Changing the Narrative: Parliamentary Representation and Poverty Conceptualizations, 1999-2023

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Abstract

How elected representatives conceptualize a policy problem is an important facet of agenda setting in democratic societies. This paper draws on a dataset of 200 speeches by government officials and nearly 350,000 questions raised by around 1800 parliamentarians from 1999 to 2023 to study how government and parliamentary approaches to poverty have changed over time in India, the world's largest democracy. It also studies the effect that parliamentarian gender and caste has on such discussions. Using text analysis methods, it shows, firstly, that India has seen a large shift in official government discourse regarding poverty: from subsidy provision before 2004, to economic growth and rights-based between 2004 and 2014, to an expansion of basic service provision by the government after 2014. Secondly, it presents evidence that elected parliamentarians have followed the move toward a more basic-services focused approach to addressing poverty in India. Third, by using a regression-discontinuity design and exploiting variation that arises from changes in granting of reserved category status to constituencies, the paper finds that female, SC, and ST parliamentarians raise more questions regarding the community that they represent and highlight different aspects of poverty than other parliamentarians. These results present new evidence about India's approach to poverty alleviation, underscores that elected parliamentarians are substantively representing the community and the concerns of the constituency that they are elected from, and highlights the importance of political representation to problem conceptualization using a novel dataset.

Introduction

In the speech that Jawaharlal Nehru (the first Prime Minister of India) made to the Constituent Assembly of newly independent India in 1947, he discussed the importance of addressing poverty in the nation. Almost all future governments in India have echoed this concern (Kohli 1987; Frankel 2005). India has made substantial progress since then, and the rate of poverty in the country has dropped from 75% (1947) to 16.9% (2019). However, the largest democracy worldwide still has the largest number of poor individuals in the world (Global Multidimensional Poverty Index Report).

Existing scholars highlight various routes that countries follow to combat poverty, "from a focus on stabilization, privatization and liberalization to aid transfers in order to eliminate poverty traps to targeted subsidies for public goods provision, to micro interventions that are studied in

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randomized controlled trials" (Minkler and Prakash 2015). An understudied aspect of poverty alleviation in a democratic context is how elected representatives are conceptualizing the problem of poverty. This is important from the perspective of two policy actors in the Indian context. First, government representatives, such as the prime minister and president – who represent the 'official discourse' regarding the role of the central government – and second, elected members of parliamentarian – who represent the interests of their constituency and party in the parliament. Conceptualizations by these actors are important for a number of reasons: Firstly, perceptions of poverty would be correlated with the policies that governments are using to address poverty. To add on, studying the perspectives of parliamentarians from marginalized communities would help understand the concerns of marginalized groups, and assess whether these are different from that of the majority group. Assessing the differences between these two stances would help assess whether representation changes discourse related to a particular policy problem and translates into substantial policy change for individuals from marginalized communities.

When considering official government discourse, scholars have found that there has been a substantial shift in the stance of the Indian state when addressing poverty, from one focused on redistribution, to one that finds equality of opportunity as key in addressing the issue (Kohli 2010; 2012). The Indian state adopted some key social policies in the beginning of the 21st century. These included: the expansion of the Integrated Child Development Services (2000); the Mahatma Gandhi National Rural Employment Guarantee Act (2005); the Jawaharlal Nehru National Urban Renewal Mission (2005); the Right to Education (2009) and the National Food Security Act (2013) (Chiriyankandath et al, 2013). These Acts were key as they formed the basis of a 'rights-based' welfare system based on legal entitlements (Chiriyankandath et al, 2013), before which a history of 'disparate and fragmented social policies' (Mehrotra et al, 2014; Roy 2023) were used for social protection. This was followed by the launch of large service provision schemes after 2014 which were targeted toward the poorer population of the country, some of which have been highlighted in the figure below.
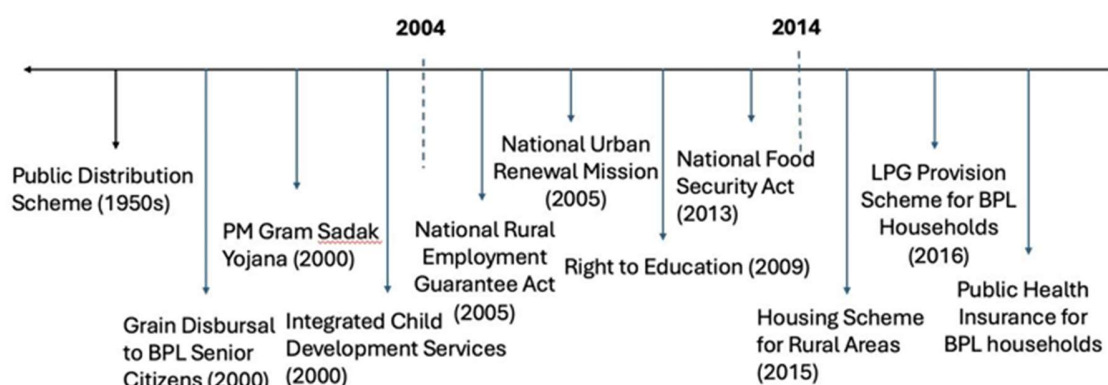

Figure 1: Anti-poverty policies introduced by the central government

This pattern begets the question of why these social policies were introduced during this time. Did their adoption represent a shift in the way that official government discourse conceptualized poverty – and hence thought about the policies that would solve it?

The first part of this project will seek to answer these questions by assessing how parliamentary discourse about poverty has changed, using key prime ministerial speeches and presidential speeches over a period of 24 years – 1999 to 2023.

The second part of this project studies the questions that parliamentarians have raised when discussing poverty. It highlights the impact of political representation through a new lens, by assessing how parliamentarians that belong to marginalized communities conceptualize poverty and engage in political discourse regarding it. Academic literature within the social sciences finds that the political representation of marginalized communities is helpful to those communities that gain representation. However, a secondary strand of literature also suggests that such representation may not always prove to be helpful in certain contexts (Hessami and Lopes da Fonseca 2020). Jensenius (2017: 6) mentions that policies of group inclusion are often perceived to have long term positive outcomes including "shift the political agenda, alter the nature of political deliberation", among other outcomes. My results will show whether the identity of individuals indeed affects the manner in which they discuss a pertinent policy problem. It will also provide insight into the relationship between different social groups in India – women, the SC, and the ST community – and assess whether they raise different questions in parliament depending on the electorate that they are representing.

The final part of the project will seek to assess how parliamentarians' questions about poverty depict the perceptions of voters regarding the importance of the issue, and whether raising more questions about a policy in parliament has any consequences on the development indicators in their constituency. In a pan-India survey of Governance Issues conducted by the Association of Democratic Reforms in 2013-2014, they find that Indian citizens prioritize the candidate that represents their constituency, over factors such as the party they belong to, the prime ministerial candidate, or caste/religion of the candidate. Given the importance of the parliamentarian for voters, the paper will seek to assess whether the poverty-related questions that the parliamentarian raises reflects the concerns that voters have about poverty. This section of the project is currently still in progress.

The data for this project is sourced from the transcripts of prime ministerial speeches and questions that were delivered and raised in the lower house of the Indian parliament (Lok Sabha). The Lok Sabha is a significant institution which houses 543 elected members during parliamentary sessions. Apart from addresses from the president, prime minister, and debates on pertinent policy topics, the question-answer session of the Lok Sabha provides a platform for elected representatives to clarify policy concerns from ministers of the national government. Further, the question-answer session of the parliament provides parliamentarians with the opportunity to bring the concerns and priorities of their constituencies to the floor of the parliament. This project draws on 181 prime

ministerial speeches along with 347,500 questions that have been raised in parliament from 1999 to 2023.

The methodology includes a mixture of content analysis, fixed effects regression modeling, close election regression discontinuity and text analysis modeling. The content analysis is employed to qualitatively ascertain the shifts in governmental discourse regarding poverty. The fixed effects and close election regression discontinuity designs are employed to assess which ministries parliamentarians are raising questions to, and causally assess the impact that parliamentarian identity has on the ministries that they pose questions to. Finally, the text analysis modeling is used to gain a finer understanding of the topics that form a part of poverty discourse in the parliament, assess how this has changed over time, and study whether female, SC and ST parliamentarians are raising different questions in the parliament.

While this research is based on India, the results are relevant to parliamentary democracies around the world. Poverty is a challenge that continues to plague countries, and they differ in the strategies that they adopt to address it. When the South African constitution was adopted by the country in 1996, the rights to adequate housing, healthcare, food, water, social security, education, and infrastructure were enshrined in the constitution. China has been successful in lifting a large number of people out of poverty, by relying on "increasing rural households' income by promoting the growth of non-agricultural jobs and industries; increasing agricultural productivity; investing in rural infrastructure" (Li and Zhang 2024). This approach is different from the one followed in the United States, where Prof. Mathew Desmond states that the American approach has focused on "those who are poor and what they can do to uplift themselves, rather than changing the systems that keep them poor" (Balch 2023). To add on, in a paper that brings together historical data from 195 countries, scholars that when constitutional provisions are stated as enforceable laws, policymakers are better able to enforce poverty reduction policies (Minkler and Prakash 2017). Thus, while the data and context for this study may be contained to India, the manner in which poverty discussions are taking place, how they are changing over time, and how political representation impacts such discourse is important for other countries around the world.

To summarize, this research seeks to understand the Indian government and elected parliamentarians' approach to addressing the complex problem of poverty, and to assess how gender and caste identity affects the manner in which parliamentarians are conceptualizing the policy problem. The results will be beneficial for policymakers in developing countries to understand how different understandings of anti-poverty programs can influence policy, and will make a stronger case for political representation by showing how different forms of representation can change the discourse regarding poverty.

Literature

There are four strands of literature in the fields of political science, public policy and economics that are closely connected to this work.

