Mind the Gap: Analysing Inequality in Access to Higher Education in India between the Poor and the Rich

Pradeep Kumar Choudhury
Jawaharlal Nehru University (JNU), Delhi, INDIA

11th South Asia Economic Policy Network Conference
World Bank & BIGD

09 May 2023
Motivation (1/2)

- Rising class inequalities in the Indian society - India is now among the most unequal countries in the world (World Inequality Report 2022)

- Education / higher education: the great equalizer - inequalities in higher education is too serious to ignore any more

- Massive expansion of higher education sector in India – but who choses? Who Looses?

- Studies on class inequalities in HE in India are sparse
### Gross Enrolment Ratio (GER)

<table>
<thead>
<tr>
<th>Net State Domestic Product (NSDP) per capita</th>
<th>High</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Goa, Delhi, Sikkim, Chandigarh, Haryana, Puducherry, Maharashtra, Kerala, Uttarakhand, Karnataka, Telangana, Tamil Nadu, Andhra Pradesh, Arunachal Pradesh, Punjab, Himachal Pradesh</td>
<td>Gujarat, Andaman &amp; Nicobar, Mizoram, West Bengal</td>
</tr>
<tr>
<td>Low</td>
<td>Jammu &amp; Kashmir</td>
<td>Chhattisgarh, Nagaland, Rajasthan, Meghalaya, Odisha, Madhya Pradesh, Assam, Jharkhand, Manipur, Uttarakhand, Bihar, Tripura</td>
</tr>
</tbody>
</table>
This Paper

- To examine the inequality in participation in higher education by economic status of the households – between poor and rich

- To analyse the variations in household expenditure on higher education between poor and rich
Data & Method

- The paper uses the unit level data available in the latest three education rounds the National Sample Survey Organization (NSSO) – 75th round (2017-18), and the 64th round (2007 – 2008)

- Using the unit level data of 2017-18, the predicted probabilities of attending higher education between poor and rich is analysed for persons aged 18-23 years using logit model
GAR in HE between Poor and Rich, 2017-18

HH Consumption Quintiles

- Q1: 2.89
- Q2: 4.45
- Q3: 6.74
- Q4: 12.16
- Q5: 32.35
- All: 24.3

2007-08

- Q1: 11.3
- Q2: 15.8
- Q3: 21.9
- Q4: 29.1
- Q5: 44.3
- All: 12.56
GAR in HE by gender between poor and rich

GAR in HE (%)


Q1  Q2  Q3  Q4  Q5  All
GAR in HE by region between poor and rich
Access to PHE (poor/rich), 2017-18

Participation (%)

Q1: 2.5
Q2: 3.2
Q3: 8
Q4: 13.1
Q5: 73.2
Completed level of Higher Education (poor & rich), 2017-18

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Completed HE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>3.71</td>
</tr>
<tr>
<td>Q2</td>
<td>4.21</td>
</tr>
<tr>
<td>Q3</td>
<td>9.32</td>
</tr>
<tr>
<td>Q4</td>
<td>21.53</td>
</tr>
<tr>
<td>Q5</td>
<td>61.23</td>
</tr>
<tr>
<td></td>
<td>Male</td>
</tr>
<tr>
<td>----------</td>
<td>-------</td>
</tr>
<tr>
<td>Poorest</td>
<td>4.16</td>
</tr>
<tr>
<td>Richest</td>
<td>59.66</td>
</tr>
</tbody>
</table>
Per-Student Annual Household Expenditure on HE in India (poor/rich), 2017-18
Gender gap in Household Exp. On HE between poor and Rich
R/U gap in Household Exp. On HE between poor and Rich

![Graph showing the R/U gap in Household Expenses on HE between poor and rich across different quarters and years. The graph compares rural and urban expenses, with data from 2007-08 and 2017-18.](image-url)
Economic Burden to Households to Access HE

% Share

Q1  Q2  Q3  Q4  Q5  Total

2007-08

2014

Q1: 30.62  26.86
Q2: 25.74  22.97
Q3: 21.33  20.89
Q4: 19.98  16.48
Q5: 20.21  16.21
Total: 19.74  21.24
How costly is HE in India? 2017-18

