**GSSA with Jump Variables**

is set of exogenous state variables

is set of endogenous state variables

is set of jump variables

Law of motion for exogenous state variables:

(1)

Nonlinear equations of the model:

Together these imply state transition equation and jump variable equation

Substitution yields:

Further substitution:

(2)

(3)

Algorithm:

1. Generate a history using (1) and initial value
2. Guess at &
3. Use (2) & (3) to generate histories &
4. Regress or otherwise fit, to & and to &
5. Use these as new guesses for &
6. Compare old and new guesses, if they are sufficiently similar, end computation. Otherwise form a convex combination of the two as a guess and return to step 3.