First, several scholars have qualitatively studied political economy behind policymaking for poorer communities in the Indian context. This literature highlights that there have been substantial shifts in the role of the Indian state: from redistribution of assets to promoting equality of opportunity by investing in health and education (see Kohli 2012); and focusing on human development (Mooij and Dev 2004). The 'rights-based social welfare movement', which was brought forth through civil society movements, have also been studied as a strong reason for the adoption of rights-backed services in the early 2000s (Mehta and Walton 2014). Other scholars state that the welfare focus in India from the late 1990s to 2014 has shifted disproportionately to expanding social protection programs, however, there has been a lack of focus on basic public service provision, such as education and health (Kapur and Nangia 2015). Other scholars have also discussed the missions and schemes introduced by the government after 2014, to state that "in contrast with redistributive schemes…these yojanas (schemes) do not seek to alter social balances or even to combat inequality, but they send the people an identity oriented message." (Jaffrelot 2021: 125). Jaffrelot further quotes a BJP cadre to explain that the schemes launched by the government post-2014 offer dignity to the poor. This study seeks to add to this literature by assessing if quantitative discourse analysis of the time periods that have been discussed by the scholars above yields similar insights.

Second, there is a large discussion on the role that political representativeness has on the group that gains representation. Evidence from India finds that gender reservations have led to more investment in infrastructure that is relevant for women (Chattopadhyay and Duflo 2004); that an increase in female representation leads to a rise in documented crimes against women (Iyer et al 2012); and that caste-based reservations increase transfers to groups that benefit from the reservations (Pande 2003). Other scholars find heterogeneity in the effect of political representativeness. Clots-Figueras (2012) finds that increasing female political representation increases the probability that an individual will attain primary education in urban areas, but this effect cannot be found in rural areas, or in the sample as a whole. However, evidence in other contexts – largely developed countries – also finds that political representation does not lead to a change in policy outcomes (Hessami and Lopes da Fonseca 2020). To add to this, Jensenius (2015) finds no impact of overall change in development for constituencies that are reserved for SC communities in India. I seek to add to this literature by focusing on substantive representation, and assessing how representation impacts policy discourse: is the policy discourse of women, SC and ST parliamentarians different from that of other elected representatives?

Third, it seeks to contribute to the literature that studies the process of policymaking by studying changes in political rhetoric. The role of language in shaping thought and practice has been discussed in literature in political science and public policy (see Watkins-Hayes and Kovalsky 2016). In the Indian context, Ayyangar and Jacob (2015) use data from the question hour between 1980-2009, and find that parliamentarians from national parties raise significantly more questions than those from subnational parties. Jacob also finds that gender does not have a causal effect on the number or content of questions asked during question hour, and that women do not raise

different questions than their male counterparts (Jacob 2014). Imtiyaz and Fakhruz-Zaman (2019) find a positive relationship between the reservation of parliamentary seats and the issues that parliamentarians raise concerning Scheduled Castes and Tribes. By using a longer time period and studying the same question using different methods, this paper seeks to add to the literature on representation by foregrounding another form of substantive representation: whether parliamentarians represent the interests of their constituency and community in the parliament.

Finally, a burgeoning strand of literature focuses on using qualitative and quantitative text analysis to study newspapers, political manifestos, and media framing of issues to gain insights on a host of political factors: the government's stance on different issues over time, including political participation, vote shares, policy decisions etc. For instance, a sentiment analysis of congressional speeches to understand perceptions regarding immigration policy in the United States finds more positive but polarized perceptions toward immigration over time (Card et al 2022). In the context of the UK, Hanlon (2022) attempts to map sentiments towards the European parliament over time from 1810 to 2005, to find that changes in the party in control of government do not substantially affect the time or attention spent by the Parliament on different topics. This form of analysis extends to the field of poverty studies: Rose and Baumgartner (2013) study media perceptions of poverty in the United States to find that the framing of poorer individuals has changed over time, which has consequences for policy decisions related to poverty in that context. This paper uses quantitative text analysis methodologies to gain insights about how the parliament of the country is perceiving an important policy issue. It seeks to add to the literature by focusing on a topic and context that has not been studied before: a developing, South Asian country.

Data

Prime Ministerial Speeches

Data for this has been sourced through the official repository of the Lok Sabha database, and includes approximately 181 speeches, covering 3 prime ministers in this dataset. The summary statistics of the speeches can be found in the table below:

Table 1: depicting the number of Lok Sabha speeches by Prime Ministers and Presidents

Prime Minister	Lok Sabha Speeches	Lok Sabha
Atal Bihari Vajpayee	73	13th Lok Sabha (1999-2004)
Manmohan Singh	55	14th-15th Lok Sabha (2004-2014)
Narendra Modi	23	16th-17th Lok Sabha (2014-2023)
Total	181	13th - 17th Lok Sabha (1999-February 2023)

<u>President's Address</u>

An address by the president is delivered to both houses of the Indian parliament every year (Article 87 of the Indian Constitution). This address is prepared by the government of India and describes the programs that the government has planned for the coming year. 30 speeches have been included in the dataset, covering speeches delivered by the president from 1999 to 2023.

<u>Question Hour Dataset</u>

The question hour dataset includes 3,43,000 questions raised by members of parliament in the parliament from 2019-2023. A question has, on average, about 30 words (including procedural words), whereas an answer has, on average, about 50 words. There are thus approximately 10,350,000 words in the corpus. Of these, approximately 7,000 questions (210,000 words) are filtered as the ones related to poverty. Only questions have been included in the analysis, as they represent the perspective of the parliamentarians. The metadata includes details of the Lok Sabha members that are posing the question, including their constituency, party, gender, and caste identity.

The total number of questions for each of the Lok Sabhas are depicted in the table below.

Table 2: depicting the number of questions raised by members of parliament on the floor between the 13th and the 17th Lok Sabha

Prime Minister	Number of Questions	Lok Sabha
Atal Bihari Vajpayee	73,531	13th Lok Sabha (1999-2004)
Manmohan Singh	66,371	14th Lok Sabha (2004-2009)
Manmohan Singh	79,401	15th Lok Sabha (2009-2014)
Narendra Modi	78,990	16th Lok Sabha (2014-2019)
Narendra Modi	47,273	17th Lok Sabha (2019-until February 2023)
Total	345,566	

Mixed-method Methodology

> I. <u>Official Government Discourse: Content Analysis</u>

Given the number of speeches that are a part of the prime minister's speeches, president's address, and budgetary speeches, the method for analyzing the speeches relies on qualitative reading and coding of the speeches, frequency counts of the words that are mentioned in the speeches to better understand 'official government discourse' regarding the issue of poverty. The first part of this analysis focuses on qualitatively studying prime ministerial, presidential and budgetary speeches (the first three of four the data sources described above) and assessing how official discourse by the government when discussing poverty has across these time periods.

II.   Parliamentarian Discourse: Structural Topic Modeling

A probabilistic topic modeling known as Structural Topic Modeling (STM) is used to study the discussions of parliamentarians in detail. I also use the tools embedded in the model to understand the impact that covariates (document-level metadata) have on the topics that have been generated. For the purpose of this analysis, each of the questions posed by a minister was treated as one document.

Before conducting the analysis, I use the following keywords (generated through a word-embedding exercise) to identify the questions related to poverty:

Poor; poverty; impoverished people; disadvantaged people; poorest; poverti; underprivileged ; poverty stricken; economically disadvantaged; poorest; low income; socially excluded; needy ; extreme poverty; destitute people; eradicate poverty; alleviate poverty; poorer people; marginalized people; glaring inequalities; economically disadvantaged backgrounds; below poverty line; BPL; neediest

These words are comprehensive, and include all the words that parliamentarians use when discussing poverty or poor individuals (as recorded when directly reading a sample of the questions).

After selection, I also clean the dataset: stopwords, and punctuation were removed; procedural terms such as 'honorable'; 'minister'; and 'India' were removed, along with any words that were less than three letters long; and the words were tokenized and stemmed.

Following this, the optimal number of topics that should be generated from the corpus was calculated (graph below). The number of topics that have been chosen seek to maximize the semantic coherence, and minimize the residuals after the analysis.

Figure 2: Depicting the optimal number of topics from the corpus

Diagnostic Values by Number of Topics

Held-Out Likelihood

Held-Out Likelihood

-7.4

2 4 6 8 12

Number of Topics (K)

Residuals

Residuals

8

2 4 6 8 12

Number of Topics (K)

Semantic Coherence

Semantic Coherence

-70

2 4 6 8 12

Number of Topics (K)

Lower Bound

Lower Bound

-14600000

2 4 6 8 12

Number of Topics (K)
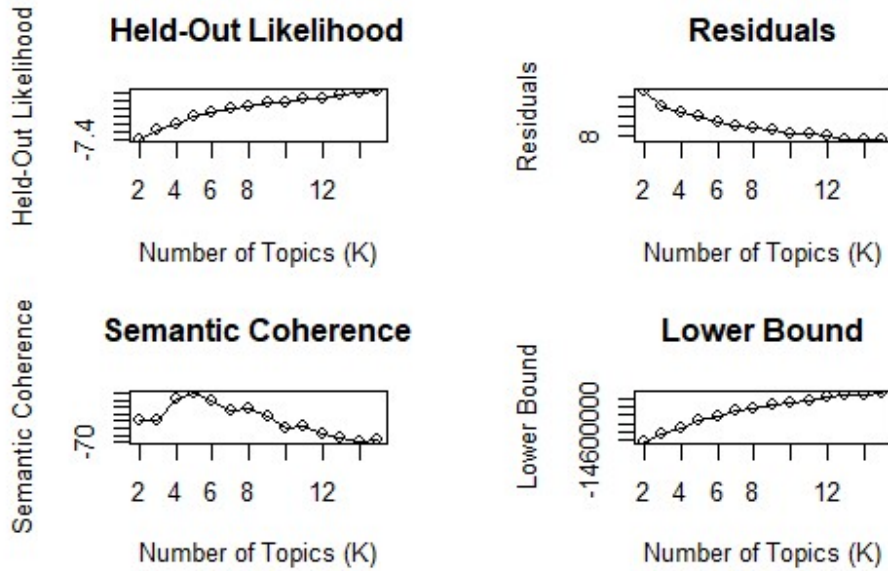
After an iteration between seven and ten topics, ten topics were generated from the corpus, the results for which have been discussed below. These ten topics were plotted over time, to find how the proportion of weight allocated to each topic changes as a function of time.

