

## Investigaciones de Historia Económica -Economic History Research



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Growth or stagnation? Well-being during the Spanish industrialization in Alcoy (1860-1910)

¿Crecimiento o estancamiento? Bienestar durante la industrialización española en Alcoy (1860-1910)

Daniel Gallardo-Albarrán\* (10)

Wageningen University

José Joaquín García-Gómez 📵

Universidad de Almería

## ANALYTICAL SUMMARY

The early stages of the industrial revolution rapidly transformed the economic, demographic and social landscape of the countries that embraced its innovations and dynamism. This process had mixed consequences for citizens' living standards, in part, due to the public health challenges it created in urban areas. The Spanish case during the 19th century is not an exception in this regard, since increases in income per capita were by low life expectancy levels for decades.

Our article examines the effects of industrialization on overall well-being in the Spanish context by considering the city of Alcoy, a classic industrial town during Spanish economic modernization. We provide a three-fold contribution to the literature. First, we analyse historical well-being using a consumption equivalent measure of well-being drawing on state-of-the-art techniques from welfare economics. This provides an unexplored view of well-being during the Spanish industrialization merging information on real wages, life expectancy and inequality using an expected utility framework. Second, we put together new quantitative data of the sectoral structure of the labour force to construct a new real wage index, disaggregated by gender, that reflects the economic structure of the city, thus improving on earlier studies considering this municipality. Third, we examine the experience of a city in Spain that closely resembled other industrial areas of North-Western Europe, thus providing a relevant Spanish benchmark for international comparisons on the consequences of industrialization.

We calculate welfare levels aggregating utility flows derived from changes in real wages, life expectancy and inequality for various benchmarks between 1860 and 1910. Our analyses present three main findings. First, we find that aggregate male welfare rose by 40 percentage points, and that most of this improvement took place before 1877. These gains were not equally distributed, since male workers in agriculture experienced long-term stagnation, while the well-being of industrial and service labourers rose substantially. We provide tentative well-being calculations for female workers showing that their welfare living standards did not stagnate during the last part of the 19th century. Second, our results point to substantially different welfare trajectories among workers. Whereas agricultural workers did not see increases in living standards during the period 1860-1910, the well-being of industrial and service labourers rose by 80 and almost 70 per cent, respectively. Our last finding shows that most welfare improvements disappear when we replace life expectancy at birth in our indicator for life expectancy at age 15. The calculations imply that excluding the youngest part of the population from the calculations during the analysed period underestimates overall welfare growth by more than 50 per cent.

The approach we have taken in this article can be extended in future research. For instance, we have measured changes in health without considering the impact of morbidity on workers' lives. Also, the welfare impact of inequality could be conceptualized more comprehensively by considering other mechanisms. In any case, we view our exercise as an important first step to understand historical well-being in Spain with an approach that has received little attention in this context until now.

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<sup>\*</sup> Corresponding author: Email: daniel.gallardoalbarran@wur.nl (Daniel Gallardo-Albarrán).