Hou 2020

* Uses “the most advanced stochastic volatility (SV) models”: SVCJ and BR.
* Note that BR is a generalization of the SVCJ model.
* Finds that jumps are present in both returns and variance.
* Existing studies find negative leverage effects but they find the correlation between returns and volatilities is positive in SVCJ model but not in the BR model.
* For BTC, jump size in return and variance is negatively correlated
* Metropolis hastings to sample posterior of SV Vt parameters. 5000 iterations total.
* Models joint jumps between returns in BTC and volatility of BTC; not inter-market jumps
* We don’t model jumps in volatility…
* But we do propose the PGAS. Did Fulop use PGAS? I don’t think so, she used something else that was way more computationally intensive. Need to capitalize on our pgas contribution.
* We should incorporate a plot that illustrates the relative frequency of the various jump types over time and relate those trends to real-life political/economic/social events. I showed something like that during our meeting 06/10 but I need to refine it to make the results clearer. Hou page 253
* Their co-jump structure is very much different from ours (MALD and MVN), and my guess is their model is more restrictive. We will need to quantify the way in which our model is more flexible. Note the single Bernoulli process… is SVCJ a special case of any of our models? I’m not seeing it but I could be wrong.
* See leverage discussion on page 256-257
* The BR model would be a considerable addition… I’m not sure its within our scope, especially since we’re not doing jumps in volatility.