

From bondage to the free labor market: living standards in the Caribbean for a century after emancipation

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Findings and conclusive arguments presented in this extended abstract are still work in progress. Do not cite without the authors' permission.

1. Introduction

The historical empirical evidence of how workers' living standards developed in former slave-societies is surprisingly meager. This paper contributes to filling this research gap by providing unique empirical estimates of living standards for 13 former British slave-colonies in the Caribbean that cover a 100 years period post emancipation, between ca. 1838-1945. We study living standards for a range of different workers' occupational titles. We employ the most up-to-date method for estimating historical real wages quantitatively, relying on the welfare ratios methodology. Our findings suggest that there were large differences in living standards across occupations in the Caribbean with wages for some occupations remaining well below subsistence-levels for a family, for decades after the abolition of slavery. Most importantly, our results also show that the major institutional change of slavery's abolition may have not been a uniformly emancipatory condition for all formerly enslaved individuals. Living standards after emancipation varied greatly by geography, with the main determining factors for an improvement in living standards being factor endowments, i.e. population densities and the availability of an unexploited land frontier.

2. Theoretical Background

Two core theoretical perspectives inform this study. First, the institutionalist perspective—when it comes to colonial institutions in particular prominently associated with Daron Acemoglu, and James Robinson—argues that colonial legacies often leave behind extractive structures. Even after the formal abolition of slavery, entrenched elites and unfavorable labor laws might keep real wages low, perpetuating poverty even after the abolition of slavery. Second, the factor endowments hypothesis, advanced by Stanley Engerman and Kenneth Sokoloff, contends that societies with ample land or other untapped resources should, in principle, allow ex-slaves to enjoy greater bargaining power, which could translate into improvements of their living conditions. Vice versa, high population densities, and land constraints, would have limited formerly enslaved individuals' opportunities for self-provisioning, potentially trapping them in low-paying jobs. Parallel scholarship on slavery's long-term impacts further underscores that legal emancipation does not necessarily guarantee robust improvements in living standards, especially if wage labor remains undervalued or access to resources is restricted.

3. Previous Research

Over time, research on living standards has expanded into global comparisons—exploring the “Great Divergence” and cross-regional inequality—leading to a wealth of empirical work on real wages in Europe, Asia, Africa, and the Americas (see indicatively Allen 2001; Zegarra 2022; Broadberry,

Custodis, and Gupta 2015; Liu 2024; Frankema and van Waijenburg 2012; Rönnbäck 2016; Geloso 2019; Abad, Davies, and van Zanden 2012; Bleynat, Challú, and Segal 2021; Zegarra 2023). Yet the Caribbean, a region historically central to plantation agriculture and coerced labor, has remained oddly neglected. One reason for this neglect is that many Caribbean economies were (and are) comparatively small in absolute terms, compared to several of the major economies in the world. Analytically, however, the Caribbean economies are of immense value for studying the role of colonial institutions in general, and the key institution of slavery in particular – including the fundamental institutional change of emancipation from slavery. We will in this study focus in particular upon the British Caribbean, including islands as well as some smaller colonies on the American mainland (e.g. Honduras or Guyana). This is an ideal setting for studying this topic, as these islands all were ruled by the same institutions imposed by the British Empire (including the emancipation from slavery in 1834), but differed in terms of the local institutions and in terms of their factor endowments. Existing studies on this region either focus on nominal wages without linking them to cost-of-living indicators or offer partial snapshots that lack continuity over long periods. The main reason has been a lack of consistent wage-and-price data. This is the gap that we aspire to fill with this study.

4. Data and Methods

4.1 Archival Sources and Occupational Wages

This paper draws on the British Colonial “*Blue Books*” of statistics, an invaluable yet underexploited repository detailing wages for numerous occupations—ranging from agricultural laborers and domestic servants to construction workers and tradesmen and clerks—and prices for basic consumer goods. The same source has previously been used for similar research for other parts of the British Empire, such as West Africa.(Frankema and van Waijenburg 2012) Although incomplete for some territories and years in the Caribbean, these records allow the construction of extended time series. Multiple wage-contract types (daily, monthly, yearly) are converted to an annual rate, following the same methodologically as has been applied in previous research. By documenting wages across various skill levels, this approach captures different segments of the labor force in post-emancipation societies.

