北京大学国家发展研究院
National School of Development

The Impact of Subsidies and Market Dynamics on China's EV Industry

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Roadmap

北京大学国家发展研究院
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1. The evolution of China’s EV industry over the past decade
2. The role of government subsides
3. The impact of market dynamics on EV expansion
4. Key takeaways and lessons learned

China's EV Industry

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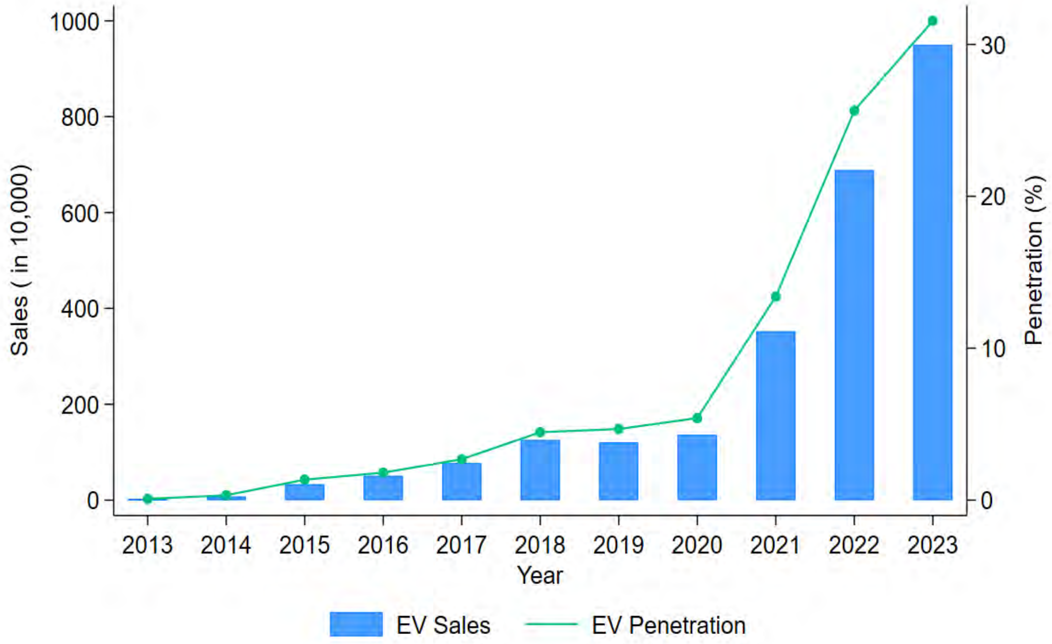
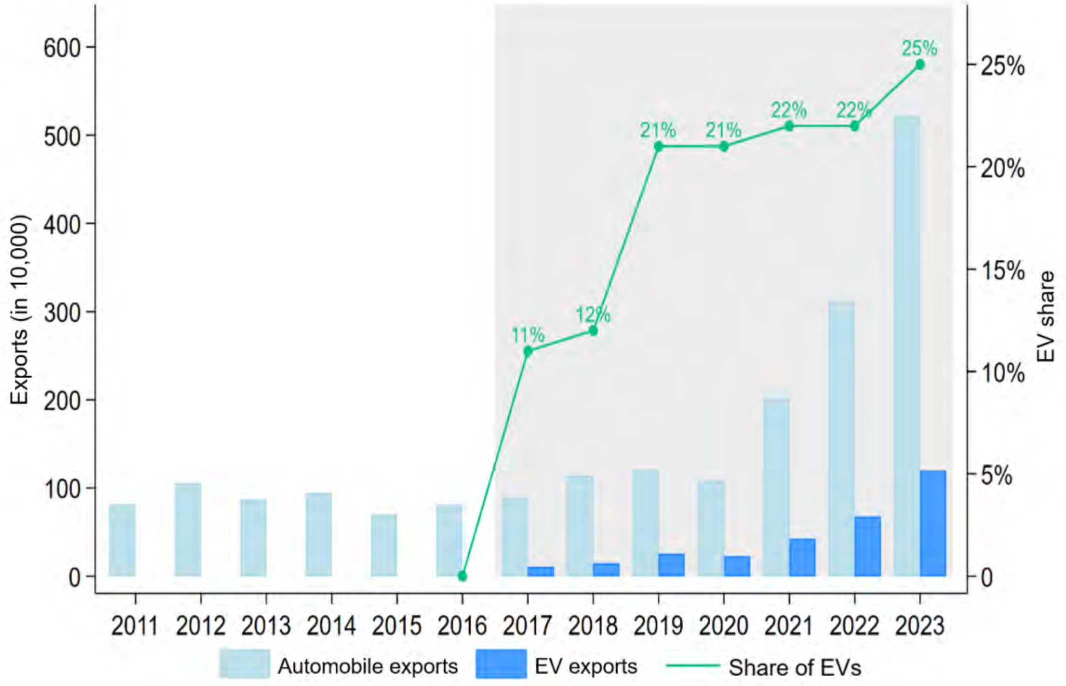