III.   Parliamentarian Discourse: Role of Identity

Female Parliamentarians: Regression Discontinuity Analysis

For the regression discontinuity analysis, I rely on the LokDhaba dataset compiled by the Trivedi Center for Political Data. I rely on the number of votes, and restrict my analysis to those elections that are close races between men and women. I compare political speech between candidates where a female has closely won an election against a male candidate to one where a male candidate has closely won an election against a female candidate.

The estimation equation is:

$Ministry_i = \beta_0 + f(FemaleVote_i) + \varepsilon_i$

Here, $Ministry_i$ is a binary variable that takes the value 1 if a question is posed by a parliamentarian to that ministry on a particular day when parliament is in session, and 0 otherwise. The dataset is restricted to the close elections where a female and male candidate

occupy the first and second position in the election. $FemaleVote_i$ is the difference between the votes received by a female candidate and the male candidate; it takes a negative value if the female candidate loses the election. At this level, I assume that the victory of a female MP rather than a male MP (or vice-versa) is random.

However, as discussed in existing literature, the victory of a female or male politician can depend on factors other than gender (Marshall 2022). For instance, it is possible that the females that narrowly win elections largely belong to one political party, or state. Thus, in this exercise, I estimate the effect of a female candidate – along with all the other characteristics associated with the marginal victory – to the loss of a male candidate – including the characteristics that are associated with the marginal loss. This set of electoral discontinuity designs (politician characteristic regression discontinuity designs) has been used by scholars to understand the effect of specific politician characteristics on outcome variables.

<u>Scheduled Caste/Tribe Parliamentarians: Pre-Post Analysis</u>

This set of analysis seeks to study the difference between SC-ST parliamentarians and their general category counterparts using a different methodology. Here, I narrow my analysis to those constituencies that used to be classified as 'general' constituencies before 2008, and were subsequently classified as reserved for 'scheduled caste' or 'scheduled tribe' after the delimitation exercise in 2008.

There are two characteristics according to which a constituency is classified as reserved. For scheduled caste classification: (i) Those constituencies will be reserved where the population of individuals from the scheduled caste is large when compared to the total population of the individuals in the constituency (ii) The reserved constituencies need to be spread across the state

The estimation equation can be found below:

$Ministry_i = \beta_0 + f(ChangeinCostituencyStatus_i) + \alpha_s + \delta_p + \rho_t + \varepsilon_i$ (*state, party, and day of week-month FEs*)

Results

I.   <u>How Has Official Government Discourse Regarding Poverty Changed Over Time?</u>

A qualitative reading and coding of the speeches shows the main tools that were thought to be effective against poverty were employment and food security from 1999-2004, which expanded to include a more growth-based discourse from 2004-2014 (which also saw the passage of acts related to food security and right to primary education), which shifted then to a welfare-based strategy of reducing poverty, which is focused on providing basic services to poorer people, such as bank accounts, toilets and sanitation facilities, and housing and electricity. This analysis shows three different approaches to tackling poverty: a food security and employment based approach (1999-2004); followed by a rights and growth-based approach (2004-2014); which is finally followed by an approach which seeks to provide basic services to poorer individuals (2014-2023). Examples of quotes from the prime ministerial speeches are provided in appendix I.

II.   <u>How Do Parliamentarians Discuss Poverty?</u>

<u>Question Hour: Descriptive Facts</u>

The time period included in this dataset corresponds to 5 Lok Sabha formations: the 13th Lok Sabha (1999-2004); 14th (2004-2009); 15th (2009-2014); 16th (2014-2019); 17th (2019-2023).

In the 17th Lok Sabha (2014-2019), the maximum number of parliamentarians have addressed questions to the Ministry of Heath and Family Welfare (6712 parliamentarian-questions); the Ministry of Agriculture and Farmers Welfare (3836); and the Ministry of Finance (3849). Male parliamentarians have raised 1,11,823 questions whereas female parliamentarians have raised 19,317 questions. The top three parties to raise questions are the Bharatiya Janata Party (70,710); the Indian National Congress (12,935) and the Dravida Munnetra Kazhagam (6,045). The largest number of questions come from parliamentarians that are in their first term (64,424), followed by parliamentarians that are in their second term (38,230) and third term (13,264). The largest number of questions originate from Uttar Pradesh (17,876), followed by Maharashtra (14,718), Tamil Nadu (9658) and Bihar (9554). From the data on poverty-related questions, most of the questions are directed toward the ministries of Rural Development (1,620); Urban Development and Poverty Alleviation (1,546); Housing and Urban Poverty Alleviation (1,281); Consumer Affairs, food and public distribution (1,260); and Health and Family Welfare (1,056).

Most members of parliament have asked at least one question in parliament. Members of parliament that are ministers do not ask questions in parliament, as they represent the side of the government and answer the questions that other members of parliament have raised to their ministry. Thus, discounting ministers, the number of members that have not asked any questions in parliament are as follows: 20 MPs in the 17th Lok Sabha; 37 MPs in the 16th Lok Sabha, and and 30 in the 15th Lok Sabha. This shows that questions are and continue to be an important parliamentary intervention, and more than 500 MPs have asked at least one question during their parliamentary tenure.

The graph below depicts which characteristics are important for the number of questions that are raised in each ministry in parliament. The anti-defection policy in India means that parliamentarians have to toe the party line when discussing and voting for bills. However, this analysis shows that, for question-hour, the individual characteristics of the member of parliament explain more of the variation in terms of whether or not questions are being raised in parliament. This is significant because it highlights the autonomy that members of parliament have while raising questions in parliament, and shows that individual characteristics are most useful in both the number of questions asked in parliament. Apart from this, I find that political party and date are also important factors that explain the variance in question hour.
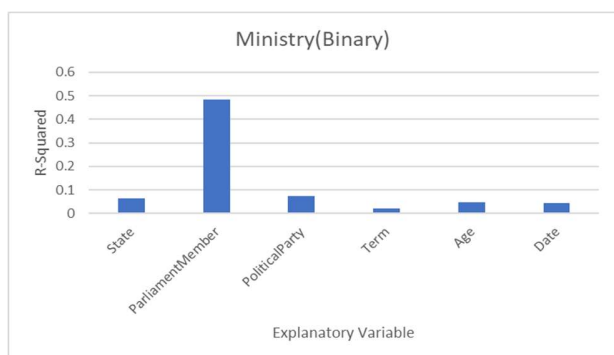
Figure 3 (above): The r-squared for each indicator (state, parliamentary member, political party, term and date)

The next set of summary statistics show the number of questions raised by female and male parliamentarians, as well as by general, SC, and ST categories in parliament.

Characteristic	Frequency	Percent (in dataset)	Min	Max
Male	908119	84.51	0	1
Female	104110	9.69	0	1
Scheduled Tribe Reserved	80094	7.45	0	1
Scheduled Caste Reserved	141935	13.21	0	1
General	840813	78.24	0	1

Table 3: This table highlights the percentage that each of these indicators have in the whole dataset.

The table in Appendix III highlights the questions posed to each of the ministries in the dataset. While there are a total of 90 ministries in the dataset to which questions have been posed, they differ in terms of the number of questions that are raised to them, with the maximum questions posed to the ministry of finance, health and family welfare and railways.

Results: Which topics do Parliamentarians Raise?

This section of the analysis focuses on understanding precisely what parliamentarians have focused on when discussing poverty. While the analysis above helps understand which ministries parliamentarians are more focused on when discussing poverty-related issues, structural topic modeling offers a more granular understanding of which topics are being raised in the parliament.

The following results from the question hour use structural topic modeling to find the latent topics that are prevalent in the poverty-related questions that are raised in parliament. Here, each document is considered to be a question that has been raised in parliament, which is mapped over a finite set of topics. Each document is a combination of topics. Each topic has a finite set of documents that form the topic.

Table 4: The results from the topic model estimation using the 'stm' package (focusing on frequent and exclusive words)

Topics	Poverty Line	Slums, Rehabilitation	Public Distribution System	Education	Financial Allocation and Credit Access	Health	Public Housing	Farmers and Communication	Infrastructure	MGNREGA and Road Connectivity
Frequent and Exclusive Words	live, census, programm, ninth, line, poverti, five, uplift, peopl, tenth	rehabilit, dda, appear, news, recommend, submit, plot, task, suggest, world	foodgrain, distribut, card, pds, lpg, kerosen, ration, sugar, wheat, anna	educ, student, school, fee, pension, age, vidyalaya, scholarship, children, class	three, year, last, fund, spent, current, wise, releas, financi, period	health, hospit, patient, treatment, medicin, drug, diseas, cancer, health car, aiim	hous, dwell, town, homeless, ihsdp, shelter, urban, bsup, jnnurm, pmay	farmer, mobil, telecom, telephon, bsnl, internet, crop, mtnl, produc, seed	railway, sport, passeng, air, energi, station, solar, coal, mine, airlin	road, mgnreg, wage, mahatma, employ, labour, highway, rural, self, unemploy

Here we find that the topics that emerge include questions intended to understand: details related to procedures of the schemes that have been introduced by the government to reduce poverty; the public distribution system (which is the largest food security scheme of the government of India); public housing allocation for the poor; the prices of foods in the country, and how the government intends to tackle inflation; how the poor are being categorized and where the 'below poverty line' is being drawn; housing schemes for the poor; communications and services for the poor; poverty-related schemes that are specific to women and children; road construction; and the provision of infrastructure – such as railways or sanitation-related infrastructure – for poorer individuals.

While the topic modeling analysis only focuses on finding the frequent and exclusive words associated with different topics, STM allows me to assess which questions have led to a particular topic.

