# Discussion of "Rebuilding Ukraine's Cities"

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December 5, 2025 - EP: PEGI Conference, Paris



# A Crossroads for Ukraine's Economy



- Ukraine is at a historic crossroads
  - History shows: Postwar reconstruction offers a rare opportunity to transform economies.
- Germany's Postwar Economic Wirtschaftswunder
  - After WWII, West Germany transformed from devastation to prosperity in just a decade.
  - Key ingredients:
    - **✓** Market reforms **✓** Competitive institutions
    - ☑ Investment in efficiency ☑ Dismantling of industrial cartels
- Rebuild the past or engineer a new future?

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- Rebuild the past or engineer a new future?
- This paper says that it should build a new future (and I agree)

# Where The Paper Really Stands Out

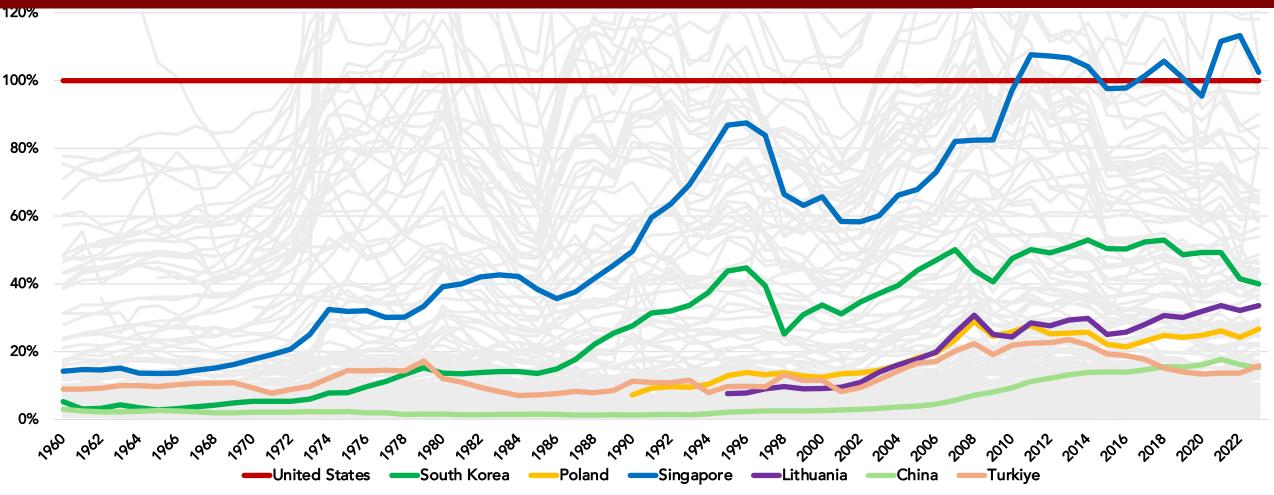


- **Key contribution:** Novel and highly policy-relevant assessment of construction costs and how to reshape the cost curve.
- → **Openness:** Facilitate entry of foreign construction firms to boost capacity, competition, and expertise (especially for large-scale projects).
- → **Regulatory efficiency:** Standardize building codes and minimize land-use regulations to improve efficiency.
- → **Procurement reform:** Standardize public purchasing to enable scale, improve price transparency, and reduce corruption.
- I like the term "Investing-in-Investing": Preparatory phase before reconstruction
  - → Institutional reforms (e.g., procurement systems)
  - → Vocational training for construction skills
  - → Stable electricity to power materials production (e.g., cement)

