Geographically targeted subsides and local tourism development:

A policy evaluation of the Italian inner areas strategy

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EXTENDED ABSTRACT

RATIONALE

Public policies' impact on tourism and the necessity for program evaluations in the tourism sector have garnered increased attention (Aguinis et al., 2023). Developing effective tourism policies involves synthesizing diverse public-private interests and establishing intervention strategies aligned with desired outcomes (Airey, 2015). Notably, policies are not always exclusively designed for tourism purposes, often being viewed as a means to achieve broader public sector goals (Joppe, 2018). This is evident in the European Cohesion Policy, where tourism is not a direct priority, but is integrated across intervention axes, redistributing funds to address various objectives, including sustainability, economic well-being, equality, and convergence.

While the European Commission acknowledges tourism's significance for the EU economy and its role in green and digital transition, researchers face challenges in assessing the impact of funds on tourism and cultural performance (European Commission, 2022; Brandano & Crociata, 2023). Although evidence supports public subsidization's impact on tourism firms and intermediaries at the regional level (Bernini & Pellegrini, 2013; Hwang & Lee, 2015), there remains a gap in understanding the local-level effects. Current literature predominantly focuses on regional analyses or employs non-causal estimation strategies (Deng et al., 2019; Jin et al., 2022; Biagi et al., 2021).

This paper addresses this gap by examining the Italian National Strategy for the Inner Areas (SNAI), a place-based policy recognizing tourism as a key driver for revitalizing marginal areas distant from

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service centers. The objective is to assess whether geographically targeted public transfers can effectively stimulate tourism in the SNAI-benefiting territories.

IDENTIFICATION STRATEGY

SNAI framework

The National Strategy for Inner Areas (SNAI) operates on a distribution mechanism aligned with the principles of Structural Funds, where funding eligibility hinges on project compliance. This mechanism leads to varying transfer intensities across distinct areas and municipalities. Notably, infrastructure projects often entail collaboration with larger neighbouring municipalities, introducing nuances in the pattern of transfer intensity. Within each inner area of Italian regions, specific municipalities receive substantial funds, while others in the same vicinity receive comparatively lower amounts. In some exceptional cases, such as the 'Montagna Materana' and 'Mercure Alto Sinni Val Sermento' areas in Basilicata region, all municipalities included in the strategy receive substantial amounts exceeding one million euros. Similarly, in the 'Monti Dauni' area in the Foggia province of Apulia, certain municipalities receive approximately 1 million euros per capita. By 2022, SNAI had allocated roughly 306 million euros to 701 Italian municipalities, with tourism being a focal point in many of the projects. This year aligns with the latest data available on Italian tourist accommodation.

Data

All variables in this analysis are at the municipal level, with the outcome variable being tourism nights spent per municipality from 2014 to 2022. This variable is assessed in both aggregate and disaggregated forms, considering domestic and foreign presences. Spatial heterogeneity is explored through NUTS1 classification and Italian Law n. 77 of 17 July 2020, which categorizes municipalities based on their predominant tourism category.

To account for potential confounding factors, all models incorporate a comprehensive covariate vector, spanning economic, social, and environmental dimensions. Descriptive statistics consider mean values over the considered period, distinguishing between eligible and treated units, eligible and not treated, and ineligible and never-treated units. These detailed statistical breakdowns ensure a robust control for diverse factors influencing tourism outcomes at the municipal level.

Empirical approach

The study evaluates the SNAI policy impact using a quasi-experimental approach. The SNAI, became operational after two or three years from its formal outset (depending on the institutional capacity of the territories to carry out all preliminary bureaucratic steps), aims to revitalize remote areas through financial interventions. Non-parametric methods estimate average treatment effects, with robustness checks incorporating parametric variations. Sensitivity analyses involve sample subclasses and a placebo-treated sample of eligible but not treated municipalities (not funded), expecting no significance.

