1006-37-129 **Judy A Kennedy*** (`jkennedy@math.udel.edu`), Dept of Math Sciences, U. of Delaware, Newark, DE 19716, and **David R Stockman** and **James A Yorke**. *Inverse limits applied to a Cash-in-advance model from economics.*

The cash-in-advance model from economics has the property of being well-defined backward in time, but not forward in time. We apply the theory of inverse limits to characterize topologically all possible solutions to such a model, and show that inverse limits are particularly well-suited for analyzing the dynamics forward in time even though the model itself is not well-defined forward in time. In particular, we illustrate how information about the inverse limit is useful for detecting or ruling out complex dynamics. (Received February 11, 2005)

1