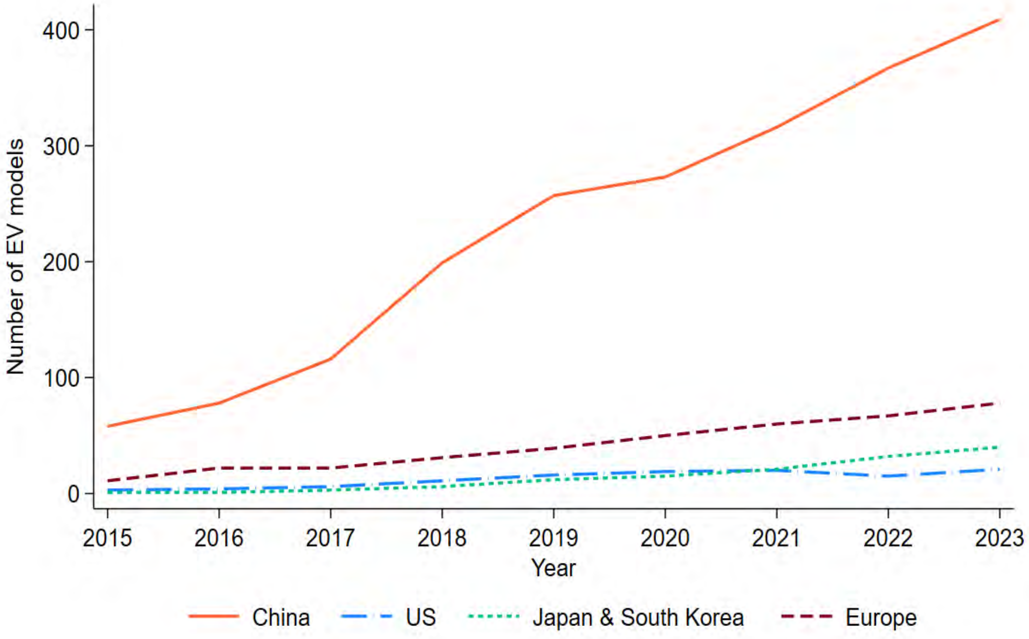
Domestic sales



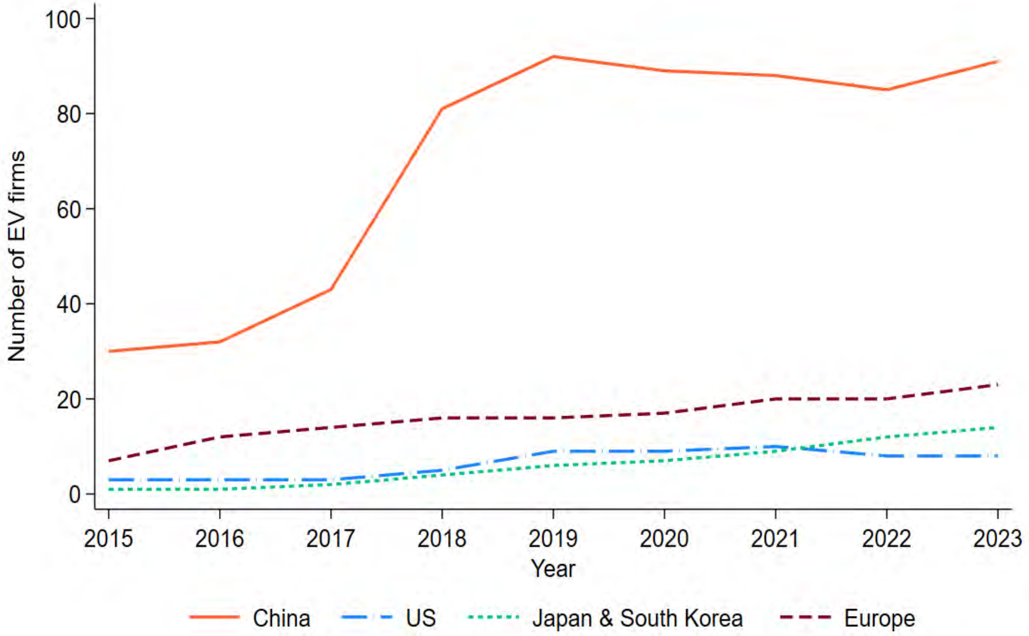
Exports

China now leads the world in EV production and sales, with over 40% of global EV exports in 2024.

