Market Efficiency and Price Stabilization Policy in Interwar Osaka-Dojima Rice Exchange

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Abstract: We investigate the relationship between market efficiency of rice futures transaction in Osaka and the Japanese government intervention in rice distributions by directly buying and selling rice during the interwar period, from the middle 1910s to 1939, considering the context of "discretion versus rules." We use a time-varying VAR model to compare market efficiency and the government's actions over time. We found the two facts by featuring the time-varying nature of the market efficiency. First, the intervention with discretionary power disrupted the rice market and reduced market efficiency in the exchange. Second, the market efficiency improved in accordance with reduction in the government's discretionary power to operate the rice policy. When the government obtained the discretionary power to operate the policy regarding commodity market, the market efficiency often reduced. Conversely, even if the government implemented a large-scale intervention, the market efficiency improved when the government chose a systematic rule-like behavior following the law.

Keywords: Rice Futures Market; Market Efficiency; Time-Varying AR Model; Price Stabilization Policy.

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