FURTHER DEVELOPMENT OPTIONS FOR BAYESIAN TRACKER

1. more time series, manual tuning
2. automatic maximum likelihood seeker (single series)
3. factorization of series:
   a. market
   b. industries
   c. individual
4. factored series (or otherwise) Portfolio optimizer
   a. sampling approach
   b. proper treatment of transaction costs
5. simple introduction of transaction penalty in present model; tradeoffs with turnover rate
6. leverage; short selling; options; etc.
7. two component coupled: money market, stocks market (need workout of optimizer -- probably Taylor series.)
8. validation of how accurate Taylor series expansion is:
   a. more terms
   b. direct (sampling) calculation
9. dynamic likelihood: more weight on recent past; investigate stability of process over different epochs
10. theoretical calculation: relative likelihood of best "reasonable" stationary distribution
11. more complex models -- sampling version of forecaster
12. investigate behavior with frequency of observation (do by dropping subsets)
13. volume term: i.e. measure time in variable units. (down scale faster than up scale!)
14. commodities prices
   a. option markets
   b. money markets
15. Research on fitting to other statistics (e.g. $\langle X, X \rangle$ auto-correlation)
16. Turn call "quality" (compactness)