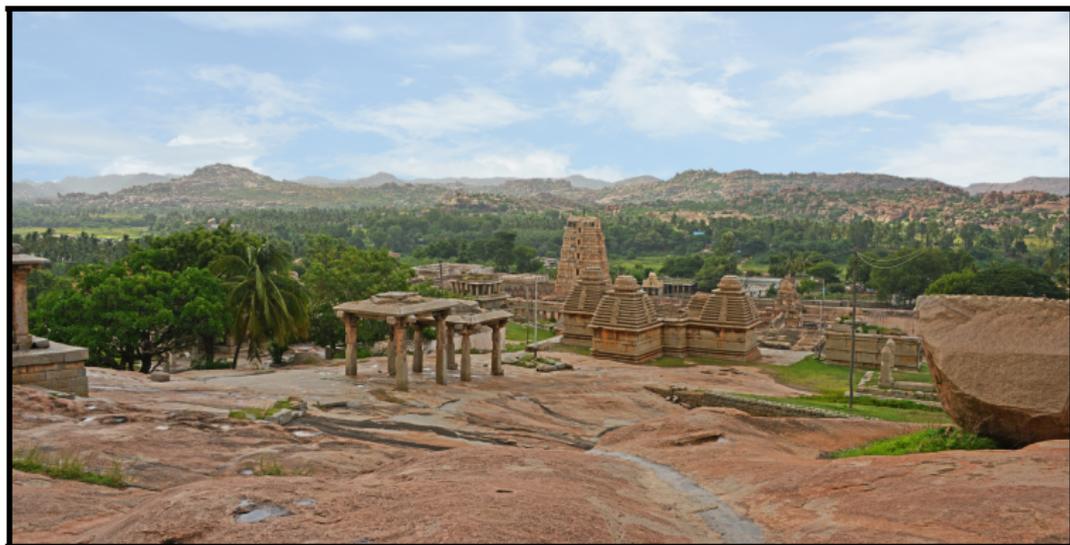


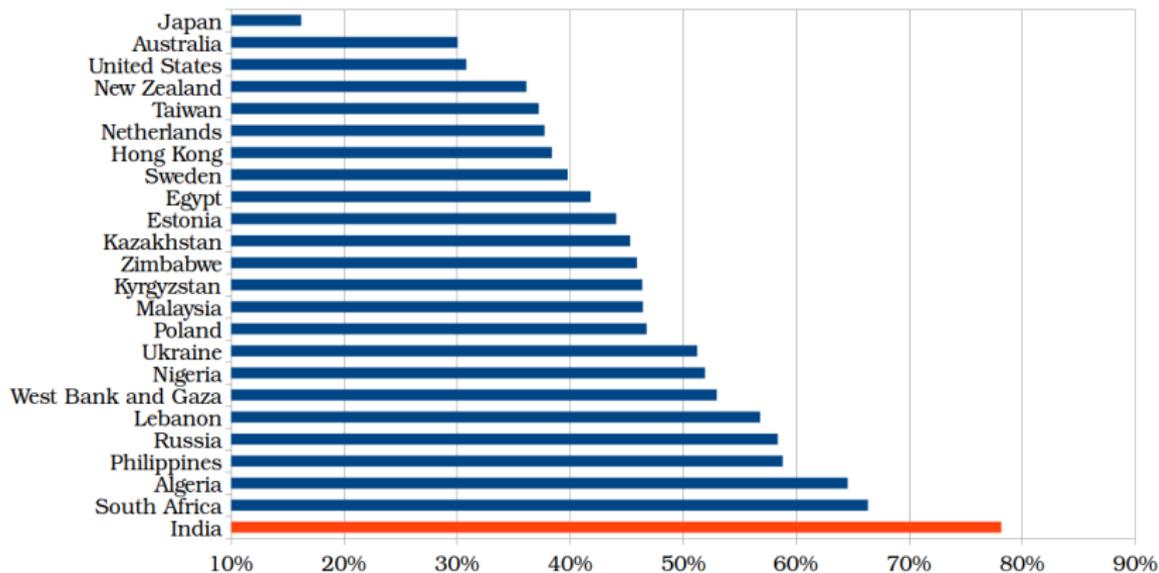
Precolonial Origins of State Capacity in India

Roberto Stefan Foa

Harvard University
November 11, 2014



Percentage: “Ever” Justifiable to “Cheat on Taxes if you have a Chance”

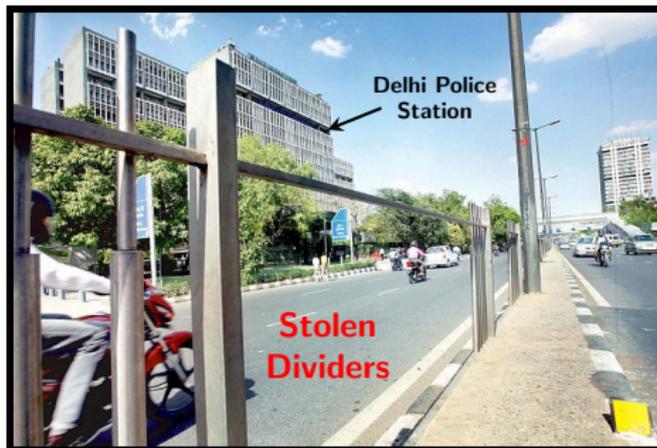


Source: World Values Survey, Wave 6 (2010-14).

The Problem of Pervasive (Non) Compliance



Before



After

“More than 50 high-quality steel rods have been stolen from the road divider grill in front of the Delhi Police HQ”. Source: Times of India.

“We lose lakhs [1 lakh = \$1,800] each year in stolen pipe railings, manhole covers, metal holdings ... However, no case has ever been solved...

Other than replacing the missing parts, there is nothing we can do” - Delhi Public Works Department

Forms of Compliance

Fiscal Compliance

Obedience with the state's *revenue* demands

Regulatory Compliance

Obedience with the state's *laws and regulations*

Bureaucratic Compliance

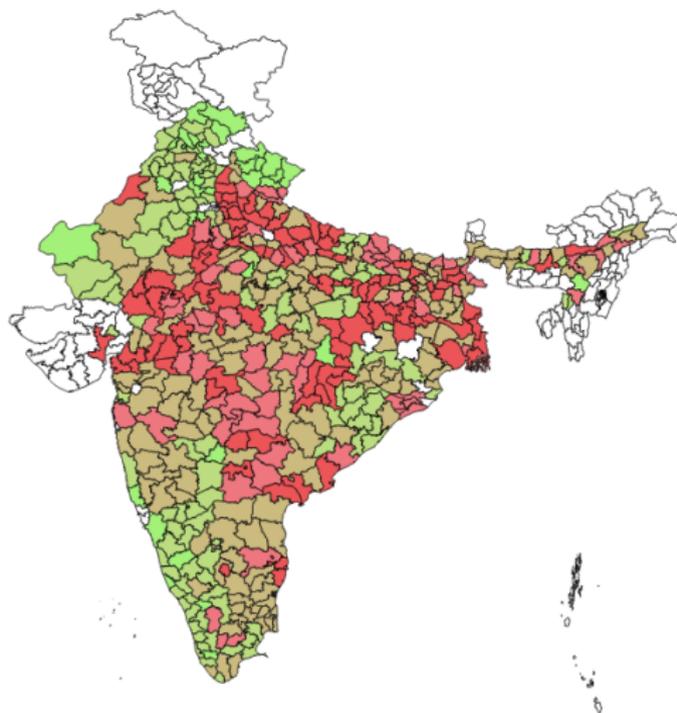
Obedience with the *edicts of senior officials*

“India is today a flailing state—a nation-state in which the head, that is the elite institutions at the national (and in some states) level remain sound and functional but that this head is no longer reliably connected via nerves and sinews to its own limbs.

