbai (Coffey et al., 2018).
The persistence of these forms of discrimination is particularly striking because untouchability has been constitutionally outlawed for almost 75 years, and specific legal acts have been passed to prevent and punish identity-related crimes against historically disadvantaged social groups – which nevertheless continue to take place frequently.\(^1\)

The recent availability of a few data sources that capture the incidence of these discriminatory practices across the country has led to the emergence of a literature that seeks to quantitatively analyse their correlates and determinants (Bros and Couttenier, 2015; Sharma, 2015; Boorooah, 2017; Thorat and Joshi, 2018; Lawson and Spears, 2021; Girard, 2018). This small literature has not yet established a systematic connection between these practices and the substantial and well-documented gaps between castes in monetary and non-monetary dimensions of well-being. The discriminatory practices implied by the observance of untouchability are not limited to only ‘symbolic’ derogatory acts of humiliation, such as slurs, enforced separation (refusal to share food, separate utensils in tea shops, for example), or denial of access to public facilities, but are also linked to economic restrictions that preclude or hinder Dalits’ access to certain occupations, services, resources, or activities (Shah et al., 2006). It is thus plausible that the culturally rooted symbolic discrimination against Dalits is likely to be associated with their material deprivation.

This paper aims to investigate the links between the living standards of Dalits and the prevalence of symbolic discrimination against them.\(^2\) How often do material deprivation and social disabilities come together for those at the bottom of India’s caste hierarchy? Are more casteist environments also characterised by larger material deprivation for Dalits and/or larger economic inequality between Dalits and others? How have these patterns evolved across space and time? Have, for instance, poverty rates for Dalits, or inequality between caste groups, evolved differently in states where the practice of untouchability is more widespread?

To answer these questions, I develop state-level indices measuring outright symbolic discrimination against Dalits, as well as broader adherence to caste norms, using information in the India Human Development Survey (Desai, Vanneman and NCAER, 2015). I then resort to some of most widely used sources for analysing India’s socioeconomic development, namely the National Sample Survey (NSS) and the National Family Health Survey (NFHS), to analyse heterogeneity across castes and states in the evolution of

\(^1\) The Prevention of Civil Rights Act forbids different discriminatory practices commonly summarised under the head ‘untouchability’, while the Prevention of Atrocities Act bans so-called atrocities: that is, attacks against the physical integrity, private property, personal dignity, and reputation of members of historically disadvantaged groups.

\(^2\) As mentioned above, it is acknowledged that the taboos associated with ‘symbolic’ discrimination have some economic components. I will refer to material disparities as a separate concept to broadly refer to measurable differences in certain economic outcomes.
consumption and a wealth index through the lens of these indices. I analyse these phenomena over the long term, covering a period of four decades between 1983 and 2021.

The main purpose of this paper is to form a bridge between the small literature on untouchability and identity-related violence mentioned above and the much larger literature zeroing in on economic and social disparities between caste groups, insightfully reviewed in Deshpande (2019). A topic of lively discussion within this literature is the extent of convergence across castes in labour market incomes and other socioeconomic outcomes (Hnatovska, Lahiri and Paul, 2012; Deshpande and Ramanachandran, 2019; Deshpande, 2019), and the possible drivers of such convergence (Hnatovska, Hou and Lahiri, 2022). Either as their main focus or as part of a broader analysis, many other studies have scrutinised the role played by caste in the distribution of living standards in India, and in some cases also its interplay with the spatial dimension (see for example Zacharias and Vakulabharanam (2011) on wealth, and Asher, Novosad, and Rifkin (2024) on intergenerational mobility). My main contribution to this literature is introducing the stratification of states according to their levels of symbolic discrimination against Dalits, and the adoption of a long-term perspective on the interaction of caste and regional disparities. The present paper can also be seen as related to studies that aim to explain how relations with higher-caste individuals shape Dalits’ economic disadvantage, such as those on how the socioeconomic outcomes of Dalits in India’s villages are affected by upper-caste dominance (Anderson, 2011; Iversen et al., 2014).

