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Agenda

The Book (Nov. 2024)

- Use e-commerce as the context to answer big questions in institutional economics and PE
- State of research and future directions

Research Journey:

- Identifying the right question (esp. for phenomenon-driven research)
- Why mixed methods
- Tips:
 - Conducting research in non-western contexts
 - Working with corporations

Phenomenon: From "Village of Beggars" to "E-commerce Village"







¥265.00

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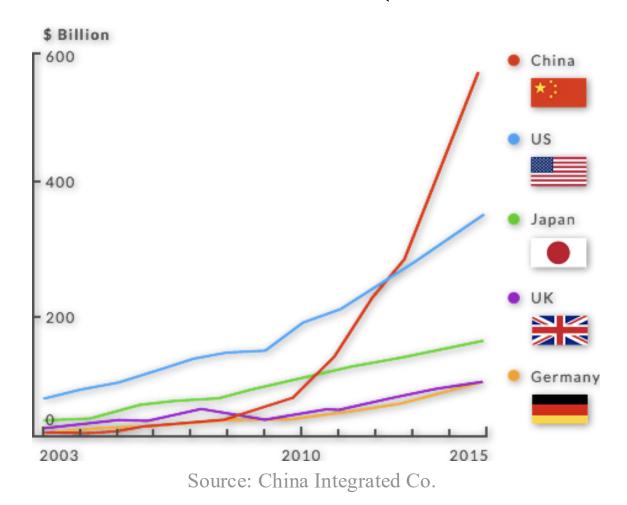






Early 2010s: "Running around for a living away from home doesn't beat selling on Taobao.com at home"

From Click to Boom (Online Retail)



800 million users; >300 million parcels per day; ~ 50% of global online retail sales; 70 million jobs created

Phenomenon -> Research Questions

Different research approaches

- Research driven by literature gap, data availability, identification or other methods
- Phenomenon-driven research: like assembling jigsaw puzzles

Initial question: Viewing e-commerce as a technology shock that democratizes market access for small merchants and marginal areas—how does this shock influence outcomes?

Why should we care?



Beyond E-commerce:

A Vantage Point to Observe China's Grand Changes



- Shift in growth model
- Rise of powerful tech sector & platforms
- Social changes, e.g, cashless society



Beyond China: The Growth Trap

How can developing countries foster growth in the absence of strong formal institutions?

E-commerce require VERY strong institutions

- No face-to-face interactions
- Order before inspecting & receiving the product
- Mostly small & anonymous sellers; little-known brands
- Impersonal exchange; not always trade repeatedly

China's paradoxical e-commerce boom

Argument: A Digital Path to Institutional Development

- Institutional Foundations of E-commerce: Institutional outsourcing
 - National govt. unable/unwilling to provide strong formal institutions -> outsource part of the institutional functions to digital platforms
 - Private-public collaboration in institutional building

Inspirations...







Methods (Qual. + Quant.)

- Over 200 interviews; 14 months of fieldwork in China
- 9 years of online ethnography



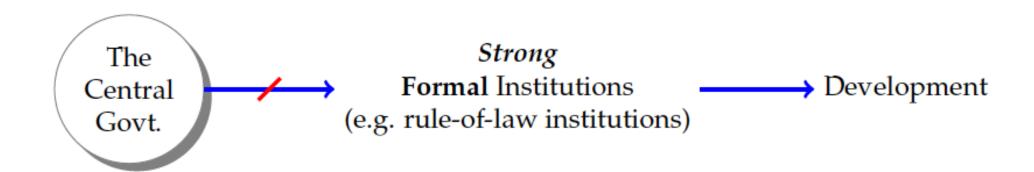
Cultural diversity

Methods (Qual. + Quant.)