China's EV Industry

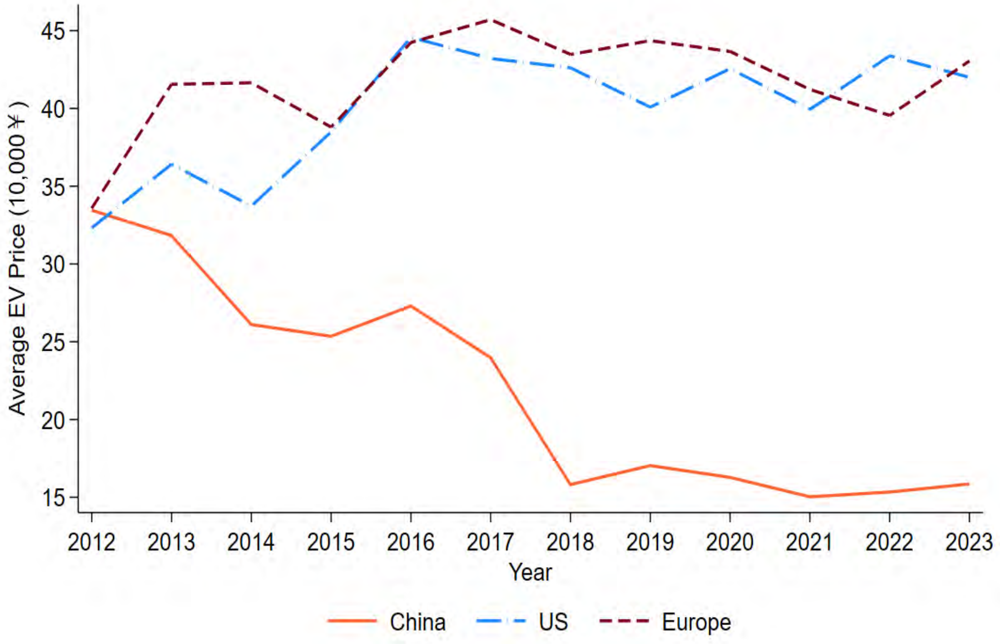


EV models

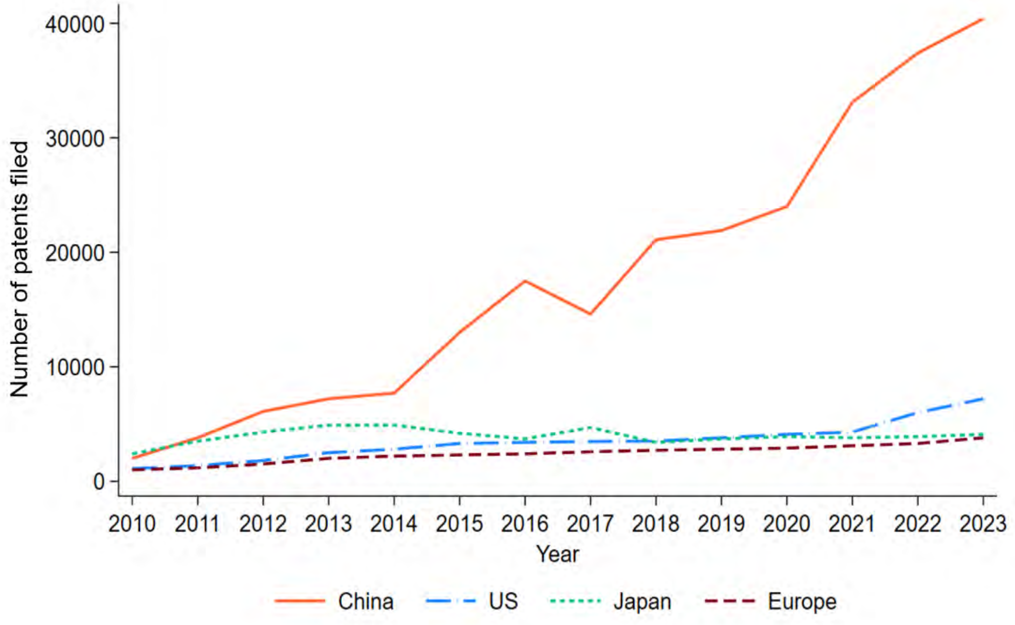


EV firms

China's EV Industry



EV price

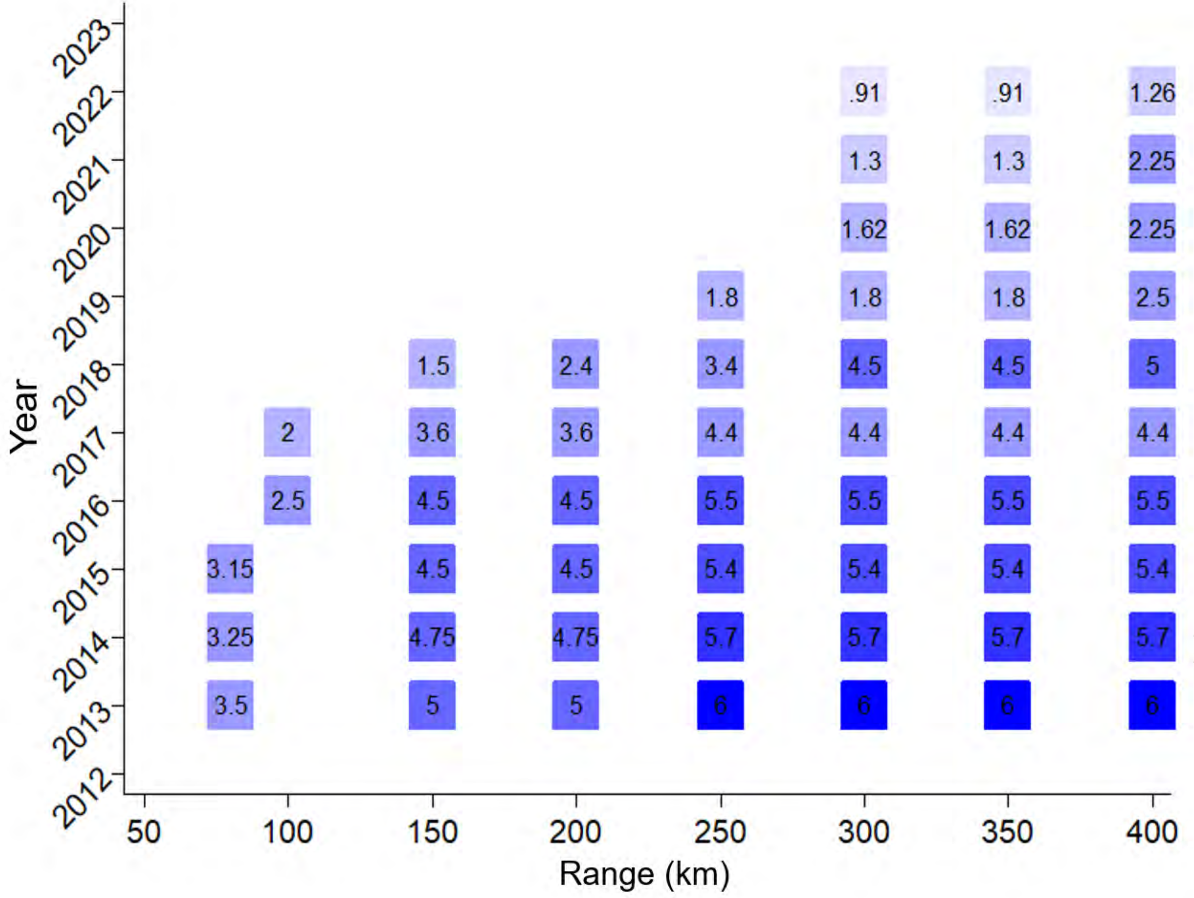


EV patents

What explains the performance of China's EV industry?