An element that sets this paper apart from the literature that aims to quantify to what extent Dalits are unfairly treated by comparison to non-Dalits with similar traits, including correspondence studies on urban labour market discrimination (Thorat and Attewell, 2007; Banerjee et al., 2009) and decomposition approaches (Kijima, 2006; Madheswaran and Attewell, 2007), is the exclusive focus on unconditional distributions of welfare. While the analysis of conditional distributions could certainly bring additional valuable insights, it seems paramount to initially ascertain the magnitude and evolution of overall differences. Given their long-standing and pervasive influence on Indian society, it is conceivable that, over the long run, caste norms and prejudice against Dalits also affect the (pre)distribution of the characteristics that permit individuals to obtain higher incomes (such as land, capital, education, and skills) and not only their returns. This unconditional approach is also consistent with the use of consumption as a measure of welfare.

The rest of the paper is structured as follows. Section 2 describes the data sources and measures of prejudice and living standards that underlie the analysis. Section 3 focuses on the construction of the indices capturing casteist attitudes. Section 4 describes the results, which are discussed in Section 5.
2 Data and methods

2.1 Indicators of casteism

The source of information regarding prejudice against Dalits and adherence to caste norms that I will rely on is the second wave of the Indian Human Development Survey (IHDS-II). IHDS is a nationally representative household panel survey conducted in 2004/5 and 2011/12, which includes information on 41,554 households across 1,503 villages and 973 urban neighbourhoods in rural India. In addition to many other socioeconomic outcomes, IHDS-II collects detailed information on social norms and relations, including some questions on caste-related attitudes.

2.2 Measuring economic disparities: consumption (NSS)

The main source for the analysis of the evolution of living standards across space and time is the Household Consumer Expenditure Schedule in the `thick` rounds of the NSS, conducted by the National Sample Survey Office (NSSO) approximately every five years. These large rounds, which collect detailed data on consumption expenditure for a large sample of households, are nationally and sub-nationally representative (including for the rural and urban parts of states). The NSS is considered the yardstick for poverty measurement in India. To study trends over an extended time period, I use six rounds of the NSS: the 38th, 43rd, 50th, 61st, 66th and 68th rounds, respectively corresponding to 1983, 1987/8, 1993/4, 2004/5, 2009/10, and 2011/12. Sample sizes range between 100,000 and 130,000 households. The long gap between 1993/4 and 2004/05 is due to incomparability issues around the consumption data collected in the 55th round, which motivated a lively debate on the extent of poverty reduction around the turn of the century, summarised by Deaton and Kozel (2005).

Unfortunately for my purposes, the official methodology for poverty measurement underwent important modifications during the study period, including changes in the underlying consumption aggregate, and substantial revisions to the poverty lines and their updating methods. It is thus not possible to use a consumption aggregate that is comparable over time and that also matches official poverty estimates.

I prioritize the construction of a consistent measure of welfare that is comparable over time and space and that allows us to simultaneously analyse the evolution of poverty and inequality indicators over the long term. For this purpose, I use household monthly per capita consumption expenditure (MPCE), as measured with a ‘Mixed Reference Period’ (MRP) (as in Himanshu (2019), for example) and deflated spatially and temporally to real 2004/05.

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3 ‘Mixed Reference Period’ (MRP) denotes that the reference period is different for food and non-food items (30 and 365 days, respectively). This stands in contrast to the ‘Unitary Reference Period’ (URP), where the reference period for both of those categories is 30 days. Official poverty measurement in India privileged the URP aggregate until 1993/4 and then privileged the MRP aggregate between 2004/05 and 2011/12. However, it is possible to reconstruct the MRP consumption aggregate from unit record data for these earlier rounds, as households provided information on their expenditures for both reference periods.
terms using the labour-price based deflators in van der Weide and Vigh (2018).\(^4\) Poverty is then measured with respect to the (Tendulkar) poverty line officially defined for that survey round. The purpose of this exercise is to evaluate changes in the distribution of consumption against a static benchmark, capturing the impact of economic growth on the living standards of the less well-off.

