Structural Characterization of Taboo-Stationarity for General Processes in Two-sided Time

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This note considers the taboo counterpart ofstationarity. A general stochastic process in two-sided time is de.ned to be *taboo-stationary* if its global distribution does not change by shifting the origin to an arbitrary non-random time in the future *under taboo*, that is, conditionally on some taboo-event not having occurred up to the new time origin. The main result is the following basic structural characterization: a process is taboo-stationary *if and only if* it can be represented as a stochastic process with origin shifted backward in time by an independent exponential random variable. An application to reflected Brownian motion is given.