How Does this Change Across Administration?

Over time, the focus of parliamentarians has shifted over time. The following graph displays changes across different administrations in their focus across these poverty-related topics:
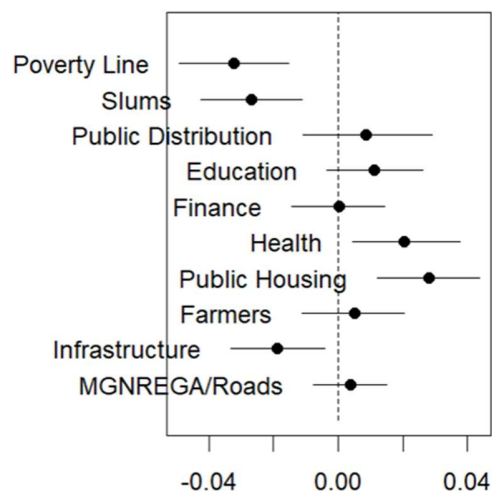
Change in Proportion of Topics (2-1)
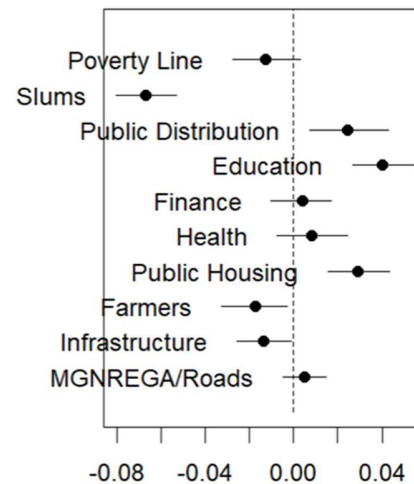
Change in Proportion of Topics (3-2)
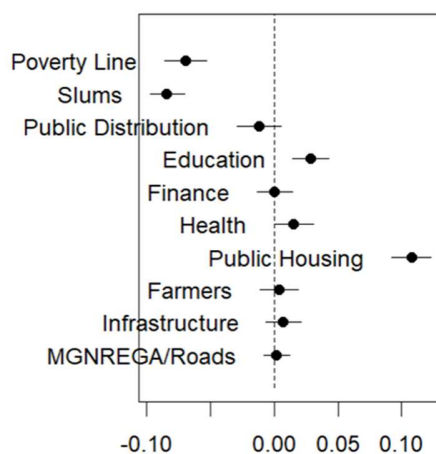
Change in Proportion of Topics (4-3)

Figure 4: This figure displays the difference in the focus of parliamentarians across the 10 aforementioned topics, across 4 Lok Sabhas: 1999-2004; 2004-2009; 2009-2014; and 2014-2019. Administration is a categorical variable which takes a value between 1 and 4. The first figure differentiates between administration 2 and administration 1; the second figure between

administration 3 and administration 2; and the final figure between administration 4 and administration 3.

This analysis shows that the focus of parliamentarians has changed over time for all of the topics apart from finance and the MGNREGA scheme. While there is a larger number of questions related to the public distribution system, education, health and public housing, this is at the cost of questions related to procedural details related to the poverty line, slums and infrastructure. Overall, this suggests that parliamentarians – following the precedent set by the government – have also moved toward a basic services-focussed approach to addressing poverty in India, as they are raising a larger number of questions about government provided services: food grains, education, health and public housing, and less about other poverty-related concerns, such as the poverty-line, slums, and infrastructure.

III.   How Does Parliamentarian Identity Impact Poverty Discussion?

Female Parliamentarians

The results from the regression discontinuity analysis can be found below:

	Ques	Finance	External	Railways	HomeAffairs	HumanDev	Gas
Female	0.00122	-0.0185***	-0.00404***	-0.00472***	-0.00662***	0.00158	-0.00760***
	(0.00539)	(0.00193)	(0.00105)	(0.00153)	(0.00161)	(0.00141)	(0.00129)
N	158944	158879	158879	158879	158879	158879	158879

Table 6: RD model to assess the difference for women when raising questions to the most popular ministries

	Health-Welfare	Educ	UDev-Pov	UEmp-Pov	House-UPov	PDS	Agri-Farmer	Wat-Sanitation
Female	0.000211	0.000851*	-0.00287***	-0.000290	0.0000586	-0.000904***	-0.000455	0.000250
	(0.00165)	(0.000457)	(0.000470)	(0.000241)	(0.000377)	(0.000244)	(0.000671)	(0.000378)

Table 7: RD model to assess the difference for women when raising questions to poverty-related ministries

	Women-ChildDev	SocialJust-Empower	TribalAffairs
Female	0.00482***	0.000487	-0.00164***
	(0.000805)	(0.000743)	(0.000600)
N	158879	158879	158879

Table 8: RD model to assess the difference for women when raising questions to representative ministries

	Commerce-Industry	Culture	Northeast	Electronics-IT	Fisheries-Animal Husbandry
Female	-0.00396***	0.000359	-0.00105***	0.000393	0.000122
	(0.00117)	(0.000662)	(0.000258)	(0.000379)	(0.000294)
N	158879	158879	158879	158879	158879

Table 9: RD model to assess the difference for women when raising questions to non-poverty related ministries

	Commerce-Industry	Culture	Northeast	Electronics-IT	Fisheries-Animal Husbandry
Female	-0.00396***	0.000359	-0.00105***	0.000393	0.000122
	(0.00117)	(0.000662)	(0.000258)	(0.000379)	(0.000294)
N	158879	158879	158879	158879	158879

These results state that are no significant differences between men and women in terms of the number of questions that they raise in parliament (column 1), and in the number of questions posed to most ministries. However, there are some ministries that raise significantly more questions to – the ministry of education, and the ministry of women and child development. There are also ministries to which women raise significantly less questions – such as the ministry of railways. The results provide causal evidence for differences in topics that men and women are concerned with, and provide evidence for representation positively changing the number of questions raised for the community that gains representation. They are also in line with the results in the literature, which states that the concerns of female parliamentarians are different from their male counterparts.

The results of the balance tests can be found below:
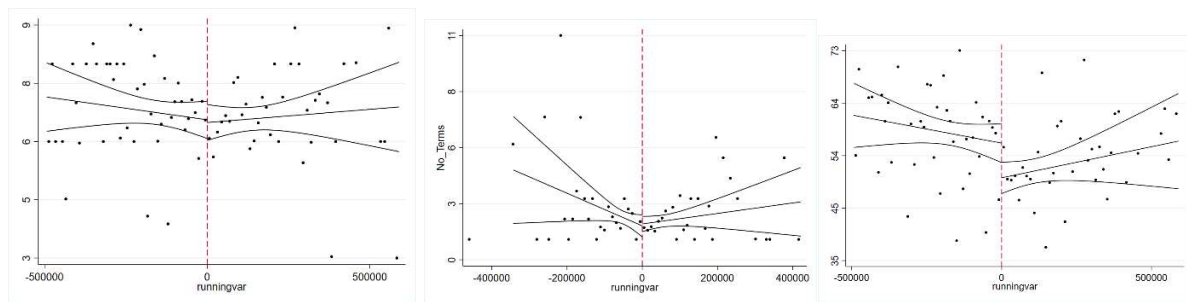
Figure 5: Balance tests for RD design on the education of the parliamentarian (1); number of terms that they have been in office (2); and age of the parliamentarian (3)

The results of the McCrary density test can be found in appendix V.

Schedules Caste/Tribe Analysis

This set of analysis seeks to study the difference between SC-ST parliamentarians and their general category counterparts using a different methodology. Here, I narrow my analysis to those constituencies that used to be classified as 'general' constituencies before 2008, and were subsequently classified as reserved for 'scheduled caste' or 'scheduled tribe' after the delimitation exercise in 2008. There are two characteristics according to which a constituency is classified as reserved. For scheduled caste classification:

(i) Those constituencies will be reserved where the population of individuals from the scheduled caste is large when compared to the total population of the individuals in the constituency

(ii) The reserved constituencies need to be spread across the state

For constituencies classified as reserved for scheduled tribes, only the first criteria applies, i.e. the constituencies that will be reserved will be the ones where the population of individuals from scheduled tribe is large when compared to the total population of individuals in the constituency.

The results from this check can be found below:

	AskQues	Finance	ExtAffair	Railway	HomeAffair	HumanDev	PetNaturalGas
GentoSC	0.0933	0.0015	-0.0046	0.0048	0.0037	0.0099**	0.0012
	(0.0735)	(0.0059)	(0.0032)	(0.0049)	(0.0044)	(0.0040)	(0.0031)
Cons	0.393***	0.0296***	0.0128***	0.0220***	0.0198***	0.0150***	0.0138***
	(0.0577)	(0.0047)	(0.0029)	(0.0036)	(0.0032)	(0.0027)	(0.0024)
N	50,542	50,542	50,542	50,542	50,542	50,542	50,542
R-sq	0.216	0.089	0.033	0.046	0.078	0.027	0.030

Table 10: Impact of change in constituency (SC) to questions posed to popular ministries

	Health	Educ	UDev-Pov	UEmp-Pov	Hous-UPov	PDS	Agri-Farm	Wat-Sani
GentoSC	0.00845*	0.00202***	-0.00776**	-0.000845**	0.00207***	-0.00118**	0.00898***	0.00398***
	(0.00498)	(0.00071)	(0.00308)	(0.00036)	(0.00058)	(0.00054)	(0.00200)	(0.00079)
Cons	0.0236***	0.000665**	0.00762***	0.000828**	0.000459	0.00116**	0.00173*	-0.000100
	(0.00352)	(0.00031)	(0.00276)	(0.00032)	(0.00034)	(0.00050)	(0.00098)	(0.00037)
N	50,542	50,542	50,542	50,542	50,542	50,542	50,542	50,542
R-sq	0.050	0.017	0.026	0.002	0.004	0.004	0.030	0.010

Table 11: Impact of change in constituency (SC) to questions posed to poverty-related ministries