Our poverty estimates thus differ from official poverty rates, especially for the earlier rounds. Since the primary interest in this paper is exploring the trajectories followed by caste groups across different states, potential inaccuracies in capturing overall poverty levels in an adequate manner (due to changes in prices, consumption patterns, or perceptions of what constitutes a minimally acceptable living standard) are hopefully less of a concern than they would be for ascertaining the ‘appropriate’ level of the poverty line, which is the cornerstone of poverty debates, as it ultimately determines the extent of overall poverty reduction, a very salient figure in public discourse. Readers who are particularly interested in poverty levels in earlier rounds are referred to official sources and specific studies, such as Lanjouw and Murgai (2009) and Panagariya and Mukim (2014).\(^5\) As a robustness check, I verify that the key insights of the analysis hold when using the official poverty measurement methodology.

The core indicators for caste disparities are (differences between Dalits and non-Dalits in) consumption-based headcount poverty rates and poverty gaps, which also captures the extent of deprivation of the poor, and average per capita consumption. The relative standing of Dalits across different states and state groups is assessed further on the basis of the share of Dalits at the bottom of their state’s wealth distribution.

2.3 Measuring economic disparities: wealth index (NFHS)

The last NSS survey round available at the time of writing was conducted in the early 2010s.\(^6\) To extend the analysis to a more recent period, I consider a different, well-established household survey with information on an alternative indicator of material well-being: the NFHS. There are six rounds of publicly available survey rounds, corresponding to the years 1992/3, 1998/9, 2005/6, 2015/6 and 2019/21, respectively. All rounds are representative at the state level, and the last two rounds are also representative at the

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\(^4\) Essentially, they use the implicit deflators from the Tendulkar poverty lines to capture price differences across states and rural/urban sectors for 2004/05. From then on, they track the evolution of prices in each state-sector in quarterly intervals with the (commonly used) consumer price index for industrial workers (CPI-IW) for urban areas and the consumer price index for agricultural labourers (CPI-AL) for rural areas, with imputation for neighbouring states when the state’s price index is not available, as is often the case for smaller states in the earlier part of the time series. See Vigh and van der Weide (2018) for further details. We construct deflators from the 66th round (2009/10) following these principles.

\(^5\) The deflators implied by the different various poverty lines in use during the period would be an intuitive alternative. However, as they are based on different principles and consumption aggregates, we prefer to use labour price deflators throughout the full period.

\(^6\) The Government of India refused to release the data corresponding to 2018, adducing severe methodological flaws. A lively debate, popularly known as the ‘second great Indian poverty debate’, has ensued as different researchers have attempted to bridge the data gap and quantify the extent of poverty reduction in India, relying on various creative methods and alternative data sources. At the time of writing, a brief summary of findings from NSS 2022/23 has been released.
district level. Sample sizes range from around 90,000 households in the first two waves to around 600,000 in the last two waves.

Due to the wide range of information that it contains, the NFHS has been used for the analysis of multi-dimensional poverty. While the main purpose of the NFHS is collecting information on health-related issues, it provides a wealth index derived from information from the household module on ownership of durable consumer goods, housing characteristics, and access to services like electricity and water. These variables are aggregated into an index by means of principal component analysis.

Our calculations are based on the national wealth index factor score provided in NFHS data. The underlying data are, while not identical, broadly consistent, but the factor scores are re-calculated each year. This is not necessarily a shortcoming, since period-specific indices may capture more accurately which goods and characteristics are most indicative of economic status at the time of the survey, as the prevalence of certain characteristics or affordability of various goods changes over time. However, this prevents me from interpreting the indices cardinally to compare them across waves. Therefore, I restrict my attention to disparities between groups in terms of relative poverty indicators uniquely based on ordinal information (rankings), such as the share of different social groups in the bottom quartile of the wealth index distribution.