In many parts of India in many sectors, the everyday actions of the field level agents of the state - policemen, engineers, teachers, health workers - are increasingly beyond the control of the administration at the national or state level”

- Lant Pritchett, 2009 (“Is India a Flailing State?”)

Reported Thefts, Kidnappings, Rapes and Robberies



Standardized mean across four indicators, 1980-90. Source: Iyer (2010).

Q: Why do patterns of state effectiveness vary within and between countries?

A: Local-level state capacity was developed in the precolonial era, and has persisted since.

→ A: Variation in colonial policy (direct/indirect rule), ethnolinguistic fractionalization, caste structure, social capital, inequality.

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This Talk

- **Theory**
 - I. What were the precolonial regimes - and why should they matter?
- **Empirical strategy**
 - II. Tracing precolonial boundaries, discontinuity effects, robustness.
 - III. Additional tests: bureaucratic responsiveness tests, archival material, historical data.
- **Implications**
 - IV. Implications: origins of state capacity, military fiscalism, and institutional persistence.

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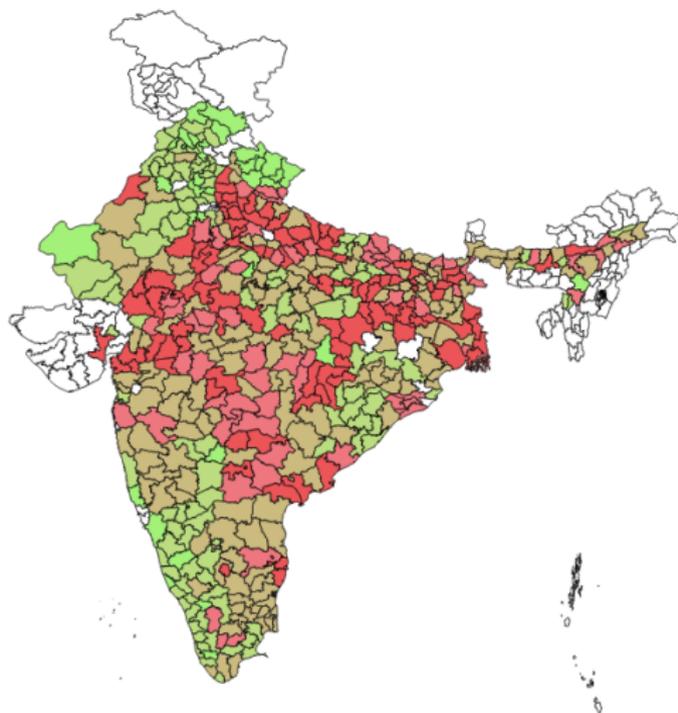
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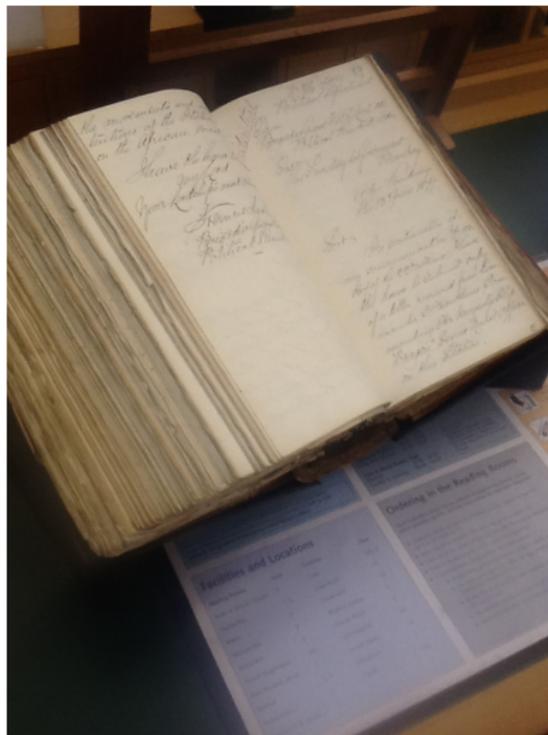
I. Why Precolonial Regimes Matter

Reported Thefts, Kidnappings, Rapes and Robberies

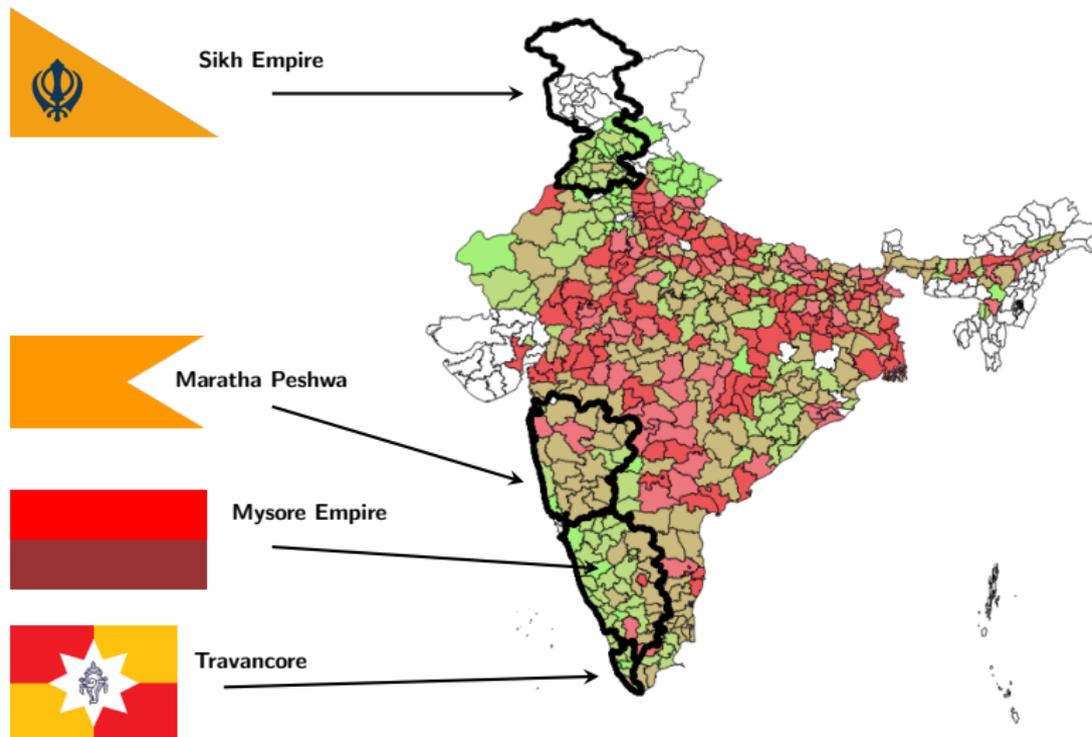


Standardized mean across four indicators, 1980-90. Source: Iyer (2010).

