

Political Incentives & Policy Outcomes:

Who benefits from technology-enabled service centers?

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Delivering Public Services

- Public service provision is fundamental, but flawed, activity of government.
- “Too often services fail poor people...They are often inaccessible or prohibitively expensive. But even when accessible, they are often dysfunctional, extremely low in technical quality, and unresponsive to the needs of diverse clientele” (World Bank, 2004).

The Promise of “eGovernment”

- New Information and Communication Technologies
- “Front to Back” process reforms
- Major focus of international aid and advice - the digital divide
- Why variation in government adoption of “eServices”?

The Indian Puzzle

- Technology-enabled service centers
- Fundamental government services
 - Regulatory - Driving licenses, arms licenses
 - Enumerative - Birth certificates, Residency certificates
 - Distributive - Welfare benefits
 - Transactional - Electricity bill payment, Tax payment
- Considerable variation across Indian states



The Argument

- Politicians weigh expected effects on political power and reelection
- Electoral benefits from satisfied citizens
 - Bribes cost Indian citizens >\$5 billion per year
 - Early evidence that eGov can reduce corruption (IIMA, 2007)
- Electoral costs from decreased corrupt income
 - Politicians collect portion of bribes through control over bureaucrats (Wade, 1985; de Zwart, 1996)
 - Bribes used to fund election campaigns (Ibid.)
- Variation in corruption across states = variation in incentives

The Role of the Party System

- Policy choice constrained by form of government
- Single-party governments centralize power in Chief Ministers
- Coalition governments diffuse decision-making power
 - Role of ministerial posts
- Threats to rents imply threats to stability of the ruling coalition

Predictions

- Technology-based reforms depend on:
 - Level of corruption
 - Degree of ruling government cohesion
- Reform is likely only in those cases where party leadership anticipates overall electoral benefits and faces no powerful resistance

Indian Policy Analysis

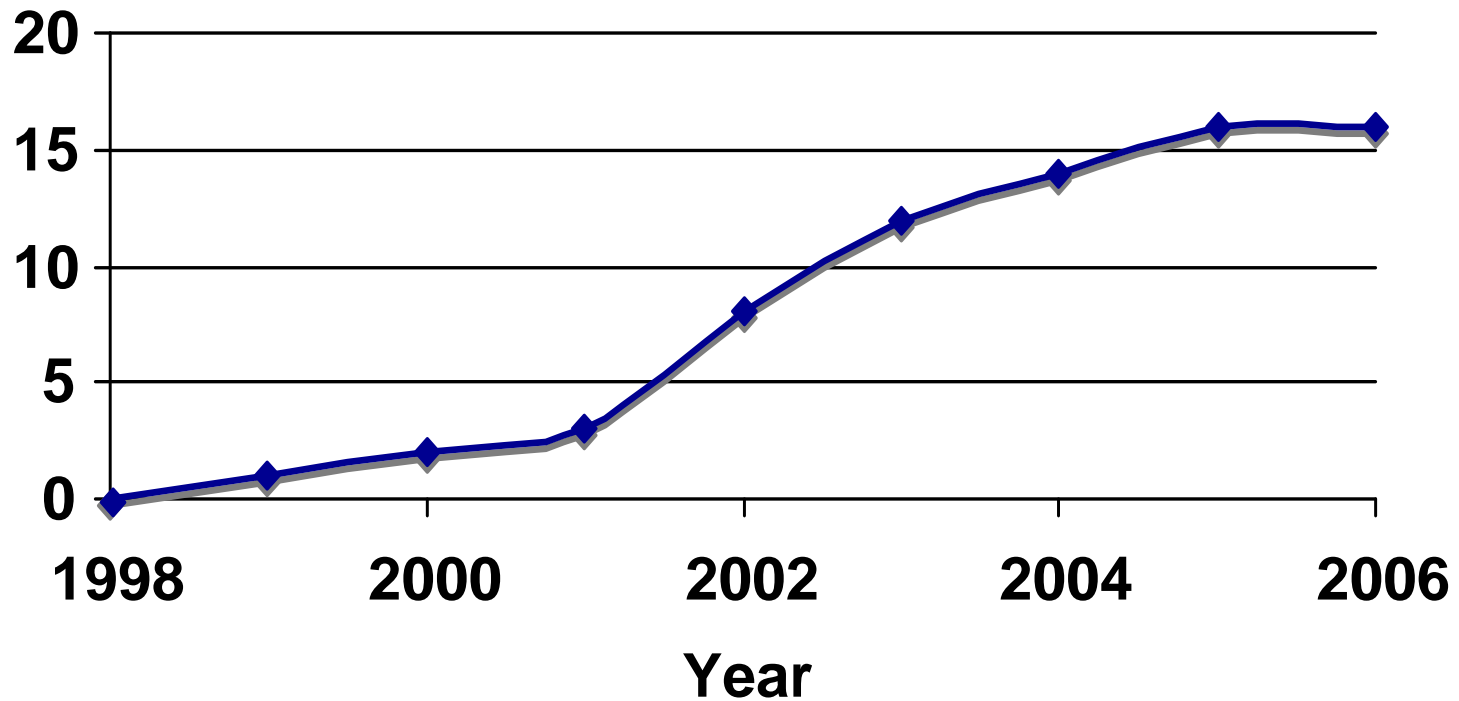
- Testing the Argument
 - Fieldwork in 17 states
 - Theory development based on seven states
 - Andhra Pradesh, Gujarat, Karnataka, Kerala, Madhya Pradesh, Rajasthan, Tamil Nadu
 - “Out of Sample” testing on nine additional states
 - Delhi, Haryana, Himachal Pradesh, Maharashtra, Orissa, Punjab, Uttarakhand, Uttar Pradesh, West Bengal
- Analysis of data from 20 states overall
 - Bihar, Goa, Jharkhand

