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Corruption in India: A Quantitative Analysis

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Abstract

This paper represents one of the first attempts at quantifying the level of corruption in India. This was made possible by the unique website ipaidabribe.com which invites people who paid a bribe to record their experience. By choosing a specific issue - identity verification by a police officer prior to issuing a passport - it was able to focus on a "harassment" bribe: a bribe paid for something a person was legally entitled to. Nearly half the persons using this website to report "passport verification" bribes were from the eight major Indian cities of New Delhi, Mumbai, Kolkata, Chennai, Bangalore, Hyderabad, Pune, and Ahmedabad. This fact is, perhaps, less an indication of the concentration of corruption in these cities and more of the greater propensity of metropolitan residents to record their grievances. Of these cities, residents of New Delhi had to pay the largest amounts, and residents of Ahmedabad the smallest, in passport verification bribes.

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1. Introduction

The fact that the level of corruption in India has become a matter of grave concern needs little justification. Public anger over the "scams" associated with the 2010 Commonwealth Games and the auction of the 2G spectrum licences - which resulted in the jailing (pending trial) of respectively, the chief of the Games' organising committee (Kalmadi) and the Minister of Telecommunications (Raja) - has led the government to establish a committee to draft an anti-corruption bill.¹ Needless to say, underlying such cases of spectacular corruption, are a myriad instances where bribes, of various sizes, are paid to obtain a variety of favours.

In analysing such bribes it is useful to draw a distinction between "harassment" bribes - where one pays a bribe to receive what one is legally entitled to - and "non-harassment bribes" where one pays a bribe for a favour to which one is not entitled.² So, for example, paying a tax inspector a bribe to receive an income tax refund to which one was entitled would constitute a harassment bribe while paying a policeman to ignore a traffic offence would constitute a non-harassment bribe. A particularly egregious example of harassment bribes are those paid for establishing one's identity in order to obtain a passport (hereafter, "passport verification" bribes). Egregious because the demand for such payment violates our most intimate possession - our identity - and over which we have, or should have, absolute control.

The process of obtaining a passport in India can be long and, sometimes, fraught. First, there is the "help" offered by touts as soon as one arrives at the passport office - Rs. 15 for a form, Rs. 4,500 for additional pages, Rs. 6,000 for a new passport. The alternative to refusing such offers of help is to wait endlessly in long queues and the sheer volume of

¹ Though even the composition of this committee is not without controversy with a prominent cabinet minister (Pawar) being forced to resign from it because his anti-corruption credentials were viewed as suspect.

² See Basu (2011), Dasgupta (2009), Bardhan (1997).

business - about 1,500 applications daily at New Delhi's regional passport office - provides fertile ground for touts to flourish.³ After the application has been lodged the police pay a visit to the applicant's place to verify his/her identity both directly and through neighbours. A "passport verification" bribe is paid to the police officer concerned in order to ensure that the verification is completed without "difficulty".

The website www.ipaidabribe.com (created by the non-profit organisation, *Janaagraha*) provides a forum to those who have paid bribes to record their experience, and the bribe paid, while preserving their (and the beneficiaries) anonymity. While bribes were paid to a variety of agencies (Police, Income Tax, Excise, and Customs) for a variety of reasons, the most well-defined purpose was that of passport verification and, indeed, of the 8,544 cases of bribery reported till the beginning of May 2011, 1,356 cases (16%) related to passport verification cases. A typical story from the website runs as follows: "[The] police visited me and asked for my verification documents. On producing all the documents the policeman asked me to produce documents for my kid. When everything was verified he questioned 'what is the proof that my kid is mine'? This was so ridiculous that my wife came to tears". The matter was satisfactorily resolved after he paid a Rs. 2,000 bribe.

2. Data and Results

Based on the information provided in the *Janaagraha* website on the 1,011 cases in which bribes were paid for passport verification (up to April 2011) we created a dataset consisting of: the amount of the passport verification bribe; the town or city, and the year, in which the bribe was paid.⁴ There were a total of 999 cases. The lowest passport verification

³ See "At the passport office, touts have 'tatal' scheme", *Times of India*, 17 April 2011, p. 8.

⁴ A case in which a bribe of Rs. 12,000 was paid was dropped because it related to an immigration issue at New Delhi airport. Also dropped were two cases in which bribes of Rs.0 and Rs. 1, respectively, were paid. Lastly, three cases in which the bribe paid was Rs. 10,000 or more were dropped since they were not credible bribes for simply passport verification.

bribe paid was Rs. 20 (in Bangalore and in Raigarh) and the highest was Rs. 6,000 in New Delhi. The median bribe was Rs. 400 and the mean bribe was Rs. 544.

One can examine the difference in bribes paid between "cities"⁵ and non-cities: of the 999 passport verification bribes, 546 bribes (55% of the total) were paid in "cities" and 453 bribes (45% of the total) were paid in non-cities. Compared to the lowest and highest bribes of Rs. 20 and Rs. 5,000 paid in non-cities, the lowest and highest bribes paid in cities were Rs. 20 and Rs. 6,000. However, the median and mean bribes in cities (respectively, Rs. 300 and Rs. 495) were *lower* than the median and mean bribes in non-cities (respectively, Rs. 500 and Rs. 603) and, furthermore, the difference between cities and non-cities in the mean passport verification bribe was statistically significant at the 5% level with $t(997)=2.6$ ($P[|T|>2.6]=0.01$). This suggests either or both of two possibilities: first, police officers in non-cities were bolder and more grasping in their demands compared to their counterparts in cities; second, compared to bribe-givers in non-cities, bribe-givers in cities were more prepared, at low levels of bribery, to record their experiences on the website.

Table 1 shows the lowest, highest, median, and mean passport verification bribes paid in the four metropolitan centres (New Delhi, Mumbai, Kolkata, Chennai) and in four major industrial centres (Bangalore, Hyderabad, Pune, and Ahmedabad). Nearly 50% (492 of the 999) reported cases of passport verification bribes were drawn from these eight cities and just two cities, Bangalore and Hyderabad, with, respectively, 219 and 88 cases, accounted for 31% of the total number of cases. The highest and lowest mean bribes were in New Delhi (Rs. 924) and in Ahmedabad (Rs. 183) and the highest and lowest median bribes were in New Delhi, Kolkata, and Hyderabad (Rs. 500) and in Ahmedabad (Rs. 100).

⁵ New Delhi (including Gurgaon and Noida), Kolkata, Chennai, Mumbai (including Navi Mumbai and Thane), Bangalore, Hyderabad, Pune, Ahmadabad, Lucknow, Jaipur, and Kanpur .

Table 1: Passport Verification Bribes in Rupees by Selected Cities in India

City	Number of Cases	Lowest Bribe	Highest Bribe	Median Bribe	Mean Bribe
New Delhi	19	100	6000	500	924
Mumbai	65	50	4000	300	511
Kolkata	21	50	3000	500	640
Chennai	22	100	5000	200	593
Bangalore	219	20	1800	300	373
Hyderabad	88	100	4000	500	566
Pune	40	100	2000	300	459
Ahmedabad	18	100	500	100	183

Table 2 shows the degree of inequality, as measured by the Gini coefficient, in the amounts paid by different persons in the eight cities enumerated above. If B_i and B_j are the bribes paid by persons i and j , $i, j=1 \dots N$, the Gini coefficient associated with the distribution of bribes is defined as:

$$G = \frac{1}{2N^2\mu} \sum_{i=1}^N \sum_{j=1}^N |B_i - B_j|$$

In other words, the Gini coefficient is computed as half the mean of the difference in bribes between pairs of bribe givers, divided by the average bribe (μ). So, $G=0.45$ implies that the difference in bribes between two givers chosen at random will be 90 percent of the average bribe: if $\mu=500$, this difference will be Rs. 450. The highest and lowest degrees of inequality in the distribution of passport verification bribes were in Chennai ($Gini=0.64$) and Ahmedabad ($Gini=0.31$).

Following Sen (1998), we argue that if μ is the mean bribe, and G the degree of inequality in its distribution, then the level of social loss from bribery, L , may be represented

as $L = \mu(1+G) = \mu^*$. This has the intuitive interpretation that greater the inequality in the distribution of bribes, the higher the social loss from a given mean bribe (μ). We define μ^* as the "distribution sensitive" bribe which reflects the inequality in the distribution of bribery experiences underlying the mean bribe, μ where $\mu^* \geq \mu$. The social loss from every bribe giver paying μ^* would be equal that from a mean bribe of μ , with some paying more than μ and others paying less.

Table 2: Gini Coefficients for Passport Verification Bribes by Selected Cities in India

City	Number of Cases	Gini Coefficient	Mean Bribe	Distribution-sensitive bribe
New Delhi	19	0.54	924	1,422
Mumbai	65	0.49	511	761
Kolkata	21	0.53	640	907
Chennai	22	0.64	593	973
Bangalore	219	0.35	373	504
Hyderabad	88	0.41	566	798
Pune	40	0.46	459	670
Ahmedabad	18	0.31	183	240

3. Conclusions

This paper represents one of the first attempts at quantifying the level of corruption in India. This was made possible by the unique website ipaidabribe.com which invites people who paid a bribe to record their experience. By choosing a specific issue - identity verification by a police officer prior to issuing a passport - it was able to focus on a "harassment" bribe: a bribe paid for something a person was legally entitled to. Nearly half the

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