Archival Research

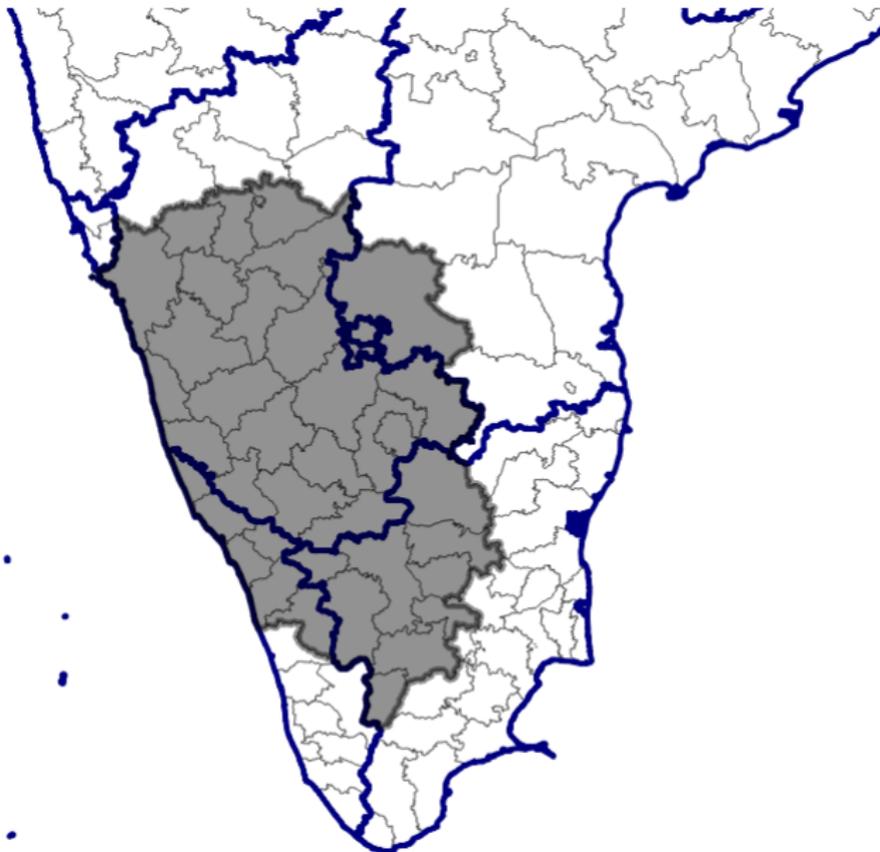


Reported Thefts, Kidnappings, Rapes and Robberies



Standardized mean across four indicators, 1980-90. Source: Iyer (2010).

Territories governed by the
Mysore Empire at its maximal
extent (gray) with current
federal state boundaries
(blue lines).



Challenger Regimes

Successor Regimes



Classification as in the New Cambridge
History of India (Ramusack, 2004)

Challenger Regimes

- Begun by peasant warriors (e.g. Marathas, Sikhs)
- Removed landlords, established direct individual-cultivator taxation
- Centrally appointed tax collectors, administrators and justices
- High and rising taxes
- Constantly at war with the Mughals, each other, and finally, the East India Company

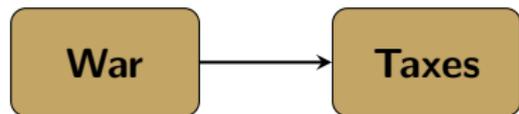
Successor Regimes

- Begun by a Mughal governor
- Large landholdings (jagirs)
- Patrimonial regimes, prebendalism
Low taxes
- Conflict averse; quick to negotiate/offer concessions to EIC

The Mechanism

War

The Mechanism



The Mechanism



The Mechanism



Upon taking control of a district, precolonial regimes:

- 1 **Established direct chains of command from the political center to the village;** e.g. Marathas appointed central bureaucrats to conduct cadastres and assess local taxes, Mysore also centrally appointed justices and police;
- 2 **Eliminated intermediary powers** (poligars and zamindars) which later established rent-seeking institutions (banditry and absentee landlordism). Mysore “rid Karnataka of many warring minor principalities... putting an end to many small principalities like Doddaballapur, Chikballapur, Sira, Harapanaballi, Ballery, Ramdurga and others”
- 3 **Introduced, rationalized and increased local taxes:** e.g. in Dakshina Kannada, after the area came under the control of Haider Ali (1763) ‘a general investigation into revenue policy was ordered. An order was issued repudiating all claims of waste lands and imposing a full fifty per cent addition to the 1618 fixation’
- 4 **Invested in public goods:** in Uttara Kannada the district gazetteer notes that ‘Haider built good military roads in the district’ and that even two centuries later the term ‘Haider ghat’ remains in use in the region ‘as a common expression for a connecting road’ (Uttara Kannada District Gazetteer, 1985: 160).

II. Empirical Tests

Q: Why do patterns of state effectiveness vary within and between countries?

H: Local-level state capacity was developed in the precolonial era, and has persisted since.

[Gennaioli and Rainer (2007), Michalopoulos and Papaioannou (2013), Putterman et al. (2012), Hariri-Gerner (2012), Fukuyama (2011), Becker et al. (2012)]

Econometric Tests

- Dependent variables: 12 district-level indicators of rule of law, public infrastructure, and human development.
- $N = 640$ districts (2011 boundaries).
- Will present results of four tests:
 - 1 Bivariate regression coefficients;
 - 2 Multivariate coefficients with district-level controls;
 - 3 Discontinuity test coefficients using border districts only;
 - 4 Discontinuity test coefficients controlling for potential confounding factors.

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Variables Used



State Effectiveness

- (1) Confidence in local govt.
- (2) Confidence in courts
- (3) Rate of Theft per 100,000
- (4) Rate of Kidnappings per 100,000

Public Goods

- (5) % of villages paved road
- (6) % villages with rail
- (7) % villages with bus service
- (8) % villages post, telegraph, phone
- (9) % villages primary school
- (10) % villages with hospital

All Districts, With Controls (n = 640)



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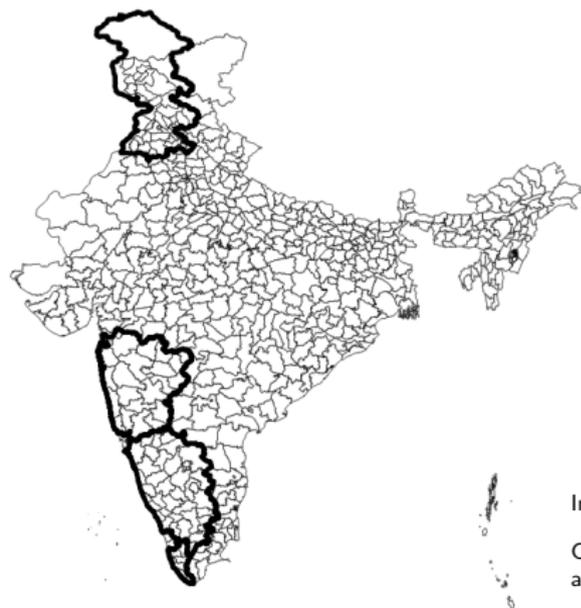
Public Infrastructure

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- (9) % villages primary school
- (10) % villages with hospital

Independent Variable: Part of a Challenger State (0/1).

Control Variables: Income; Gini index; Social capital (membership in vol. associations); % Lower castes; % Tribal population; Direct British rule (0/1).

All Districts, With Controls (n = 640)



State Effectiveness

(1) Confidence in local govt.	+	***
(2) Confidence in courts	+	*
(3) Rate of Theft per 100,000	-	***
(4) Rate of Kidnappings per 100,000	-	***

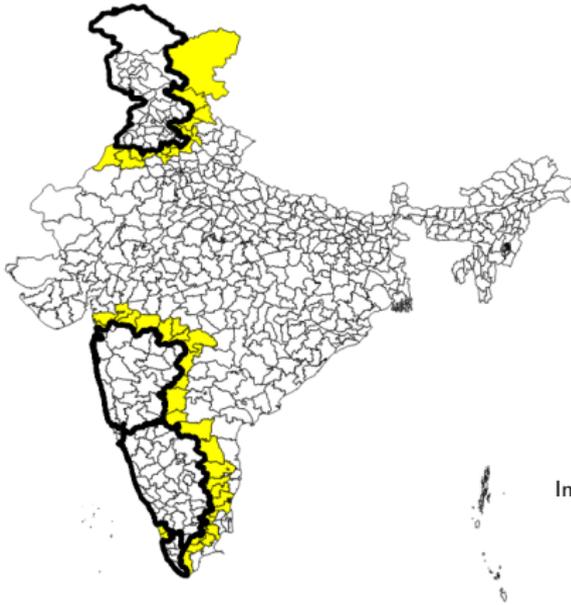
Public Infrastructure

(5) % of villages paved road	+	***
(6) % villages with rail	+	***
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Border Districts Only, Bivariate Associations (n = 121)