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7 The latter rounds provide state-specific indices. We restrict our attention to the national index to enhance comparability.
3 Measuring casteism and discrimination against Dalits

There are several questions in IHDS-II that provide direct or indirect information of the prevalence of caste norms. Surveyed households are directly asked whether any of their members practise untouchability and, if they answer negatively, a follow-up question is posed on whether they would admit a person from a Scheduled Caste background into their kitchen or to share their utensils — some of the most salient restrictions introduced by untouchability norms. I include the share of non-Dalit households explicitly acknowledging the practice of untouchability, and also the share of those implicitly admitting it after having denied engaging in it, among the candidate variables for measuring discrimination against Dalits. I also incorporate the share of Dalit households that report having suffered from untouchability over the last five years.

These are the variables from this dataset that have received the most attention in regard to measuring prejudice or caste discrimination. However, some concerns remain about the validity of this information, as responses might be affected by social desirability bias. I therefore add indicators reflecting other forms of symbolic Dalit discrimination. Spatial segregation is one of these forms, as Dalit households are sometimes prevented from entering neighbourhoods where higher-caste individuals live (Girard, 2018). IHDS provides information on another customary form of spatial segregation: namely, the share of the villages where Dalits are confined to live in segregated hamlets. Finally, IHDS includes information on the share of schools where higher and lower castes drink water from separate water sources. While there is no explicit mention of Dalits, they are usually the target of this type of exclusion, motivated by untouchability norms (Bros and Couttenier, 2015).

A second set of measures capture the importance of caste norms without an explicit component of discrimination against Dalits. The first is the prevalence of caste endogamy, a fundamental factor in the persistence of this institution, as measured by observed behaviour, based on the answers of married women regarding the caste identity of their husband, and by awareness about inter-caste marriage in the community. The second proxy for caste norms without an explicit component of discrimination against Dalits is the share of households not having any meat-eating member. Vegetarianism is an important component of Hindu identity that is often mobilised in the context of disputes with Muslims (Shayo, Colson-Sihra and Atkin, 2021) and linked to the very same notions of purity and pollution that sustain caste norms. This is complemented by the share of non-vegetarian households reporting not eating meat in public, which can be seen as an indicator of how...

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8 One could consider including differences in the prevalence of vegetarianism among non-Dalits and Dalits as an indicator of their cultural distance from upper castes and hence as a predictor of the discrimination they experience. We choose not to do this since this variable does not fit conceptually well within the two indices defined here.
strong they perceive these norms to be in their community. Finally, we consider the share of households reporting that their children have teachers who favour pupils from certain caste backgrounds. While this is indeed a measure of perceived caste discrimination, it is included in this group because there is no specific reference to Dalits, and this differential treatment could be taking place among a different set of castes.

Another commonly used source of information on caste discrimination against Dalits (see e.g. Girard, Chassonery-Zaïgouche and Mayer, 2023) is the National Crime Records Bureau, an administrative data source that contains information on complaints filed with the police for different types of offences, including crimes specifically related to the social identity of Dalits and Adivasis, and violent crimes against Dalits perpetrated by people not belonging to Scheduled Castes or Tribes. I abstain from including these measures because violence is often strategically deployed against Dalits’ assertion of their rights. Hence, these indicators are more likely to react to changes in the relative economic standing of Dalits – as shown in Sharma (2015). For similar reasons, I do not incorporate a question on caste-related conflict from IHDS.

State-level averages for these indicators are computed using household weights (except for the share of schools with segregated water sources) for all states and union territories where the Dalit share of the population according to the 2001 census is at least 5%. States are merged back to 1983 borders to create a classification consistent with the long time-series, which implies that Chhattisgarh is included in Madhya Pradesh, Jharkhand in Bihar, and Uttarakhand in Uttar Pradesh.

