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Local Lagged Adapted Generalized Method of Moments Dynamic Process

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(54) **LOCAL LAGGED ADAPTED GENERALIZED METHOD OF MOMENTS DYNAMIC PROCESS**

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(57) **ABSTRACT**

(22) Filed: **Oct. 27, 2015**

Aspects of a local lagged adapted generalized method of moments (LLGMM) dynamic process are described herein. In one embodiment, the LLGMM process includes obtaining a discrete time data set as past state information of a continuous time dynamic process over a time interval, developing a stochastic model of the continuous time dynamic process, generating a discrete time interconnected dynamic model of local sample mean and variance statistic processes (DTIDMLSMVSP) based on the stochastic model, and calculating a plurality of admissible parameter estimates for the stochastic model using the DTIDMLSMVSP. Further, in some embodiments, the process further includes, for at least one of the plurality of admissible parameter estimates, calculating a state value of the stochastic model to gather a plurality of state values, and determining an optimal admissible parameter estimate among the plurality of admissible parameter estimates that results in a minimum error among the plurality of state values.

Related U.S. Application Data

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(58) **Field of Classification Search**
None

See application file for complete search history.

14 Claims, 12 Drawing Sheets