Variation in Policy Characteristics

- Range of Policy Characteristics
 - Timing of Policy Initiation
 - Extent of Implementation
 - Quantity of Services
 - Type of Services
 - Degree of Automation
- Today's focus:
 - Timing, Quantity, & Type of Services

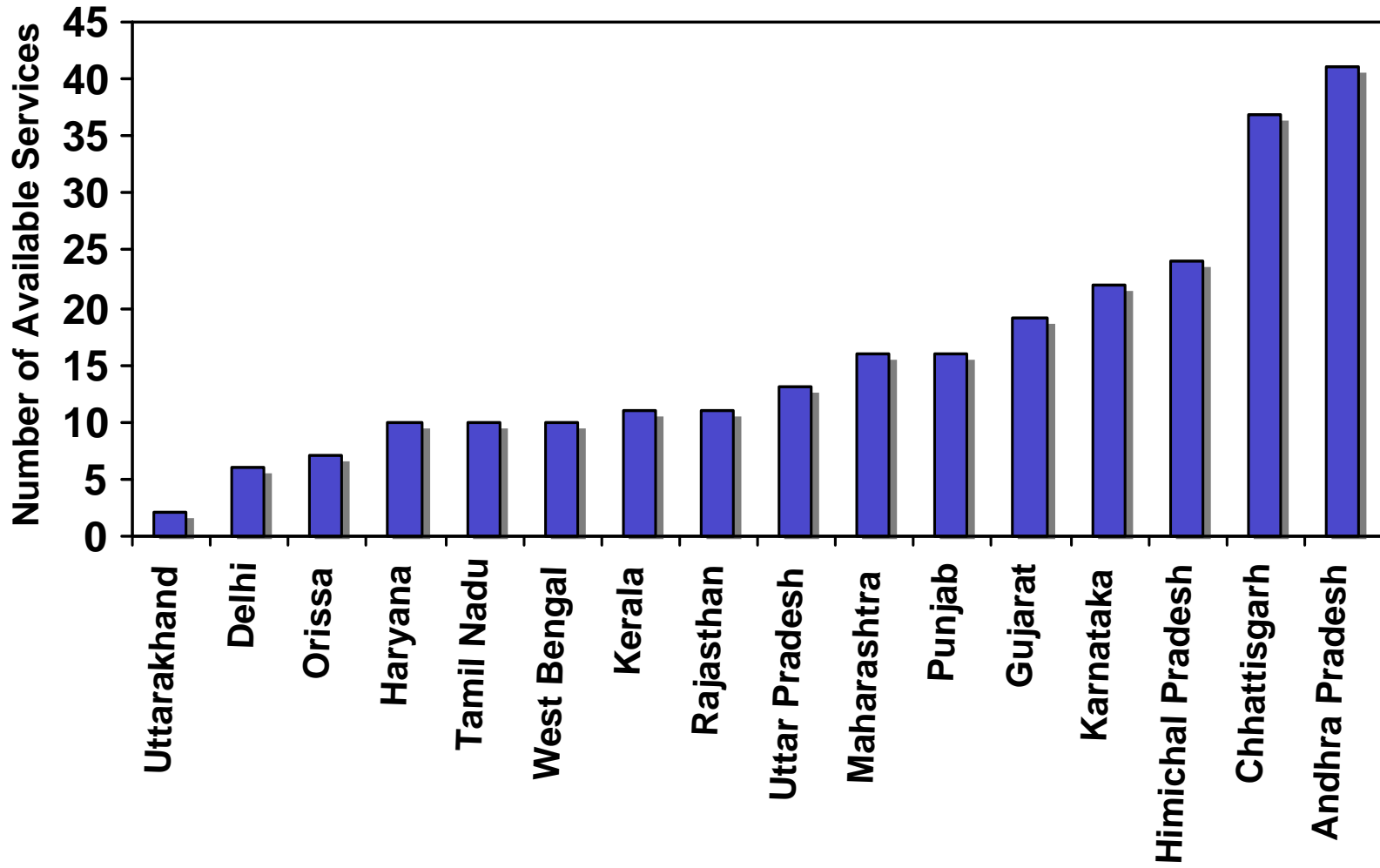
Policy Timing

Technology-Enabled Service Centers in India
Cumulative State Policy Adoption



◆ Total Policies

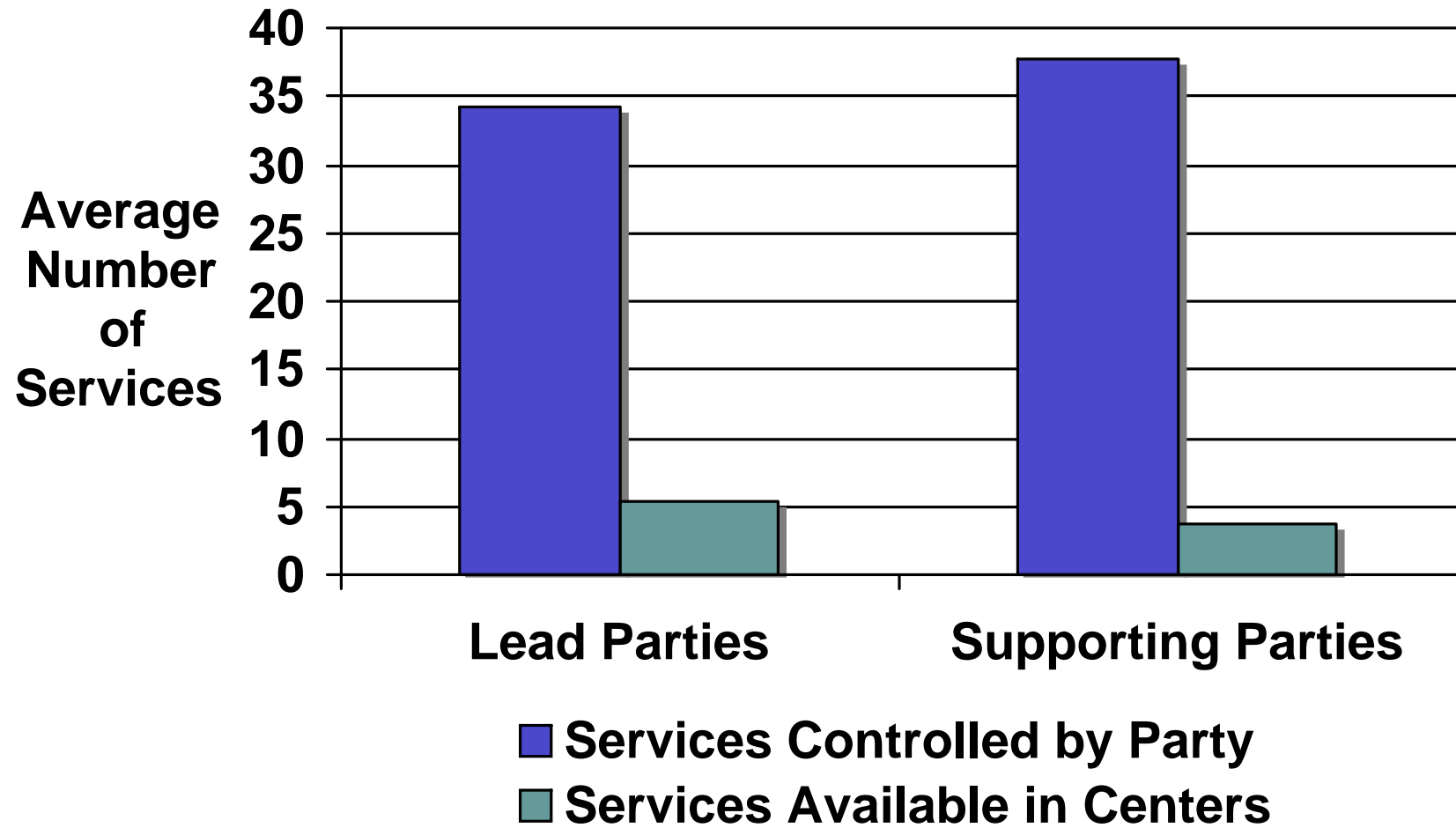
Quantity of Services



Testing Alternative Explanations for Quantity of Services