	Commerce-Industry	Culture	NortheastDev	Electronics-IT	AnimalHusband-Dairy
GENtoSC	0.0000130	0.00387***	0.000314*	0.00203***	0.00111**
	(0.00278)	(0.00120)	(0.000172)	(0.000510)	(0.000466)
Cons	0.0142***	0.00166**	0.000213**	0.000618***	0.000305
	(0.00227)	(0.000669)	(0.000102)	(0.000232)	(0.000211)
N	50542	50542	50542	50542	50542
R-sq	0.014	0.005	0.002	0.011	0.009

Table 12: Impact of change in constituency (SC) to questions to non-poverty related ministries

	Women-ChildDev	SocialJustice-Emp	TribalAffairs
GENtoSC	0.00606***	0.00247*	0.00234***
	(0.00138)	(0.00143)	(0.00074)
Cons	0.00274***	0.00531***	0.00160***
	(0.00088)	(0.00106)	(0.00045)
N	50,542	50,542	50,542
R-sq	0.022	0.004	0.005

Table 13: Impact of change in constituency (SC) to questions to representative ministries

A similar methodology was applied to study the impact of a constituency changing from a general category to 'ST' category:

	AnyQues	Finance	ExtAffairs	Railways	HomeAffairs	HumanDev	Petrol-Gas
GENtoST	-0.0788	-0.0121	-0.00352	-0.00853	0.00133	-0.00371	-0.00752*
	(0.0771)	(0.00785)	(0.00383)	(0.00738)	(0.00437)	(0.00579)	(0.00383)
Cons	0.541***	0.0368***	0.00735**	0.0277***	0.0162***	0.0276***	0.0183***
	(0.0629)	(0.00559)	(0.00326)	(0.00648)	(0.00330)	(0.00374)	(0.00280)
N	17,130	17,130	17,130	17,130	17,130	17,130	17,130
R-sq	0.387	0.098	0.018	0.049	0.064	0.037	0.034

Table 14: Impact of change in constituency (ST) to questions raised in most-popular ministries

	Health	Educ	Udev-Pov	Uemp-Pov	Hous-UPov	Cons-PDS	Agri-Farm	Water-Sanit
GENtoST	-0.00930	0.00333*	-0.00341*	-0.00461**	0.000307	-0.00126*	0.00825**	0.00386***
	(0.00567)	(0.00173)	(0.00169)	(0.00201)	(0.00135)	(0.000648)	(0.00336)	(0.00140)
Cons	0.0350***	0.000398	0.00391**	0.00383**	0.00269***	0.00141**	0.00153	0.000335
	(0.00480)	(0.000613)	(0.00163)	(0.00159)	(0.000979)	(0.000633)	(0.00197)	(0.000669)
N	17130	17130	17130	17130	17130	17130	17130	17130
R-sq	0.042	0.015	0.014	0.009	0.006	0.004	0.029	0.012

Table 15: Impact of change in constituency (ST) to questions raised to poverty-related ministries

	Commerce-Industry	Culture	Northeast	Electronics-IT	AnimalHusbandry-Dairy
GENtoST	-0.0107**	0.000642	0.000957	0.00260**	0.00180*
	(0.00444)	(0.00164)	(0.00059)	(0.00106)	(0.00093)
Cons	0.0232***	0.00583***	0.000102	0.000402	0.000208
	(0.00400)	(0.00087)	(0.00029)	(0.00062)	(0.00042)
N	17,130	17,130	17,130	17,130	17,130
R-sq	0.020	0.009	0.003	0.012	0.008

Table 16: Impact of change in constituency (ST) to questions raised to non-poverty ministries

	Women-ChildDev	SocialJustice-Emp	TribalAffairs
GentoST	0.00950***	-0.0000683	0.00611*
	(0.00240)	(0.00204)	(0.00337)
Cons	0.00281**	0.00909***	0.00449**
	(0.00135)	(0.00151)	(0.00201)
N	17,130	17,130	17,130
R-sq	0.031	0.007	0.012

Table 17: Impact of change in constituency (ST) to questions raised to representative ministries

Impact of Parliamentarian Identity on Poverty Discourse

While the analysis above presents evidence that parliamentarians focus on different ministries depending on their identity, this part of the paper uses structural topic modeling to study which discussions take place at a more granular level. The analysis below seeks to identify if the topics that individuals from the reserved category – scheduled caste or scheduled tribe – discuss when talking about poverty are different from the topics that individuals from the general category discuss; and whether women discuss poverty differently than men.

For the impact that the gender and caste of the parliamentarian has on the topics they raise, I study how the identity of the parliamentarian impacts the proportion of the topic in the corpus. I use the specification provided below:

$$\text{TopicProportion}_i = \beta_0 + \beta_1 \text{ParliamentMemberGender}_{i,c,s,p,t}$$

$$\text{TopicProportion}_i = \beta_0 + \beta_1 \text{ParliamentMemberConstituencyType}_{i,c,s,p,t}$$

where TopicProportion signifies the proportions of each of the topics in the corpus, on average. The gender of the parliamentarian signifies the gender of parliamentarian i of constituency c of state s and party p on a parliamentary date t. The ParliamentMemberConstituencyType represents the constituency type of parliamentarian i of constituency c of state s and party p on a parliamentary date t. ParliamentMemberConstituencyType can take three values: general, scheduled caste, or scheduled tribe.
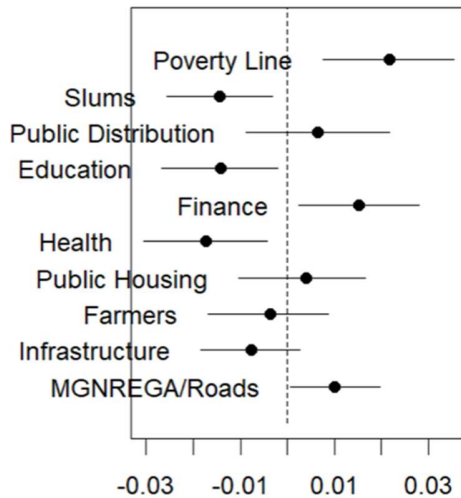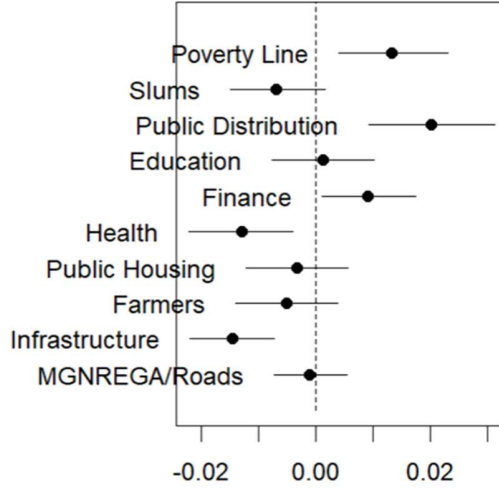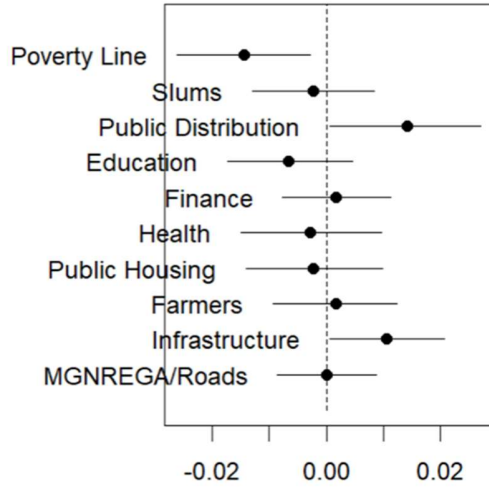
Figure 6 (left) shows the heterogeneous effect of women (1) when compared to men (0) in terms of the proportion (number of questions raised) across different topics.

Figure 7 (right) shows the heterogeneous effect of scheduled caste parliamentarians (1) when compared to all other parliamentarians (0) in terms of the proportion (number of questions raised) across different topics.

Figure 8 (below) shows the heterogeneous effect of scheduled tribe parliamentarians (1) when compared to all other parliamentarians (0) in terms of the proportion (number of questions raised) across different topics.

There are two factors that stand out here. First, that women, and parliamentarians from the scheduled caste and scheduled tribe communities focus on different aspects of poverty when raising questions in parliament. Women raise a larger number of questions about the public distribution system and about infrastructure. When considering the case of Scheduled Caste parliamentarians, there are a higher number of questions about the poverty line, public distribution system, and about finance. Finally, when considering Scheduled Tribe parliamentarians, it is evident that they raise a higher number of questions about the poverty line, and about finance. This shows that political representation allows the concerns of the community that gains representation to be represented in parliament.

Robustness Checks

For the impact that the gender and caste of the parliamentarian has on the topics they raise, I use the fixed effects specification provided below:

$AnyQuestion_{i,t} = \beta_0 + \beta_1 ParliamentMemberGender_{i,c,s,p,t} + \alpha_s + \delta_p + \rho_t + \varepsilon_i$ (*state, party, day of week, month FEs*)

$AnyQuestion_{i,t} = \beta_0 + \beta_1 ParliamentMemberConstituencyType_{i,c,s,p,t} + \alpha_s + \delta_p + \rho_t + \varepsilon_i$ (*state, party, day of week, month FEs*)

$\alpha_s, \delta_p, \rho_t$ include a full set of state, party day of the week, and month fixed effects.

where AnyQuestion takes the value 1 if a question has been asked by a member of parliament on a particular date of the parliament, and 0 if the member of parliament has not asked any question on that particular date

$Ministry_{i,t} = \beta_0 + \beta_1 ParliamentMemberGender_{i,c,s,p,t} + \alpha_s + \delta_p + \rho_t + \varepsilon_i$ (*state, party, and day of week-month FEs*)

$Ministry_{i,t} = \beta_0 + \beta_1 ParliamentMemberConstituencyType_{i,c,s,p,t} + \alpha_s + \delta_p + \rho_t + \varepsilon_i$ (*state, party, and day of week-month FEs*)

$\alpha_s, \delta_p, \rho_t$ include a full set of state, party and day of the week-month fixed effects

where Ministry is a binary variable for each of the 90 ministries. It takes the value 1 if that ministry has received a question by ParliamentMember i of constituency c, state s, party p in time period t. ParliamentMemberGenderi,c,s,p,t takes the value 1 if the parliamentarian is a female, and 0 otherwise. ParliamentMemberConstituencyTypei,c,s,p,t is a binary variable which takes the value 1 for each of the three types of constituencies (Gen, SC, ST), and 0 otherwise.