**Figure 1: Candidate indicators of discrimination against Dalits and casteism: correlation**

![Correlation Casteism Indicators](image)

Correlation across states. Own calculation from IHDS-II household survey data.
Figure 1 shows the pairwise correlation of the casteism indicators under consideration across states. While generally positive, these correlations are not too strong, which supports the notion that they might be capturing different dimensions of discrimination against Dalits. Therefore, I use principal component analysis to aggregate this information into two indices: the Dalit Discrimination Index (DDI), including only information on various forms of discrimination against Dalits, and a Casteism Index that also incorporates the broader set of measures of adherence to caste norms. Perceived teacher bias is ultimately not included in any of the indices as it is the only variable that shows systematic negative correlations with other indicators.

Figure 2 shows the spatial distribution of the values for the DDI and the Casteism Index, respectively. Perhaps unsurprisingly, states in the Hindi Belt emerge as those with the highest scores in both indices. They even monopolise the top positions for the most comprehensive casteism measure, while Odisha replaces Haryana in the top position for the DDI. Interestingly, Delhi shows consistently lower values than surrounding states. On the other hand, the states and union territories which occupy the lowest positions are those with a large tribal (Assam, Tripura) or Muslim (West Bengal, Jammu and Kashmir) population, in addition to southern states (Andhra Pradesh, Tamil Nadu and most notably Kerala), and Maharashtra. Rajasthan stands out as the highest-ranked state for both indices, while Jammu and Kashmir and Kerala exchange their ranking in the two top positions, with the latter ranking lower in terms of discrimination against Dalits.

Figure 2: Spatial distribution of Dalit Discrimination Index and Casteism Index

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9 The same holds for Chandigarh, which is excluded from the main analysis (as is Puducherry) due to very small sample sizes.
Note: Own computation with IHDS-II data. The maps show state boundaries corresponding to 2015. For states that were not independent by 1983 (Chhattisgarh, Jharkhand, Telangana and Uttarakhand), the indices have been computed together with the state they were previously part of.

In the following section, I analyse whether the evolution of various welfare indicators is associated with these indices. I will henceforth focus on the DDI because its relation to the economic disparities between Dalits and others is conceptually more straightforward. Since both indices lead to closely aligned state rankings, results for the Casteism Index are qualitatively similar. In addition to state-level analysis, states are classified into three groups based on their DDI ranking, as follows:

- High DDI: Rajasthan, Madhya Pradesh, Himachal Pradesh, Odisha, Uttar Pradesh, Bihar.
- Medium DDI: Gujarat, Haryana, Karnataka, Tamil Nadu, Delhi, Punjab.
4 Results: symbolic discrimination and economic disadvantage

4.1 Consumption (NSS): 1983–2011/12

We start by analysing the evolution of household per capita consumption expenditure over the period 1983–2011/2 for Dalits and non-Dalits. Figure 3 shows the evolution of headcount poverty rates for Dalits and non-Dalits across the three state groups, as defined by their DDI levels. It is apparent that poverty rates have fallen massively alongside the acceleration of India’s economic growth. It can be seen that poverty rates for both groups are not only higher in high-DDI states throughout the study period, but they have also declined much more slowly. Thus, the fact that in 2011/12 Dalit poverty rates are almost twice as high in states where Dalits also face symbolic discrimination is partly due to the more limited success of those states in reducing poverty overall.

Figure 3: Poverty for Dalits and others in the long term across state groups

Note: Figures constructed by the author based on MRP consumption from NSS, expressed in real 2004/5 terms using deflators based on CPI-AL and CPI-IW. Poverty lines are 2004/5 Tendulkar lines. DDI denotes the ‘Dalit Discrimination Index’ – see Section 3 for details. Standard errors account for the complex survey design.

