

Title: Are Picked-up Losers Really Losers? : Evidence from Scrapping Policies in the Japanese Spinning Industry 1965-79

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Abstract:

Scrapping policy induces or forces firms to dismantle and dispose of “excessive” machines, and had been a typical policy tool for depressed or declining industries in postwar Japan. This paper examined the effects of this policy in Japanese spinning industry from 1965-79 using firm level data.

Since the 1950’s, several policy measures had imposed on the industry for controls on production facility use and other activities (Korenaga, 1999a, 1999b; Kiyota and Okazaki, 2010). Before and after the liberalization in 1970, scrapping policy was implemented three times, but under a different backgrounds and schemes respectively.

After clarifying features in the policy scheme, I firstly calculated productivity and (capital) profitability of the specified machine targeted by scrapping policy, by estimating production function with data of production stage. (Levinsohn and Petrin (2003) procedure was used.) Then, several forms of (dis)investment function were estimated to examine the direct effect on investment under policy implementation, and indirect effect on post-policy investment. The former effect crucially depended upon whether scrapping is compulsory or voluntary and the coverage of targeted machines. Compulsory scrapping distorted more a firm’s investment decision than voluntary one. Here, The Tobit models were estimated in the form of a saturated model with policy-implementation year dummies to measure treatment effect.

As for the latter effect, firms picked up by voluntary scrapping in a certain period were shown to be actually losers still investing less or disinvesting in the post-treatment period. One possible interpretation is that a firm’s participation to voluntary scrapping worked as its revelation of the expected long-term return on investment. Here, the different types of tests with the Average Treatment Effect model were also conducted.

Firm exits also had a certain role in cutting down the unprofitable machines. Distortions by another related policy (scrap-and-build constraint on investment) is also observed. As a result, this skillfully designed policy schemes was, as a whole, far from a welfare-enhancing one.

Keywords: Industrial Policy, Regulation, Scrapping, Textiles, Spinning Industry, Japan

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