4.2 Calculating Welfare Ratios

Real wages are estimated via welfare ratios, a method widely used in economic history(de Zwart 2023; Abad and Gary 2023). The numerator is a worker’s annual wage, and the denominator is the cost of a standardized basket of subsistence goods (e.g., staple foods and minimal household necessities) for supporting a family of four people. Ratios above one imply that a single wage can support the whole family at subsistence or better, whereas ratios below one indicate insufficient purchasing power to do so.

To avoid over-reliance on a single basket type, the study uses three methods: (1) a regionally adapted, stable “bare bones” basket reflecting local diets, (2) a linear programming approach that minimizes cost while meeting nutritional requirements for a flexible basket of locally available goods, and (3) actual institutional diets derived from historical records from prisons, asylums, and hospitals. Cross-verifying results across these methods helps address concerns about historically diverse consumption patterns.

4.3 Commodity Prices

Across the whole period, price information for 137 original products are recorded that correspond to 29 standardized unique commodities. The price availability varies across commodities, however, and not all 29 standardized commodities are recorded consistently across time and space. Some important commodities of everyday use and consumption (like pork, beef, sugar, bread, wheat flour, rice etc.) are

consistently recorded across time and across space (colonies). There are some commodities, however, that despite being historically important for household consumption, went unrecorded in some Blue Books. For commodities not consistently reported, particularly items like fish and vegetables, “proxy-prices” are constructed by leveraging observed price ratios with commonly recorded staples such as pork or sugar. For example, if fish prices are unrecorded in a given year, the fish-to-pork ratio from comparable years is applied to local pork prices. This method ensures that essential foods remain in the cost-of-living calculation, reducing potential biases in estimating welfare levels.

5. Preliminary Findings

Figure 1. Food cost based from different methods; linear programming (LP) and institutional diets

