



## Intisari

Banyak peneliti telah mengidentifikasi bahwa salah satu faktor utama pendorong risiko kredit sektor pertanian adalah faktor cuaca. Cuaca buruk dapat berdampak pada kinerja keuangan sistem perbankan, bahkan guncangan cuaca membuat kredit sektor pertanian jauh lebih berisiko dibanding sektor lain. Studi ini bertujuan untuk melihat apakah curah hujan berdampak pada risiko kredit sektor pertanian di Indonesia. Unit analisis dalam penelitian ini melibatkan data regional dari 32 provinsi di Indonesia selama periode 2009—2021. Dengan menerapkan metode panel dinamis *Generalized Method of Moment (GMM)*, peneliti membuktikan bahwa curah hujan berdampak pada risiko kredit sektor pertanian di Indonesia dengan pola hubungan nonlinier, yaitu menyerupai pola “berbentuk U”. Peningkatan curah hujan akan mengurangi risiko kredit sektor pertanian, tetapi pada suatu titik tertentu, peningkatan curah hujan justru akan meningkatkan risiko tersebut. Risiko cuaca menimbulkan tantangan baru bagi bank, bank sentral, regulator, dan pengawas perbankan. Bagaimanapun bank harus mengantisipasi risiko kredit sektor pertanian yang disebabkan oleh risiko cuaca serta membuat keputusan investasi yang tepat.

**Kata kunci:** curah hujan, risiko kredit, pertanian, nonlinier



## Abstract

Many researchers have identified weather as one of the main factors driving credit risk in the agricultural sector. Adverse weather conditions can have an impact on the financial performance of the banking system, with agricultural credit being significantly riskier compared to other sectors. This study aims to examine the impact of rainfall on credit risk in the agricultural sector of Indonesia. The analysis unit in this research involves regional data from 32 provinces in Indonesia spanning the period 2009-2021. By employing the dynamic panel method known as Generalized Method of Moments (GMM), the researchers provide evidence that rainfall has a non-linear relationship with credit risk in the agricultural sector of Indonesia, resembling a "U-shaped" pattern. An increase in rainfall reduces credit risk in the agricultural sector, but beyond a certain point, further increases in rainfall actually increase this risk. Weather-related risks pose new challenges for banks, central banks, regulators, and banking supervisors. Nonetheless, banks must anticipate credit risks in the agricultural sector arising from weather-related factors and make appropriate investment decisions.

**Keywords:** rainfall, credit risk, agriculture, non-linear.