State Effectiveness

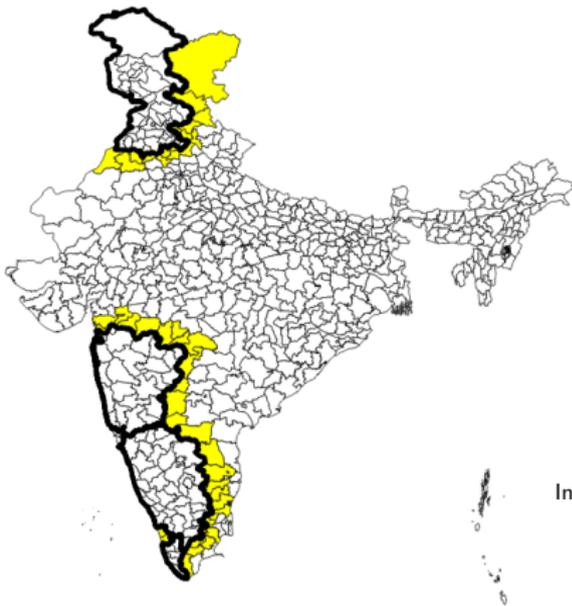
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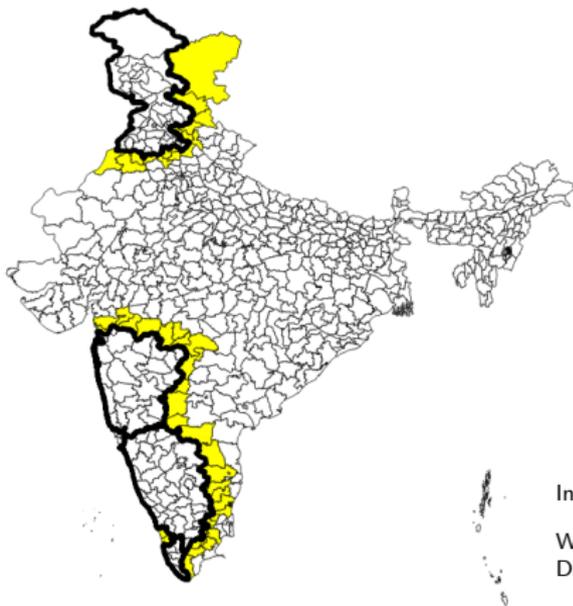
(1) Confidence in local govt.	+	***
(2) Confidence in courts	+	**
(3) Rate of Theft per 100,000	-	***
(4) Rate of Kidnappings per 100,000	-	***

Public Infrastructure

(5) % of villages paved road	+	***
(6) % villages with rail	+	**
(7) % villages with bus service	+	***
(8) % villages post, telegraph, phone	+	***
(9) % villages primary school	+	***
(10) % villages with hospital	+	***

Independent Variable: Part of a Challenger State (0/1).

Border Districts Only, With Controls (n = 121)



State Effectiveness

(1) Confidence in local govt.	+	*
(2) Confidence in courts	+	
(3) Rate of Theft per 100,000	-	
(4) Rate of Kidnappings per 100,000	-	

Public Infrastructure

(5) % of villages paved road	+	*
(6) % villages with rail	+	
(7) % villages with bus service	+	**
(8) % villages post, telegraph, phone	+	**
(9) % villages primary school	+	*
(10) % villages with hospital	+	***

Independent Variable: Part of a Challenger State (0/1).

With Control Variables: Soil quality (% red/black soil); Annual rainfall; Direct British rule (0/1).

III. Further Evidence

Further Tests and Evidence

- Are the coefficients robust to exclusion of individual polities?
- Triangulation - bureaucratic responsiveness test data
- Process tracing - going into archives to look for intermediary steps

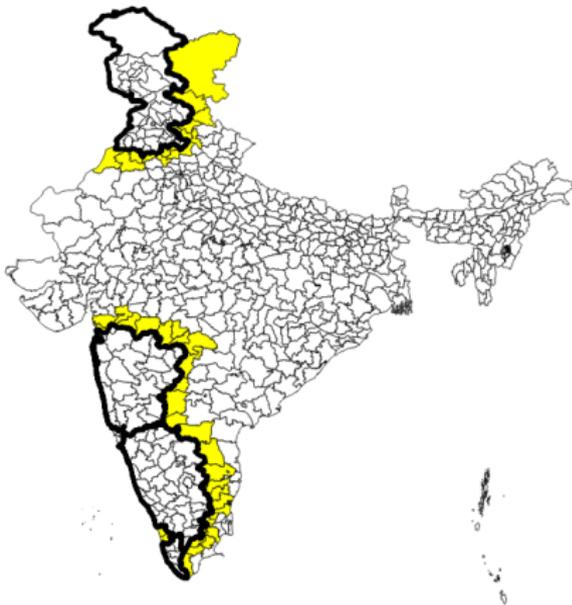
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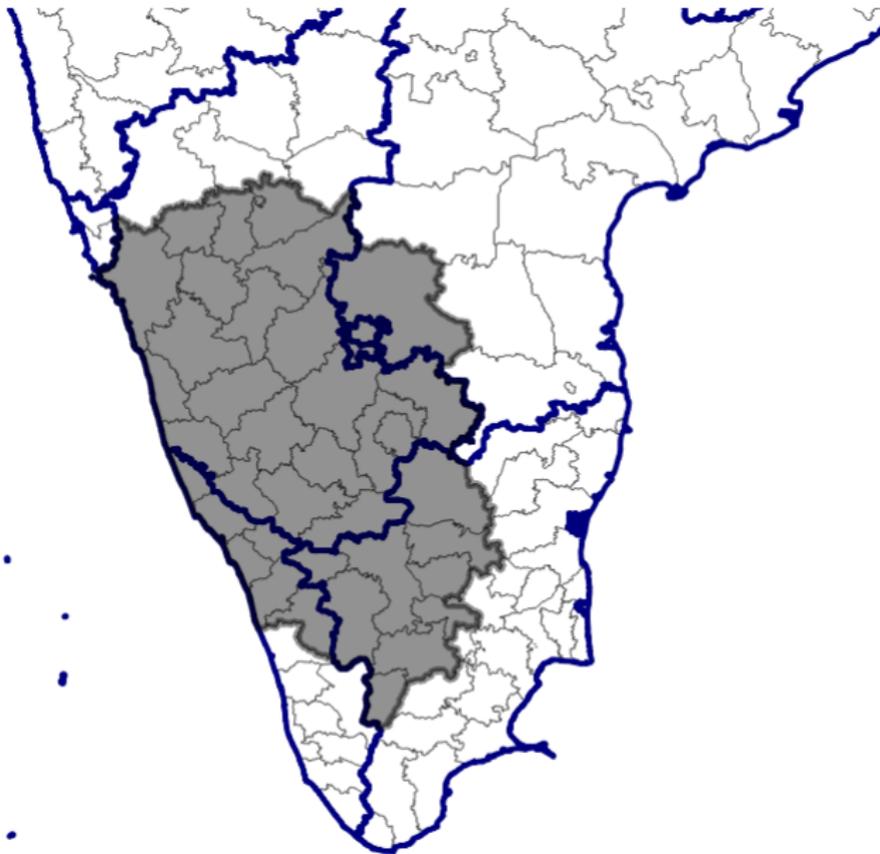
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Border Districts Only, Bivariate Association for Each Polity