- Over 200 interviews; 14 months of fieldwork in China
- 9 years of online ethnography
- Web-scraped data from 1.76 million online stores
- National online survey on 3,280 business owners
- RCT
 - Randomized e-commerce access across 100 villages
 - Two rounds of survey
 - 2,800/3,800 households
 - 11,500 price quotes from local physical stores
 - 28 million transaction records from Alibaba
- Why qualitative research also matters for economics research

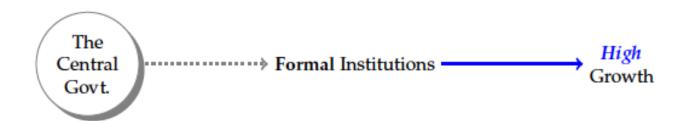
Developing Countries' Growth Problem

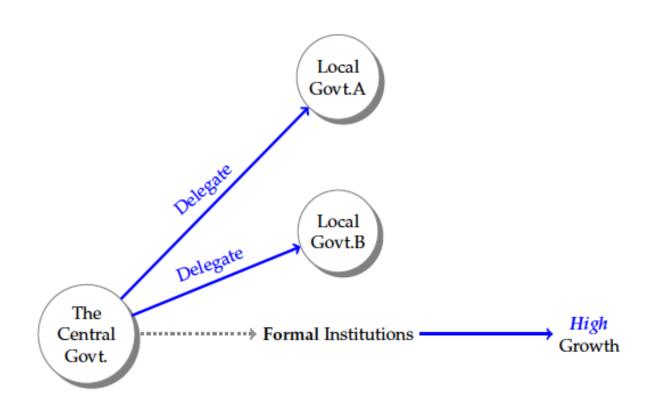
- Institutions matter for market growth
- Non-western countries: Political or technical barriers hinder formal institutional development

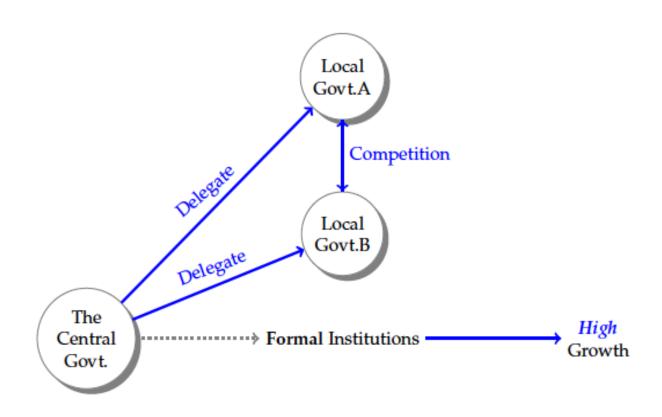


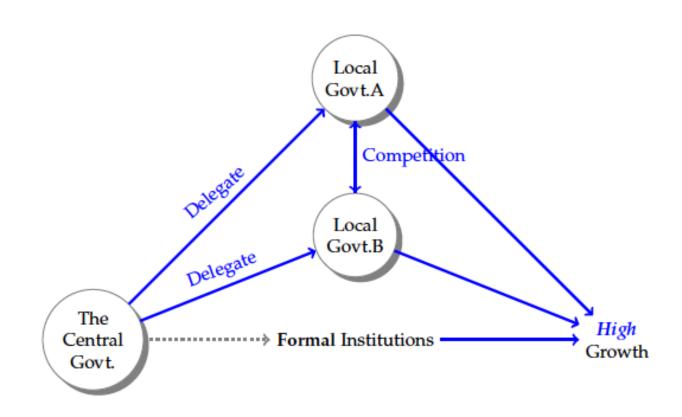
Competitive "Federalism"

