

Discussion:
**From Battlefield to Marketplace: Legacies, Highway and Polycentric
Development in Vietnam (Nose, Sawada)**

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Paper in one slide (summary)

- **Question.** How did large-scale transportation infrastructure projects affect the spatial distribution of economic activity in northern Vietnam?
 - Did large-scale highway investments shift northern Vietnam toward *polycentric* development?
- **Design.** Combines remote sensing (night-lights, Landsat), Vietnam GSO microdata (commune panel, Firm Census/VES, Population Census/VHLSS, IZ locations), modeled transport-cost/network layers (LCP/MST from land cover elevation; distances to GMS corridors); measure Firm Market Access (FMA) from micro-founded transport costs; identification via least-cost-path / minimum-spanning-tree instruments with geographic interactions.
- **Findings.** Increased FMA raises firm entry and employment near corridors in both core and periphery; spatial pattern consistent with *agglomeration along corridors* and *polycentric emergence*.
- **Model & Mechanism.** Non-linear, threshold effects of market access; input-output linkages amplify local gains.

Positioning the Paper: What Question, Where in the Literature, What It Adds

- **What's the question?**

- Evidence on how *large interregional highway improvements* reshape the *distribution of activity* (and sectoral structure).
- Strong empirical tradition exists (e.g., Donaldson–Hornbeck on railroads; Duranton–Turner on roads; Faber on Chinese highways, Akamatsu-et-al on HSR in Japan)
- Most powerful when it speaks directly to the failings of the most commonly **QSM** models (e.g. Allen-Arkolakis)
 - What are we missing if we build on models that **qualitatively** and **quantitatively** get the comparative static pattern of agglomeration/structural change wrong?

Positioning the Paper: What Question, Where in the Literature, What It Adds

- Failings of baseline QSM: **Fenced city critique** (Akamatsu, Mori, Duranton et al)
 - With land embedded multiplicatively and uniqueness imposed, many baseline QSMs predict **dispersion** when access improves. (Duranton–Mori, 2025)
 - “Lower transport costs lead to the **dispersion** of economic activity in Helpman’s model instead of its concentration in Krugman (1991b)’s.”
 - “Multiplicative separability with power functions leads instead to **monotonic** behavior.”
 - “... which is why the QSM city needs to be **fenced**.”
 - Implication: we may need **hierarchical / threshold agglomeration** processes (central-place logic, corridor “racecourse,” hub–spoke hierarchies).

Positioning the Paper: Fenced city critique

- **Your contribution**

- You document **corridor-centric agglomeration** and **polycentric takeoff** once firm market access crosses **thresholds**—closer to NEG-style *access forces* than to net-dispersive baseline QSM heuristics.
- Make this tension explicit and **run a horserace**:
 - Compare observed patterns to a calibrated baseline QSM (Helpman-style with land / uniqueness) that implies dispersion.
 - Contrast with a model variant featuring *IO linkages + non-linear/threshold* adoption around corridors.
 - Frame as “Putting Quantitative Models to the Test” (in the spirit of Adão–Donaldson et al.): predicted maps vs. your reduced-form/event-study maps.

Minor comments

- **First-stage (visual + stats).** Plot $\Delta \ln FMA_c$ against distance-to-LCP/MST (by terrain bins); report first-stage strength (e.g., KP F). If multiple endogenous terms, add SW partial F and Shea's R^2 .
- **Thresholds / dose-response.** Start with a semi-parametric distance-to-corridor profile to motivate the *20 km/50 km* windows; show robustness to bandwidths and (optionally) interchange-based discontinuities.
- **Mechanisms / falsification.**
 - Larger effects in IO-dense/manufacturing; weaker in footloose services.
 - Interchange-adjacent vs. equidistant non-interchange segments (placebo geometry).
 - Timing chain: lights/built-up \rightarrow firm counts \rightarrow employment.
- **Corridor vs. hub decomposition.** Along-corridor gradients across successive interchanges to separate reallocation along links from net creation near hubs.
- **Outcomes & heterogeneity.** Split extensive (entries) vs. intensive (employment); report by initial MA quantiles and IO-intensity bins.