Robustness Check Results

The next set of analysis is rooted in the fixed effects model, and answers the following questions: first, is there any difference in the number of questions asked by female parliamentarians (when compared to male parliamentarians); or SC and ST parliamentarians (when compared to general category parliamentarians)? Second, are there any differences between these categories when considering the ministries that have the highest number of questions (finance, home affairs, external affairs, railways)? Third, are there differences between these categories when considering poverty versus non-poverty related ministries? Finally, do parliamentarians raise more questions to the ministries that they seek to represent: the ministry of Women and Child Development; Social Justice and Empowerment; or Tribal Affairs?

The results show that there are no differences between the number of questions asked by female and male parliamentarians; or SC and general category parliamentarians; but ST parliamentarians raise less questions than their general category counterparts. Further, when considering the ministries that receive the largest number of questions, female parliamentarians raise comparatively less questions than their male counterparts to the Ministry of Finance, but there is no significant difference between male and female parliamentarians for the other ministries. When considering poverty-related ministries, the results show that female parliamentarians raise more questions to the Ministry of Education and Agriculture, but that there are no large differences across any of the other ministries. There are also no large differences between the ministries that Scheduled Castes focus on when raising questions to parliament, when compared to their male, general category counterparts. However, Scheduled Tribe parliamentarians raise significantly less questions to nearly every ministry, when compared to their male, general category parliamentarians. Finally, there is strong evidence to suggest that parliamentarians substantively represent their communities when they are in parliament: female parliamentarians raise more questions to the Ministry of Women and Child Development; SC parliamentarians raise a higher number of questions to the Ministry of Social Justice and Empowerment; and ST parliamentarians raise a higher number of questions to the Ministry of Tribal Affairs. Examples of each of these questions can be found in Appendix VI.

	AnyQuestion	AnyQuestion
Female	-0.000654	-0.000954
	(0.0243)	(0.0242)
Gen	0.0352*	
	(0.02)	
SC		-0.0178
		(0.0231)
ST		-0.0729**
		(0.0337)
Constant	0.462***	0.498***
	(0.0177)	(0.00982)
N	1003915	1003915
R-squared	0.094	0.095

Table 18: This table shows that there are no significant differences between male and female parliamentarians, and scheduled caste and general category parliamentarians in the number of questions asked. However, ST parliamentarians raise less questions than their general category, male counterparts.

Variable	Home Affairs	Home Affairs	HumanResourceDev	HumanResourceDev	PetrolNaturalGas	PetrolNaturalGas
Fem	-0.0000130	-0.0000311	0.00197	0.00194	-0.00145	-0.00147
	(0.00168)	(0.00168)	(0.00171)	(0.00171)	(0.00110)	(0.00110)
Gen	0.00176		0.00142		0.000535	
	(0.00125)		(0.00124)		(0.000991)	
SC		-0.000714		-0.000167		0.000889
		(0.00139)		(0.00148)		(0.00124)
ST		-0.00403*		-0.00414**		-0.00362***
		(0.00222)		(0.00187)		(0.00122)
Cons	0.0221***	0.0239***	0.0212***	0.0227***	0.0154***	0.0160***
	(0.00112)	(0.000606)	(0.00109)	(0.000592)	(0.000888)	(0.000472)
N	1,003,915	1,003,915	1,003,915	1,003,915	1,003,915	1,003,915
R-sq	0.079	0.079	0.018	0.018	0.027	0.027

Table 19 (above): This table studies differences across groups of parliamentarians when considering the most popular ministries

Table 20 (below): This table studies differences across groups of parliamentarians when considering the ministries that are related to poverty

	HealthFamilyWelfare		Education		UrbanDevPovertyAlleviation		UrbanEmpPovertyAlleviation	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Fem	0.00255	0.00252	0.000939**	0.000937**	-0.000886***	-0.000889***	-0.000276***	-0.000278***
	(0.00189)	(0.00188)	(0.000411)	(0.000411)	(0.000338)	(0.000339)	(0.0000918)	(0.0000919)
Gen	0.00285**		0.000384		-0.000290		-0.0000125	
	(0.00141)		(0.000284)		(0.000481)		(0.0000953)	
SC		-0.00128		-0.000237		0.000440		0.000124
		(0.00168)		(0.000346)		(0.000638)		(0.000125)
ST		-0.00626***		-0.000703*		-0.0000361		-0.000230*
		(0.00210)		(0.000409)		(0.000561)		(0.000132)
Con	0.0277***	0.0306***	0.00178***	0.00217***	0.00229***	0.00201***	0.000605***	0.000596***
	(0.00124)	(0.000691)	(0.000250)	(0.000149)	(0.000456)	(0.000181)	(0.0000859)	(0.0000495)
N	1003915	1003915	1003915	1003915	1003915	1003915	1003915	1003915
R-sq	0.042	0.042	0.012	0.012	0.011	0.011	0.002	0.002

| | Housing-UrbanPovAlleviation | | ConsumerAffairs-PublicDistri | | Agriculture-FarmerWelfare | | DrinkingWater-Sanitation | |
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Fem	-0.000140	-0.000139	-0.000171	-0.000172	0.00171*	0.00171*	0.000812**	0.000811**
	(0.000270)	(0.000270)	(0.000126)	(0.000126)	(0.000953)	(0.000953)	(0.000392)	(0.000392)
Gen	0.000178		-0.000191		0.00179***		0.000162	
	(0.000208)		(0.000136)		(0.000651)		(0.000266)	
SC		-0.000230		0.000248		-0.00178**		-0.0000582
		(0.000226)		(0.000170)		(0.000738)		(0.000308)
ST		-0.0000635		0.0000675		-0.00180*		-0.000388
		(0.000408)		(0.000165)		(0.00104)		(0.000443)
Con	0.00197***	0.00215***	0.000674***	0.000485***	0.00619***	0.00798***	0.00203***	0.00219***
	(0.000182)	(0.000101)	(0.000129)	(0.0000478)	(0.000531)	(0.000378)	(0.000230)	(0.000122)
N	1003915	1003915	1003915	1003915	1003915	1003915	1003915	1003915
R-sq	0.002	0.002	0.002	0.002	0.027	0.027	0.006	0.006

Table 21 (below): Regression results for representative ministries

| | Women-Child Development | | Social Justice | | Tribal Affairs | |
	(1)	(2)	(3)	(4)	(5)	(6)
Fem	0.00445***	0.00445***	0.000628	0.000612	0.000110	0.000148
	(0.000812)	(0.000811)	(0.000569)	(0.000564)	(0.000424)	(0.000405)
Gen	0.000375		-0.00203***		-0.00306***	
	(0.000483)		(0.000504)		(0.000527)	
SC		-0.000331		0.00294***		0.000845***
		(0.000552)		(0.000648)		(0.000322)
ST		-0.000471		0.0000636		0.00787***
		(0.000864)		(0.000786)		(0.00135)
Cons	0.00577***	0.00614***	0.00872***	0.00672***	0.00638***	0.00324***
	(0.000419)	(0.000223)	(0.000466)	(0.000202)	(0.000514)	(0.000128)
N	1003915	1003915	1003915	1003915	1003915	1003915
R-sq	0.018	0.018	0.003	0.003	0.005	0.005

Table 22 (below): Regression to assess for non-poverty related ministries

| | Commerce-Industry | | Culture | | NorthEast | | Electronics-IT | | FisheriesAnimalHusbandry | |
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Fem	-0.00201**	-0.00202**	0.000970**	0.000972**	-0.000212**	-0.000212**	0.000617**	0.000615**	0.000536**	0.000536**
	(0.000901)	(0.000900)	(0.000474)	(0.000474)	(0.0000970)	(0.0000970)	(0.000296)	(0.000296)	(0.000229)	(0.000230)
Gen	0.00219**		0.000450		0.0000208		0.000345*		0.000218	
	(0.000884)		(0.000375)		(0.000102)		(0.000205)		(0.000162)	
SC		-0.00187*		-0.000596		-0.0000107		-0.000230		-0.000240
		(0.000983)		(0.000408)		(0.0000944)		(0.000235)		(0.000181)
ST		-0.00289*		-0.000133		-0.0000426		-0.000596*		-0.000169
		(0.00158)		(0.000715)		(0.000224)		(0.000337)		(0.000300)
Con	0.0152***	0.0174***	0.00448***	0.00493***	0.000653***	0.000674***	0.00151***	0.00186***	0.000834***	0.00105***
	(0.000790)	(0.000452)	(0.000330)	(0.000177)	(0.000918)	(0.000616)	(0.000178)	(0.0000978)	(0.000141)	(0.0000811)
N	1003915	1003915	1003915	1003915	1003915	1003915	1003915	1003915	1003915	1003915
R-sq	0.011	0.011	0.003	0.003	0.007	0.007	0.007	0.007	0.006	0.006

These tables highlight the following facets of discourse in the Indian parliament. First, when considering the most popular ministries, there is not a large difference between women and men, and across the different constituencies – GEN, SC, and ST. Second, female parliamentarians raise a larger number of questions to the ministries of education, agriculture and farmer welfare, and drinking water and sanitation than their male counterparts. Third, for most other poverty-related concerns, there are no large differences between SC parliamentarians and their general-category counterparts, although they do raise significantly less questions to the ministry of Agriculture and Farmer Welfare. Fourth, I also note that ST parliamentarians raise significantly less questions to nearly all ministries – both poverty-related as well as non-poverty related. Fifth, there is strong evidence of substantive representation: table 8 reports that women raise more questions to the

ministry of Women and Child Development; SC parliamentarians raise more questions to the ministry of Social Justice and Empowerment, as well as the ministry of Tribal Affairs; and ST parliamentarians raise more questions to the ministry of Tribal Affairs. I also note that general category parliamentarians raise less questions to both the ministry of Social Justice and Empowerment, as well as the ministry of Tribal Affairs. Finally, there also seem to be differences between men and women when it comes to non-poverty related ministries (as can be observed in table 9). However, there are no substantial differences between the questions raised by SC and ST parliamentarians, when compared to their general category counterparts.