State Effectiveness	T	Ma	My	S
(1) Confidence in local govt.	-	+	+	+
(2) Confidence in courts	+	+	-	+
(3) Rate of Theft per 100,000	-	-	-	-
(4) Rate of Kidnappings per 100,000	-	-	-	-
Public Infrastructure				
(5) % of villages paved road	+	+	+	+
(6) % villages with rail	+	+	+	+
(7) % villages with bus service	+	+	+	+
(8) % villages post, telegraph, phone	+	+	+	+
Human Development				
(9) Literacy Rate	+	+	+	+
(10) Male-Female Literacy Gap	-	-	-	-
(11) % villages primary school	+	+	-	+
(12) % villages with hospital	+	+	+	+

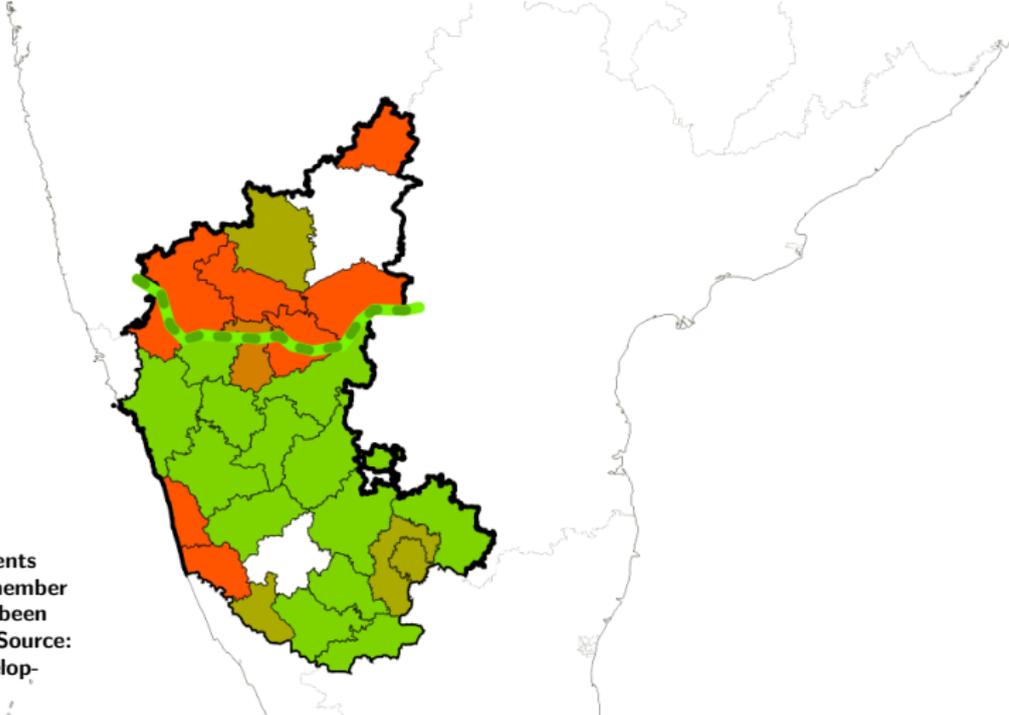
Territories governed by the
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Further Evidence

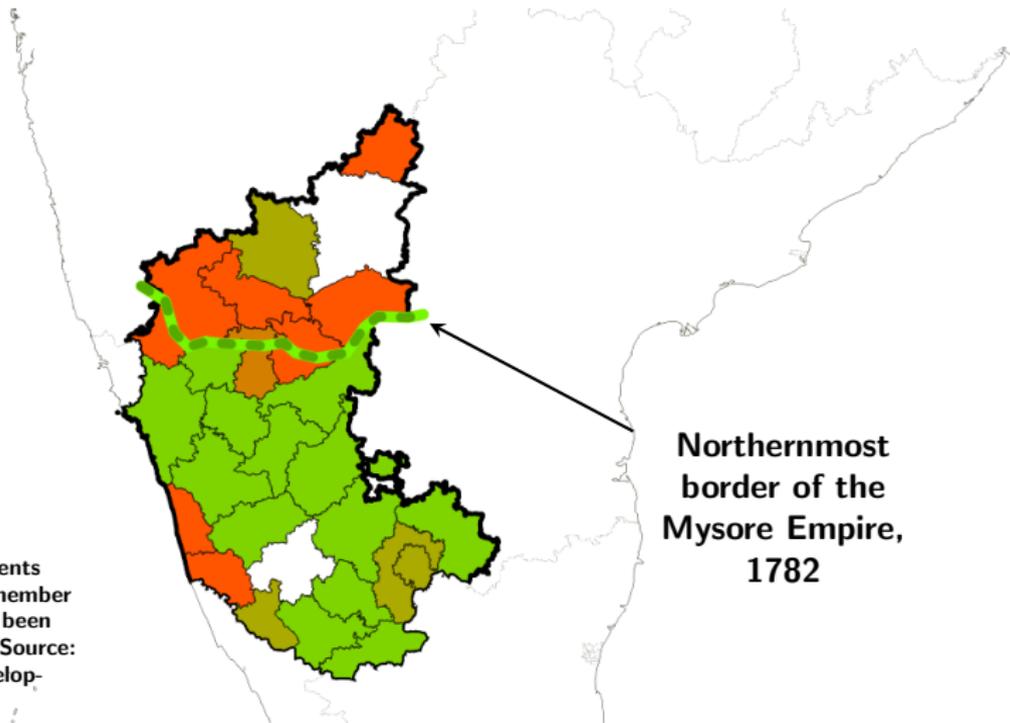
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Mysore Northern Border



Percentage of respondents who report they or a member of their household has been "a victim of assault". Source: Maryland Human Development Survey (2005).

Mysore Northern Border



Percentage of respondents who report they or a member of their household has been "a victim of assault". Source: Maryland Human Development Survey (2005).

**Northernmost
border of the
Mysore Empire,
1782**

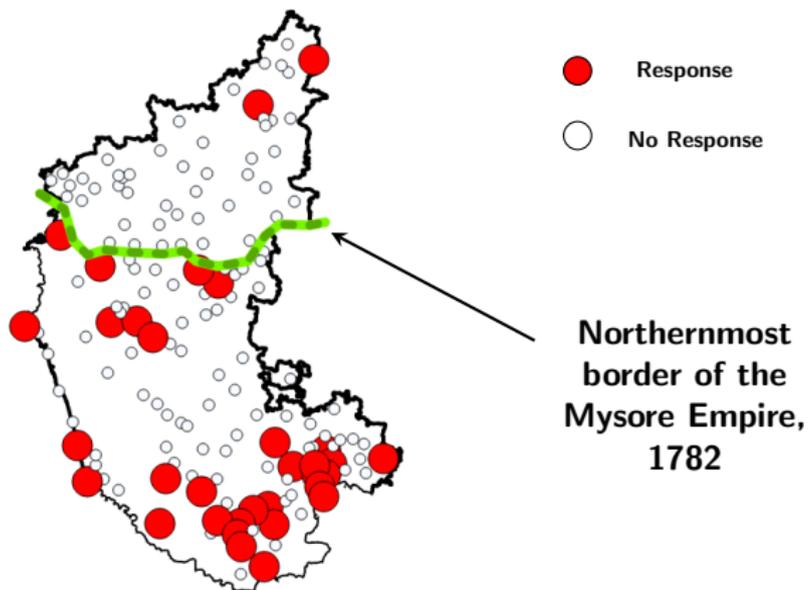
Testing Bureaucratic Responsiveness in Karnataka

- We can also get at the issue of compliance from the angle of bureaucratic compliance.
- Following the Right to Information (RTI) Act of 2005, public entities are required by law to respond to questions posed by members of the public.
- A request sent to Karnataka state government in November 2013 was sent down to all municipalities, who were instructed to reply directly (Nov 2013-Apr 2014)
- Sample of category I-III cities within Karnataka (n = 157)
- Question: “What is the number of public servants prosecuted under (3)(2)(viii) of the SC/ST Act I (2011)?”
- Responses coded based on response (0/1) and speed of response (days)



Lots and lots of replies.

