Acronym glossary

1PL	one-parameter logistic model
2PL	two-parameter logistic model
2SIV	two-step instrumental variables
2SLS	two-stage least squares
3PL	three-parameter logistic model
3SLS	three-stage least squares
ADF	asymptotic distribution free
ADTE	average direct treatment effect
ADTET	average direct treatment effect with respect to the treated
AFE	attributable fraction among the exposed
AFP	attributable fraction for the population
AFT	accelerated failure time
AIC	Akaike information criterion
AICc	corrected Akaike information criterion
AIDS	almost ideal demand system
AIPW	augmented inverse-probability weights
AITE	average indirect treatment effect
AITEC	average indirect treatment effect with respect to controls
ANCOVA	analysis of covariance
ANOVA	analysis of variance
AP	attributable proportion
APARCH	asymmetric power autoregressive conditional heteroskedasticity
APE	average partial effects
API	application programming interface
APM	alternating projection method
AR	autoregressive
AR(1)	first-order autoregressive
ARCH	autoregressive conditional heteroskedasticity
ARFIMA	autoregressive fractionally integrated moving average
ARIMA	autoregressive integrated moving average
ARMA	autoregressive moving average
ARMAX	autoregressive moving-average exogenous
ASCII	American Standard Code for Information Interchange
ASE	asymptotic standard error
ASF	average structural function
ASL	achieved significance level
ASM	average structural mean
ASP	average structural probability
ATE	average treatment effect
ATET	average treatment effect on the treated
ATEU	average treatment effect on the untreated
AUC	area under the curve
AUCPR	area under the precision–recall curve
BC	bias corrected
BCa	bias-corrected and accelerated
BCC	boundary characteristic curve
BE	between effects
BFGS	Broyden–Fletcher–Goldfarb–Shanno
BHHH	Berndt–Hall–Hall–Hausman
BIC	Bayesian information criterion
BLOB	binary large object
BLUP	best linear unbiased prediction
BMA	Bayesian model averaging
BRR	balanced repeated replication

CA	correspondence analysis
CAIC	consistent Akaike information criterion
CATE	conditional average treatment effect
CCC	category characteristic curve
CCI	conservative confidence interval
CCT	controlled clinical trial
CD	coefficient of determination
CDC	Centers for Disease Control and Prevention
CDF	cumulative distribution function
CES	constant elasticity of substitution
CFA	confirmatory factor analysis
CFI	comparative fit index
CI	conditional independence
CI	confidence interval
CIF	cumulative incidence function
CM	choice models
CMA	cumulative meta-analysis
CMI	conditional mean independence
CMLE	conditional maximum likelihood estimates
CMYK	cyan, magenta, yellow, and key
CPMP	cumulative posterior model probability
CRD	cluster randomized design
CRE	correlated random effects
CRT	cluster randomized trial
CRVE	cluster–robust variance estimator
ct	count time
cusum	cumulative sum
CV	coefficient of variation
CV	cross-validation
DA	data augmentation
DDD	difference in difference in differences
DDF	denominator degrees of freedom
DDFs	multiple denominator degrees of freedom
DEFF	design effect
DEFT	design effect (standard deviation metric)
DF	dynamic factor
df / d.f.	degree(s) of freedom
d.f.	distribution function
DFAR	dynamic factors with vector autoregressive errors
DFP	Davidon–Fletcher–Powell
DGM	data-generating mechanism
DGP	data-generating process
DIB	Device-Independent Bitmap
DIC	deviance information criterion
DID	difference in differences
DIF	differential item functioning
DLL	dynamic-link library
DMC	Data Monitoring Committee
DML	double machine learning
DPD	dynamic panel data
DSGE	dynamic stochastic general equilibrium
DSMB	Data and Safety Monitoring Board
DSMC	Data and Safety Monitoring Committee
EB	empirical Bayes
EBCDIC	extended binary coded decimal interchange code
EE	estimating equation
EGARCH	exponential GARCH

