

Cointegrated Processes

In Part I, stationary, stable VAR processes have been considered. Recall that a process is stationary if it has time invariant first and second moments. This property implies that there are no trends (trending means) or shifts in the mean or in the covariances. Moreover, there are no deterministic seasonal patterns. In this part, nonstationary processes of a very specific type will be considered. In particular, the processes will be allowed to have stochastic trends. They are then called integrated. If some of the variables move together in the long-run although they have stochastic trends, they are driven by a common stochastic trend and they are called cointegrated. VAR processes with integrated and cointegrated variables are analyzed in this part. In Chapter 6, some important theoretical properties of cointegrated processes are discussed and it is shown that they can be conveniently summarized in a vector error correction model (VECM). Estimation of such models is treated in Chapter 7. Specification of VECMs and model checking are considered in Chapter 8.