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Level crossing analysis of the stock markets

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Abstract. We investigate the average frequency of positive slope ν_α^+ crossing for the returns of market prices. The method is based on stochastic processes in which no scaling feature is explicitly required. Using this method we define a new quantity to quantify the stage of development and activity of stock exchanges. We compare the Tehran and western stock markets and show that some, such as the Tehran (TEPIX) and New Zealand (NZX) stock exchanges, are emerging, and also that TEPIX is a non-active market and is financially motivated to absorb capital.

Keywords: stochastic processes

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