# Stagnation Without Convergence



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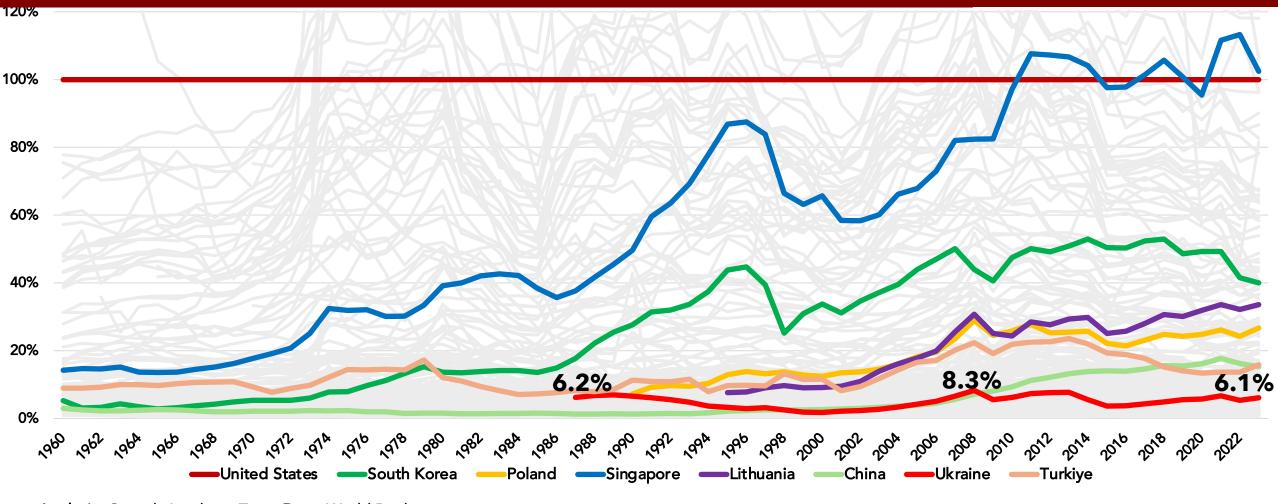


Analysis: Growth Academy Team Data: World Bank

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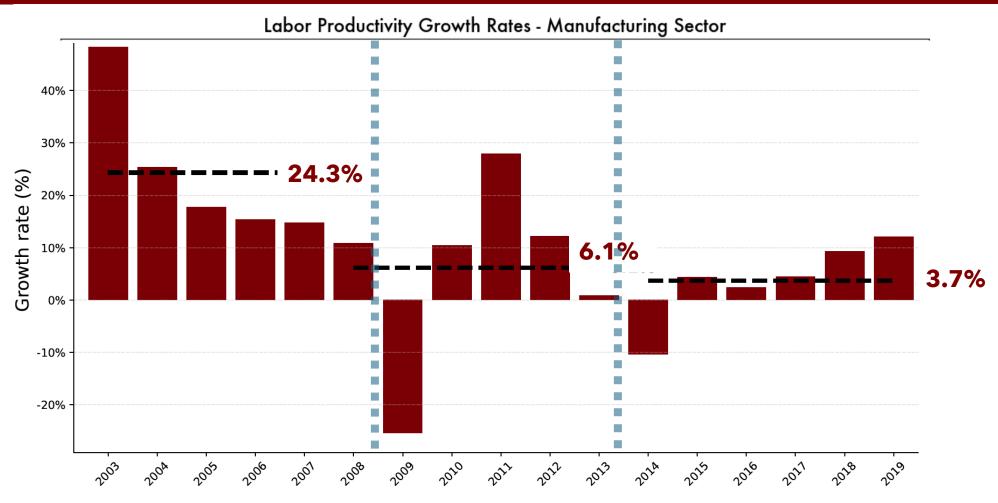
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Ukraine remained largely stagnant—rising from 6.2% of U.S. income per capita to 8.3% in 2008, then falling back to 6.1% by 2020.

# Labor Productivity Growth Over Time



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Analysis: Akcigit, Kilic, Lall, and Shipak (2025) "Engineering Ukraine's Wirtschaftswunder". Data: Ukrainian Firm-Level Dataset, Comprehensive Balance Sheets and Financial Statements

Ukraine's productivity growth has visibly lost steam.

## **Highest Quality Data**

#### **High Quality Data Sources:**

Firm-Level Balance Sheet Data (2002-2024):