Testing Bureaucratic Responsiveness in Karnataka



Further Evidence

- Are the coefficients robust to exclusion of individual polities?
- Triangulation - bureaucratic responsiveness test data
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Tracing the Origins of the Border Divergence

- Maybe this is an artifact of something that happened in the colonial or postcolonial era. How can we be sure the difference dated from the Mysore Empire?
- Another angle is to examine qualitative records from the eighteenth and early nineteenth century.
- Thanks to the district and imperial gazetteers, we have good data (descriptive and quantitative) of the regions along the former border during the colonial era.
- E.g. data from the 1908 Imperial Gazetteer:

Even in 1901, there was higher irrigation, roads, forest protection, education spending, and taxation in former Mysore Empire areas (under British direct rule since 1799)

	cultivable land irrigated, %	road miles per 10,000 pop	Protected Forested Area (%)	Education spending per 1,000 (Rs.)	Land revenue per capita (Rs.)	Literacy Rate (%)
North of Border (non-Mysore)	1.2%	6.4	6.7%	116.4	2.0	4.0%
South of Border (former Mysore)	3.1%	12.3	27.1%	171.4	2.3	6.2%
Districts immediately north (outside) of the 1782 Mysore Kingdom Border						
Raichur	2.2%	3.6	3.3%	32.6	2.3	2.1%
Bijapur	0.3%	10.2	5.1%	144.1	1.6	4.6%
Belgaum (non-Mysore areas)	2.7%	5.1*	14.5%	138.7*	2.0*	4.8%
Districts immediately south (inside) of the 1782 Mysore Kingdom Border						
Belgaum (Mysore areas)	3.0%	5.1	14.1%	138.7	2.0	5.6%
Uttara Kannada	5.7%	27.0	79.1%	181.5	2.2	8.4%
Dharwad	3.8%	9.1	8.1%	203.0	2.6	6.7%
Bellary	2.3%	9.0	10.9%	128.8	2.1	4.6%

Sample: districts immediately north and south of the 1782 border.

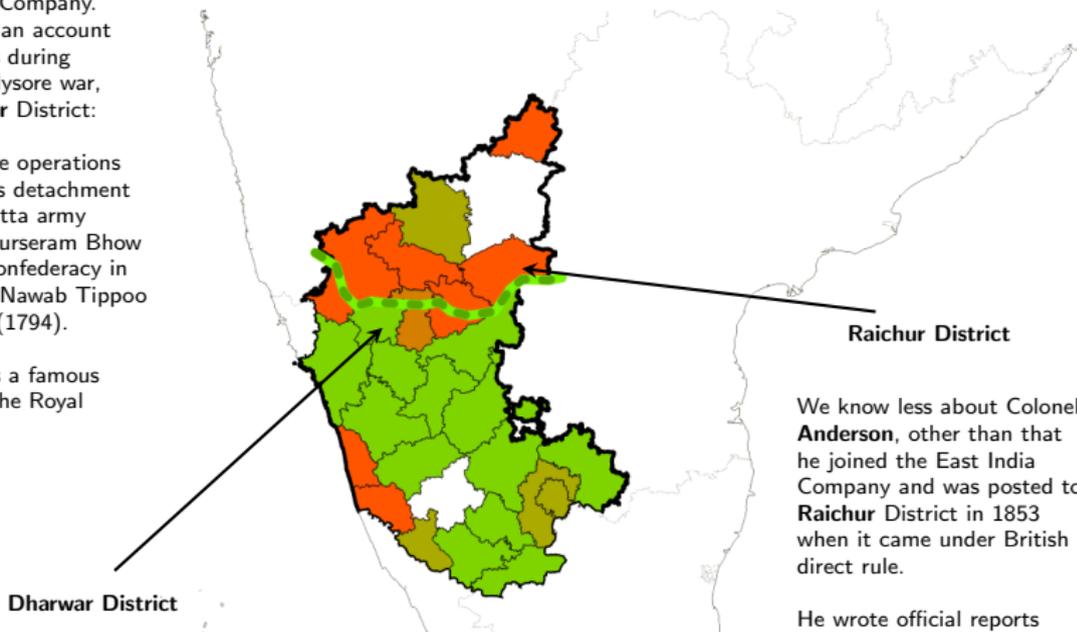
* Figures refer to whole of Belgaum, and not specific Mysore/non-Mysore areas Source: Bombay, Madras, Hyderabad volumes of the Imperial Gazetteer (1908 edition).

Archival Evidence Either Side of the Border

Edward Moor was a soldier in the East India Company. Age 23 publishes an account of his experiences during the final Anglo-Mysore war, including **Dharwar District**:

'A narrative of the operations of Captain Little's detachment and of the Mahratta army commanded by Purseram Bhow during the late Confederacy in India against the Nawab Tippoo Sultan Bahadur' (1794).

Later he becomes a famous Indologist, joins the Royal Society in 1806.



We know less about Colonel **Anderson**, other than that he joined the East India Company and was posted to **Raichur District** in 1853 when it came under British direct rule.

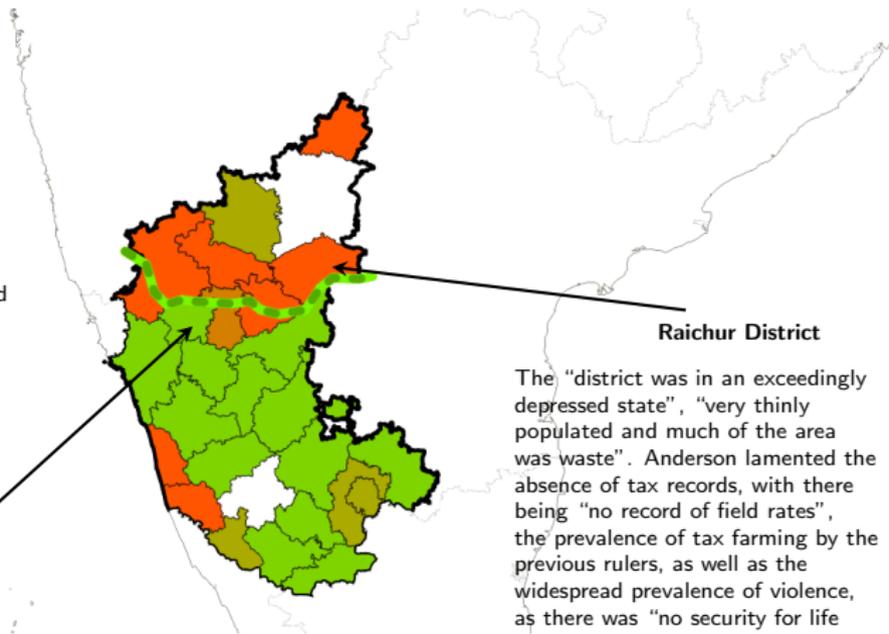
He wrote official reports about the region which are recorded in the district gazetteers.

Archival Evidence Either Side of the Border

The "country was very rich; no garden mould could be richer. The lands near Dharwar were in the highest state of tillage, affording the cattle luxuriant pasturage and the army plentiful supplies".

From the Dharwar District Gazetteer: "in spite of the frequent wars, when (Mysore-ruled northern Karnataka) passed from Tipu to the Marathas the district was fairly prosperous".

