

# AN EMPIRE LOST: SPANISH INDUSTRY AND THE EFFECT OF COLONIAL MARKETS AND TRADE ON INNOVATION

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**ABSTRACT.** I investigate the effect of trade on innovation direction using an historical experiment in Spain between 1878 and 1910. I provide causal evidence on how trade movements enhanced technical direction through several channels. First, as predicted by theory, I find that trade policies that forced Spanish colonies to buy cotton fabrics during the last decade of XIXth century encouraged cotton innovation. Second, the Spanish-American war and the unexpected loss of these captive markets forced textile industrialists to enter international markets. I show that this change towards more sophisticated fabrics pushed cotton innovation towards weaving. I show that changes on relative labor effective endowments explain this result. Moreover, I observe the direct adoption of these technologies with an increase on cotton looms after 1900. Finally, I document the presence of spillover effects. Due to knowledge diffusion effects I show that the increase on cotton innovation boosted other economic sectors' development. I find a positive increase on cotton textiles related technologies, but not on sectors related with non-cotton textiles.

**JEL CODES:** F15, F63, L16, N73, O24, O32

**KEYWORDS:** Colonialism, Directed Technical Change, Induce Innovation

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