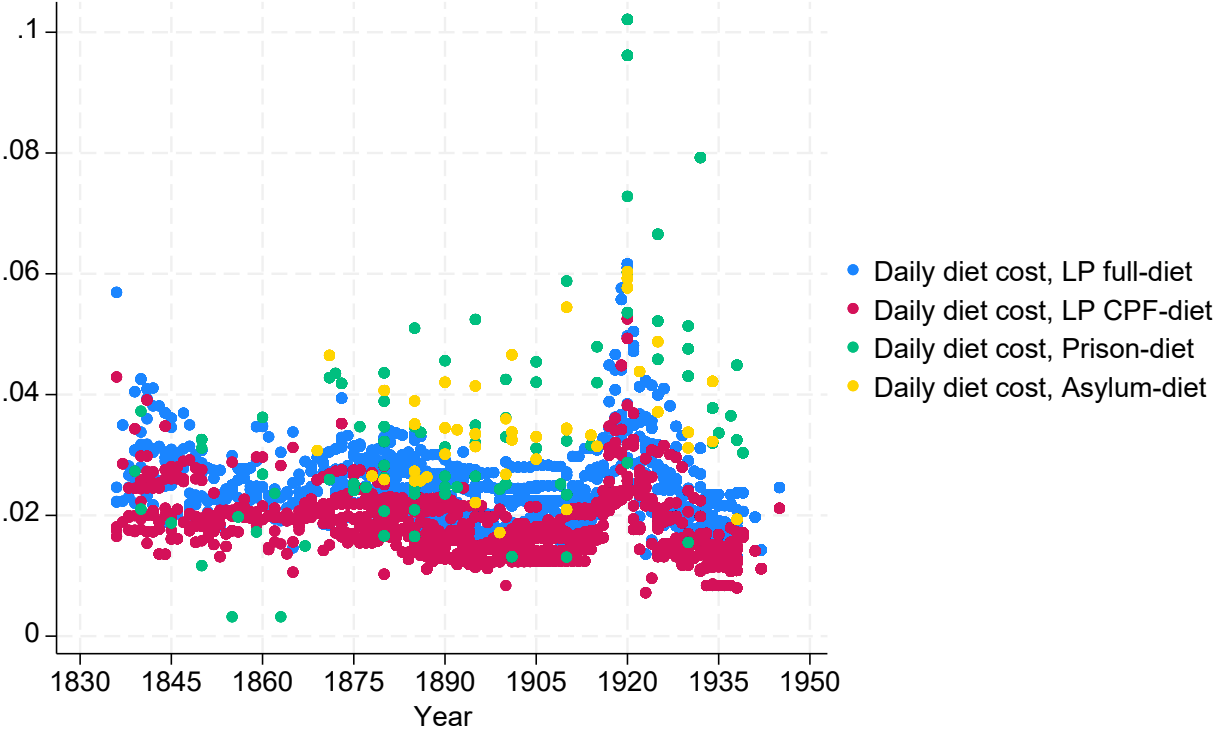


Figure 2: Welfare ratios for agricultural workers in the Caribbean

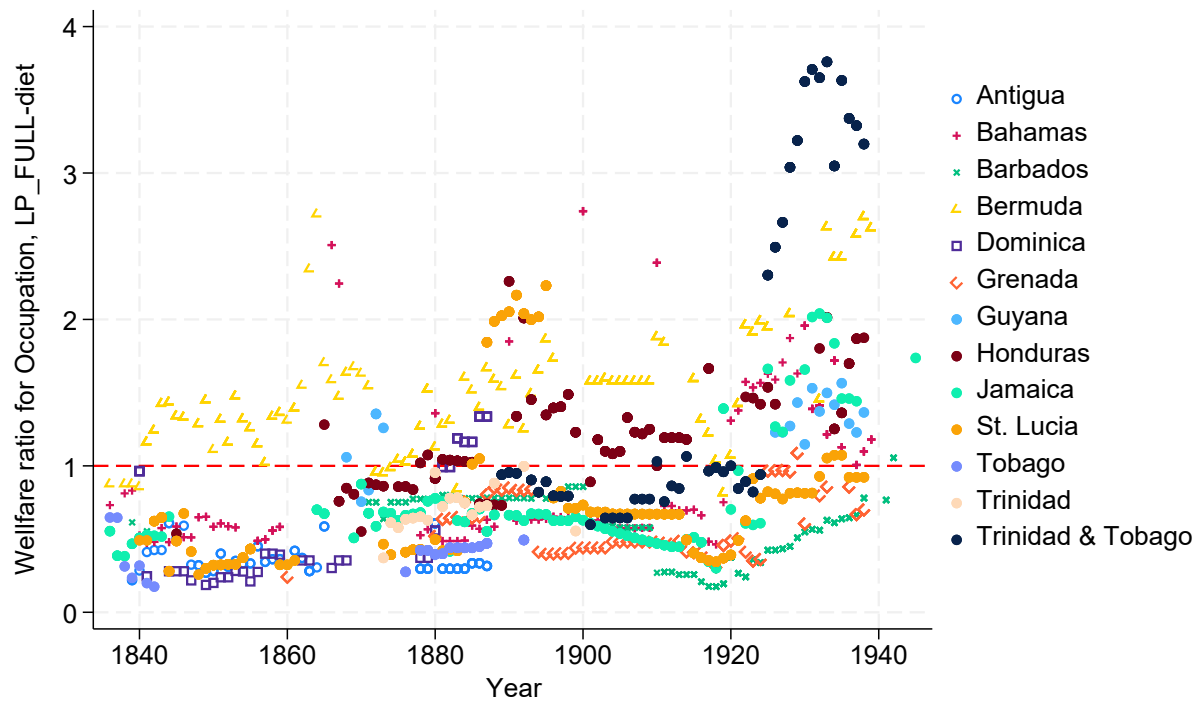


Figure 3: Welfare ratios for domestic servants in the Caribbean

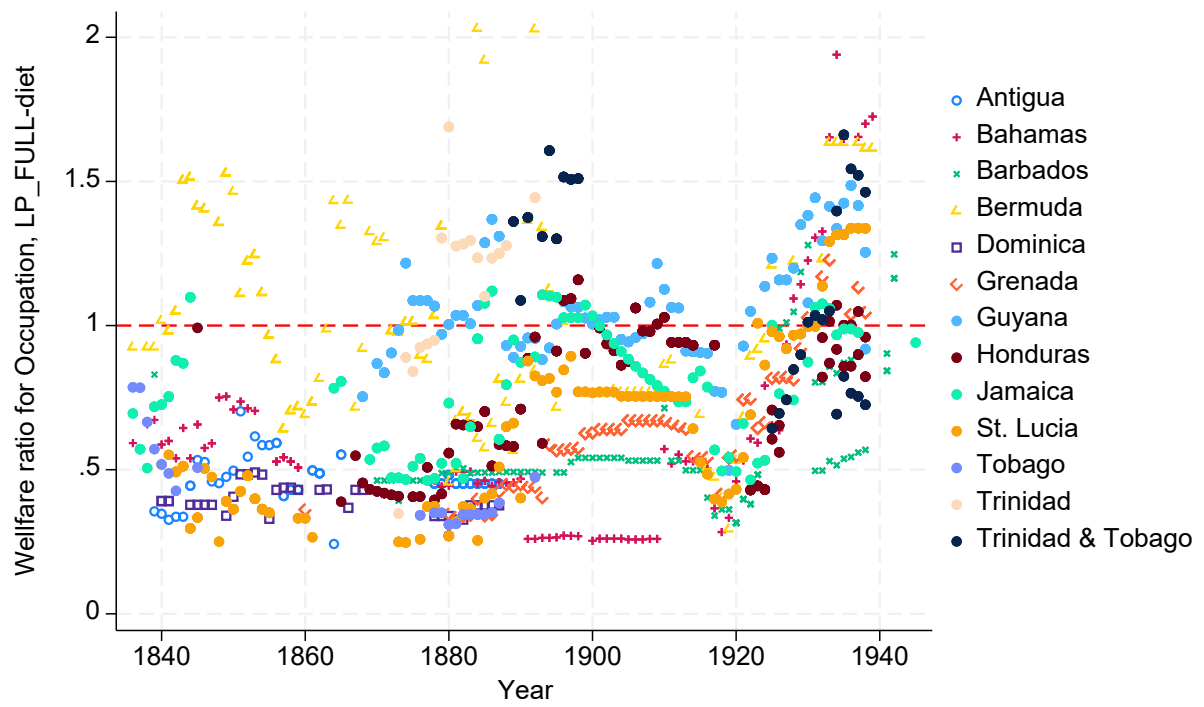


Figure 4: Welfare ratios for construction laborer/tradesman in the Caribbean

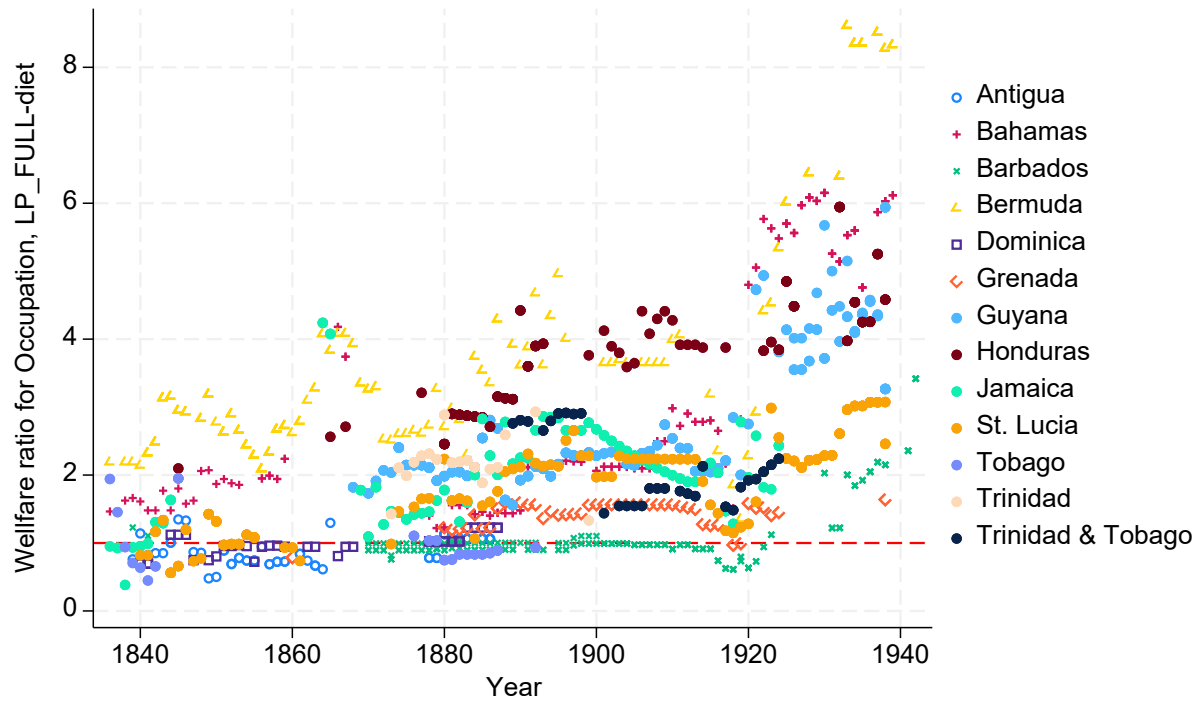
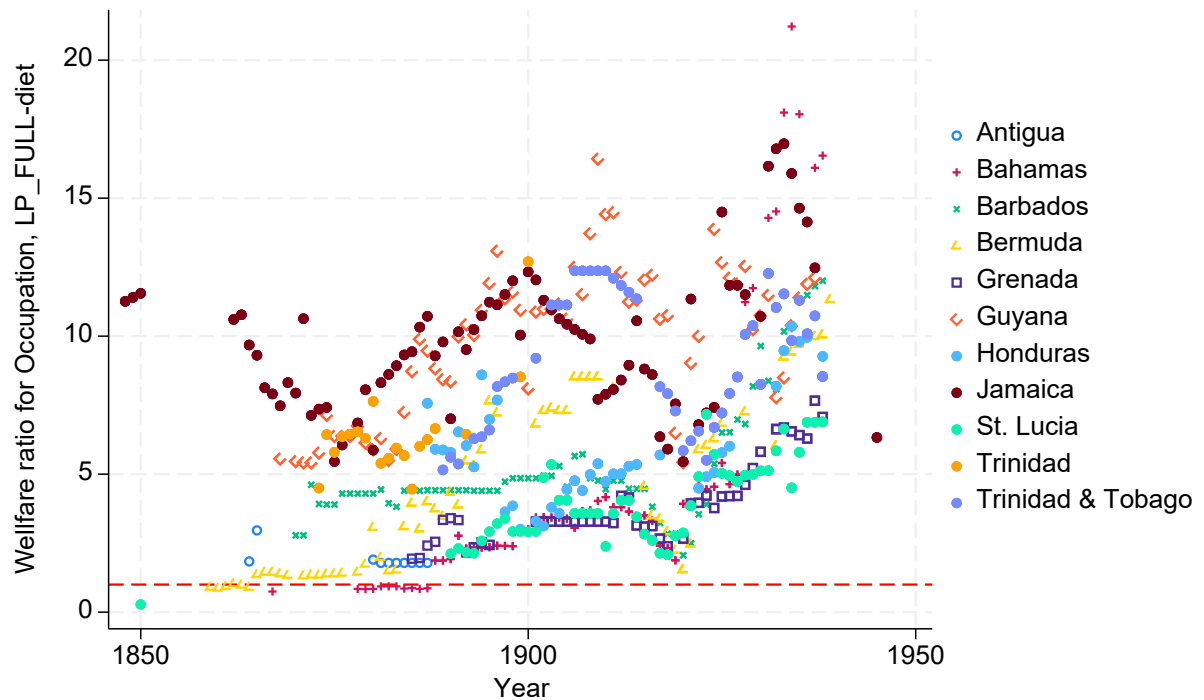


Figure 5: Welfare ratios for post office clerks in the Caribbean



The results reveal marked divergences in living standards across colonies and occupations. Agricultural laborers in densely populated or resource-poor settings frequently found their welfare ratios at or below subsistence, suggesting that emancipation alone did not yield major upward mobility. Where plantation elites maintained land control and political influence, ex-slaves often encountered limited options beyond low-paid farmwork, reinforcing their economic vulnerability. By contrast, in territories with underutilized land or lower population pressures, real wages surpassed minimal subsistence more consistently, offering ex-slave populations a path to improvements of their material living standards. These patterns closely align with the factor endowments hypothesis, confirming that access to arable land or alternative livelihoods can spur higher living standards. Some colonies did witness gradual but meaningful gains, while others saw prolonged economic stagnation for most of the labor force for decades after emancipation.

The evidence also suggests a most considerable skill premium; craftsmen and – most importantly – clerks all received a wage many times higher than the wage paid to (unskilled) agricultural or domestic workers. Those people in the Caribbean colonies that were able to acquire an education were thus able to enjoy comparatively high material living standards. Future research will look into if/how this skill premium was associated with the investments made in the educational system in these colonies.

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