Discussion

There are two main insights that can be gathered from the analysis above. First, that there is substantive representation by parliamentarians from marginalized communities. This is apparent by studying the results from all the models discussed above: that female parliamentarians raise more questions to the Ministry of Women and Child Development; Scheduled Caste parliamentarians raise more questions to the Ministry of Social Justice and Empowerment; and Scheduled Tribe parliamentarians raise more questions to the Ministry of Tribal Affairs. Second, that parliamentarians from marginalized communities represent the problem of poverty differently from male-general category parliamentarians. For instance, it can be observed that female, SC, and ST parliamentarians raise significantly more questions to the Ministry of Education than their counterparts. Female and SC parliamentarians also raise more questions to the Ministry of Rural Development than their general category counterparts. ST parliamentarians also raise significantly more questions to the ministries of agriculture and farmer welfare, and drinking water and sanitation. Further, they also raise less questions to the ministries of Urban Development and Poverty Alleviation. This presents evidence that the concerns of marginalized groups when reducing poverty is different from that of their general-category counterparts: they focus more on specific issues, such as education, and less on others such as urban employment.

Conclusion

This project uses 24 years of data from the Indian parliamentary question-and-answer session to assess how the institutional conceptualization of poverty in India has changed over time, and whether the social identity of parliamentarians affects this discourse. There are two main findings from the analysis. First, the Indian government's conceptualization about poverty has changed, from an understanding that employment and food security need to be the backbone of poverty reduction, followed by an economic growth and rights-based focus to reducing poverty, and finally, a provision of basic-services approach to the redressal of poverty in India. Further, the project finds that the poverty-topics raised by female, SC, and ST parliamentarians differ from those raised by male, general category groups. Finally, female parliamentarians focused more on issues related to females, which shows that political representation allows the represented communities' interests to be discussed in parliament.

There are two policy recommendations that emerge from this analysis. The first policy recommendation would be to assess how a policy problem is being conceptualized by parliamentarians as part of analyzing the policies that are being adopted by a government. There are often differing ideas that parliamentarians have regarding the best way that a policy problem can be addressed, and studying the narratives that the government has about the policy problem may provide valuable insights about the tools that they have chosen to address the issue.

The second recommendation would be to ensure adequate political representation from members of different communities, to ensure that the interests of different groups are represented during policymaking. As observed above, the perspectives and topics that individuals focus on when addressing a policy issue differ according to the social groups that they belong to. Having a plurality of voices when making policy decisions is helpful not only to ensure that different perspectives are represented, but also that the interests of different communities have a political voice.

Finally, it is important to highlight some limitations of this research. First, there are many tools that parliamentarians have to intervene in parliament. This study has focused on 3 main tools: presidential and budgetary speeches (and the prime ministers' response to them); and question answers that are raised in parliament. However, other tools include raising concerns through zero hour, calling attention of a Minister through Rule 197, raising issues through rule 377 and half-an-hour discussions, bringing private member resolutions to the floor of the parliament, participating in bills that are introduced on the floor of the parliament, among other tools. While the tools of parliamentary intervention discussed in this paper are important, they do not encompass the wide range of tools available to members of parliament while intervening in parliament. Second, the policy tools that can be used for poverty reduction – such as education or healthcare – are under the preview of both central and state governments. This paper has only used data that is available for the central government.

The future steps of this project would be to quantitatively assess whether these changes in parliamentary discourse have led to changes in public policies adopted by the government.

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Appendix I: Sample of Prime Ministerial Speeches

R. K. Narayan	Address to Parliament	As the Father of the Nation always exhorted us during our struggle for freedom, we must ensure that the first claim on the fruits of development belongs to the poor and the weak. India cannot achieve the strength and prosperity that we all desire, and that our country is capable of, if vast areas and large sections of our population remain deprived and poor. Faster economic growth is a precondition for removing social and regional imbalances in development. We shall re-double our efforts to ensure that the poor and the deprived have an even greater stake in economic reforms than at present. The Government will facilitate increased public and private investment in the development of physical and social infrastructure, with an emphasis on improving the living conditions of the urban poor. Higher growth alone will ensure that we can mobilize larger and larger resources for the social sector—for education, health, drinking water, sanitation and roads—particularly for those living in the villages and in urban slums…we must lose no more time to eradicate mass poverty, remove illiteracy…and assure basic minimum services to all our fellow citizens.

February 23, 2006	Manmohan Singh	Lok Sabha Speech	Our pledge to ensure that our growth process is inclusive, caring and equitable has imparted a new sense of belonging to all sections of our society…Each of the development and employment oriented programmes we have launched has this single objective in mind. The National Rural Employment Guarantee Act, the Sarva Shiksha Abhiyan, the Mid-Day Meal Programme, the ICDS programme. Bharat Nirman covering rural roads, drinking water, irrigation, electricity, housing and telecom. The National Rural Health Mission; the Jawaharlal Nehru Urban Renewal Mission, the initiatives we have taken in infrastructure development, in reviving the manufacturing sector, in reviving agricultural growth – every initiative has been aimed at ensuring that while we accelerate growth, we do so in an equitable, fair and just manner…the country is on the verge of crossing an eight percent growth rate this year. If we sustain this for the next

			few years, it is possible that we can eliminate poverty, ignorance and disease which afflict millions of our people. This Government has economically and socially empowered Scheduled Castes and Scheduled Tribes, religious and linguistic minorities, farmers and the working class, the unemployed and the poor.

February 7th, 2019	Narendra Modi	Lok Sabha Speech	Those who say that this Government is for the rich, I am glad that I have built toilets for the 10 crore rich people of my country…13 crore gas connections have been provided in 55 months and that includes 6 crore Ujjwala connections…in 55 months we have become successful in achieving cent per cent target…we have provided electricity in 18 thousand villages…we have completed the task of providing electricity to two and a half crore familities and in the days ahead we will have the pride of achieving hundred percent electrification.

Appendix II

Appendix II: Sample of Question with Indicators

Date	Name of Parliamentarian	Relevant Ministry	Question
July 27th, 2016	'NEELAM SONKAR', 'PROF. CHINTAMANI MALVIYA', 'GOPAL CHINAYYA SHETTY', 'RAGHAV LAKHANPAL', 'P.K.BIJU', 'DARSHANA VIKRAM JARDOSH'	Housing and Urban Poverty Alleviation	Will the Minister of HOUSING AND URBAN POVERTY ALLEVIATION be pleased to state: (a) the State-wise number of residential units made for urban poor and handed over to them in the country during the last three years and the current financial year; (b) whether there is any shortfall in target set and final delivery made; (c) if so, the reasons therefor; (d) the State-wise number of residential units being constructed for

			urban poor in the current year; and (e) the amount earmarked for this purpose?

Appendix III: Average of Questions Posed to Each Ministry

Ministry	Mean	Standard Deviation	Minimum	Maximum
Agriculture	.0191139	.1369255	0	1
Agriculture and Farmers Welfare	.008517	.0918938	0	1
Agro and Rural Industries	.000715	.0267304	0	1
Atomic Energy	.0025249	.0501853	0	1
Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homeopathy	.0028108	.0529421	0	1
Chemicals and Fertilizers	.0078495	.0882488	0	1
Civil Aviation	.0162631	.1264858	0	1
Coal	.0060451	.0775152	0	1
Coal and Mines	.0006694	.0258642	0	1
Commerce and Industry	.0174232	.130842	0	1
Communications	.0051299	.0714397	0	1
Communications and Information Technology	.0124934	.1110736	0	1
Company Affairs	.0002355	.0153458	0	1
Consumer Affairs, Food and Public Distribution	.0141581	.1181425	0	1
Cooperation	.0001676	.0129444	0	1
Corporate Affairs	.0022317	.0471878	0	1
Culture	.00525	.0722668	0	1
Defense	.0137931	.1166314	0	1
Development of North Eastern Region	.0006312	.0251165	0	1

Drinking Water and Sanitation	.0024616	.0495537	0	1
Earth Sciences	.0015688	.0395767	0	1
Education	.0023387	.0483039	0	1
Electronics and Information Technology	.0020631	.045375	0	1
Environment and Forests	.0100904	.0999431	0	1
Environment, Forests and Climate Change	.0069892	.0833088	0	1
External Affairs	.0106351	.1025768	0	1
Finance	.0330821	.178851	0	1
Fisheries, Animal Husbandry and Dairying	.001174	.0342439	0	1
Food Processing Industries	.0031562	.0560911	0	1
Health and Family Welfare	.0319537	.1758769	0	1
Heavy Industries	.0002551	.0159698	0	1
Heavy Industries and Public Enterprises	.0033722	.0579724	0	1
Home Affairs	.0246256	.1549813	0	1
Housing and Urban Affairs	.0030044	.0547302	0	1
Housing and Urban Poverty Alleviation	.002294	.0478412	0	1
Human Resource Development	.0238528	.1525906	0	1
Information and Broadcasting	.0075525	.0865762	0	1
Jal Shakti (Water)	.0022279	.0471485	0	1
Labour and Empowerment	.0097702	.0983602	0	1
Law and Justice	.0057742	.0757686	0	1
Micro, Small and Medium Enterprises	.0036692	.0604624	0	1
Mines	.0025063	.0500004	0	1
Minority Affairs	.0023061	.047967	0	1
New and Renewable Energy	.0042734	.0652315	0	1
Non-conventional Energy Sources	.0008668	.0294284	0	1