Oi 1992, 1999, Montinola et al. 1995, McKinnon 1997

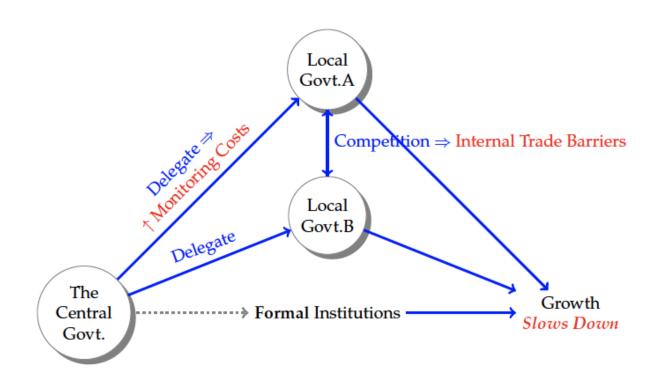




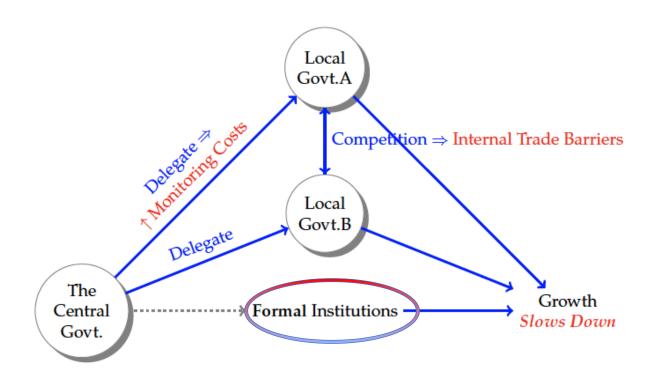




Growing Challenges since mid-2000s



Growing Challenges since mid-2000s



- Efforts to shift economic model: Investment, export -> domestic consumption
- Need a national common market & impersonal exchange -> need strong institutions!

Where Did Strong Institutions Come From?



Enter Institutional Outsourcing

- National govt. unable/unwilling to provide strong formal institutions
 -> outsource part of the institutional functions to key private actors,
 e.g., digital platforms
 - Encompassing, impersonal, limited
 - Substitute for or complement formal institutions

Next:

- Part I: Platforms' private institutional building
- Part II: The political logic of state outsourcing

China's E-commerce Market is *Platform*-based

	Online Retailing	
	Platforms	Independent Company Websites
	(e.g. Amazon.com)	(e.g. Nike.com)
China	90%	10%
USA	24%	76%

Source: McKinsey & Company (2011)

- E-commerce requires not only connectivity but also trust
- Major platforms as private suppliers of market institutions (e.g. contract enforcement, dispute resolution)
 - Example: Taobao.com

Taobao.com



The "Everything" Market



Crab



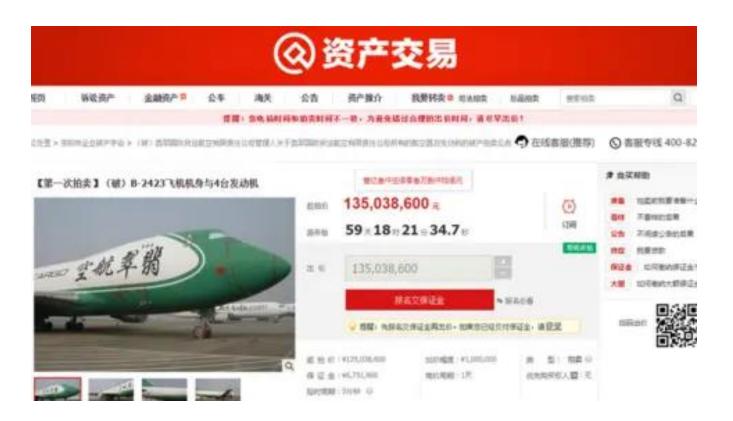
Dragon Boat

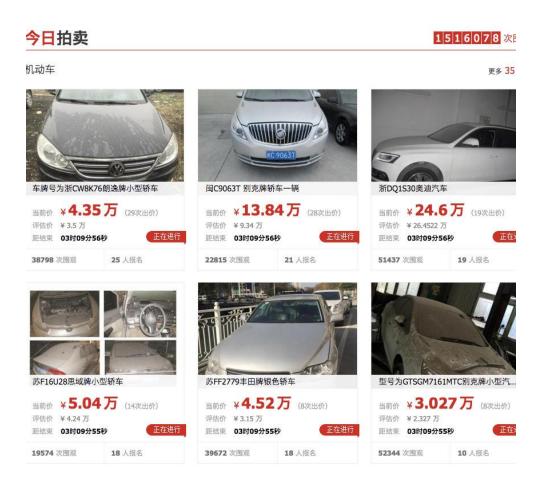


Bad Debt for Sale

Two Boeing 747 jumbo jets sold in China Taobao auction

21 November 2017 Share **₹** Save **+**





Court-Seized Assets: e.g. Cars



¥999

西天懂佛特朗普 禅修雕塑 川建国 让你的公司再度伟大 白瓷16CM高

Trump Buddha to "Make Your Company Great Again"

