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DATA-DRIVEN SCORE TEST OF FIT FOR CONDITIONAL DISTRIBUTION IN THE GARCH$(1,1)$ MODEL

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Abstract: A data-driven score test for a conditional distribution in the GARCH$(1,1)$ model is proposed. Conditional distribution assumption is verified by a score test, obtained from nesting the null density into an exponential family and then choosing the dimension of this exponential family by a score-based selection rule. A simulation study, which is provided, shows good empirical behaviour of the proposed test, outperforming in most cases the behaviour of competitive tests.

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