To account for these different poverty levels and trends, the difference between the poverty rate for Dalits and that for non-Dalits is denoted as ‘excess Dalit poverty’. For India as a whole, excess Dalit poverty fell from over 15% in 1983 to below 10% in 2011/2. Figure 4 shows that, at the start of the period, the DDI does not relate to excess Dalit poverty as one would expect a priori, since the gap between Dalits and others is smallest for the high-prejudice states. However, there is an intuitive relation between the DDI and the evolution of excess Dalit poverty, which has steadily declined and more than halved for low-prejudice states but followed an inverted-U shape for high-prejudice states, with no improvement taking place over the three decades. Excess Dalit poverty increased for medium-DDI states
as well until 1993, but the post-liberalisation decline has been stronger than the initial rise. This implies that the association between the symbolic discrimination and economic disadvantage experienced by Dalits strengthened between the 1980s and the 2010s.

The bottom panel of Figure 4 shows that this stronger association of excess poverty and the DDI holds when looking at the trajectories of individual states. While the correlation between excess Dalit poverty and symbolic discrimination was actually negative in 1983, it has evolved into a positive correlation as substantial reductions have taken place in virtually all low- and mid-DDI states. On the other hand, large states in the Hindi Belt, like Uttar Pradesh and Bihar, have seen virtually no progress over these 30 years.

**Figure 4: Excess Dalit poverty and the DDI**

The evolution of the excess Dalit poverty gap, depicted in the right panel, does show a decline for all states, including those with high DDI values, implying that the average distance between poor Dalits and the poverty line declined faster than that for non-Dalits across the country. However, the magnitude of this decline was much stronger for states with more inclusive attitudes towards Dalits.

Appendix Figure A.1 shows that these results are not an artefact of my choices regarding real per capita consumption and poverty lines, and that similar patterns hold when computing poverty following the official methodology (using official poverty lines and the corresponding consumption aggregate). While state-level poverty rates for Dalits differ markedly between the early-period Lakdawala lines and my approach (as they do between Lakdawala and Tendulkar lines in the period they overlap), a qualitatively similar
development of their correlation with the DDI can be observed, as excess Dalit poverty goes from being negatively to positively correlated with it over the period covered by Lakdawala lines (1983/4–2004/5). The evolution of excess Dalit poverty between 1993/4 and 2011/2 according to official Tendulkar poverty lines is also consistent with the narrative in this paper.

Part of these developments in excess Dalit poverty might be explained ‘mechanically’ by stronger growth. Accelerating growth (even if distributionally neutral) affects the excess Dalit poverty rate when Dalits are underrepresented or overrepresented in the segment of the consumption distribution being marginally pulled above the poverty line. As richer states reduce their poverty rates beyond a certain level, one would thus expect their excess Dalit poverty levels to decline because Dalits are disproportionately represented among the least well-off across virtually all states.

**Figure 5: Dalit economic disadvantage (NSS MPCE) and the DDI**

Therefore, it is necessary to directly assess whether developments in the poverty and excess poverty of Dalits are also partly driven by changes in their relative standing in within-state consumption distributions. Figure 5 visualises the evolution of two indicators of inequality between castes. The left panel displays the share of Dalits among the poorest quarter of their respective states. This is a measure of within-state inequality that sheds light on the concentration of Dalits at the bottom of the distribution. Dalits are overrepresented among the poorest in virtually all states and time periods (except for the two northeastern states with large tribal population towards the end of the period). For
several states in the high-DDI and mid-DDI categories (such as Rajasthan and Haryana), the relative standing of Dalits worsened markedly over the three decades under consideration. This is reflected in a largely flat Dalit bottom 25% share for high-DDI states, in line with the developments for excess Dalit poverty, but also for medium-DDI states, which display the most unfavourable situation for Dalits throughout the entire period of study. This indicates that the decline in excess Dalit poverty in those states is just the product of improvements in their overall economic situation. On the other hand, the share of Dalits in the bottom quarter starkly declined to levels below 30% in low-DDI states.