EGLS	estimated generalized least squares
EIM	expected information matrix
EM	expectation maximization
EMF	Enhanced Metafile
EPS	Encapsulated PostScript
ERM	extended regression model
ERR	excess relative risk
ESS	effective sample size
ESS	error sum of squares
ESS	expected sample size
FCS	fully conditional specification
FD	first-differenced estimator
FDA	Food and Drug Administration
FE	fixed effects
FEVD	forecast-error variance decomposition
FGLS	feasible generalized least squares
FGNLS	feasible generalized nonlinear least squares
FIML	full information maximum likelihood
FIPS	Federal Information Processing Standard
FIVE estimator	full-information instrumental-variables efficient estimator
flong	full long
flongsep	full long and separate
FMI	fraction of missing information
FMM	finite mixture model
FP	fractional polynomial
FPC	finite population correction
FSD	fixed-sample design
GARCH	generalized autoregressive conditional heteroskedasticity
GBM	gradient boosting machine
GATE	group average treatment effect
GATES	sorted group average treatment effect
GEE	generalized estimating equations
GEV	generalized extreme value
GHK	Geweke–Hajivassiliou–Keane
GHQ	Gauss–Hermite quadrature
GIF	Graphics Interchange Format
GIS	geographic information system
GLIM	generalized linear interactive modeling
GLLAMM	generalized linear latent and mixed models
GLM	generalized linear models
GLME	generalized linear mixed effects
GLMM	generalized linear mixed model
GLS	generalized least squares
GMM	generalized method of moments
GPCM	generalized partial credit model
GRM	graded response model
GRT	group randomized trial
GS2SLS	generalized spatial two-stage least squares
GSEM	generalized structural equation modeling/model
GSD	group sequential design
GUI	graphical user interface
HAC	heteroskedasticity- and autocorrelation-consistent
HPD	highest posterior density
HPM	highest probability model
HQIC	Hannan–Quinn information criterion

HR	hazard ratio
HSB	hue, saturation, and brightness
HSL	hue, saturation, and luminance
HSV	hue, saturation, and value
HTML	hypertext markup language
IATE	individualized average treatment effect
IC	information criteria
ICC	item characteristic curve
ICD-9	International Classification of Diseases, Ninth Revision
ICD-10	International Classification of Diseases, Tenth Revision
ICD-10-CM	International Classification of Diseases, Tenth Revision, Clinical Modification
ICD-10-PCS	International Classification of Diseases, Tenth Revision, Procedure Coding System
ICE	individual conditional expectation
ICU	International Components for Unicode
IIA	independence of irrelevant alternatives
i.i.d.	independent and identically distributed
IIF	item information function
IPW	inverse-probability weighting
IPWRA	inverse-probability-weighted regression adjustment
IQR	interquartile range
IQR	inverse quantile regression
IR	incidence rate
IRD	incidence-rate difference
IRF	impulse–response function
IRLS	iterated, reweighted least squares
IRR	incidence-rate ratio
IRT	item response theory
IV	instrumental variables
IVQR	instrumental-variables quantile regression
JAR	Java Archive file
JCA	joint correspondence analysis
JDBC	Java Database Connectivity
JPEG	Joint Photographic Experts Group
JRE	Java Runtime Environment
JVM	Java Virtual Machine
KNN	*k*th nearest neighbor
KMO	Kaiser–Meyer–Olkin
LAPACK	linear algebra package
LASSO	least absolute shrinkage and selection operator
LAV	least absolute value
LCA	latent class analysis
LDA	linear discriminant analysis
LES	linear expenditure system
LIML	limited-information maximum likelihood
LM	Lagrange multiplier
LME	linear mixed effects
LMR	Lo–Mendell–Rubin
LOO	leave one out
LOWESS	locally weighted scatterplot smoothing
LPS	log predictive-score
LR	likelihood ratio
LSB	least-significant byte

MA	moving average
MAD	minimum absolute deviation
MAE	mean absolute error
MANCOVA	multivariate analysis of covariance
MANOVA	multivariate analysis of variance
MAR	missing at random
MC3	Markov chain Monte Carlo model composition
MCA	multiple correspondence analysis
MCAGHQ	mode-curvature adaptive Gauss–Hermite quadrature
MCAR	missing completely at random
MCC	Matthews correlation coefficient
MCE	Monte Carlo error
MCMC	Markov chain Monte Carlo
MCSE	MCMC standard errors
MDES	minimum detectable effect size
MDS	multidimensional scaling
ME	multiple equation
MEFF	misspecification effect
MEFT	misspecification effect (standard deviation metric)
MFP	multivariable fractional polynomial
MH	Metropolis–Hastings
MI / mi	multiple imputation
midp	mid-*p*-value
MIMIC	multiple indicators and multiple causes
MINQUE	minimum norm quadratic unbiased estimation
MIVQUE	minimum variance quadratic unbiased estimation
ML	machine learning
ML	maximum likelihood
MLE	maximum likelihood estimate
MLMV	maximum likelihood with missing values
mlong	marginal long
MM	method of moments
MNAR	missing not at random
MNL	multinomial logit
MNP	multinomial probit
MPL	modified profile likelihood
MPM	median probability model
MS	mean square
MSAR	Markov-switching autoregression
MSB	most-significant byte
MSDR	Markov-switching dynamic regression
MSE	mean squared error
MSL	maximum simulated likelihood
MSS	model sum of squares
MUE	median unbiased estimates
MVAGHQ	mean–variance adaptive Gauss–Hermite quadrature
MVN	multivariate normal
MVREG	multivariate regression
NaN	not a number
NARCH	nonlinear ARCH
NDE	natural direct effect
NHANES	National Health and Nutrition Examination Survey
NIE	natural indirect effect
NLME	nonlinear mixed effects
NLS	nonlinear least squares
NPARCH	nonlinear power ARCH
NPMLE	nonparametric maximum-likelihood estimation