Covers nearly entire universe of Ukrainian firms

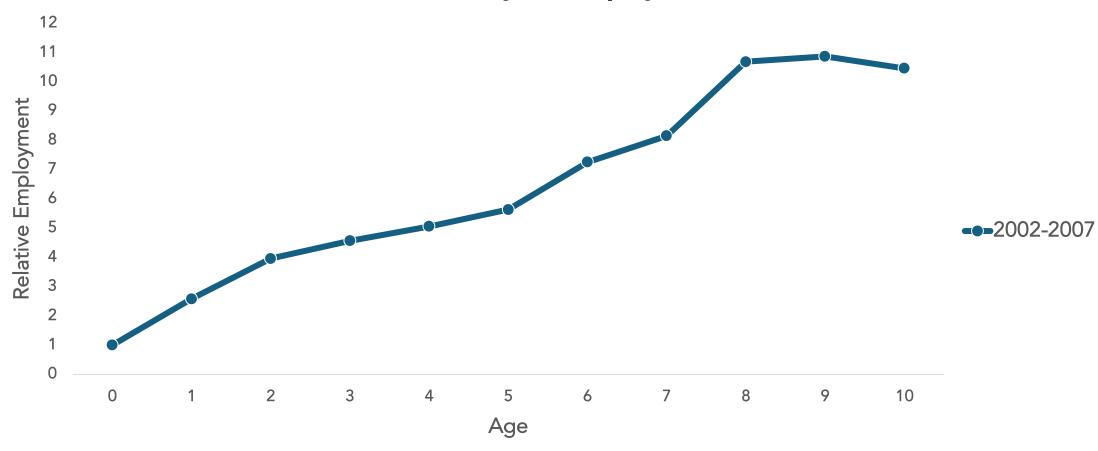
#### **Firm Registry Data**

Contains registration date for all Ukrainian firms

# Business Dynamism Over Time

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#### Firm Life Cycle - Employment



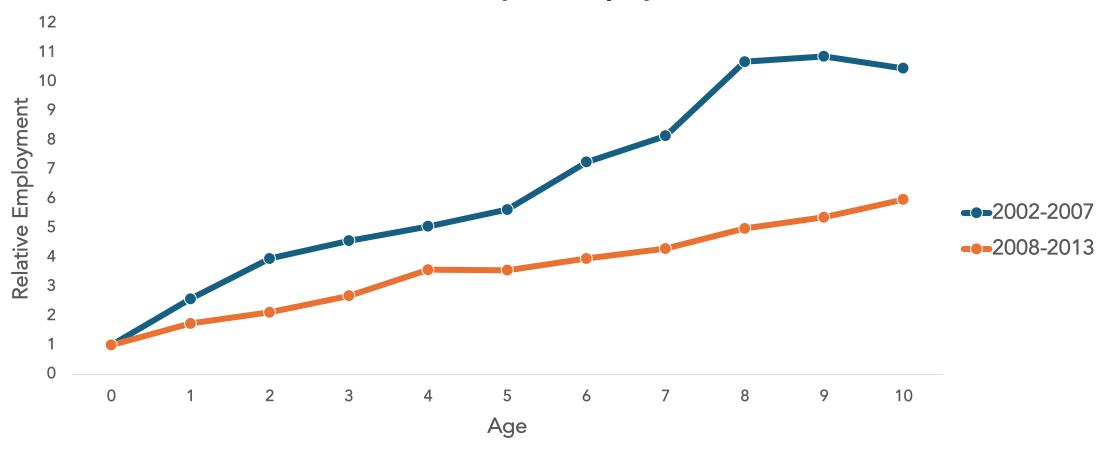
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Data: Ukrainian Firm-Level Dataset

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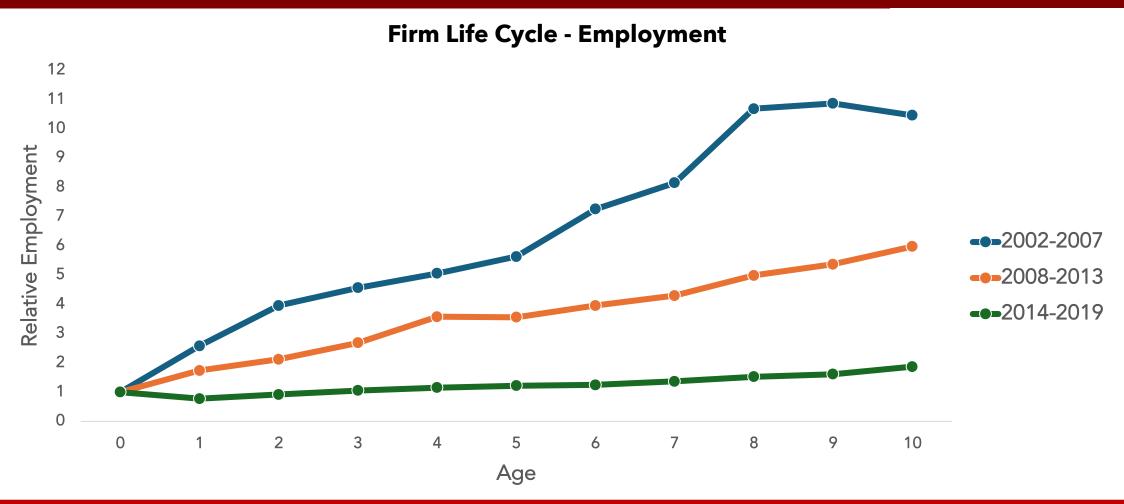
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# **Business Dynamism Over Time**



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Early 2000s: Ukrainian firms resembled their U.S. counterparts—dynamic and growth-oriented.

