

**KARAKTERISTIK INFLASI BERDASARKAN
MODEL SPILLOVER SPASIAL DI INDONESIA**

DISERTASI



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KARAKTERISTIK INFLASI BERDASARKAN MODEL SPILLOVER SPASIAL DI INDONESIA

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Abstrak

Penelitian ini menganalisis tentang derajat *spillover* (efek limpahan) inflasi, dampak *spillover* inflasi terhadap wilayah pengirim dan penerima inflasi di Indonesia, menemukan pola *spillover* inflasi dan faktor penentu inflasi non inti di Indonesia. Variabel penelitian dianalisis berdasarkan data sekunder dengan dua struktur data *time series* dan data panel yang bersumber dari publikasi BPS tahun 2018-2022. Penelitian ini menggunakan perangkat model VAR dengan KPPS *H-step ahead Error Variance Decomposition (FEVD)* Diebold-Yilmaz dan model regresi panel spasial ekonometrika.

Model VAR dengan KPPS *H- step ahead FEVD* Diebold-Yilmaz membuktikan derajat *spillover* inflasi di Indonesia yang tinggi dan berdampak positif. Hasil ini memberi indikasi bahwa *spillover* inflasi dapat meredam inflasi non inti jika faktor-faktor penyebabnya dapat diantisipasi dari awal. Pola *spillover* inflasi di Indonesia dijelaskan dengan nilai *Net directional spillovers* melalui visualisasi *connectedness network*. Total *Spillover Index* Inflasi di Indonesia untuk wilayah yang bertindak sebagai *transmitter* adalah wilayah Jawa, Sulawesi, Kalimantan dan Balinusra. Sedangkan wilayah Sumatra dan Mamapapa bertindak sebagai wilayah *recievers*.

Metode analisa ekonometrika spasial menghasilkan nilai koefisien *lag* spasial dan nilai *spasial autoregressive coefficient* yang signifikan, mengindikasikan bahwa dampak *spillover* inflasi bersifat *spread effect* dan positif bagi wilayah pengirim dan penerima inflasi. Metode analisa ekonometrika spasial menggunakan matrik pembobot *Double Power distance weight*, *gravity inspirations* $p=2$ dengan hasil terbaik menggunakan model SAR dengan FEM dan AIC terkecil. Nilai ini membuktikan bahwa Pendapatan Asli Daerah (PAD), pengeluaran pemerintah, kinerja institusi, konsumsi energi, dan infrastruktur merupakan faktor penentu inflasi non inti yang signifikan di Indonesia.

Temuan penelitian memberikan rekomendasi kebijakan kepada pemerintah bahwa setiap daerah provinsi mewaspadai pergerakan inflasi yang terjadi pada 2 wilayah provinsi tetangga terdekat. Pola *spillover* inflasi di Indonesia merekomendasikan kebijakan kepada pemerintah Indonesia agar menyusun program-program pembangunan infrastruktur strategis untuk meningkatkan *connectivity* antar wilayah. Rekomendasi juga diberikan kepada pemerintah daerah agar merespon faktor-faktor penentu inflasi non inti di Indonesia.

Kata kunci: Inflasi, *Forcast Error Variance Decomposition (FEVD)* VAR, Spasial, *Spillover*.

INFLATION CHARACTERIZATION BASED ON SPATIAL SPILLOVER MODEL IN INDONESIA

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Abstract

This study aims to analyze the degree of inflation spillover (spillover effect), the impact of inflation spillover on inflation sending and receiving regions in Indonesia, finding inflation spillover patterns and determinants of non-core inflation in Indonesia. The research variables are analyzed based on secondary data with two data structures time series and panel data sourced from BPS publications from 2018 to 2022. This research uses VAR model tools with KPPS H-step ahead Error Variance Decomposition (FEVD) Diebold-Yilmaz and econometric spatial panel regression model.

The VAR model with KPPS H-step ahead FEVD Diebold-Yilmaz proves the inflation spillover degree in Indonesia is high and has a positive impact. This result indicates that inflation spillovers can dampen non-core inflation if the causal factors can be anticipated in advance. The pattern of inflation spillovers in Indonesia is explained by the value of Net directional spillovers through connectedness network visualization. The total Inflation Spillover Index in Indonesia for regions acting as transmitters are Java, Sulawesi, Kalimantan, and Balinusra regions. While the Sumatra and Mamapapa regions act as receivers.

The spatial econometric analysis method produces a spatial lag coefficient value and spatial autoregressive coefficient is significant, indicate that the impact of inflation spillovers is spread effect and positive for inflation-sending and receiving regions. The spatial econometric analysis method uses a Double Power distance weight matrix, gravity inspirations $p=2$ with the best results using the SAR model with FEM and the smallest AIC. This value proves that Regional Original Revenue (PAD), government expenditure, institutional performance, energy consumption, and infrastructure are significant determinants of non-core inflation in Indonesia.

The research findings provide policy recommendations to the government that each provincial region should be aware of inflation movements that occur in the surrounding provinces in the 2 closest neighboring regions. The spillover pattern of inflation in Indonesia recommends policies to the Indonesian government to formulate strategic infrastructure development programs to improve connectivity between regions. Recommendations are also given to local governments to respond to the determinants of non-core inflation in Indonesia.

Keywords: Inflation, Forecast Error Variance Decomposition (FEVD) VAR, Spatial, Spillover.