To conclude, I extend this analysis beyond the bottom of the distribution by examining the average consumption gaps between Dalits and others. The increasing association of larger caste inequalities with symbolic Dalit discrimination described above extends to consumption gaps, although in a more nuanced way. While the only group of states for which the Dalit average consumption gap increased (mainly due to developments between 1983 and 1993) is that with a high DDI, the levels of this gap remain higher for the other two groups of states: particularly so for mid-DDI states, which underscores the important caste differences in the upper segment of the income distribution of those states. As a consequence, the correlation between consumption gaps and the DDI is very tenuous.

It is remarkable that, as opposed to excess Dalit poverty, the all-India Dalit consumption gap has not declined over the period, staying at levels around 25%. This difference between both indicators is consistent with the finding of Hnatovska, Lahiri and Paul (2012) of convergence in terms of consumption between poor Scheduled Castes/Scheduled Tribes and poor households not belonging to those groups, and divergence at the top of the distribution.


We now turn to an analysis of the wealth index in the NFHS to shed light on developments after 2011. Figure 6 shows the share of Dalits (and non-Dalits) in a given set of states at the bottom 25% of the all-India distribution of the national NFHS wealth index. As opposed to the consumption-based poverty rate, the level of this indicator does not capture the overall improvement in living standards over time – and improvements for one group necessarily must be compensated for by a worse performance of another group. Thus, as in the case of consumption, the regional distribution of this indicator is influenced by how well states have fared relative to each other.

Dalits in high-DDI states are notoriously overrepresented at the bottom of India’s wealth distribution. They are also the only group whose situation deteriorated between 1992 and 2019, even if in the latter years there was an improvement after over half of them fell into the bottom wealth index quartile in 2015/16. Non-Dalits in these states fare worse than Dalits in other states.
To neutralise the impact of differences in overall poverty reduction, one can look at the left panel in Figure 7 at the evolution of “excess Dalit wealth poverty” (the difference between the respective shares of Dalits and non-Dalits in the bottom quartile of the all-India wealth index distribution). Between 1992 and 2005, only Dalits in low-DDI states improved their situation with respect to non-Dalits, as observed for consumption during this period for which NSS and NFHS overlap. The trajectories of Dalits in low-DDI and high-DDI states have drifted apart further since 2005, as excess Dalit wealth poverty has declined substantially in the former and remained flat at around 15% in the latter. Consistently, the correlation between symbolic Dalit discrimination and excess Dalit poverty increased over the period. Regarding individual states, West Bengal and Madhya Pradesh stand out, respectively, for a large reduction in, and a large increase in, excess Dalit wealth poverty.
Regarding the relative ranking of Dalits within states, shown in the right panel of Figure 7, developments for high-DDI and low-DDI states correspond to those for the national ranking. Again, mid-DDI states combine the highest levels of within-state inequality with the lowest values of excess Dalit wealth poverty.
5 Discussion

The overarching conclusion from this exercise is that the link between the symbolic discrimination and economic disadvantage faced by Dalits has significantly strengthened over the last few decades. While the state-level indicators of Dalit discrimination measured from the recent India Human Development Survey were inversely correlated to Dalit deprivation and disadvantage in the past, this correlation has increased markedly and has become positive. This relation is stronger for indicators of material deprivation than for inequality measures reflecting the full distribution, mainly because strong and sufficiently inclusive economic growth has enabled some states that do not stand out for particularly high or particularly low levels of symbolic Dalit discrimination to reduce excess Dalit poverty while maintaining high caste inequalities among households above the poverty line.

An obvious limitation of the analysis is that prejudice was measured in 2011, hence at the end of the consumption series. One possible alternative interpretation of these results is that the improvement in Dalits’ economic situation has come hand in hand with their broader empowerment and a reduction in the level of symbolic discrimination against them. It cannot be ruled out for certain that this is part of the story, and it is plausible that social norms react to economic factors to some extent. Indeed, some studies have suggested that certain changes in economic circumstances (especially those that undermine the structure of traditional agricultural production) can change the nature of caste relations and potentially improve the social standing of Dalits (Epstein (1962), Kapur et al. (2010), Carswell and De Neve (2013), Jodhka and Simpson (2019), Garcés Urzainqui (2023)). However, Dalit economic empowerment may also lead to a backlash and identity-motivated violence (Sharma, 2015), to ‘show them their place’, so that its relation to casteism is theoretically and empirically ambiguous.

