A Review of “Globalisation, the Terms of Trade, and Argentina’s Expansion in the Long Nineteenth Century” by Francis (2017)

Reviewer 2

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Disclaimer

> I am wiser than this person; for it is likely that neither of us knows anything fine and good, but he thinks he knows something when he does not know it, whereas I, just as I do not know, do not think I know, either. I seem, then, to be wiser than him in this small way, at least: that what I do not know, I do not think I know, either.
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> Plato, *The Apology of Socrates*, 21d

> To err is human. All human knowledge is fallible and therefore uncertain. It follows that we must distinguish sharply between truth and certainty. That to err is human means not only that we must constantly struggle against error, but also that, even when we have taken the greatest care, we cannot be completely certain that we have not made a mistake.
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> Karl Popper, 'Knowledge and the Shaping of Reality'

Overview

Citation: Francis, J. A. (2017). Globalisation, the Terms of Trade, and Argentina's Expansion in the Long Nineteenth Century. *Journal of Latin American Studies*, Vol. 49, No. 1, pp. 1–30.

Abstract Summary: This article resolves the paradox of Argentina's export-led expansion despite a lack of price incentives by presenting a new estimate of Argentina's terms of trade, which suggests they improved by at least 2,000 per cent from the 1780s to the early twentieth century, providing considerable price incentives for growth. The expansion was thus less a result of internal factors and more a response to globalisation.

Key Methodology: Quantitative analysis using a new "part-proxy" estimate of Argentina's net barter terms of trade (NBTT), combining domestic wholesale prices for exports with proxy import prices from major trade partners, calculated using a chained geometric Laspeyres index.

Research Question: Why did Argentina experience a dramatic export-led expansion in the first half of the nineteenth century despite an apparent lack of price incentives (Halperin Donghi's paradox)?

Summary

Is It Credible?

Francis offers a compelling and methodologically grounded resolution to the "Halperin Donghi paradox," effectively overturning the long-standing view that Argentina's nineteenth-century expansion occurred without price incentives. The article achieves this not through narrative spin, but by identifying and correcting a fundamental measurement error in the existing historiography: the use of core country prices as proxies for peripheral terms of trade. By constructing a new index using domestic export prices, the author demonstrates that what looked like stagnation from London was actually a massive boom from the perspective of Buenos Aires. The central finding—a net barter terms-of-trade improvement of approximately 1,500 percent—is robust, derived from transparent data sources, and withstands scrutiny regarding the inevitable limitations of nineteenth-century economic data.

The credibility of the article rests on its handling of the "price convergence" phenomenon. Previous historians failed to account for the dramatic fall in trade costs (freight, insurance, and markups) that occurred between the colonial era and the late nineteenth century. The author argues convincingly that using European prices to estimate Argentine reality introduces a severe downward bias. By utilizing domestic wholesale prices for exports, the article captures the rapid convergence of local prices with international prices following the end of the Spanish trade monopoly. While the author relies on a "part-proxy" method for imports—using foreign export prices rather than Argentine import prices—this limitation actually strengthens the verdict. As the article notes, because trade costs also fell for imports, the "true" price of imported goods in Argentina likely fell faster than the foreign export prices used in the model. Consequently, the calculated 1,500 percent improvement is almost certainly a lower-bound estimate; the reality was likely even more favorable to the author's hypothesis.

However, a distinction must be drawn between the empirically derived "part-proxy" estimate of 1,500 percent and the adjusted figure of "at least 2,000 percent" highlighted in the abstract. The latter relies on a speculative adjustment based on the price differential of a single commodity—paper—in the 1780s to proxy for colonial trade costs. While the logic that colonial markups were high is historically sound, anchoring a quantitative adjustment of this magnitude on one data point introduces a margin of error not present in the primary index. Nevertheless, this is a minor grievance; whether the improvement was 1,500 percent or 2,000 percent, the historiographical implication is identical. The magnitude of the price incentive was enormous, rendering the "paradox" of expansion obsolete.

The supporting evidence regarding the consequences of this boom—specifically the deindustrialization of the Interior—is also credible, though subject to data coarseness. The comparison of textile occupations between the 1869 and 1914 censuses reveals a collapse in handicraft employment that aligns perfectly with the theory of Dutch Disease or "development of underdevelopment" driven by the terms-of-trade shock. Although the census categories are not perfectly identical, the sheer scale of the decline in absolute numbers, despite population growth, validates the argument.

Ultimately, this article represents a significant contribution to knowledge. It successfully shifts the explanatory weight for Argentina's expansion from internal institutional factors to external market forces driven by globalization. By exposing the flaw in using core-country data to measure peripheral economic reality, Francis not only solves a specific Argentine puzzle but also suggests a necessary revision for the economic history of Latin America as a whole. The article is rigorous, transparent about its limitations, and persuasive in its conclusions.

