A traveling wave with a buffer zone for asymptotic behavior of an asymmetric fixed credit migration model

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Abstract

In this paper, we introduce a new traveling wave with a buffer zone, which is approached by an asymmetric credit migration model with fixed migration boundary. The asymptotic behavior of the solution of the model is discussed. By constructing two sets of sub and super solutions sequences, it is proved that the solution of the credit rating migration model approaches the new traveling wave with buffer zone as time goes to infinite in a direction. Additionally, some numerical results are presented.

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