The role of subsidies?

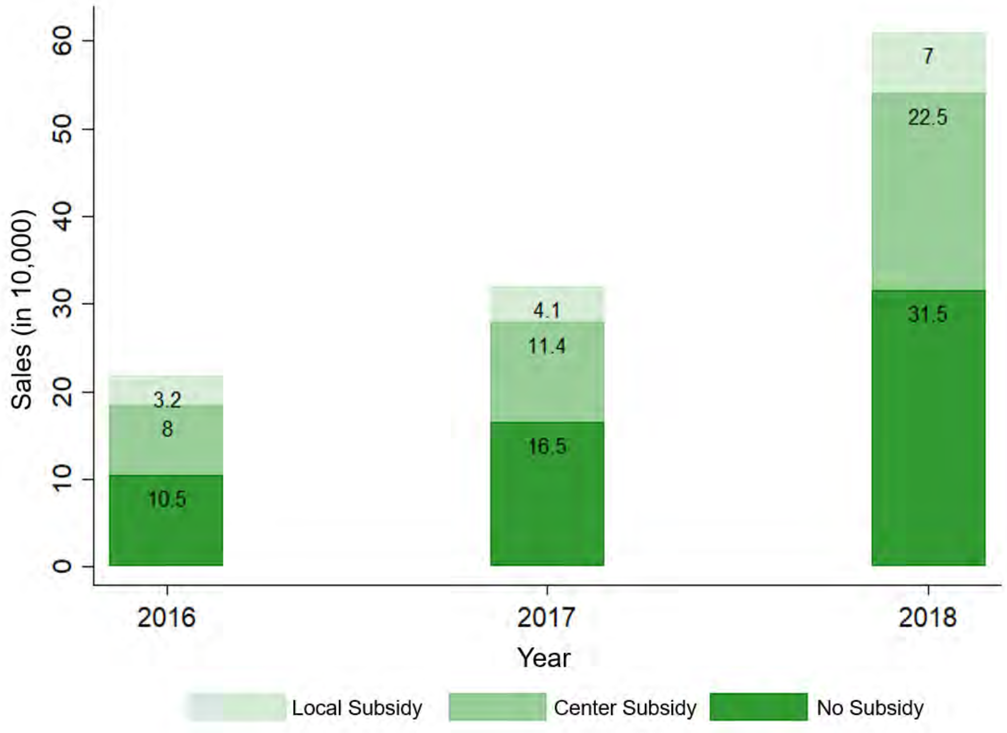
EV Subsidies



Central subsidy

- **Subsidy amount based on range**
- **2010: 10 pilot cities**
- **2013: Official implementation**
- **Ended by the end of 2022.**