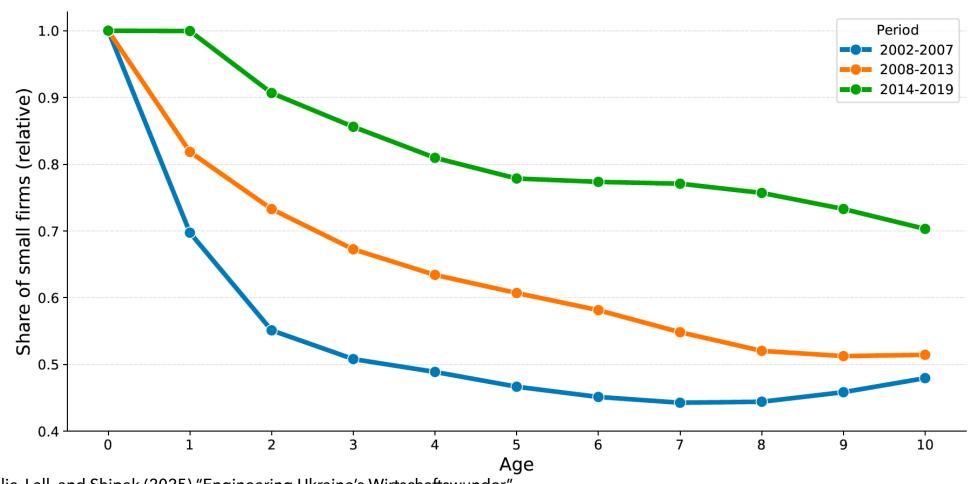
A decade later: Their profile shifted closer to that of Mexican firms.

Over time: They increasingly resemble Indian firms – stagnant with limited selection dynamics.

# Selection Mechanism Weakens



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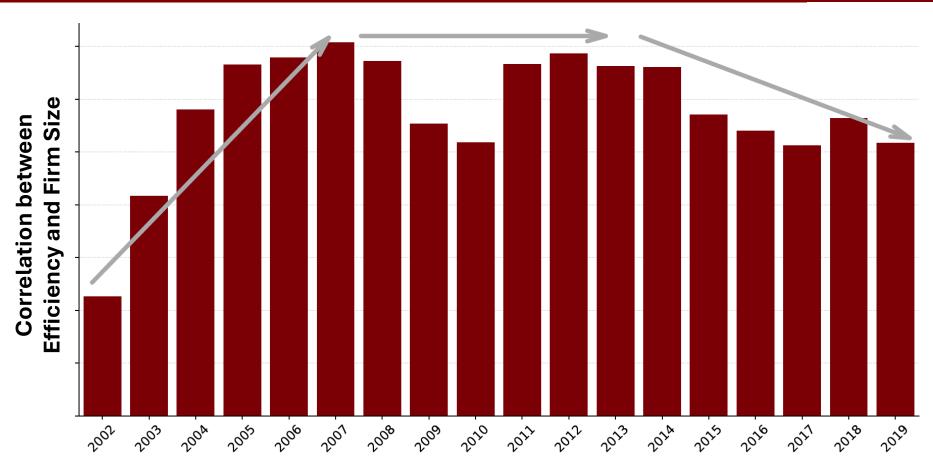
#### Small firms now linger, not leap

"Up or out" dynamics have faded-inefficient firms survive longer.