Dharwar District



Raichur District

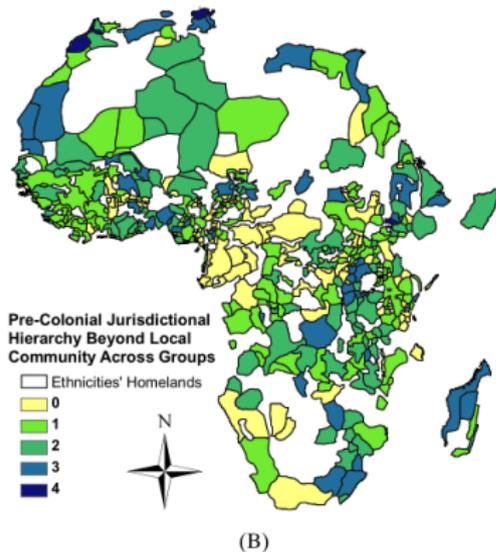
The "district was in an exceedingly depressed state", "very thinly populated and much of the area was waste". Anderson lamented the absence of tax records, with there being "no record of field rates", the prevalence of tax farming by the previous rulers, as well as the widespread prevalence of violence, as there was "no security for life and property and the only law apparently recognised was that of the strongest" (Raichur District Gazetteer, 1970, 470-1).

IV. Implications

Precolonial Origins of State Capacity

Contribution: emerging literature on importance of early state formation

- Growing econometric literature on precolonial institutions
- Mainly focused on Africa (Gennaoli and Rainer 2007, Nunn and Puga 2013, Michalopoulos and Papaioannou 2013)
- Confirmatory results from within the South Asian context



Michalopoulos and Papaioannou (2013) 'Pre-Colonial Ethnic Institutions and Contemporary African Development', *Econometrica*, Vol. 81: 1, pp. 113152.

Precolonial Origins of State Capacity

Contribution: external validation of the 'war makes states' hypothesis

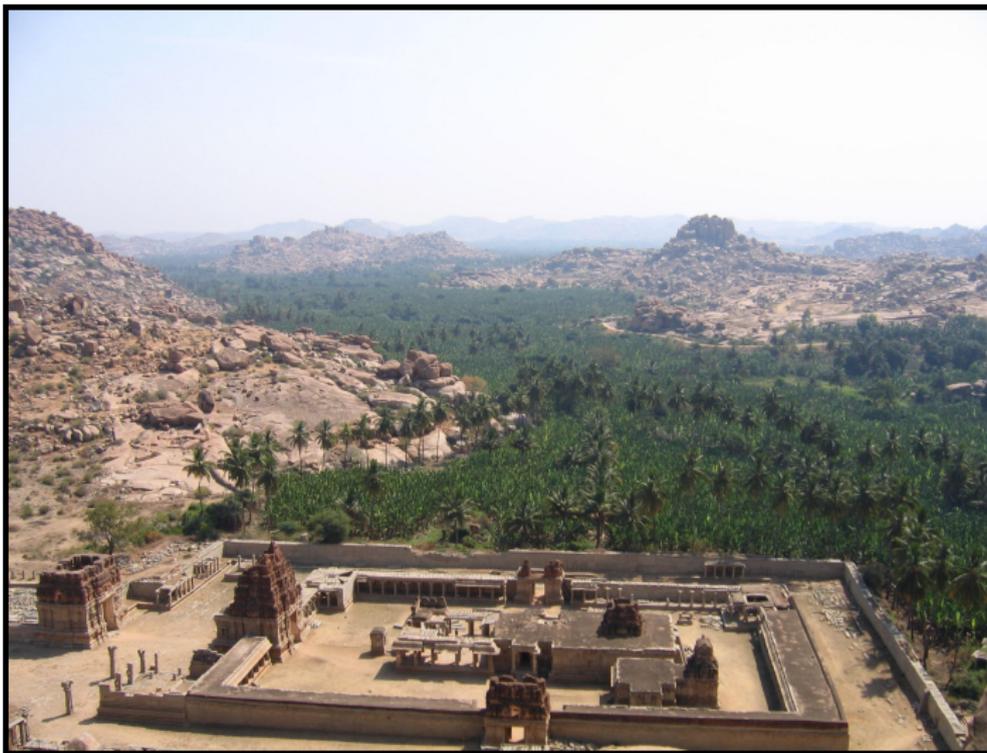
- Political science literature on war and state formation largely focused on Europe, following Tilly (1992); lack of external validation (Centeno 2002)
- Yet large recent historical literature on war and state formation, especially in South Asia (Roy 2013, Bayly 1983, Stein 1984, Dirks 1988)
- Shows the 'war makes states' hypothesis applicable beyond Europe



Precolonial Origins of State Capacity

Endogenizing the Colonial Origins Literature

- Large literature on effects of colonialism (e.g. Banerjee and Iyer 2005, Iyer 2010, Mukherjee 2010, Herbst 2002)
- Yet colonial policies endogenous to precolonial institutions (AJR 2002, Engerman and Sokoloff 2002)
- And precolonial institutions confound many widespread arguments regarding effects of colonial policies e.g. on democracy or state capacity (Hariri-Gerner 2012, Putterman 2012)



Further information: www.roberto.foa.name

Appendix

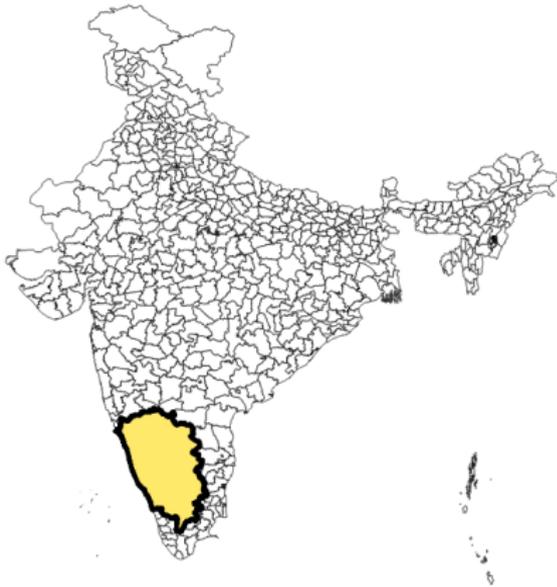
Independent variable:

	conf: govt	conf: court	kidnap	robbery	road	rail	buses	comm
Challenger State	0.25*** (0.03)	0.06*** (0.05)	-47.07*** (4.95)	-20.32** (2.43)	0.3* (0.02)	0.01*** (0)	0.3 (0.02)	0.29 (0.02)
% Scheduled castes	-0.27*** (0.08)	-0.06 (0.13)	-33.54*** (12.44)	-18.93*** (6.1)	0.21*** (0.06)	0.01*** (0.01)	0.07*** (0.06)	0.1*** (0.06)
% Scheduled Tribes	-0.07*** (0.07)	-0.1 (0.11)	-33.3** (10.83)	12.52** (5.31)	-0.48*** (0.05)	-0.01* (0)	-0.16 (0.05)	-0.16 (0.05)
Direct British Rule	0.06 (0.02)	-0.08 (0.04)	-13.2** (3.95)	6.84* (1.94)	0.07*** (0.02)	0 (0)	0.03** (0.02)	0.04** (0.02)
Income	0** (0)	0 (0)	0*** (0)	0*** (0)	0*** (0)	0 (0)	0 (0)	0 (0)
Social Capital Index	0.47*** (0.18)	-0.51 (0.31)	-35.6*** (29.33)	-3.74* (14.38)	0.33 (0.14)	0.08 (0.01)	1.36** (0.14)	1.35** (0.13)
Land inequality (gini)	1.19* (0.14)	0.82 (0.24)	-1.06 (22.71)	21.28 (11.14)	0.38* (0.11)	-0.06*** (0.01)	0.38*** (0.11)	0.27** (0.1)
Intercept	-2.27 (0.08)	-1.51 (0.14)	50.88 (13.21)	16.85 (6.48)	0.16 (0.06)	0.03 (0.01)	0.02 (0.06)	0.05 (0.06)
N	572	572	570	570	572	572	572	572
Adj. R-squared	0.29	0.05	0.2	0.14	0.39	0.2	0.38	0.39

Notes: *** significant at the 0.001 level; ** significant at the 0.01 level; * significant at the 0.05 level. All districts.

