

Absolute Income Mobility: An Empirical Analysis

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Abstract: Income mobility means the degree of association between parental income and offspring income. If there is low association then the society is less dependent on their parental status. India is historically divided into different socio-economic groups. So immobility is an important character of Indian economy. In my paper, I utilize India Human Development Survey (IHDS) data to assess the income mobility in India using ordinary least square technique. It is found that there is high income immobility exist in India. I find an average absolute income gap of Scheduled tribe (ST) children in India. It is also identified that if education gap between father and children increases then mobility will increase.

JEL Classification: D31; J15

Keywords: Intergenerational, income mobility, social groups

I. Introduction

The degree of variance in social situations between parents and offspring is referred to as intergenerational mobility or "fluidity." In a society with high intergenerational mobility (relative or absolute), a person's welfare is less dependent on their parents' social status. When a society's mobility is poor, a person's chances of success in life are limited. In their article, a number of economists and social scientists discovered a high degree of correlation between children's and parents' salaries based on distinct demographic statuses ((Solon, 1999); (Blanden, et al., 2005); (Hnatkovska, et al., 2013); (Murray, et al., 2018)). There are no major shifts in intergenerational economic mobility in the United States, according to our data, which include cohorts born between 1952 and 1975. (Lee & Solon, 2009). As a result of education policy reforms, intergenerational income elasticity has decreased by roughly seven percentage points (Pekkarinen, et al., 2006). Only education levels above middle school demonstrated a positive link with upward mobility in India between 2004 and 2011. (Azam, 2016). Intergenerational income persistence is lower in rural areas, and India is now making headway toward cross-caste equality, but development is slow (Mohammed, 2019). There are publications that explain the relationship between child income and parental income as intergenerational income mobility and they measure relative mobility which is affected by the relative change in child and father standard deviations of income.

Utilizing IHDS-I and IHDS-II information, we will explore whether intergenerational educational mobility expands total pay mobility in India. Utilizing the OLS approach, this exploration tracks down a flat out proportion of association between standardized child and father month to month salaries. I find intergenerational total pay will increment because of an increment in education gap. At the point when a child's schooling is higher than the middle level and the father's schooling is lower than the middle level, I track down the higher versatility.

The paper will be discussed as follows. Section II will provide the data and methodology of the paper. In section III we will discuss the empirical model and findings. Section IV comments on policy implications and concludes the paper.

II. Data and Methodology

2.1 Data source

India Human Development Survey (IHDS) conducted a nationally representative, multi-topic panel survey of 41,554 households in 1503 villages and 971 urban neighborhoods in 2004-05 (IHDS-I) and 42,152 families in 384 districts, 1420 villages, and 1042 urban areas in 2012 (IHDS-II). Utilizing the father and mother ids, I make a child parent pair. The informational collection prohibits child who are as yet in school and whose father's are beyond 59 years old. All the while, I eliminated child age more than 15 from my data set. I currently have 8215 child parent blends after the entirety of this. At that point, in view of the child's and fathers tutoring years, I partition them into four classes. Class 4 and class 8 are the middle degrees of schooling for fathers and child's, separately. The child's higher schooling than child decides intergenerational instructive versatility. Table 1 contains outline measurements for all factors used in our examination.

Table1: Summary Statistics

Variable	Mean	Standard Deviation	Minimum	Maximum	Observation
Log child monthly income(Normalized)	6.665	1	1.599	9.857	8215
Log father monthly income(Normalized)	6.432	.999	2.228	9.296	5838
Age	22.987	4.622	15	47	8215
Monthly working day	6.205	3.312	2	22	8211
Number of worker in household	3.289	1.283	0	13	8215
Education Gap	3.698	4.287	-15	16	8215
Sex:					
Male	.863	.342	0	1	8215
Caste:					
Other Backward Class(OBC)	.370	.483	0	1	8196
Scheduled Caste(SC)	.247	.431	0	1	8196
Scheduled Tribe(ST)	.134	.341	0	1	8196
Religion:					
Muslim	.144	.351	0	1	8215
Other Minority Religious Group	.058	.235	0	1	8215
Region:					
West	.158	.365	0	1	8215
South	.228	.420	0	1	8215
East	.141	.348	0	1	8215
North East	.034	.183	0	1	8215
Union Territory	.060	.239	0	1	8215

2.2 Testable Hypothesis

First and foremost, we expect that the month to month pay of a child and the month to month pay of the father are inconsequential. On the off chance that the connection among child and father month to month pay is genuinely huge, I reject the null, and we show that it fits well with intergenerational pay idleness

Also, intergenerational educational versatility has no impact on monetary portability. In the event that educational portability decidedly affects financial versatility, I will dismiss the null and contend that educational portability improves intergenerational pay versatility.

III. Empirical models and results

3.1 Methodology

The heteroscedasticity adjusted ordinary least square (OLS) regression methodology was used to estimate the intergenerational absolute income mobility. The normalized log monthly income of the i th child is regressed on the normalized log monthly income of the i th child's father and other control variables.

$\text{Log}(\text{Child Monthly Income})_i / \sigma_C = \beta_0 + \beta_F \text{Log}(\text{Father's Monthly Income})_i / \sigma_F + \delta Y + e_i$, where Y is the vector of exogenous factors.

Where σ_C and σ_F are standard deviation of child and father monthly income. The coefficient β_F measures simply the correlation between child and father monthly income. Intergenerational absolute income mobility (β_j) is the term for this. As a result, $(1 - \beta_j)$ is a measure of intergenerational income mobility.