EV Subsidies

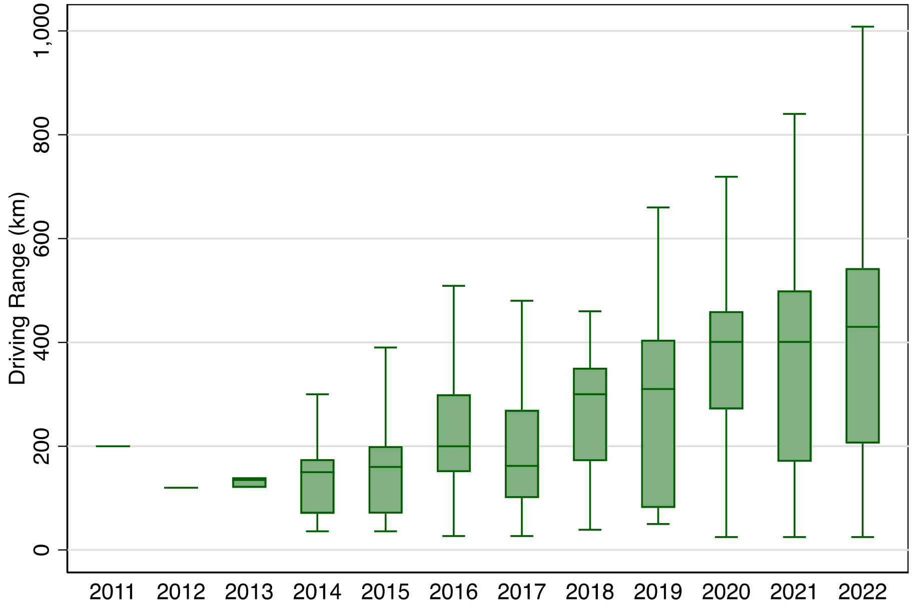


Sales impact

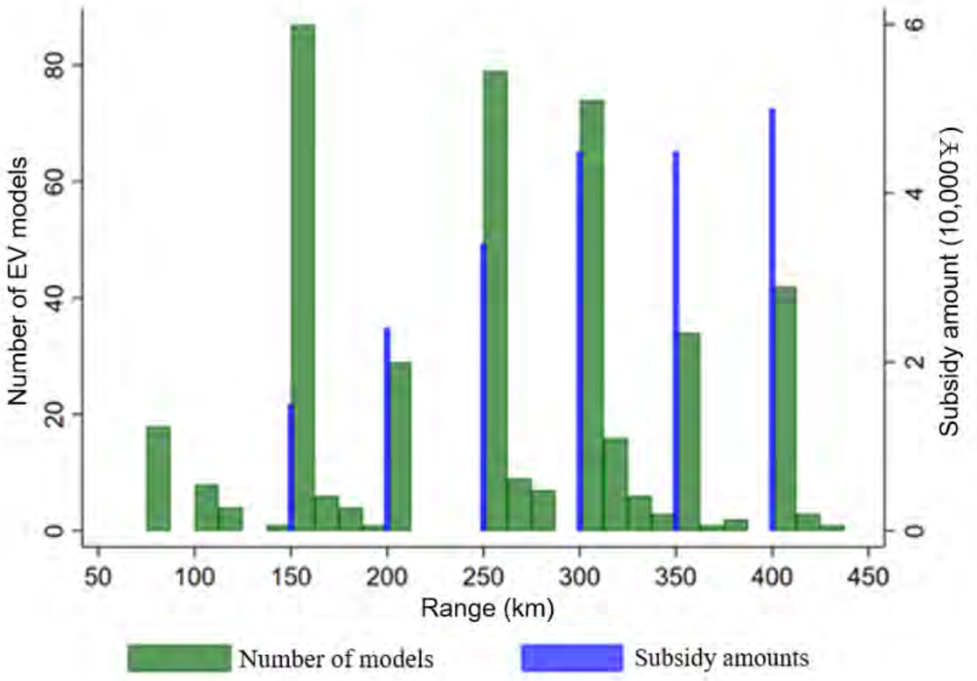
- **Subsidies accounted for 49% of EV sales, with central subsidies contributing to three-fourths of the increase.**