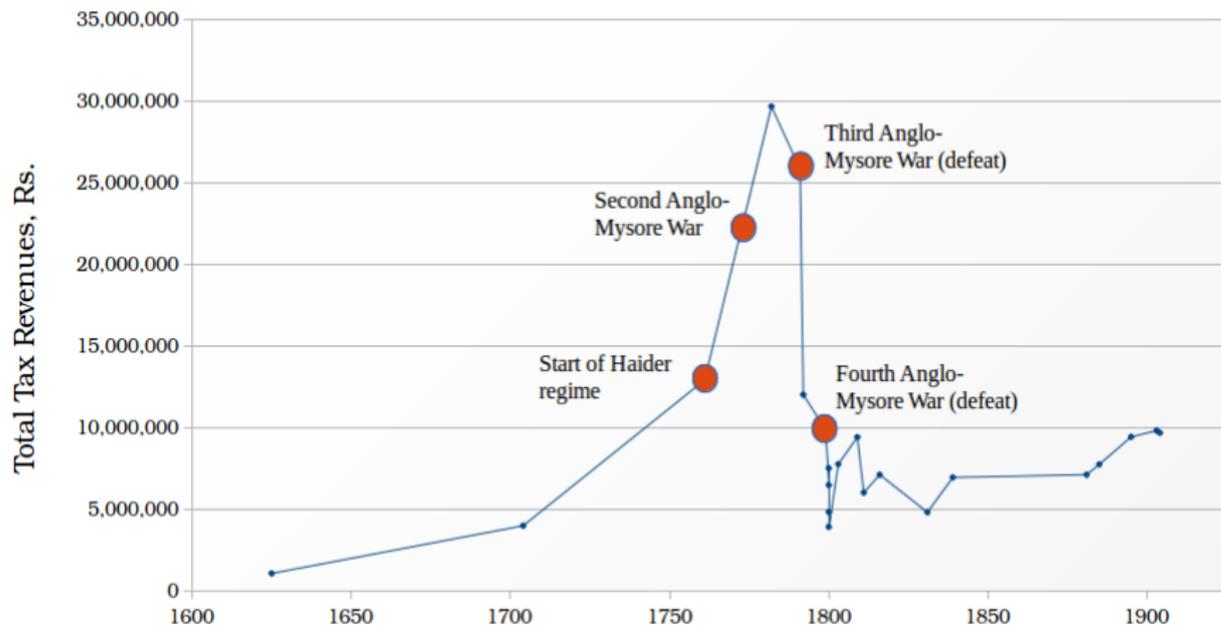


The Mysore Empire



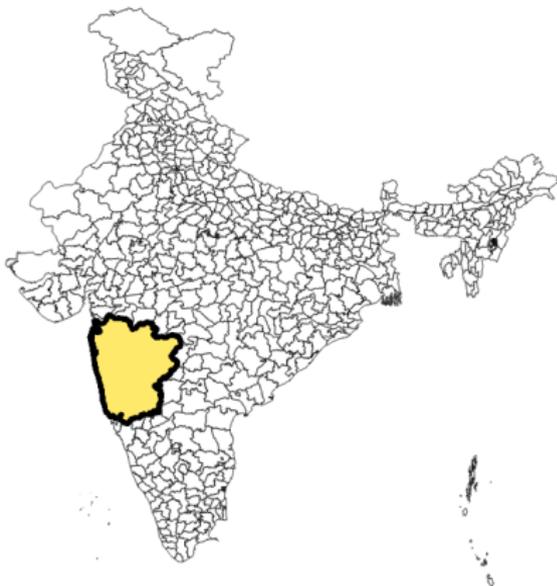
- Expanded by Chikka Deva Raja in the late seventeenth century.
- In late eighteenth century Haider Ali assumes post of Sarvadhikari (chief regent to the king) and establishes highly centralized “autocracy of the Cromwellian type” (Rao 1948)
- Bayly (1988) estimates up to forty per cent of GDP in taxation
- Fielded army of 150,000 soldiers (6% of adult male population)
- 4 wars against East India Company (1767-1769, victory; 1780-1784, draw; 1789-1792, loss; 1799, loss)

The Fiscal Revolution in Precolonial Mysore





The Maratha Peshwa



- Founded by Shivaji in the late seventeenth century.
- Shivaji appoints himself a Hindu king in revolt against Mughal rule. Implements cabinet government of 8 ministers under the peshwa (prime minister).
- Ministers are salaried bureaucrats w. very high pay (10,000 hon = 280kg gold/yr)
- “the Maratha polities... rapidly developed European-style infantry and artillery wings” (Bayly)
- 3 wars against East India Company (1775-1782, victory; 1803-5, loss; 1817-8, loss)



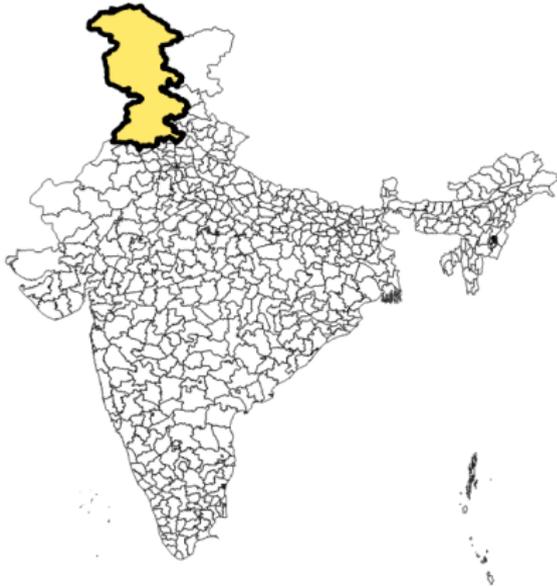
Travancore



- Marthanda Varma in 1729 refounds the Venad Kingdom as “Travancore” in order to “create a new type of centralised state” (Ramusack 2004: 34).
- Executes nayar elites and appoints brahmins centrally who have direct responsibility to the sovereign.
- Establishes a fiscal polity on the Company model: monopoly over export agriculture (spices, pepper, wood) and naval power
- 1 war against the Dutch East India Company (1739-41, victory); 1 against East India Company (1808-9, loss)



The Sikh Empire



- Traces origins to the uprising by Sikhs from 1710-1716; Sikh empire founded by Ranjit Singh in 1799.
- Largely continued Mughal practices in matters of taxation and law.
- Main innovation was its high degree of social mobilization into warfare.
- Aggressive expansion in nineteenth century against Afghans, Mughals, and Jats. 2 wars against East India Company (1845-6, loss; 1848-9, loss)



Alexander Gardner of Wisconsin, one of 100 western recruits to the Sikh army.

All Districts, Bivariate Associations (n = 640)



State Capacity

- (1) Confidence in local govt.
- (2) Confidence in courts
- (3) Rate of Theft per 100,000
- (4) Rate of Kidnappings per 100,000

Public Infrastructure

- (5) % of villages paved road
- (6) % villages with rail
- (7) % villages with bus service
- (8) % villages post, telegraph, phone

Human Development

- (9) Literacy Rate
- (10) Male-Female Literacy Gap
- (11) % villages primary school
- (12) % villages with hospital

Independent Variable: Part of a Challenger State (0/1).

All Districts, Bivariate Associations (n = 640)



State Capacity

(1) Confidence in local govt.	+	***
(2) Confidence in courts	+	**
(3) Rate of Theft per 100,000	-	***
(4) Rate of Kidnappings per 100,000	-	***

Public Infrastructure

(5) % of villages paved road	+	***
(6) % villages with rail	+	**
(7) % villages with bus service	+	***
(8) % villages post, telegraph, phone	+	***

Human Development

(9) Literacy Rate	+	***
(10) Male-Female Literacy Gap	-	***
(11) % villages primary school	+	***
(12) % villages with hospital	+	***

Independent Variable: Part of a Challenger State (0/1).