Basic Facts about Taobao

- Alibaba-owned
- Does not sell its own products
 - > 800 million active buyers
 - > 10 million active merchants (individuals, SMEs, big brands)
- 2016 GMV
 - > Amazon and eBay combined; > Walmart Global



Jack the Founder



Jack the Rocker

Taobao: A Private Provider of Market Institutions

- Contract enforcement -> Complex reputation mechanisms + Alipay
- Fraud prevention -> Big data detection + Risk framework
- Dispute resolution -> Juries OR a Taobao employee
 - 1.5 million "Jurors" resolved 2.5 million cases
 - Online disputes -> Randomly select 13 jurors from 2 million -> Review evidence -> Vote -> Win with 7 votes



Taobao's "Online Jury" System

Taobao: A Private Provider of Market Institutions

- Institutional enforceability
 - Escrow system of Alipay
 - Big data analytics and detection
- Institutional adaptability
 - "House of Representatives for Rules"



Limitations: fake reviews ("catch me if you can!"), limited coercive power, etc

• Part I: How do digital platforms supply private institutions that can substitute for or complement formal institutions?

• Part II: Why does the authoritarian government outsource institutional functions?

Forms of Outsourcing

- De facto outsourcing:
 - Acquiescence to the private institutional development

- De jure outsourcing:
 - Explicit endorsement & written contracts

De facto Outsourcing

- Acquiescence to the private institutional development;
 - Strategic non-regulation not because the govt lacked info or regulatory power!





Lao Tzu — "Practice not-doing, and everything will fall into place."

De facto Outsourcing

- Acquiescence to the private institutional development;
 - Strategic non-regulation not because the govt lacked info or regulatory power!
 - Interview: "No regulation is the best support"
 - Alipay: Nonbank third-party payment systems had no legal authorization
 - Jack Ma: "If someone needs to go to jail for Alipay, let it be me."
 - The state legalized it after 8 years
 - The state didn't ban Yu'e bao despite strong calls from the state-owned banks

De Jure Outsourcing

- Explicit endorsement & written contracts
 - Major platforms signed strategic agreements of collaboration with various levels of govt and central ministries many collaboration beyond e-commerce
 - E.g., combat bribery and scam; enforce debt repayment; recover missing children...

The Political Logic of Outsourcing

- Overcoming technical barriers
- Political feasibility
- Parallel with China's earlier reforms (1980s)
 - Experimenting with the nature and contents of rules
 - The center can disassociate itself from failed experiments
 - Protests against Taobao

Possible Future Directions of Research

- Institutional outsourcing in other country contexts?
- What to outsource, what not?
- Given the same function, comparing the pros and cons of public/private institutions



Empirical Tests and Tips: Effects of E-commerce (Ch 4 & 5)

Effect I: Rural Development (Household Welfare)

(AER: Insights, 2021)

• RCT; first experimental evidence on e-commerce's causal effects on household welfare

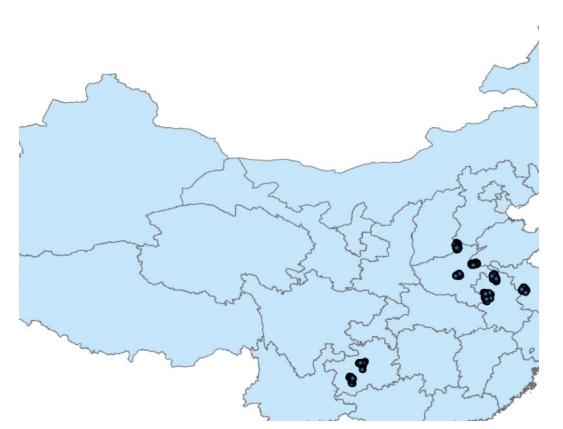
- Taobao's 100,000 Village Project
 - Randomized the location of e-commerce terminals across 100 villages in 8 counties of 3 provinces



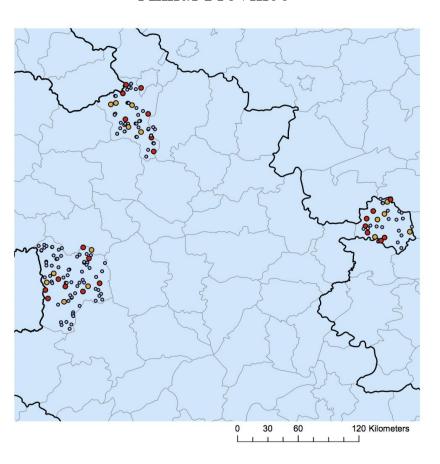
Fieldwork, Donghan Village, Henan Province (2015/08)

