

Peer Review

Review of: "Testing Baumol's Cost Disease in Tourism: Productivity, Prices, and Labour Costs in Selected EU Countries Post-COVID"

Italo Arbulú¹

1. Universitat de les Illes Balears, Spain

Thank you for the opportunity to review this manuscript. The study addresses an important topic by examining **Baumol's Cost Disease (BCD) in the tourism sector**, with a particular focus on **productivity, prices, and labour costs** in selected EU countries post-COVID. The research question is relevant, and the econometric methodology appears sound. However, **several critical issues** limit the robustness and generalisability of the findings. In its current form, the manuscript is **not suitable for publication**. Below, I outline the **main concerns** and suggestions for improvement.

1. Limitations of the Sample and Tourism Classification

The manuscript makes **strong claims regarding BCD**, yet it relies on a **highly limited sample**. Moreover, the classification of **tourism activities** is **not fully appropriate**. The study focuses primarily on **food services and tour guiding**, which are undoubtedly **labour-intensive**, but it **generalises these findings to the entire tourism sector**. This is problematic because one of the most significant components of tourism—**accommodation services**—is highly **capital-intensive** rather than **labour-intensive**. If the study intends to focus on **specific labour-intensive tourism activities**, this should be **explicitly stated**, and the analysis should not generalise findings to the entire sector.

2. Lack of Differentiation Between Tourism Types

Another significant limitation is that the **analysis does not distinguish between different types of tourism**. The implications of BCD are likely to be **more relevant for urban tourism**, where **human interaction and service provision** are central to the experience. In contrast, for **nature-based tourism**,

where there is less direct human interaction, the BCD framework may be less applicable. A more nuanced approach that accounts for different tourism segments would strengthen the validity of the findings.

3. Inconsistencies in the Interpretation of Productivity and Technology Effects

The manuscript discusses technology and productivity improvements in tourism but dismisses their significance too quickly. The authors state that technological advances in tourism have had limited effects on productivity, reinforcing low productivity growth and increasing labour costs. However, this contradicts their own empirical results. The interaction dummy that multiplies productivity suggests otherwise, revealing a weaker than expected impact of BCD on tourism. This contradiction needs to be addressed, and a more balanced discussion of technology's role in tourism productivity is necessary.

4. Country Selection Issues

In the introduction, the authors highlight UK, Germany, France, and Luxembourg as examples of service-dominated economies. However, UK and Germany are not included in the dataset, which weakens the justification for their mention. Furthermore, the selection of tourism-specialised countries is limited. While Greece, France, and Italy are included, Spain and Portugal—two of the most tourism-dependent economies in the EU—are missing. The authors should justify the exclusion of these key tourism economies and discuss how this limitation affects the generalisability of their findings.

5. Issues with the Econometric Framework

The econometric methodology is generally well described. However, the study claims to follow a two-stage analysis, yet the results of the first stage are not presented. Furthermore, it remains unclear how the two-stage process adds value to the overall analysis. If a two-stage approach is necessary, the authors should provide an explicit rationale for its use and include the first-stage results in an appendix.

6. Error in Theoretical Framework (Section 3)

In Section 3, the discussion on inflation differentials contains a formulaic error that must be corrected. A precise reformulation of this expression is needed to ensure theoretical clarity.

7. Weak Explanation of Key Results

The explanation of the results, particularly regarding **the interaction dummy**, is unconvincing. The authors use phrases such as:

"While the model does not explicitly measure wages, the weaker link between productivity and prices in tourism highlights how labour-intensive sectors struggle to manage wage-driven cost pressures, a central feature of BCDH."

This interpretation appears **forced** and does not fully align with the model's estimated coefficients. The explanation should be **more directly tied to the empirical findings** rather than relying on broad theoretical assertions.

8. Overstated Conclusion Relative to the Evidence

Despite the **many limitations** outlined above, the **conclusion makes a bold claim**:

"This study provides robust empirical evidence supporting BCDH in the context of tourism, with important implications for understanding sectoral dynamics, wage-price relationships, and the impact of external shocks like the COVID-19 pandemic."

Given the **limited dataset, questionable proxies, and classification issues**, this statement **overstates the strength of the findings**. A more **cautious and nuanced** conclusion is necessary, acknowledging the **study's limitations** and the **need for further research**.

Final Recommendation

At this stage, the manuscript **does not provide sufficiently robust evidence** to support its claims regarding **Baumol's Cost Disease in tourism**. The **small sample, inadequate tourism classification, omission of key tourism economies, contradictions in the results, and weaknesses in interpretation** significantly limit the study's contribution.

I recommend **substantial revisions** before reconsideration for publication. Specifically, the authors should:

- **Clarify the scope of the study**, ensuring that generalisations about tourism are justified.
- **Differentiate between tourism types**, particularly urban vs. nature-based tourism.
- **Reconcile the contradiction** between their theoretical claims and empirical findings.
- **Justify the selection of countries** and acknowledge the limitations this imposes.

- **Present the missing first-stage results** and explain their relevance.
- **Revise the theoretical framework** to correct formulaic errors.
- **Provide a more rigorous and evidence-based discussion** of key findings.
- **Moderate their conclusions**, aligning them with the actual strength of the results.

If these **substantial revisions** are made, the manuscript **may** offer a meaningful contribution to the literature on **BCD and tourism**. However, without addressing these critical issues, the study remains **unsuitable for publication in its current form**.

Declarations

Potential competing interests: No potential competing interests to declare.