

论文

ESTIMATION OF A KIND OF JUMP REGRESSION FUNCTION

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摘要 Research on jump regression functions has not been adequate yet. According to the information about the number of jumps, their positions and jump magnitudes, jump regression functions can be classified into eight types. This paper deals especially with the second jump regression function. First of all, a concept of trimmed spline estimate is proposed and with it an L^2 -consistent estimate of the smoothing part of the jump regression function is obtained. This along with the L^2 -consistent estimate of jump magnitude constitutes an estimate of the second jump regression function. This paper discusses also the case that the jump positions have some indeterminacy. A new criterion is suggested and its unique solution derived. In the end, a few numerical results are given.

关键词 [Jump regression function, trimmed spline](#)

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Key words [Jump regression function](#) [trimmed spline estimate](#) [correction](#)

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