Urbanizing China

A reflective dialogue
Managing Cars in China
Four Cases

• Bidding to Drive: Shanghai’s Auction
• Superficial Fairness: Beijing's Lottery
• Price as a Policy Signal: Gauging the Public
• Purposeful Policy Leakage: Non Local Vehicles
Question

Are these patterns also true to other domains?

housing, education, energy, environment, health,...

Please offer examples.
Overall Acceptance

- 43% negative
- 30% neutral
- 27% positive

Fully unacceptable to Fully acceptable
Core policy drivers

- **Effect**: Strongly Positive
- **Affordability**: Strongly Negative
- **Equity**:
  - Private vehicle auctions
  - Government vehicles
  - Comparison with other cities
  - Transparency in revenue usage

Effectiveness and Affordability are strongly positive, while other aspects are strongly negative.
Car Owners (18%) vs. Non-Car Owners (72%)

Shanghai License (80%) vs. Non-local License (20%)
3.1.1 Rich vs. Poor
Current & future car buyers

3.1.2 Prior vs. New
Prior car buyers

3.1.3 Revenue Transfer
Resource redistribution

3.1.4 Space
Inner vs. Outer City

3.2.1 Local vs. Migrant
Different social class

3.2.2 Government Vehicles

3.3.1 Corruption

3.3.2 Information Asymmetry

Car Owners

Non-Car Owners

Future car owners

Local

Migrant

Private

Public

Loopholes
Shadow Price of Beijing license
Policy making in China is Easier?

- Fewer regulatory constraints
- Stronger government power
- Richer resources
- Elite-driven
- Lack of public participation

Authoritarian decision making

- Straightforward
- One-directional

?
Do governments gauge the public opinions?

• Lack of mechanism
  • Formal public participation

• Consequences
  • Implicitly gauging public opinion
    – No feedback / ignore feedback
    – Over react
    – Drama
Mechanism of Quota Decision Making

Quota (t) = 1.354 RoadArea + 0.808 Quota (t-1) + 40.4 Price (t-1) + ...

Supply $\rightarrow$ Quota $\rightarrow$ Price

*Bidding Price as a Signal for Policy Adjustment*
Beijing’s Lottery Policy

- Effectiveness: Extraordinary
- Efficiency: Disaster
- Equity: Superficial
Purposeful Policy Leakage

Legitimacy and Intentionality of Non-Local Vehicles
Consequences of leakage

- Effectiveness
- Revenue
- Traffic management
- Fairness
- Trustworthiness of government
Effectiveness  vs.  Openness

• Congestion Management

• Shanghai as a global center
City State vs. City in a Region

- **Singapore**
  - No domestic car industry
  - City-state
    - Closed system with no non-local vehicle problems

- **Shanghai**
  - Car as pillar industry
  - City of region
    - Open city allowing non-local vehicles entering
Government Response: Timeline

Timeline:
- 1994: Introduction of car license auction policy
- 1995: Non-local vehicle owners start to pay road construction tolls as Shanghai car owners
- 2000: Peak hour driving ban on elevated expressway
- 2002: Regional collaboration on controlling Shanghai residents getting non-local licenses
- 2004: Government vehicle auction starts
- 2005: Introduction of Green Mark Policy
- 2007: Dealership announced local vehicle purchased only register with local license
- 2009: Electronic camera enforcement on elevated expressway
- 2010: 2011: 2012:
## Legitimacy and Intentionality

<table>
<thead>
<tr>
<th></th>
<th>Government</th>
<th>Public</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Legitimacy</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mixed signals</td>
<td></td>
<td>NLL seen as reasonable reaction to policy</td>
</tr>
<tr>
<td>Choice to restrict but not completely ban confers implicit legality</td>
<td>But inconvenient and lower status</td>
<td></td>
</tr>
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<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Intentionality</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intentional in general</td>
<td></td>
<td>Maintain current choice</td>
</tr>
<tr>
<td>Unintentional on specifics</td>
<td></td>
<td>Potentially more NLL</td>
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</tbody>
</table>
Shanghai’s Policy on Non Local Vehicles

Reserved, Gradual and Strategic
Four Cases

• Bidding to Drive: Shanghai’ Auction
• Superficial Fairness: Beijing's Lottery
• Price as a Policy Signal: Gauging the Public
• Purposeful Policy Leakage: Non Local Vehicles
China’s Transportation Policy Making
1. Cocktails of state + market combinations
## Embracing the market?

<table>
<thead>
<tr>
<th></th>
<th>Shanghai</th>
<th>Beijing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long term policy intervention</td>
<td>From early stage motorization</td>
<td>Late + Sudden</td>
</tr>
<tr>
<td>Intervention strength</td>
<td>Strong</td>
<td>Strong</td>
</tr>
<tr>
<td>Maximum quota</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Allocation mode</td>
<td>Auction</td>
<td>Lottery</td>
</tr>
<tr>
<td>Allocation mechanism</td>
<td>Price based bidding</td>
<td>Time based queuing</td>
</tr>
<tr>
<td>Efficiency and equity</td>
<td>More efficiency</td>
<td>More equity</td>
</tr>
<tr>
<td>Consequences</td>
<td>Less distortion</td>
<td>Queueing ➔ Price or Power</td>
</tr>
<tr>
<td>Financing ability to pay vs.</td>
<td>Mixed of both</td>
<td>Neither</td>
</tr>
<tr>
<td>willingness to pay</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Market and state</td>
<td>State + market</td>
<td>State only</td>
</tr>
</tbody>
</table>
2. Tougher tradeoffs
Tougher tradeoffs

• Multiple goals: often conflicting
• Congestion management and city openness
• Efficiency and equity
• Interests of different groups
• Public sentiments and sensible policy choices
3. Devolution of decision making
Devolution of decision making

• Experiments in Shanghai and Beijing
  – Significant
  – Significantly different
• 600+ Cities: Each Experiments its Own Transportation Policies
• Tolerance and Encouragement of Diversity and “Try and Error”

Highly centralized politically

Highly decentralized economically and administratively
4. Policy Learning, Transfer and Mobility
Zhao, J. and Z. Wang (2013) An Interview Based Survey of Transportation Policy Transfers in China, working paper
Policy Experiment and Transfer

Pilot, Evaluate, Codify, Disseminate and Scale up...
Formation of Transport Policy Market

Image removed due to copyright restrictions. Table listing the mechanisms behind the transport policy market. Source: unknown.
Broader Policy Transfers

- Singapore → Shanghai
  - Car industry
  - City state vs. city in a region

- Shanghai → Beijing?
  - Bidding vs. lottery
  - Control use vs. control ownership
  - SH+BJ → Guangzhou/Xi’an → 3rd cities

- China → World?
  - China → other developing countries
  - China → western cities
  - Local context vs. generic human nature

Borrowing from the west
Experimenting within
Exporting knowledge?
5. Policy Design ~ Behavioral Response
Increasingly two-way interactive rather than simply top-down command and control
Shanghai

- Embracing market
- Gauging the public
- Learning and adjusting
- Regionally collaborative
- Strategic about leakage
- More open towards migrants
Increasing sophistication in China’s policy making

Subtleties in Bold Design
Question

Are these patterns also true to other domains?

housing, education, energy, environment, health,...

Please offer examples.
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