Non-resident Indians Affairs	.00000559	.0023635	0	1
Ocean Development	.0002095	.0144719	0	1
Overseas Indian Affairs	.0011684	.0341624	0	1
Panchayati Raj	.0018602	.0430898	0	1
Parliamentary Affairs	.0001015	.0100733	0	1
Personnel, Public Grievances, and Persions	.0050722	.0710387	0	1
Petroleum and Natural Gas	.0162752	.1265321	0	1
Planning	.0042613	.0651394	0	1
Ports, Shipping and Waterways	.0003799	.0194862	0	1
Power	.0112524	.1054787	0	1
Prime Minister	.0001061	.0103017	0	1
Railways	.0274066	.163265	0	1
Road Transport and Highways	.0116331	.1072279	0	1
Railways	.0274066	.163265	0	1
Road Transport and Highways	.0116331	.1072279	0	1
Rural Development	.0135808	.1157429	0	1
Science and Technology	.0036794	.0605465	0	1
Shipping	.0031832	.0563298	0	1
Shipping, Road Transport, and Highways	.0025976	.0509	0	1
Skill Development and Entrepreneurship	.0023192	.048102	0	1
Skill Development, Entrepreneurship, Youth Affairs and Sports	.0001229	.0110851	0	1
Small Scale Industries	.0005614	.0236874	0	1
Social Justice and Empowerment	.0073988	.0856978	0	1
Space	.0013323	.0364763	0	1
Statistics and Programme Implementation	.0014962	.0386512	0	1

Steel	.0032539	.0569504	0	1
Textiles	.007923	.088658	0	1
Tourism	.0052603	.0723369	0	1
Tourism and Culture	.0018732	.0432402	0	1
Tribal Affairs	.0042492	.0650472	0	1
Urban Development	.00652	.0804827	0	1
Urban Employment and Poverty Alleviation	.000553	.0235101	0	1
Water Resources	.0064985	.0803513	0	1
Water Resources, River Development and Ganaga Rejuvenation	.0028173	.0530033	0	1
Women and Child Development	.0070721	.0837977	0	1
Youth Affairs and Sports	.005885	.0764877	0	1
Consumer Affairs and Public Distribution	.0004981	.0223126	0	1
Disinvestment	.0007662	.0276703	0	1
Finance and Company Affairs	.0012187	.0348888	0	1
Information Technology	.0004311	.0207576	0	1
Labour	.0020101	.0447889	0	1
Law, Justice and Company Affairs	.0010223	.0319565	0	1
Mines and Minerals	.0001676	.0129444	0	1
Small Scale Industries and Rural and Agro Industry	.0005335	.023091	0	1
Surface Transport	.0005102	.0225819	0	1
Urban Development and Poverty Alleviation	.0018676	.0431758	0	1

Appendix IV

State and Party Variation

The graph below shows that there is a wide variation in the number of questions asked by parliamentarians in each state. The graph below depicts this variation:
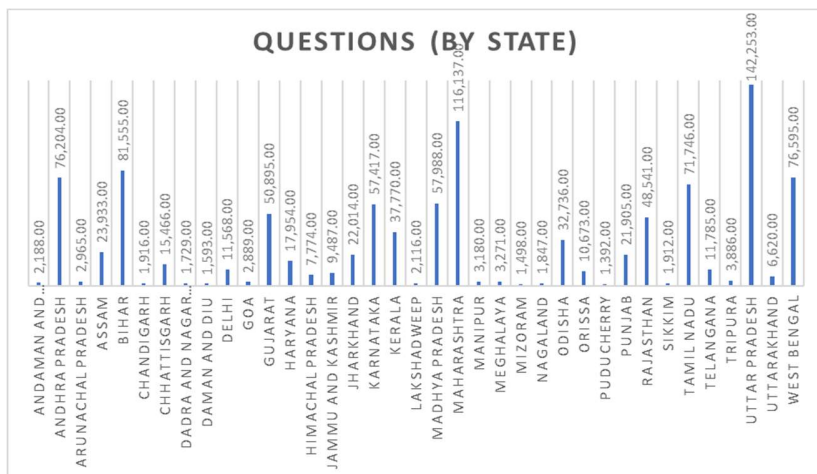

Figure X: The number of questions asked by representatives from each state in the dataset (13th-17th Lok Sabha)

This variation largely represents the difference in the number of MPs for each state: Uttar Pradesh (80); followed by Maharashtra (48), West Bengal (42) and Bihar (40).

In terms of party, the following variation can be observed:

Party	Number of Questions
Bharatiya Janata Party	173588
Indian National Congress	101989
Shiv Sena	28312
All India Anna Dravida Munnetra Kazhagam	17090
Samajwadi Party	15932
Biju Janata Dal	15886
Telugu Desam Party	15582

Janata Dal (United)	15012
Communist Party of India (Marxist)	14352
Nationalist Congress Party	11667
Bahujan Samaj Party	9198
Dravida Munnetra Kazhagam	8963
Rashtriya Janata Dal	6758
Communist Party of India	5945
Yuvajana Sramika Rythu Congress Party	5811

For ease of presentation, only the statistics for the largest parties have been included here. Due to the allocation of question that each member of parliament has, this division largely represents the number of members of each party in the parliament.

Appendix V

The results of the McCrary Density Test can be found below:
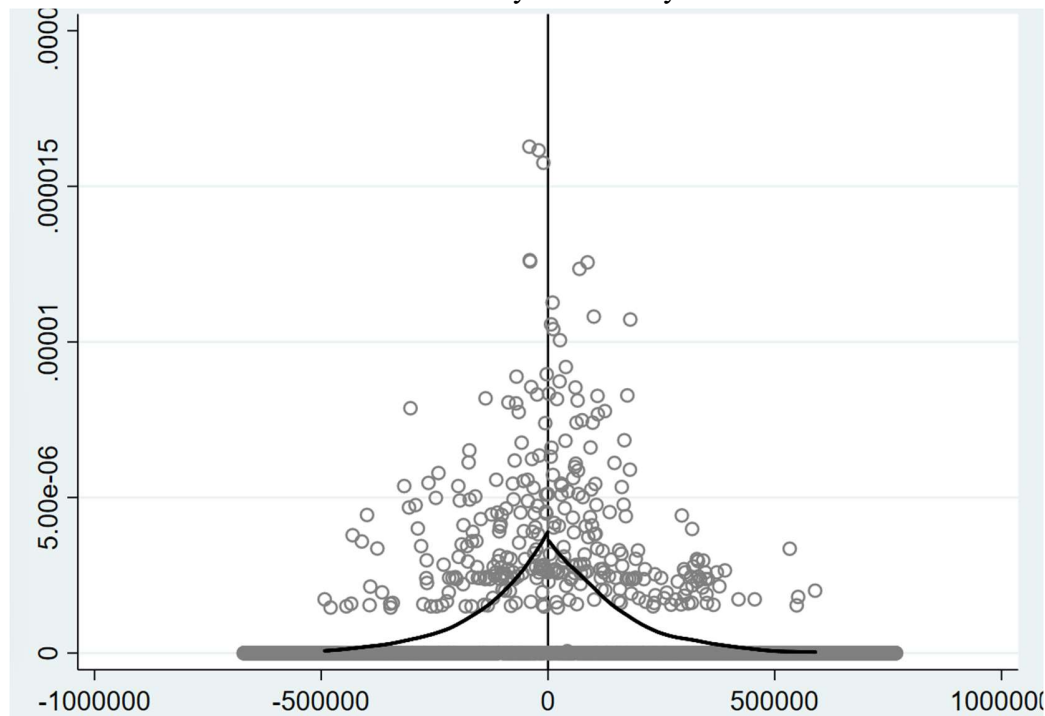
Appendix VI

Example of a question raised to the Ministry of Social Justice and Empowerment that has been raised in parliament:

Will the Minister of SOCIAL JUSTICE & EMPOWERMENT be pleased to state:

(a) whether the Government adequately rehabilitates the differently abled persons including those with fifty per cent or more disabilities and if so, the details thereof;

(b) whether despite the adequate measures in place, such persons are deprived of decent means of livelihood and if so, the details thereof;

(c) the steps taken by the Government to create employment opportunities/ self employment for such persons; and

(d) whether the Government has issued instructions to the private sector for providing employment opportunity to the differently abled persons, if so, the details thereof and the follow up action taken thereon?

Example of a question raised to the Ministry of Tribal Affairs in parliament:

Will the Minister of TRIBAL AFFAIRS be pleased to state:

(a)   whether any study/survey has been conducted or is proposed to be conducted to ascertain the population of various tribal communities residing in forest areas of the country;

(b)   if so, the details thereof; and

(c)   the basis/criteria adopted by the Government to introduce welfare measures for tribal people?

Example of a question raised to the Ministry of Women and Child Development:

Will the Minister of WOMEN AND CHILD DEVELOPMENT be pleased to state:

(a)   whether the incidence of malnutrition among women is higher as compared to men and if so, the details thereof and the reasons therefor;

(b)   whether the incidence of malnourishment among children is largely under reported in many parts of the country and if so, the details thereof and the reasons therefor;

(c)   whether the faulty methods employed to diagnose malnutrition has led to poor detection of cases of malnutrition and if so, the details thereof; and

(d)   the details of efforts made by the Government to reduce malnutrition among women and children in the country?

Example of a poverty-related question that has been raised in parliament:

Will the Minister of **RURAL DEVELOPMENT** be pleased to state:

(a)   the date on which the last census of people living Below Poverty Line (BPL) was conducted at National and State level especially in Jharkhand;

(b)   the outcome of the said census conducted at National and State level;

(c)   whether the Government proposes to conduct census of such people again;

(d)   if so, the time by which it is likely to be done; and

(e)   if not, the reasons therefor?