Maps of Experiment Locations

Provinces: Anhui, Henan, Guizhou



Anhui Province



Timeline and Data Collection

List of candidates Stratification Stratification Survey Baseline Terminal Survey Survey

Measuring Household Welfare

- Cost of living effect (direct price effect); income effect
 - Household Survey (100 sample villages)
 - 2,800/3,800households (baseline/endline surveys)
 - Data on every online/offline purchase, income
- Cost of living effect (pro-competitive effects)
 - Local store price surveys (100 sample villages)
 - 11,500 price quotes per survey round
 - Count of stores and new products

Are the sample villages representative?

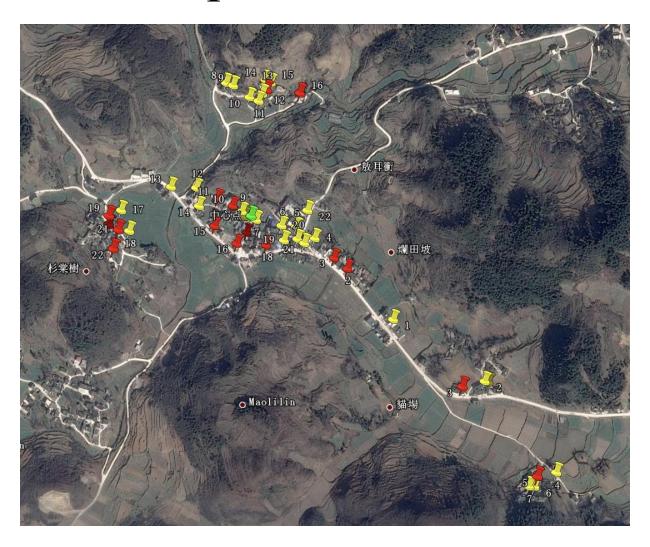
- Taobao's internal database (12,000 program villages)
- 28 million transactions
- Universe of buying and selling(Nov.2015-Jan.2017)

Sample Villages





Sample Households



Gaozhai Village, Guizhou Province

Survey Data Collection + Adminsitrative Data





Findings: Sizable but Unequal Gains

• Sizable economic gains for the 14 % of households that use terminal, 178k RMB per village/year

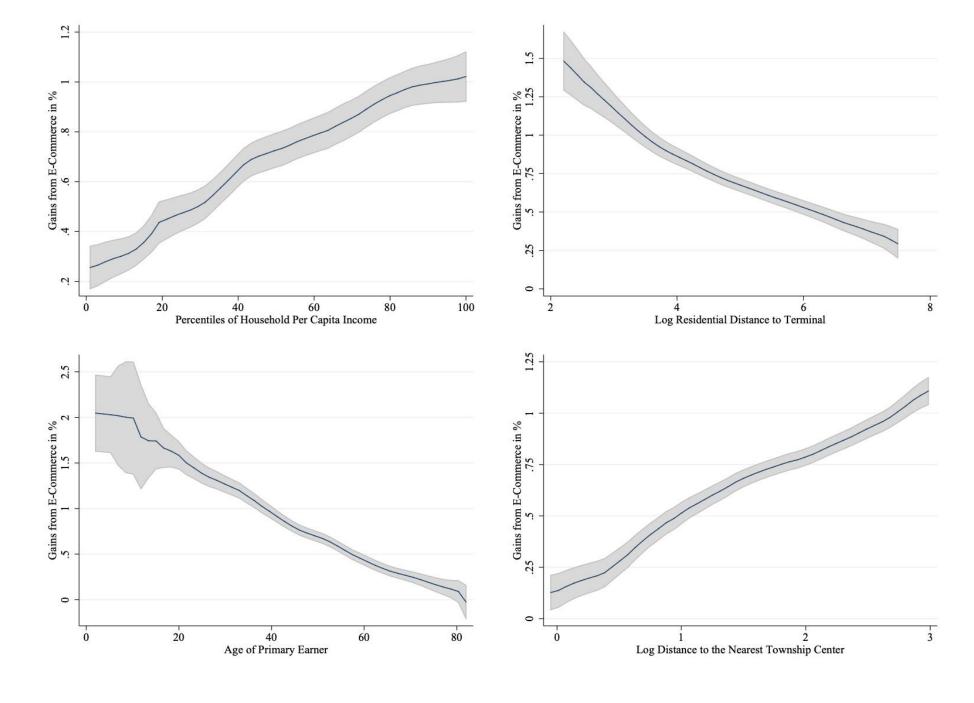
• Average effects (weighted) on retail cost of living

