

Variability of Farm Income and New Farm Safety Net Programs

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Summary

This report investigates farm income variability, and revenue insurance and NISA-type risk management savings accounts as new farm safety net programs in Japan. The analysis is based on Farm Economy Survey data for 2,854 farms, conducted by the MAFF over the 1995–1999 period.

First, the report shows that combining average annual farm income with Farm Income DI (diffusion index, defined as the percentage of farms whose farm income increased less the percentage of farms whose farm income decreased in the previous year), the influence of farm income variability on the farmhouse and rural economy can be evaluated appropriately.

Second, the report considers three types of revenue insurance models based on single-crop, combined rice and wheat and/or soybean, and whole-farm agricultural sales. Under these models, average damage ratios (equivalent to premium rates) are calculated for the 2000–2009 simulation period. The results show that rice revenue insurance and whole-farm revenue insurance present relatively low damage ratios.

Finally, the report examines the level of withdrawals from NISA-type savings accounts for the 2000–2009 period. Results show that certain farmer account balances dry up and withdrawals were not possible when required, even if higher contribution rates were applied, whereas other account balances accumulate year-on-year beyond farm needs.