- **US: 40% (Li et al. 2017)**
- **Norway: 57% (Springel 2021)**

EV Subsidies

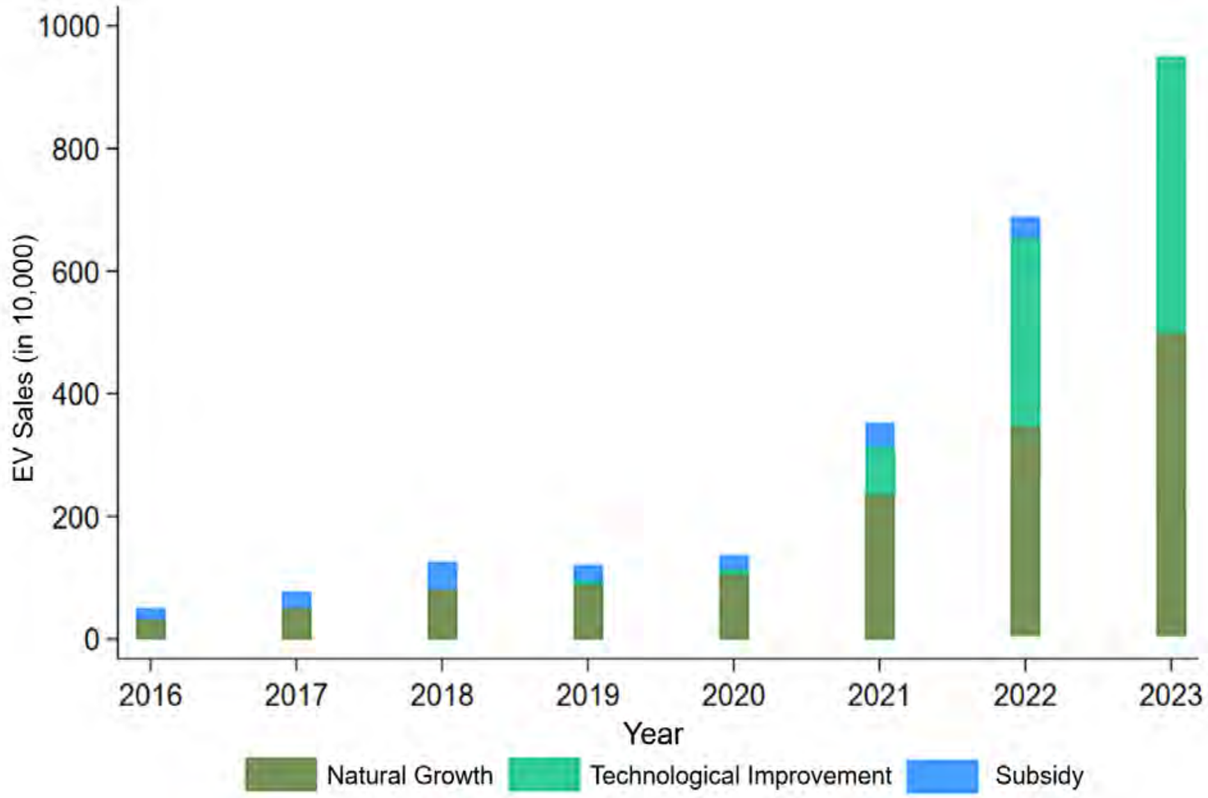


Range improvement



Subsidy and technological improvement

EV Subsidies

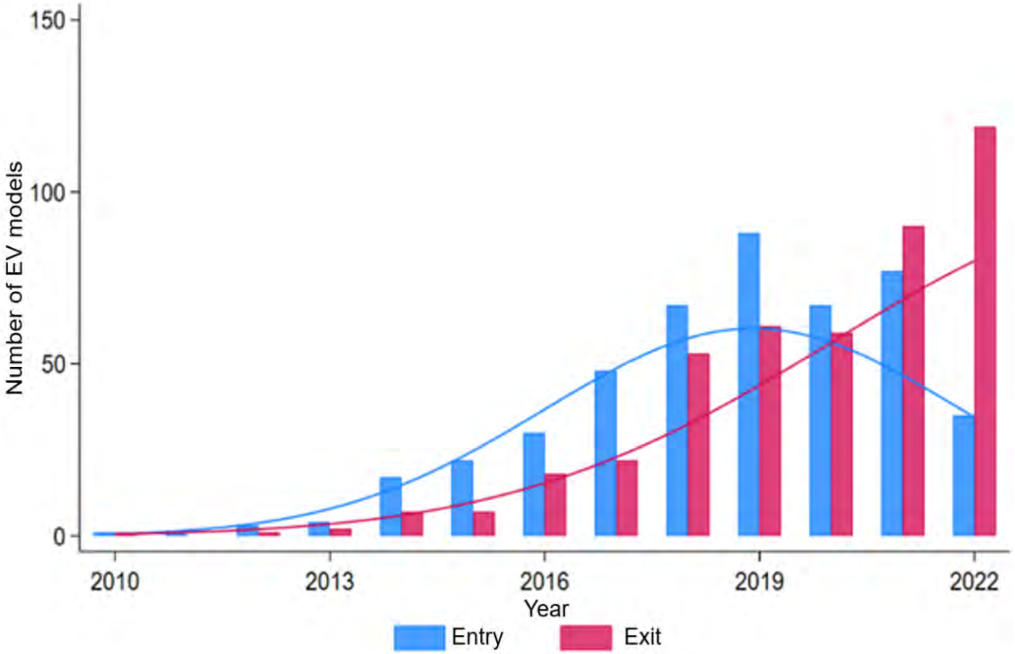


What explains the performance of China's EV industry?

