This study investigates the potential impact of international tourists on Italy's gender wage gap. Although it is often acknowledged that tourism plays a significant role in regional development, job creation, and local economic growth, its distributive impacts within labor markets have received far less attention. Specifically, the impact of tourism demand shocks on gender wage disparities in local economies is little understood. Changes in tourism intensity may have significant effects on gender-based wage inequality because the tourism and hospitality industries employ a disproportionately high percentage of women and are distinguished by particular occupational structures, wage-setting mechanisms, and levels of informality. By examining the effect of tourists' inflows on the gender wage difference across Italian provinces over the period 2009-2016, this study offers evidence on this matter.

Theoretically, the relationship between gender wage discrepancy and tourism is ambiguous. On the one hand, increased tourism might lead to a greater need for workers in service-intensive industries where female employment shares are generally high, like lodging, food services, retail, and personal services. Women's labor market attachment, outside options, and wage discrimination may all be strengthened if tourism-induced labor demand disproportionately increases work opportunities for women. However, part-time contracts, seasonality and occupational segregation are common characteristics of jobs associated to tourism. Increased tourist arrivals may exacerbate gender wage gaps if women are overrepresented in lower-paying roles in tourism-related industries. Moreover, tourism shocks may alter the overall sectoral composition of local economies, potentially crowding out higher-paying tradable industries and thereby affecting wage structures in ways that differentially impact men and women.

We create a panel dataset that combines province-level measurements of tourists' inflows, labor market results broken down by gender and education in order to experimentally evaluate these conflicting causes. The gender wage gap, which is the difference (or ratio) between average male and female wages in the formal private sector, is our primary outcome variable at the province-year level. In order to capture both the vast and intensive edges of tourism demand, official figures on arrivals and overnight stays are used to measure tourist inflows. Italy's notable geographic variations in cultural, coastal, and urban tourist specialization are reflected in the analysis, which takes use of significant cross-province heterogeneity in tourism exposure.

A key empirical challenge in estimating the causal impact of tourist inflows on the gender wage gap is endogeneity. Provinces experiencing improvements in labor market conditions or reductions in gender wage inequality may attract more tourists due to improved services, higher productivity, or better amenities. Additionally, unobserved local shocks—such as infrastructure investments, changes in local governance, or sectoral transformations—may simultaneously influence both tourism and wage structures. To address these concerns, we implement an instrumental variable (IV)

strategy based on a shift-share (Bartik-type) instrument. The instrument combines historical province-level shares of tourists by country of origin with time-varying aggregate tourist flows from those origin areas. The identifying assumption is that historical tourists settlement patterns determine local exposure to foreign tourist demand, while aggregate changes in tourist flows by origin are driven by external shocks unrelated to contemporaneous province-specific labor market conditions.

The shift-share design builds on the idea that historical patterns of tourist presence shape future tourism flows through persistent destination–origin linkages, reputation effects, and repeat visitation dynamics. Provinces that historically hosted larger shares of tourists from specific origin areas are more exposed to subsequent fluctuations in travel demand from those same areas. These persistent relationships may arise from accumulated destination knowledge, word-of-mouth transmission, cultural familiarity, and established tourism infrastructure tailored to particular foreign markets.

By interacting predetermined province-level shares of tourists by origin—measured in a pre-determined base period—with aggregate changes in tourist flows from each origin area over time, we construct a Bartik-type instrument that generates plausibly exogenous variation in local tourist inflows. The identifying variation comes from external shocks affecting travel demand in origin areas (such as macroeconomic conditions, exchange rate movements, or geopolitical events), which are assumed to be orthogonal to contemporaneous province-specific labor market shocks in Italy.

The validity of this strategy relies on two key assumptions. First, historical tourist settlement patterns must be predetermined with respect to current gender wage dynamics and not reflect anticipatory adjustments to future labor market conditions. Second, aggregate tourist shocks from origin areas must not be directly correlated with unobserved determinants of province-level gender wage differentials. To assess the credibility of these assumptions, we implement a range of robustness checks. These include reporting first-stage F-statistics to evaluate instrument strength, using alternative base years to construct historical tourist shares, excluding major tourism hubs to test sensitivity to outliers, and conducting placebo exercises in pre-treatment periods to verify the absence of spurious correlations.

The empirical specification includes province fixed effects and year fixed effects to control for time-invariant local characteristics and common macroeconomic shocks, respectively. Province fixed effects account for persistent differences in industrial composition, cultural norms, and institutional environments that may influence gender wage disparities. Year fixed effects absorb national trends such as macroeconomic cycles, labor market reforms, and country-wide shocks, including the COVID-19 pandemic. Standard errors are clustered at the province level to account for serial correlation and the province-level variation of the instrument and endogenous regressor. In additional specifications, we allow for province-specific linear time trends and include

controls for local GDP, employment rates, demographic structure, and sectoral composition.

We further explore heterogeneity along several dimensions. First, we examine whether effects differ between northern and southern provinces, reflecting structural economic disparities across Italian regions. Second, we assess whether the impact varies before and after the COVID-19 pandemic, given the severe contraction in tourism flows during 2020 and the subsequent recovery. These analyses provide insights into how tourism-induced labor demand shocks interact with local economic structures to shape gender wage inequality.

Our results add to several lines of literature. First, they indicate significant distributional effects within labor markets, expanding the scope of research on the economic effects of tourism beyond overall growth and employment outcomes. Second, by discovering a new demand-side factor that operates through sectoral composition and local labor demand shocks, they add to the body of knowledge on gender pay inequality. Third, the study demonstrates the applicability of shift-share instruments to labor market dynamics driven by tourism, adding to the expanding body of work that uses them to detect causal impacts in regional economics.