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SOME STATISTICAL PROPERTIES OF THE VECTOR MULTIPLICATIVE ERROR MODEL

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Abstract. It is very useful for joint consideration several interested nonnegative processes using the vector Multiplicative Error Model. This model includes various higher-order multivariate conditional autoregressive range and autoregressive conditional duration models are the special cases. In present paper, we give the strict stationarity and the existence of the first moment, stationary, geometric ergodicity and β-mixing property with exponential decay for the general higher-order vector Multiplicative Error Model.

Keywords. Nonnegative valued processes; Stationarity; Geometric ergodicity; β-mixing; Markov chain.

AMS (MOS) subject classification: 60G10, 62M10

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