

- partial market model, 282–283, 283
- protection strategies, 324–334
- R language packages, 295–307
- structural multiple equation models, 281–284
- structural vector autoregressive models, 284–287, 303–304
- structural vector error correction models, 285, 288–289, 306–307
- time series models, 274, 275–289, 297–302, 304–307
- univariate time series models, 275–281
- vector autoregressive models 284–286, 299–300, 302–307, **309**
- vector error correction models, 285, 287–288, 305–310
- tail dependencies, 138–139, 141, 145, 199, 204–207, 210–221, **218**
- three-stage least squares (3SLS) method, 284
- time series models
 - ARMA time series process, 279–281, 297–302
 - autoregressive time series process, 275–277, 300–302
 - moving average time series process, 277–278, 300–302
 - multivariate time series models, 281–289
 - structural multiple equation models, 281–284
 - structural vector autoregressive models, 284–287, 303–304
 - structural vector error correction models, 285, 288–289, 306–307
 - tactical asset allocation, 274, 275–289, 297–302, 304–307
 - univariate time series models, 275–281
 - vector autoregressive models 284–286, 299–300, 302–307, **309**
 - vector error correction models, 285, 287–288, 305–310
- timeSeries package, 30–33, 253
- Tinbergen arrow diagram, 282
- transition kernels, 347–348
- translation invariance, 43
- trimming, 164
- truncdist package, 347
- tseries package, 127–128
- two-stage least squares (2SLS) method, 284
- uncertainty sets, 168–174, 190–195
- unconditional variance, 117–119
- unit root tests, 307–308, **308**
- univariate time series models, 29–32, **30**, 31, 32, 275–281
- urca package, 304–307
- utility function, 49–50
- value at risk (VaR), 38–44, 40, 41
 - diversification of risks, 201–204, 211, 222–225
 - extreme value theory, 93–94, 101–102, 111
 - return distributions, 63, 77–80, **78**, 79, 82–84, **83**
 - risk-optimal portfolios, 228, 229–238, 241, 250–255, 265
 - volatility, 126
- VAR *see* vector autoregressive
- variance-covariance matrix
 - dependence, 140, 149
 - diversification of risks, 198–199, 202, 210
 - modern portfolio theory, 47, 50–51
 - return distributions, 68–69
 - risk measures, 42
 - risk-optimal portfolios, 250