In general, casteism is typically seen as the product of longstanding practices and beliefs that change only very sluggishly over time, as reflected by the marked association of both indices with linguistic, religious and demographic characteristics, and as attested by the relatively common practice of untouchability even in India’s dynamic metropoles (Coffey et al., 2018). In addition, some indicators of discrimination and casteism, such as the existence of segregated hamlets for Dalits or the prevalence of intra-caste marriage, reflect historical rather than present-day attitudes: the spatial distribution of the share of women married to a husband from the same caste has barely changed over time. Moreover, NFHS data reflect an evolution of caste gaps in low-prejudice and high-prejudice states over the last decade that is consistent with the patterns in pre-2011 data. All in all, it is unlikely that the findings presented in this paper can be fully explained away by the late measurement of casteism.

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10 IHDS data allow us to track the evolution of caste endogamy across space and over time by splitting the women sample by the time of marriage. The relationship is remarkably stable over time – the rank correlation across states for the share of women that married endogamously until 1987, and those that did so after 2004, is over 0.9.
Of course, the descriptive nature of this exercise does not allow us in any way to conclude that prejudicial attitudes towards Dalits have been the key driver (or even a cause at all) of the different trajectories observed for excess Dalit poverty. The initial negative correlation of the DDI and Dalits’ living standards is a useful reminder that there are many other factors at play, and the geographic clustering of high-DDI states further attests that they share many potentially relevant common characteristics. However, given the large and widely documented impact of caste norms, networks, and identities on various economic outcomes, and the large number of economic restrictions associated with untouchability practices, it is not implausible either that they have hampered the access of Dalits to the opportunities for economic advancement offered by capitalist development, which is typically portrayed as led by ‘free markets’ with no concern for identities but in practice is more often than not embedded in pre-existing social structures (Mosse, 2020).

Be that as it may, it is inescapable that an increasing share of the Indian poor is constituted by Dalits living in environments where discrimination against them is especially prevalent (Figure 8). This double barrier to enjoying a dignified life free of poverty and prejudice is an ever-present reality when thinking about India’s poor. While the various forms of discrimination suffered by Dalits beyond the economic sphere deserve increased attention in development policy and discourse on their own, they are thus also likely to stand in the way of future poverty alleviation efforts.

**Figure 8: Spatial distribution of the poor in the long term (NSS MPCE)**

![Poverty Across States](image)

Note:
Figures constructed by the author based on MRP consumption from NSS, expressed in real 2004/5 terms using deflators based on CPI-AL and CPI-IW. See Section 3 for details on the DDI.

Although the different trends in excess Dalit poverty gaps described above have also played a role, the increasing concentration of poverty among Dalits in high-DDI states emerges to a large extent as an unexpected corollary of the well-documented process of spatial divergence in the Indian economy (Ghosh, 2012) and the related concentration of poverty in
poorer states (Narayan and Murgai, 2016). However, even overall growth may not be fully independent of casteist attitudes. It has been argued that inequality of opportunity, which is undeniably generated by caste norms, has negative effects on economic growth (Marrero and Rodriguez, 2013). It is not hard to imagine that the waste of human talent and economic opportunities introduced by discrimination against Dalits has negative implications that go well beyond those who directly suffer from this form of oppression.
References


Appendix A.1

Figure 9: A.1. Dalit excess poverty (official lines) and the DDI

Note: Figures constructed by the author based on consumption data from NSS. Figures in the right panel show results for the MRP consumption aggregate, expressed in real 2004/5 terms using deflators based on CPI-AL and CPI-IW, and Tendulkar poverty lines for 2004/5. Figures in the left panel based on nominal consumption (Unitary Reference Period for Lakdawala lines and MRP for Tendulkar lines). See Section 3 for details on the DDI.