When Tenants Get Their Own Land: The Effect of Land Reform on Agricultural Output in Taiwan in 1953

Abstract

Introduction

The rapid economic transformation of economies in East Asian between 1960 and 1990 and China in the subsequent years have attracted many researchers’ attention. Many debates focus on the role of public policy in such a transformation, such as export-oriented trade policy and macroeconomy policy. However, only limited discussions have paid attention to the role of agricultural policy even though agriculture was the major activity of a large portion of the economies’ population. World Bank (1993) points out some characteristics in the HAPEs (high performing Asian economies) in the high growth period are high investment in agriculture and rural infrastructure and limited taxation of agriculture. Asian Development Bank (1997) mentions the strong agricultural production has built foundation for subsequent industrial development by serving functions of reducing poverty, stabilizing prices, and encouraging investment in education and non-agricultural economy. Joe Studwell (2013) argues that successful agricultural policy is the key factor of the rapid growth of Asian economies by comparing the development of Northeast Asia economies (postwar Japan followed by Korea and Taiwan) and Southeast Asia (Indonesia, Malaysia, the Philippines, and Thailand). Kay (2002) explores the agriculture’s contribution to industrialization by comparing East Asian countries (Korea and Taiwan) and Latin American countries. Among all the agricultural policies, land reform may be the most important one. By transforming the land ownership from wealthy landowners to poor farmers, the policy incentivized those farmers, raised agricultural production and savings, and hence provided an initial productive surplus for future industrial development (Studwell, 2013). Also, as Boyce et al. (2005) suggests, the relatively egalitarian distribution of wealth and income resulted from land reforms was probably the most important factor to East Asia’s economic miracle.

On the other hand, land reform itself has become prominent in the literature of agricultural economics and development economics since 1950s (Barlowe, 1953; De Janvry, 1981; Lipton, 2009; King, 2019). Researchers have investigated the economic effect of land reforms in different countries (Lippit, 2018; Jeon and Kim, 2000; Koo, 1968; Kawagoe, 1999). However, most past studies estimate the effects of land reform in East Asia based on country-level time series data, making their estimation vulnerable to omitted variable bias. On the contrary, some studies in other countries have utilized cross-region variation within a country to identify the effect of land reform (Besley and Burgess, 2000; Ghatak and Roy, 2007; Banerjee et al., 2002; Mendola and Simtowe, 2014; Adamopoulos and Restuccia, 2020). Following a similar pattern, this paper uses a continuous difference-in-differences method to identify the effect of the land reform in 1953 on agricultural output in Taiwan, utilizing different regions’ different amounts of tenant-cultivated area reduced by the land reform in 1953.

Some past studies have also used other kinds of data than country-level data to estimate the effect of land reform in Taiwan. Yeh (2012) uses a difference-in-difference approach to estimate the first phase of land reform in Taiwan in 1949 with the farm-level data in 1925-1927 and 1950-1951 and finds no efficiency improvement in 1950-1951 from 1925-1927. This paper differs from Yeh’s in two main points. First, Yeh estimates the effect of land reform in 1949, whose main goal was to reduce the rent burden on tenants, while this paper studies the effect of land reform in 1953, whose main goal was to transferring land ownership from wealthy landowners to poor tenants. Second, the interval between the two periods of comparison by Yeh may be too long for the two periods to be comparable. This paper’s main result only compares the data from 1952 and the data from a year between 1953 to 1956 to exclude the influence of other potential factors. Duan (2015) uses fixed effect model with panel data from 1950s to 1960s to estimate the effect of land redistribution on rice productivity and real capital accumulation by utilizing the variation of each region’s percentage of owner-cultivator in each year. However, even after controlling the regional fixed effect, the model may still suffer severely from the omitted variable bias since agriculture in Taiwan was under a significant change in the period. Also, the change in percentage of owner-cultivator in each region can hardly be exogenous. This paper uses only the sharp effect of land reform in 1953 and only data in a short period between 1952 to 1956 to minimize the endogenous problem. In addition, the paper does not only focus on the production of rice but also other crops to give a more comprehensive picture of how the land reform in 1953 affected the agricultural output in Taiwan.

History Background

Data & Methods

Results

Extension and Conclusion