Independent Variable	Mean Number of Services (< avg on IV)	Mean Number of Services (> avg on IV)	Difference in Means	t-statistic
<i>Level of Corruption</i>	20.1	10.6	9.5	2.07
<i>Coalition</i>	18.0	11.4	6.6	1.64
<i>SDP per Capita</i>	18.0	13.3	4.7	0.92
<i>Years since Policy Initiation (at 2006)</i>	14.1	17.8	-3.6	-0.66

Coalitions & Quantity of Services



Coalitions and Type of Services

- Implementation experience in coalition-led states
 - Kerala
 - Orissa
 - (Karnataka, Maharashtra, Uttar Pradesh)
- Two major trends
 - Small coalition partners often control citizen-facing departments
 - States often do not provide services held by ministers from supporting coalition parties

Conclusions

- New technologies present an opportunity to break cycle of corruption and ineffective services
- Multi-billion dollar effect for developing country citizens
- Outcomes depend fundamentally on politicians':
 - Expectations regarding political costs and benefits
 - Power to act in a particular institutional setting
- Politics are key to understanding global digital divide

Thank You!

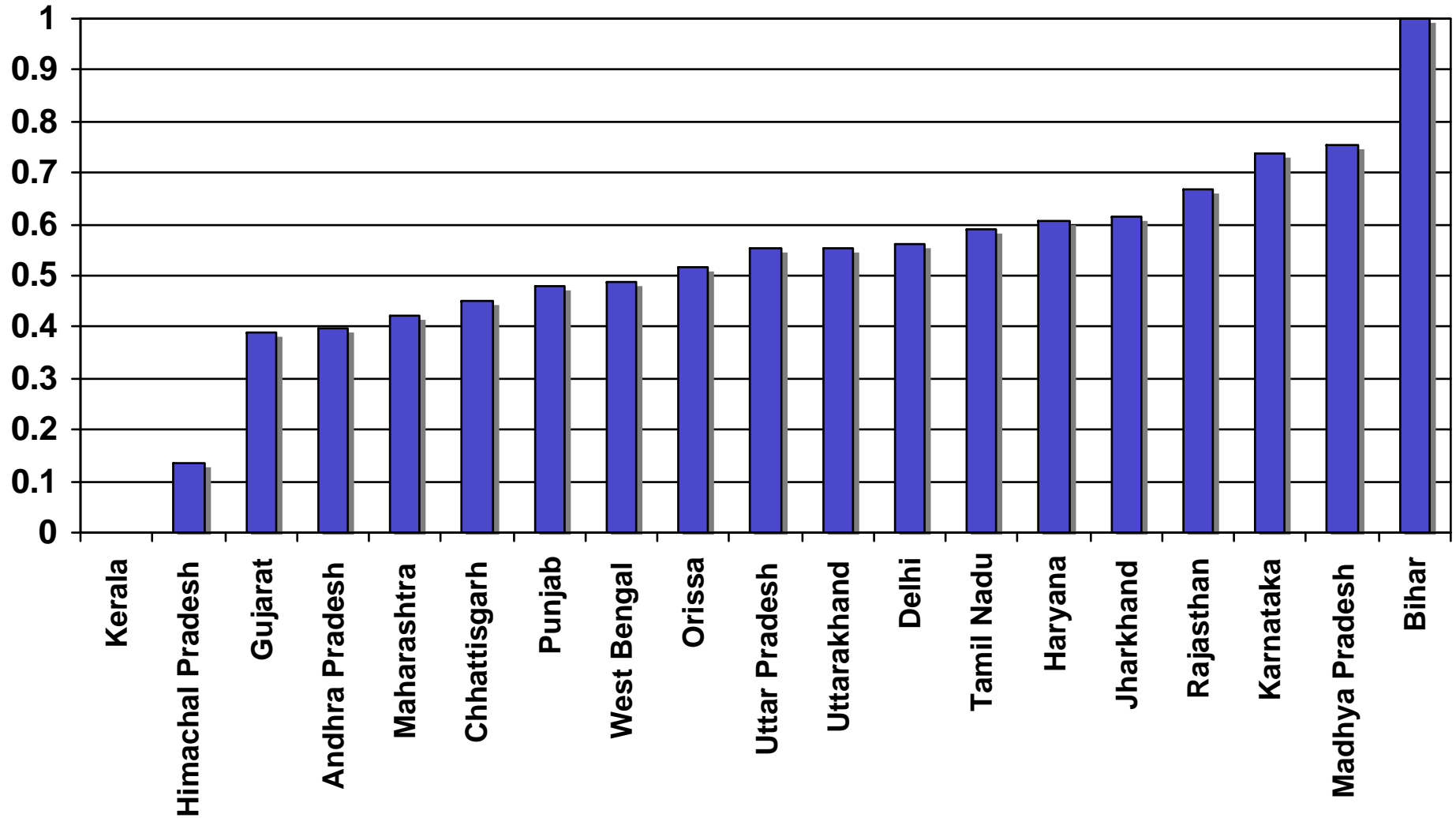
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A Measure of Corruption

