

Accepted Manuscript

Industrial Output Fluctuations in Developing Countries: General Equilibrium Consequences of Agricultural Productivity Shocks

Iona Hyojung Lee

PII: S0014-2921(17)30218-0
DOI: [10.1016/j.eurocorev.2017.10.024](https://doi.org/10.1016/j.eurocorev.2017.10.024)
Reference: EER 3090

To appear in: *European Economic Review*

Received date: 23 September 2016
Accepted date: 8 October 2017

Please cite this article as: Iona Hyojung Lee, Industrial Output Fluctuations in Developing Countries: General Equilibrium Consequences of Agricultural Productivity Shocks, *European Economic Review* (2017), doi: [10.1016/j.eurocorev.2017.10.024](https://doi.org/10.1016/j.eurocorev.2017.10.024)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



Industrial Output Fluctuations in Developing Countries: General Equilibrium Consequences of Agricultural Productivity Shocks*

Iona Hyojung Lee[†]
Singapore Management University

Oct 1, 2017

Abstract

This paper shows that a negative shock to agricultural productivity may increase food prices, and labor and capital can move away from manufacturing into agriculture to meet the subsistence requirement for food. This effect depends on income levels and openness to trade. Using annual manufacturing data and rainfall shocks as the instrument for crop yields (proxy for agricultural productivity), I find that an exogenous decline in yield decreases manufacturing output as well as employment and capital investment in manufacturing. Overall, crop yield variation can explain up to 44% of industrial output fluctuations in developing countries (rainfall shocks cause 31% of the fluctuations). Lastly, this paper shows that such perverse phenomena, in which resources move toward the sector with declining productivity, can lead to a significant reduction in aggregate productivity.

JEL codes: F1, E32, O11; *Key words:* Economic Fluctuations, International Trade, Development, International Comparisons, Agriculture

1 Introduction

An important regularity in macroeconomic data is the frequent and large changes in developing country growth rates, compared to the relatively stable growth rates in developed countries (Lucas, 1988). Accordingly, many authors have focused on the negative relationship between aggregate output volatility, defined as the standard deviation of yearly output growth rates, and per capita income levels. The negative association between the

*I am very grateful to David Hummels for his continuous guidance and support. I would like to thank Chong Xiang, Justin Tobias, Thomas Sargent, Samuel Kortum, Phillip Abbott, Anson Soderbery, and Pao-Li Chang for valuable comments and discussions. The paper has also benefited from discussions with seminar participants at Singapore Management University, University of Copenhagen, Bank of Korea, Purdue University, the 2014 Spring Midwest International Trade Meeting, the 2015 World Congress of the Econometric Society, and the 2016 SMU-NUS Joint Trade Workshop. All errors are my own.

[†]Contact: School of Economics, Singapore Management University, 90 Stamford Road, Singapore 178903
Tel: +65 6808 7942. E-mail: hyojunglee@smu.edu.sg

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات