# Progetti di ricerca tematica all'Istat

## Risultati della prima call

**Istat**

LABORATORI tematici

28-29 APRILE 2022

#IstatWebinar

# Discussing the paper: 'Urban non-urban agglomeration divide: is there a gap in productivity and wages?'

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# Productivity

- ▸ **Cross-sectoral** differences in labour **productivity** are driven (to a great extent) by cross-sectoral differences in **capital deepening** ($K/L$)
- ▸ Comparing **firms** across **different sectors** with **heterogeneous capital intensity** might be misleading
- ▸ Three **options** here:
    - ▸ Move from labour productivity to **total factor productivity** $\Rightarrow$ maybe not a good idea as you would need information on **capital** and **panel data** to properly estimate establishment-level TFP and, moreover, that would **not** be an useful variable to discuss the issue of the **productivity/wages gap**
    - ▸ Account for **narrowly-defined sector** (e.g. 4 digit) in a **flexible** way (using dummies) in your **econometric** analysis
    - ▸ **Control** in the regressions for systematic differences in **capital deepening** across **sectors** $\Rightarrow$ even using **macro**-level information on capital stock by 2-digit sector

# Gap

- The productivity/wages **gap** (as defined in the regression, not in the descriptives) is basically the **inverse** of the **labour share**
  - There is an **extensive literature** (theoretical and empirical) on the **drivers** of the labour share at the micro, regional, sectoral, macro levels
- Productivity/wages **gap** is a **combination** of:
  - **Composition** of **workers** (e.g. skills, occupation, experience, ability) **within** the **establishment**
  - '**Sharing** the **pie**' of high productivity
  - **Capital intensity** of the establishment (or sector)
- Minor: **Figure 4** could be more informative if the productivity/wages **gap** was measured as a **ratio**

## Urbanisation

- ▸ Potentially **time-varying** measure ⇒ why not to **exploit** it?
- ▸ Use **alternative definitions** (e.g. based on different thresholds)
- ▸ Why not employing a **continuous measure** of urbanisation? **RDD** to validate **thresholds**?
- ▸ You focus your attention on '**urbanisation economies**' (i.e. **Jacobian** clusters) ⇒ what about considering the contribution of '**Marshallian** clusters'? (control for '*distretti*' dummy)
- ▸ Some of the **advantages** (and costs) arising from **urbanisation** go **beyond** the **municipality** and can be earned (or borne) by all people and companies within the **commuting zone** ('*sistemi locali del lavoro*') ⇒ define urbanisation at the SLL level

# Shift-share analysis

- To **disentangle** the role played by **firm-specific** factors and **compositional** factors, you could also run a **shift-share analysis**
- In this way, you would **compare** the **contribution** of **within-sector** differences in productivity, wages and gap to the **between-sector** differences in productivity, wages and gap across different areas (or categories of areas)
- This would be of great **importance** to explicitly **measure** the role played by one type of **sorting** / **self-selection**

## Econometric analysis

▸ You might consider including a much larger set of **area-level control variables** to account for **confounding** factors ⇒ these controls should be **carefully selected** to avoid including variables that measure some specific dimension of urbanisation (e.g. transportation infrastructure could be problematic)

▸ It would be of great interest to **explicitly evaluate** the **contribution** of some specific **dimensions** of urbanisation economies/diseconomies (infrastructures, local markets, access to knowledge, supply of skills, amenities, pollution, etc.)

▸ Given your **discussion** on the possible sources of **endogeneity**, you should make **explicit** your prior **beliefs** about the likely **direction** of the **bias** in OLS

▸ Also **report first stage regressions** for your IV estimates (does each IV correlates with the 'corresponding' endogenous variable?)

▸ I **like** your **instrumental variables** for urbanisation but... they are not perfect
  ▸ **Inter-generational spillovers** (correlated both with urbanisation and current performance, directly)
  ▸ **Contribution** of these variables to build the local '**social capital**'