- Humanities: 10.6
- Commerce: 14.2
- Science: 17.2
- All: 19.3
- Others: 31.4
- Engineering: 45.8
- Medicine: 50.5
# Predicted probabilities of attending HE: Logit Estimates

<table>
<thead>
<tr>
<th>Quintile</th>
<th>All</th>
<th>Male</th>
<th>Female</th>
<th>Rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient</td>
<td>ME</td>
<td>Coefficient</td>
<td>ME</td>
<td>Coefficient</td>
</tr>
<tr>
<td>2nd Quintile</td>
<td>0.436***</td>
<td>0.055***</td>
<td>0.448***</td>
<td>0.058**</td>
<td>0.419***</td>
</tr>
<tr>
<td></td>
<td>(0.057)</td>
<td>(0.007)</td>
<td>(0.077)</td>
<td>(0.009)</td>
<td>(0.087)</td>
</tr>
<tr>
<td>3rd Quintile</td>
<td>0.852***</td>
<td>0.123***</td>
<td>0.891***</td>
<td>0.134**</td>
<td>0.795***</td>
</tr>
<tr>
<td></td>
<td>(0.053)</td>
<td>(0.007)</td>
<td>(0.070)</td>
<td>(0.009)</td>
<td>(0.080)</td>
</tr>
<tr>
<td>4th Quintile</td>
<td>1.307***</td>
<td>0.215***</td>
<td>1.298***</td>
<td>0.218**</td>
<td>1.317***</td>
</tr>
<tr>
<td></td>
<td>(0.052)</td>
<td>(0.007)</td>
<td>(0.070)</td>
<td>(0.009)</td>
<td>(0.078)</td>
</tr>
<tr>
<td>5th Quintile</td>
<td>2.143***</td>
<td>0.414***</td>
<td>2.147***</td>
<td>0.422**</td>
<td>2.138***</td>
</tr>
<tr>
<td></td>
<td>(0.051)</td>
<td>(0.007)</td>
<td>(0.068)</td>
<td>(0.009)</td>
<td>(0.077)</td>
</tr>
<tr>
<td>Constant</td>
<td>-2.298***</td>
<td></td>
<td>-2.275***</td>
<td></td>
<td>-2.408***</td>
</tr>
<tr>
<td></td>
<td>(0.067)</td>
<td>(0.089)</td>
<td>(0.102)</td>
<td>(0.083)</td>
<td>(0.124)</td>
</tr>
<tr>
<td>Log-Likelihood</td>
<td>-23258.89</td>
<td></td>
<td>-13203.19</td>
<td></td>
<td>-10027.83</td>
</tr>
<tr>
<td>Pseudo-R²</td>
<td>0.122</td>
<td>0.111</td>
<td>0.138</td>
<td>0.097</td>
<td>0.114</td>
</tr>
<tr>
<td>Observations</td>
<td>41,240</td>
<td>22,794</td>
<td>18,446</td>
<td>23,035</td>
<td>18,205</td>
</tr>
</tbody>
</table>
Major Empirical Findings (Predicted Probabilities)

- **Consumption Quintiles**
  - Predicted probability of higher education attainment increases with the increase in the economic status of the household - the probability of attending higher education is 41.4 per cent higher for richest (5th) quintile as compared to the poorest (first) quintile group individuals.

- **Gender**
  - Chances of attending higher education are significantly higher for men as compared to women, more gender gap among poor.

- **Location**
  - Individuals residing in urban area have 4.2 per cent higher chances of attending higher education as compared to those who belong to rural areas, the effect is higher among the richest households.

- **Caste**
  - Chances of attending higher education are 7.3 per cent and 11.1 per cent higher for other backward classes and general category respectively, as compared to scheduled tribes, this gap narrows with increase in capacity to pay.
Where do we fail to convert expansion to equity in HE?

• Even with considerable expansion of HE, it remains out of reach for many of the India’s poorest and most marginalized. But Why?

• An important issue often discussed in academia and policy contexts is the growing presence of the private sector – out of reach to many who aspires for HE

• Reduced role of the state – declining or stagnant public funding for HE

• Translating expansion to equity is a great challenge for the HE sector in India. To make HE as an egalitarian space is need of the hour

• But what equity policies are in place? Where to locate NEP 2020 in this debate?
Thank You

pradeepchoudhury@jnu.ac.in