The role of market forces?

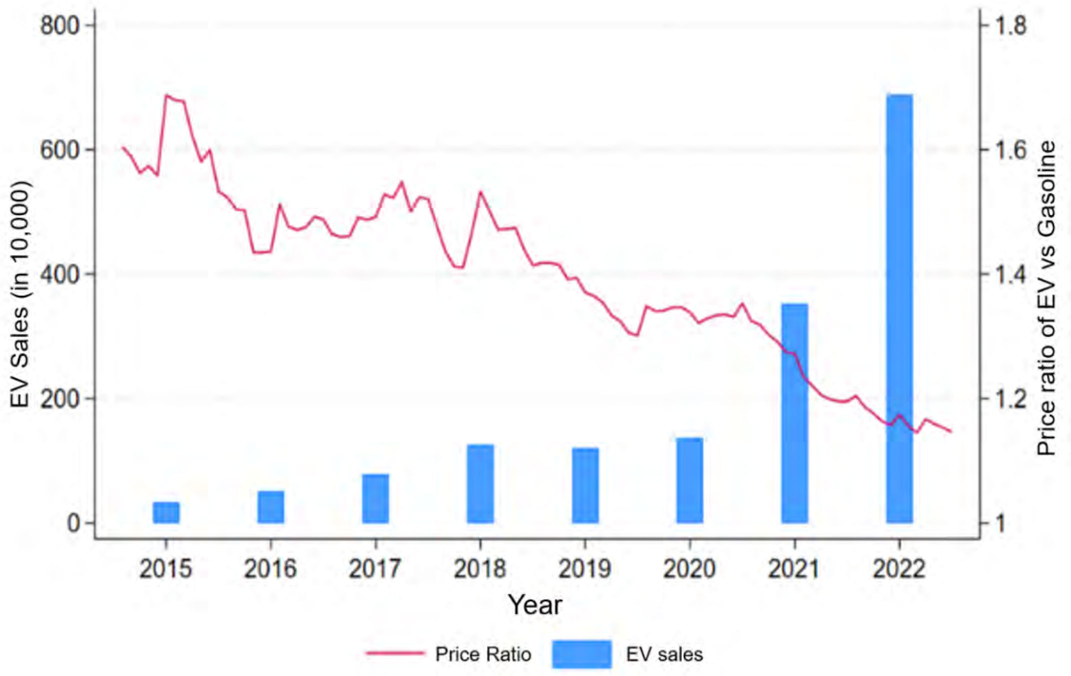
Competition

EV firms

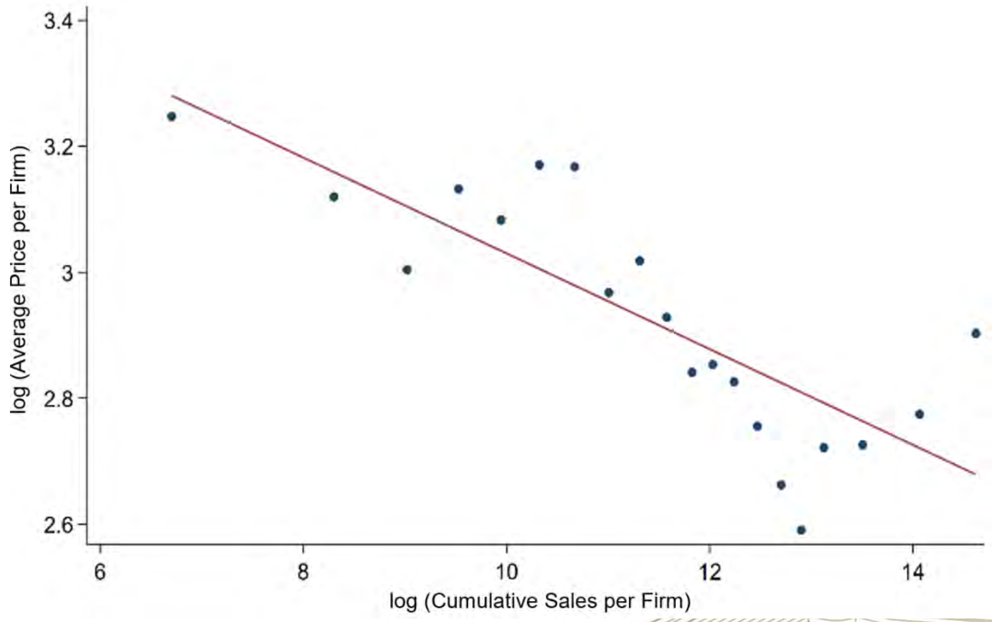


EV models

Learning by doing

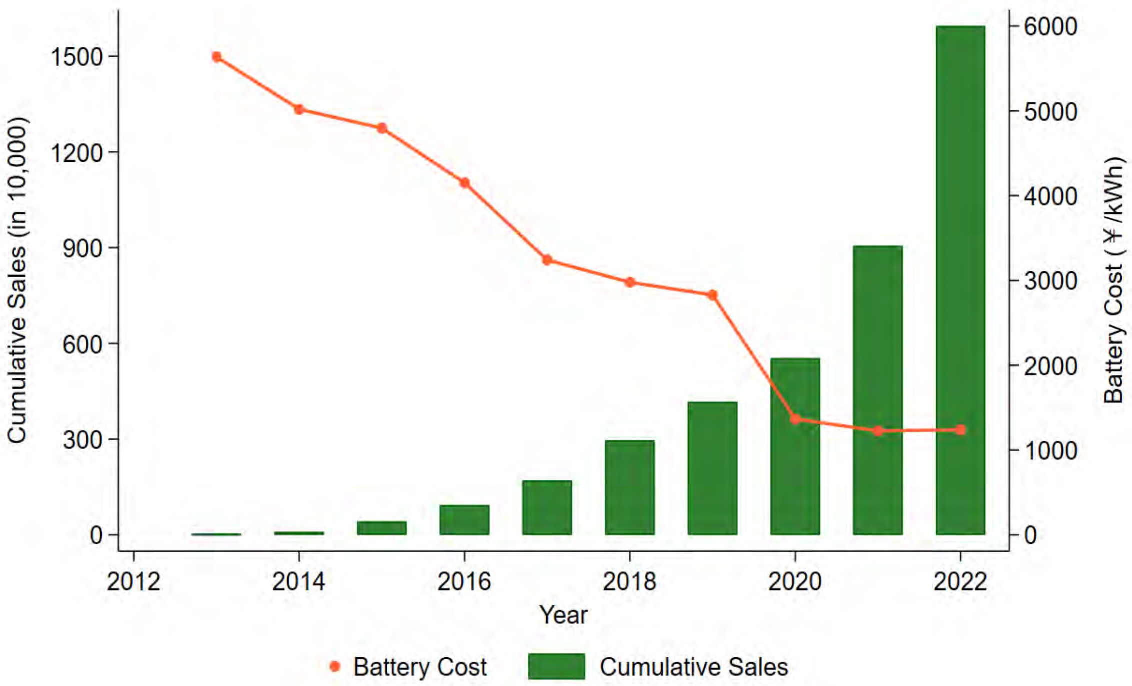


Learning by doing (industry)



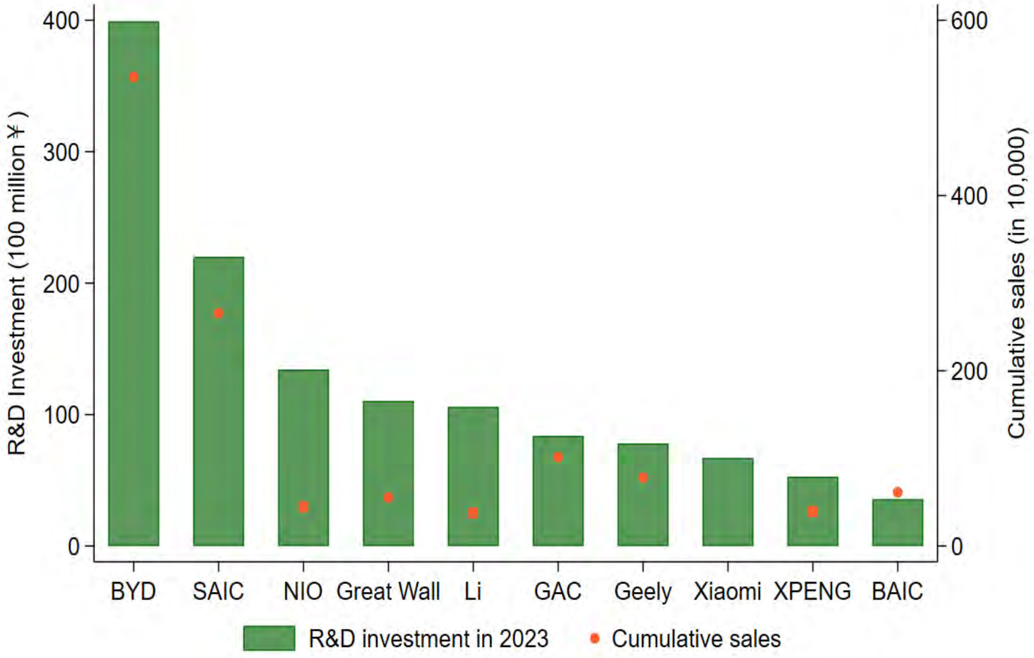
Learning of doing (within-firm)

Supply chain



Learning by doing (supply chain)

Innovation



Innovation and production

Human capital

Data source: zhaopin.com

Human capital development

Takeaways

1. Subsidies played a key role in early market expansion.

2. Subsidy-driven growth accelerated learning-by-doing, innovation, human capital development, and the upstream industry advancement.
   → Justification of IP: addressing externalities

3. Market forces sustain growth in post-subsidy era.

Thank you!

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