- State-level surveys conducted in 2005 by Transparency International India
- Sample of 14,405 respondents in 151 cities and 206 villages in 20 states
- Questions regarding experience with, and perception of, corruption (bribe paying)
- Largest-ever corruption survey when conducted; one of few to focus on petty/bureaucratic corruption

Indian State Corruption Scores

(Scaled)



An Event History Model of Policy Timing

Factors Influencing the Timing of Policy Initiation			
Variable	Hazard Ratio	z-ratio	P-value
Corruption	0.24	-2.94	.003
Coalition	0.01	-2.18	.030
Technology Infrastructure	1.66	1.96	.050
Economic Development	1.68	0.63	.528
Electoral Competition	1.99	0.96	.339

State Policy Adoption

Initial Adopters (1999-2001)	Early (2002-2003)	Late (2004-2006)	Non-Adopters
Andhra Pradesh Kerala Maharashtra	Chhattisgarh Delhi Gujarat Haryana Himachal Pradesh Karnataka Rajasthan Tamil Nadu West Bengal	Orissa Punjab Uttar Pradesh Uttarakhand	Bihar Goa Kharkhand Madhya Pradesh

Corruption and Quantity of Services

Corruption		
	Below Average	Above Average
State (number of services)	Andhra Pradesh (41) Chhattisgarh (37) Himachal Pradesh (24) Gujarat (19) Maharashtra (16) Punjab (16) Kerala (11) West Bengal (10) Orissa (7)	Karnataka (22) Uttar Pradesh (13) Rajasthan (11) Haryana (10) Tamil Nadu (10) Delhi (6) Uttarakhand (2)
Mean Number of Services	20.1	10.6
Difference in Means (t-Statistic)	9.5 (2.07)	

Are Highly Corrupt Services Available in Service Centers?

Reason for Bribe	Est. Annual Bribe Value- Rs. '000 (\$ '000)	% of States Offering Service	< Average Corruption States Offering Service	> Average Corruption States Offering Service
<i>Police First Info. Report</i>	18,325,000 (458,000)	13%	Andhra Pradesh Chhattisgarh	<i>None</i>
<i>School Fees (exemption)</i>	13,583,000 (340,000)	0%	<i>None</i>	<i>None</i>
<i>Rural Financial Loan</i>	12,583,000 (313,000)	0%	<i>None</i>	<i>None</i>
<i>Register Property</i>	12,266,000 (307,000)	50%	Chhattisgarh Gujarat Himachal Pradesh Maharashtra Orissa	Karnataka Rajasthan Uttar Pradesh
<i>School Certificate</i>	11,525,000 (288,000)	0%	<i>None</i>	<i>None</i>
<i>Electricity Connection</i>	6,639,000 (166,000)	13%	Andhra Pradesh West Bengal	<i>None</i>

Do Available Services Have Potential to Reduce Corruption?

- 82 reasons citizens report paying bribes
 - Only 14 likely to be affected by computerized services offered in at least one state
- In only 6 of these cases do above average corruption states offer these services
 - Service typically related to land/property records
 - Karnataka is only above average corruption state offering non-property related services (water connection, traffic ticket)
- Most commonly offered services are not highly corrupt
 - Bill payment, Certificates