3.2 Results and Discussion

The aftereffect of absolute mobility is introduced in table-2. The exact findings uncover that child month to month income and father income have a solid relationship. The income of the subsequent child rises quicker as the father's pay rises. I inspect the log of the dad's month to month pay and the log of the child's month to month pay in the main model.

Table-2 Intergenerational Absolute Income Mobility: By Educational Attainment

Log Child Monthly Income										
	Full Sample		Child Education < Median & Father education<Median		Child Education < Median & Father Education>Median		Child Education> Median & Father Education<Median		Child education> Median & Father education>Median	
	Model-1	Model-2	Model-3	Model-4	Model-5	Model-6	Model-7	Model-8	Model-9	Model-10
Log father monthly income	.589*** (.012)	.299*** (.011)	.582*** (.026)	.314*** (.023)	.559*** (.040)	.302*** (.036)	.528*** (.039)	.233*** (.030)	.564*** (.023)	.330*** (.021)
Age		.021*** (.001)		.022*** (.003)		.023*** (.005)		.025*** (.004)		.017*** (.004)
Monthly working day		.161*** (.003)		.161*** (.007)		.149*** (.011)		.158*** (.008)		.156*** (.006)
Number of worker in household		.012* (.006)		.024** (.011)		.019 (.020)		.029* (.016)		-.006 (.015)
Education Gap		.003** (.001)								
Sex:										
Male		.383*** (.025)		.420*** (.041)		.391*** (.072)		.579*** (.072)		.227*** (.051)
Caste:										
Other Backward Class(OBC)		.028 (.022)		.162*** (.043)		.158** (.062)		.031 (.065)		-.028 (.039)
Scheduled Caste(SC)		.059** (.024)		.142*** (.048)		.269*** (.072)		.164** (.068)		-.083** (.042)
Scheduled Tribe(ST)		-.052** (.027)		.100** (.050)		-.014 (.088)		-.004 (.074)		-.131** (.059)
Religion:										
Muslim		-.020 (.025)		.052 (.040)		.053 (.069)		.043 (.074)		-.129** (.068)
Other Minority Religious Group		.125*** (.033)		.145** (.056)		.081 (.092)		.109 (.082)		.157** (.068)
Region:										
West		.084*** (.022)		.093** (.042)		.072 (.065)		.014 (.057)		.166*** (.044)
South		.179*** (.020)		.118*** (.037)		.001 (.063)		.166*** (.046)		.276*** (.042)
East		.004 (.023)		.067** (.034)		-.103 (.064)		-.068 (.072)		-.009 (.062)
North East		.307*** (.049)		.302*** (.080)		.318** (.152)		.374*** (.122)		.366*** (.096)
Union Territory		.124*** (.036)		.080 (.100)		.076 (.099)		.045 (.094)		.170*** (.056)
Constant	2.825*** (.084)	2.743*** (.089)	2.791** * (.169)	2.441*** (.170)	2.932** * (.333)	2.694** * (.259)	3.262*** (.255)	2.654*** (.238)	3.112** * (.171)	2.864*** (.184)
R ²	.354	.662	.285	.651	.333	.658	.247	.638	.348	.614
Observation	5838	5821	1675	1675	629	623	914	914	1659	1653

***Note: Significance levels: *p<0.1, **p<.05, ***p<.01

I incorporate individual and family level boundaries like age, station, sex, territorial zone, schooling gap, month to month complete working day, and all out working part in the home into model-2, and I track down that the connection among father and child income falls by 49%. The total connection between father month to month income and child month to month pay is .299 in the relapse model-2. Time is addressed by age as an intermediary variable. I have found that age positively affects pay, suggesting that normal pay ascends as individuals get more established. The finding uncovers that when an individual's month to month working day increments, his does as

well or her pay. On the off chance that you add an additional day of work to your month's timetable, your odds of acquiring will improve by around 16%. In the event that the original of the family has additional functioning individuals, there will be more open positions for the subsequent age, just as an expansion in pay. As the instructive fulfillment hole between the child and the father augments, the probability of monetary versatility among the child develops, and the solid connection among child and father month to month pay in the long run blurs. Male child have a lot more prominent normal pay than female child. The child from a scheduled caste (SC) has more pay portability than the general child; however there is no significant contrast with child from other in other backward class (OBC). The scheduled tribe (ST) child, then again, has a significant normal dissimilarity with the general caste. Aside from Muslims, minority religions have higher normal month to month earnings than Hindus, in spite of the fact that I don't perceive any generous pay dissimilarity among Muslims and Hindus. The western, southern, upper east and association domain zones have more prominent normal livelihoods than the north, yet there is no considerable mean pay divergence in the eastern zone. I find that kids with higher-than-middle education and fathers with lower-than-middle schooling have more pay versatility. In model-8, I uncover a fascinating outcome: when ST Child instructive achievement is superior to the middle worth, notwithstanding their father's low proper tutoring, the normal pay dissimilarity with the general caste vanishes. At the point when we consider instructive accomplishment over the middle of both child and father in model-10, I track down a normal pay gap among SC and ST child and general child.

IV. Conclusion

The level of progress in status starting with one generation then onto the next is estimated by intergenerational mobility. Our findings support the possibility that intergenerational education mobility well affects intergenerational income versatility.

I talk about the survey of the Indian Human Development Survey as to intergenerational income portability in this investigation. Straightforward OLS approaches are utilized to examine the level of relationship between's child month income and father month to month income, just as how singular level and family level information impact versatility. As indicated by our discoveries, there is an impressive connection among kid and father pay. On the off chance that there is intergenerational instructive portability, there will be intergenerational income versatility. The income portability is higher when child schooling is more prominent than the median and father schooling is lower than the median.

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