	Durables	Non-Durables	Total Retail
	Consumption	Consumption	Consumption
All households	-2.908%	-0.419%	-0.714%
(incl. non-users)	(0.031)	(0.003)	(0.005)
Users	-16.599%	-3.267%	-4.764%
	(0.215)	(0.024)	(0.032)
Users last month	-45.802%	-7.797%	-11.259%
	(2.411)	(0.064)	(0.124)

- Consumption effect, not production effect; strongest for durables
 - Equalizing consumer rights but insufficient to narrow the urban-rural divide
- E-commerce did not affect the prices offered by local physical stores; but local stores seem to source from the e-commerce terminal.

Findings: Sizable but Unequal Gains

- Heterogeneity and digital inequality
 - Larger gains for more remote villages
 - Reducing cross-village inequality
 - Larger gains for younger, richer households, living closer to terminals
 - Increasing within-village inequality



Tips for Working with Big Corporations

- Connections matter
 - Building connections take time; people value face time rather than emails
 - But don't just rely on one person; building multiple connections
- Frame the collaboration as a win-win

- Find a local collaborator; be aware of dialects
- How to ensure independence
 - Funding

Effect II: State-business Relations

- Starting point: Localized state-business relations
- Does the rise of e-commerce attenuate such ties? Autonomous merchant group?
- Yes, but merchant groups are still not autonomous
- National online survey on online vs offline merchants
 - Methods: matching
 - E-Commerce participation among private merchants is associated with greater autonomy from the local governments
 - Online merchants have less interaction with local governments; less incentivized to forge political ties with local officials

E-commerce does not eradicate state-biz relations, but centralizes it

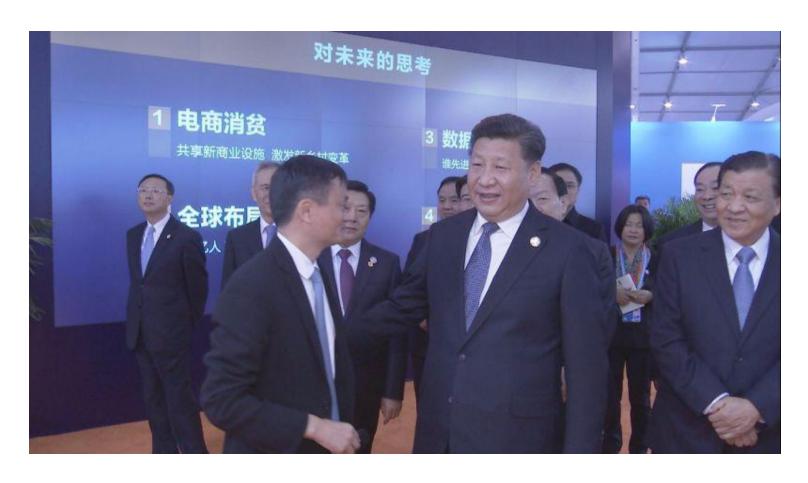
Online merchants' autonomy from the local government is in fact shifted dependency on the platforms



Merchants Pray to Jack Ma for a Prosperous Chinese Cyber Monday

The Rise of National Platform-Central Govt Collaborations

• Platform-central government ties can turn platforms into "points of centralized control"



Conclusion

E-commerce market in China reveals a digital path to development: institutional outsourcing

• Not just in e-commerce, but many other areas

China's development is not just about industrial policy

• But strategic non-regulation

Government institutions matter -> Firm-provided digital institutions matter

The tricky balance between private and public regulatory powers