The Bottom Line

The article is highly credible. It resolves a major historical paradox by correcting a specific measurement error: the reliance on European prices to estimate Argentina's economic reality. By using domestic prices, the author proves that Argentina experienced a massive terms-of-trade boom—likely exceeding 1,500 percent—which provided clear incentives for its rapid nineteenth-century expansion. While some specific adjustments to the data are speculative, the core finding is robust and likely underestimates the true magnitude of the boom.

Specific Issues

Speculative adjustment of the primary finding: The author's claim that the terms of trade improved by "at least 2,000 percent" (p. 1) is an adjustment of the empirically calculated 1,500 percent figure. This adjustment relies on the assumption that the price gap between Argentina and the core narrowed from 100 percent in the 1780s to 30 percent in the 1900s (p. 14). The 100 percent baseline is derived from data for a single imported good—paper—which the author admits is the "only imported good for which there is currently sufficient data" (p. 14). While the qualitative argument for high colonial trade costs is strong, anchoring a quantitative adjustment of this magnitude on a single commodity introduces significant uncertainty. However, as the unadjusted 1,500 percent figure is sufficient to prove the central thesis, this does not undermine the article's validity.

Limitations of the import price proxy: The import price index (Pm) is constructed using the export price indices of Argentina's trade partners (FOB) rather than domestic import prices (CIF) (p. 13). This method fails to capture the reduction in insurance and freight costs for goods entering Argentina. The author acknowledges this as a "crude" measure (p. 29) but correctly identifies that this introduces a downward bias (p. 13). Because trade costs fell, actual import prices in Argentina would have dropped more steeply than the foreign export prices used in the index. Therefore, the article likely underestimates the improvement in the terms of trade, meaning the error works in favor of the author's conclusion. Relatedly, the weighting for this index for the 1780–1850 period relies on trade data from 1825 (p. 29), effectively projecting a post-independence trade structure onto the colonial era. While historically inexact, this is a necessary constraint given the lack of colonial data.

Data constraints in the export price index: The construction of the export price index (Px) involves several approximations due to data scarcity. For the period 1780–1822, the index relies 100 percent on the price of dry hides (p. 26). While the author notes that hides constituted over 90 percent of exports (p. 25), this single-good dependency limits the index's granularity in the early period. Furthermore, for the period prior to 1910, the price of live cattle is used as a proxy for chilled and frozen beef (p. 27). Additionally, the index combines different price metrics over time, splicing unit values (1779–96), wholesale prices (1810–1910), and official trade statistics (p. 24). Finally, the author uses a geometric Laspeyres index as a "shorthand" for a Fisher index without providing a robustness check (p. 25). These are standard issues in long-run historical statistics and are transparently documented.

Issues regarding presentation and secondary evidence: There are minor issues regarding the evidence for deindustrialization and early exchange rates. The comparison of textile workers between the 1869 and 1914 censuses relies on lists of occupations that are not identical; for example, "pelloneros" appear in 1869 but not 1914, while "cardadores de lana" appear in 1914 but not 1869 (p. 18). However, the decline in absolute numbers is so precipitous that this mismatch is unlikely to alter the trend. Regarding exchange rates, the author uses the silver content of the peso to estimate rates for 1780–1822 (p. 25), which assumes metallic parity held during a period of revolutionary instability. The author mitigates this by switching to market rates in 1816. Finally, the export volume data for 1810–70 is limited to Buenos Aires (p. 18), though this is a reasonable proxy given the port's dominance.

Future Research

Construction of a domestic import price series: The current "part-proxy" estimate relies on foreign export prices to approximate Argentine import costs. Future research should prioritize the collection of actual wholesale prices for imported goods (textiles, coal, iron) within Buenos Aires from newspapers, merchant account books, and customs records. Constructing a true domestic import price index (CIF) would allow for the precise calculation of the terms of trade without relying on the speculative adjustments currently required to account for freight and insurance drops.

Regional terms of trade analysis: The current study relies heavily on prices in Buenos Aires. Research should attempt to construct terms-of-trade indices for the Interior provinces (e.g., Córdoba, Tucumán) to empirically test the "development of underdevelopment" hypothesis. Comparing the relative price movements of locally produced textiles versus imported European goods in interior markets would provide definitive evidence regarding the timing and mechanism of the deindustrialization described in the article.

Real wage and welfare analysis: While the article establishes a massive price incentive for the export sector, it does not empirically demonstrate how this terms-of-trade boom translated into living standards. Future research should combine the new price indices with wage data to calculate real wages for rural and urban workers. This would determine whether the benefits of the "long boom" were widely shared through high wages or captured primarily by landholders and merchants.

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