# Are Bigger Firms More Efficient? - Misallocated Resources



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Analysis: Akcigit, Kilic, Lall, and Shipak (2025) "Engineering Ukraine's Wirtschaftswunder". Data: Ukrainian Firm-Level Dataset, Comprehensive Balance Sheets and Financial Statements

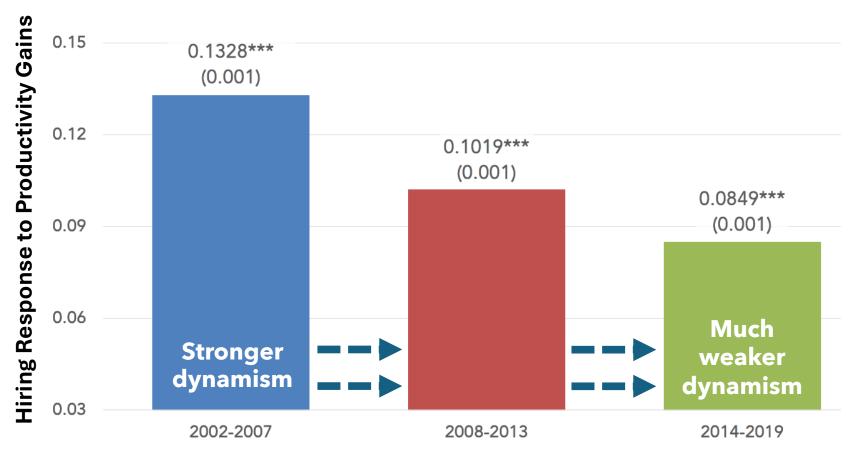
#### Bigger no longer means better

The link between firm size and productivity is weakening.

# The Link Between Productivity and Hiring



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**Analysis**: Akcigit, Kilic, Lall, and Shipak (2025) "Engineering Ukraine's Wirtschaftswunder". **Data**: Ukrainian Firm-Level Dataset, Comprehensive Balance Sheets and Financial Statements

Productivity gains aren't being translated into more jobs like they used to.

# This Paper: 5 Facts about Ukraine

- Population is declining
  - From 52 mln (1991) to 38 mln (2021). Lower fertility, outmigration
- Population is shifting west and to Kyiv
- Kyiv is becoming more attractive
  - Population increased, GDP share from 21% (2002) to 30% (2021)
- 90% of housing built pre-1991
- Congested cities
- Policy Conclusion: Reconstruction pays off most in Kyiv, Lviv, Odesa, Dnipro:
  - → High productivity
  - → Strong amenities

# The paper: model for reconstruction



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- Individuals choose where to live
  - Ukraine v/abroad, and cities within Ukraine. No relocation

Infrastructure matters for consumption and production

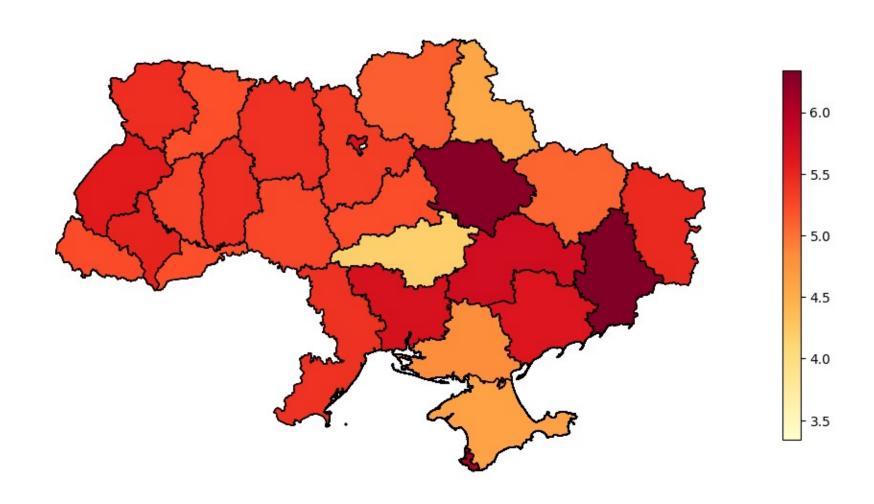
- Policy: infrastructure reconstruction
  - Tension between accommodating population dynamics and rebuild in the East

# Big Picture Reactions

- Economic activity shifted toward the east: "This shift might reflect the possibility that under communism, Ukraine was artificially overbuilt in regions that were closer to Moscow..."
- The time-series patterns/interpretations: Do they align with the broader decline in productivity and dynamism?
- In the cross section, the conclusions rely heavily on productivity estimates derived from later years.
- What do we observe in earlier years? Are the patterns consistent?