The parallel trends assumption is verified pre-treatment, ensuring constant outcome trends for control and treatment groups. The event-study method assesses outcomes with lags and leads. The difference-in-differences (DID) method identifies and quantifies causal effects post-SNAI. The routine by Callaway and Sant'Anna (2021) measures average treatment effects, accommodating non-parallel dynamics in the large and geographically varied sample.

Transitioning from non-parametric to parametric estimators, a two-way fixed-effect model is applied. The model features treatment effect interaction over time, covariates, and unit fixed-effects. This ensures robustness and examines potential non-linearities and omitted factors.

FINDINGS

Evaluating the SNAI policy's impact on Italian municipalities' tourism outcomes involves first an event study framework. During the pre-treatment phase, coefficients show no discernible trends, ensuring parallel trends. Post-treatment coefficients display positive fluctuations, notably from the second year onward, with significant impacts on domestic and overall nights spent, while foreign nights spent show fluctuations.

Baseline estimations with DID confirm the SNAI's positive impact, resulting in a substantial and statistically significant increase in overall tourist nights spent. Domestic nights spent also register a significant increase, while foreign nights spent show no significant impact.

Exploring heterogeneities reveals positive impacts in mountainous and cultural municipalities, whereas hilly areas witness a reduction in domestic nights spent. Further analysis using Law n. 991 of 1952 classifications reveals positive impacts in 'totally mountainous' municipalities.

Examining impacts by NUTS1 macro-region uncovers substantial geographical variations. Northern regions experience impacts on foreign tourism, while the South and Islands predominantly see a pronounced positive influence on domestic tourism. Central Italy exhibits no statistically significant coefficients, emphasizing regional disparities in SNAI's effects.

Robustness checks

A series of robustness checks are conducted to validate the findings. Employing the TWFE estimator produces results consistent with the baseline model. The treatment dummy reveals a positive and significant impact on overall tourist nights spent, approximately 7 pp, and a 5 pp positive impact on domestic nights spent. Foreign nights spent remain statistically insignificant.

In the second robustness check, we refine the sample by population size. Estimates consistently align with the baseline results. The positive and significant impact persists for overall and domestic nights spent, around 6 pp and 4 pp, respectively. No significant effects are observed for foreign nights spent.

The final robustness check introduces a placebo test using municipalities that did not receive funding as fake treated units. As expected, no significant effects are identified in these units, affirming the credibility of the study's overall findings. The absence of significance in the placebo test strengthens the argument that the observed effects are directly attributable to the policy rather than unconsidered factors.

CONCLUSIONS AND IMPLICATIONS FOR POLICY

The study offers insights a decade post-policy outset. Despite a growing literature on SNAI, our work pioneers an evidence-based approach to comprehensively assess its effects on domestic and foreign tourism. The policy proves effective in elevating overall tourist nights spent by approximately 6 percentage points, aligning with its goal of rejuvenating economically challenged regions. Significantly, SNAI excels in promoting domestic tourism, vital amid the challenges of the COVID-19 era (Gyimóthy et al., 2022). However, it lacks substantial impact on foreign tourist nights spent, possibly due to insufficient technological innovation and investment (García-Gómez et al., 2023). Regional disparities are profound, with northern regions benefiting more from foreign tourism, while the south and islands experience a surge in domestic tourism. These divergences necessitate

tailored policy adjustments based on distinct regional features. Mountainous municipalities exhibit positive impacts, overcoming geographical challenges, showcasing the success of place-based policies in preventing a 'tourism staple trap' (Schmallegger & Carson, 2010). Policymakers should heed these insights, recognizing the dominance of domestic tourism and devising sustainable strategies post-pandemic.

While promising, results are preliminary, given the policy's recent implementation. Future investigations should consider evolving dynamics and heightened transfers in subsequent policy cycles. Policymakers must scrutinize regional disparities and ensure congruence with initial objectives. A strategic reassessment is urged to enhance treated areas' appeal to international visitors. Despite limitations, the study provides valuable guidance for shaping effective, resilient tourism policies.

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