NR	Newton–Raphson
NRM	nominal response model
ODBC	Open DataBase Connectivity
OIM	observed information matrix
OIRF	orthogonalized impulse–response function
OLE	Object Linking and Embedding (Microsoft product)
OLS	ordinary least squares
OPG	outer product of the gradient
OR	odds ratio
OVO	one versus one
OVR	one versus rest
PA	population averaged
PARCH	power ARCH
PCA	principal component analysis
PCM	partial credit model
PCSE	panel-corrected standard error
PDF	Portable Document Format
p.d.f.	probability density function
PDP	partial dependence plot
PFE	prevented fraction among the exposed
PFP	prevented fraction for the population
PH	proportional hazards
PIP	posterior inclusion probability
pk	pharmacokinetic data
p.m.f.	probability mass function
PMM	predictive mean matching
PMP	posterior model probability
PNG	Portable Network Graphics
PNIE	pure natural indirect effect
PO	partialing out
POM	potential-outcome means
PPP	posterior predictive p-value
PrSS	precision and sample size
PS	PostScript
PSS	power and sample size
PSU	primary sampling unit
QC	quality control
QDA	quadratic discriminant analysis
QML	quasimaximum likelihood
QUAIDS	quadratic almost ideal demand system
RA	regression adjustment
rc	return code
RCT	randomized controlled trial
RE	random effects
REML	restricted (or residual) maximum likelihood
RERI	relative excess risk due to interaction
RESET	regression specification-error test
RF	random forest
RGB	red, green, and blue
RMSE	root mean squared error
RMSEA	root mean squared error of approximation
RMSLE	root mean squared logarithmic error
RNG	random-number generator
ROC	receiver operating characteristic

ROP	rank-ordered probit
ROT	rule of thumb
RR	relative risk
RRR	relative-risk ratio
RSM	rating scale model
RSS	residual sum of squares
RUM	random utility model
RVI	relative variance increase
SAARCH	simple asymmetric ARCH
SAR	spatial autoregressive, simultaneous autoregressive, or spatial or simultaneous autoregression, depending on context
SARAR	spatial autoregressive model with spatial autoregressive disturbances
SARIMA	seasonal ARIMA
SBIC	Schwarz's Bayesian information criterion
SCI	simultaneous confidence interval
s.d.	standard deviation
SDR	successive difference replication
SE / s.e.	standard error
SEE	smoothed estimation equations
SEM	structural equation modeling/model
SF	static factor
SFAR	static factors with vector autoregressive errors
SHAP	Shapley additive explanation values
SI	synergy index
SIR	standardized incidence ratio
SJ	Stata Journal
SMCL	Stata Markup and Control Language
SMR	standardized mortality/morbidity ratio
SMSA	standard metropolitan statistical area
SOR	standardized odds ratio
SQL	Structured Query Language
SRD	standardized rate difference
SRMR	standardized root mean squared residual
SRR	standardized risk ratio
SRS	simple random sample/sampling
SRSWR	SRS with replacement
SSC	Statistical Software Components
SSCP	sum of squares and cross products
SSD	summary statistics data
SSU	secondary sampling unit
st	survival time
STS	structural time series
SUR	seemingly unrelated regression
SURE	seemingly unrelated regression estimation
SUTVA	stable unit treatment value assumption
SVAR	structural vector autoregressive
SVD	singular value decomposition
SVG	scalable vector graphics
TACC	treatment-arm continuity correction
TAR	target acceptance rate
TARCH	threshold ARCH
TCC	test characteristic curve
TDT	transmission/disequilibrium test
TE	total effect
TET	treatment effect on the treated
TEU	treatment effect on the untreated
TIF	test information function

TIFF	tagged image file format
TLI	Tucker–Lewis index
TNDE	total natural direct effect
TSS	total sum of squares
TWFE	two-way fixed effects
UCA	Unicode Collation Algorithm
UCM	unobserved-components model
UI	user interface
UTF-8	Universal character set + Transformation Format—8-bit
VAR	vector autoregressive
VAR(1)	first-order vector autoregressive
VARMA	vector autoregressive moving average
VARMA(1,1)	first-order vector autoregressive moving average
VCE	variance–covariance estimate
VEC	vector error correction
VECM	vector error-correction model
VIF	variance inflation factor
VLMR	Vuong–Lo–Mendell–Rubin
WCB	wild cluster bootstrap
WLC	worst linear combination
WLF	worst linear function
WLS	weighted least squares
WNLS	weighted nonlinear least squares
wrt	with respect to
XML	Extensible Markup Language
ZINB	zero-inflated negative binomial
ZIOL	zero-inflated ordered logit
ZIOP	zero-inflated ordered probit
ZIP	zero-inflated Poisson
ZTNB	zero-truncated negative binomial
ZTP	zero-truncated Poisson