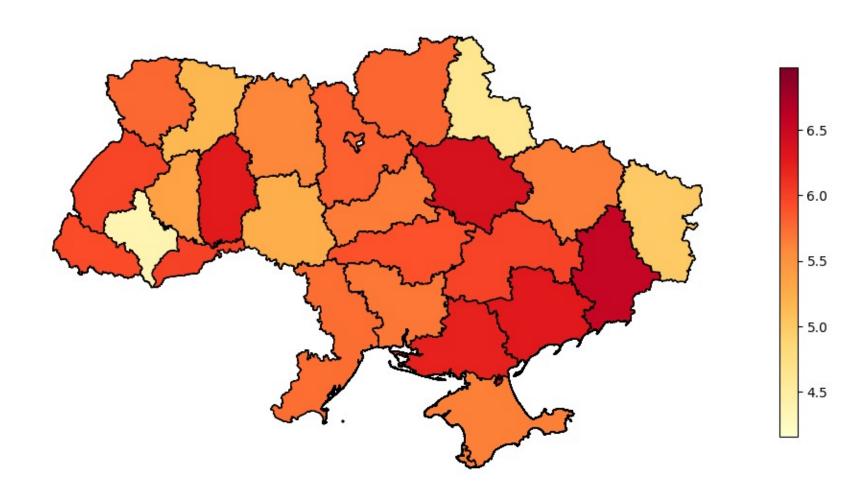
# **Total Factor Productivity 2002-2007**





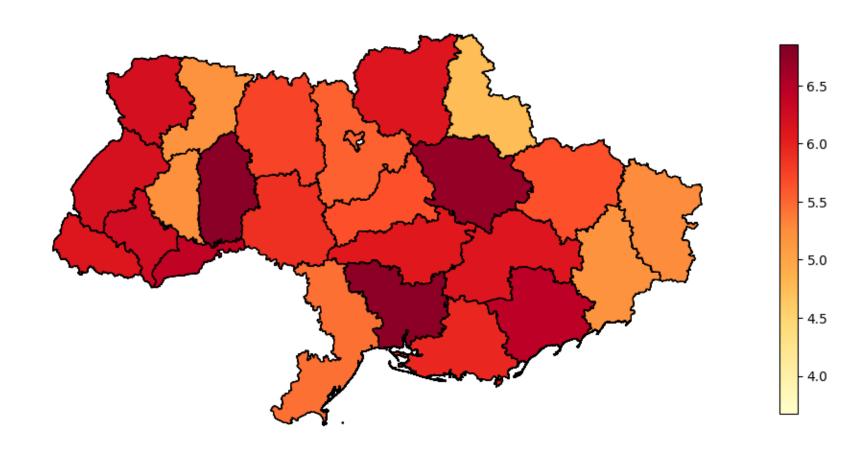
# **Total Factor Productivity 2008-2013**





# **Total Factor Productivity 2014-2019**





# Important Question

- Which years most closely reflect the true underlying local exogenous productivity?
  - $\rightarrow$  2002-2008 or 2020-2021?

• Wages are determined as:

$$w_i = lpha A_i^{rac{1}{lpha}} \left(rac{1-lpha}{r}
ight)^{rac{1-lpha}{lpha}}$$

Hence the productivity levels are identified as follows:

$$A_i = \left[rac{w_i}{lpha}\left(rac{r}{1-lpha}
ight)^{rac{1-lpha}{lpha}}
ight]^lpha$$

- ullet Productivity levels  $A_i$  are identified by wages  $w_i$
- Are wages truly determined only by productivity, or do other factors play a role?
  - > Human capital? Sectoral heterogeneity? Market power/concentration at the expense of wages?

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- Productivity has three components:
  - Exogenous productivity  $A_i$
  - Producer related infrastructure  $I_i^p$
  - Population in region i  $N_i$

$$A_i = \bar{A}_i N_i^{\lambda} I_i^p$$

• Because infrastructure is unobserved in the data, the paper cannot separately identify exogenous productivity from infrastructure:

$$\bar{A}_i I_i^p = \frac{A_i}{N_i^{\lambda}}$$

 More clarity would be helpful: The division of the estimated joint value between exogenous productivity and infrastructure is critical for policy.

# **Final Comments**

- Productivity estimates are central.
  - > Moving to micro data would greatly improve local-level inference while reducing dependence on model structure/assumptions.
- I care about  $\dot{A}$ , but the dynamics are missing. Could we introduce an idea-production function, similar to the infrastructure-production function?
- Incumbent capture would show up in the calibration as lower observed productivity
- In the current model, this is absorbed into the exogenous productivity component.
- 97% has up to 50 workers in the construction sector.
  - > What about market concentration at the top?



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# Thank You.