

## ECONOMICAL MATHEMATICAL MODEL WITH M-SERIES LOCAL DERIVATIVE

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## ABSTRACT

In this paper, we submit the price adjustment equation, which moves a substantial role in market equilibrium, by considering the generalized  $\mathcal{M}$ -derivative with the  $\mathcal{M}$  series described as the limit for  $\alpha$ -differentiable functions. The essential advantage of these models, as per their classical versions is that the derivative be arbitrary orders. For this aim, the method for linear ordinary differential equations on the generalized  $\mathcal{M}$ -derivative approach is utilized and some major results are acquired with this method. The price adjustment equation, which acts a crucial role in supplying market equilibrium, is resolved with this method when the agents expectancys are considering or disregarded [1-5].

Keywords Price adjustment equation  $\cdot$  Generalized  $\mathcal{M}$ -derivative  $\cdot$  Mathematical model

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