

Inequality — Inequality measures

[Remarks and examples](#)[References](#)

Remarks and examples

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Stata does not have commands for inequality measures, except `roctab` has an option to report Gini and Pietra indices; see [\[R\] roctab](#). Stata users, however, have developed an excellent suite of commands, many of which have been published in the *Stata Journal* (SJ) and in the *Stata Technical Bulletin* (STB).

Issue	Insert	Author(s)	Command	Description
SJ-12-3	st0266	I. Almås, T. Havnes, M. Mogstad	<code>adgini</code>	Adjusting for age effects in cross-sectional distributions
SJ-17-1	st0467	D. W. K. Andrews, W. Kim, X. Shi	<code>cmi_test</code> , <code>cmi_interval</code>	Testing conditional moment inequalities and equalities
SJ-14-4	st0361	F. W. Chávez Juárez, I. Soloaga	<code>iop</code>	<code>iop</code> : Estimating ex-ante inequality of opportunity
STB-48	gr35	N. J. Cox	<code>psm</code> , <code>qsm</code> , <code>pdagum</code> , <code>qdagum</code>	Diagnostic plots for assessing Singh–Maddala and Dagum distributions fit by MLE
SJ-11-3	st0237	A. Doris, D. O’Neill, O. Sweetman	<code>gmmcovearn</code>	GMM estimation of the covariance structure of longitudinal data
STB-23	sg31	R. Goldstein	<code>rspread</code>	Measures of diversity: Absolute and relative
SJ-18-3	st0539	L. Hong, G. Alfani C. Gigliarano, M. Bonetti	<code>survbound</code> , <code>survgini</code> , <code>survlsl</code>	Measuring inequality from incomplete and survival data
SJ-16-4	st0457	B. Jann	<code>lorenz</code>	Lorenz and concentration curves
SJ-16-2	st0432	B. Jann	<code>pshare</code>	Assessing inequality using percentile shares
STB-48	sg104	S. P. Jenkins	<code>sumdist</code> , <code>xfrac</code> , <code>ineqdeco</code> , <code>geivars</code> , <code>ineqfac</code> , <code>povdeco</code>	Analysis of income distributions
STB-48	sg106	S. P. Jenkins	<code>smfit</code> , <code>dagumfit</code>	Fitting Singh–Maddala and Dagum distributions by maximum likelihood
SJ-20-3	st0606	S. P. Jenkins	<code>ineqord</code>	Indices of inequality and polarization for ordinal data
STB-51	sg115	D. Jolliffe, B. Krushelnytsky	<code>ineqerr</code>	Bootstrap standard errors for indices of inequality

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Issue, <i>cont.</i>	Insert, <i>cont.</i>	Author(s), <i>cont.</i>	Command, <i>cont.</i>	Description, <i>cont.</i>
STB-51	sg117	D. Jolliffe, A. Semykina	sepov	Robust standard errors for the Foster–Greer–Thorbecke class of poverty indices
SJ-8-4	st0100_1	A. López-Feldman	descogini	Decomposing inequality and obtaining marginal effects
SJ-6-4	snp15_7	R. Newson	somersd	Gini coefficient is a special case of Somers's <i>D</i>
SJ-18-3	st0427_2	O. O'Donnell, S. O'Neill, T. Van Ourti, B. Walsh	conindex	Calculation of rank-dependent inequality indices
SJ-7-2	gr0001_3	S. P. Van Kerm, P. Jenkins	glcurve	Generalized Lorenz curves and related graphs
STB-48	sg108	P. Van Kerm	poverty	Computing poverty indices
STB-23	sg30	E. Whitehouse	lorenz, inequal, atkinson, relsgini	Measures of inequality in Stata

More commands may be available; enter Stata and type `search inequality measure, historical`.

To download and install the Jenkins and Van Kerm `glcurve` command from the Internet, for instance, you could

1. Select **Help > SJ and community-contributed features**.
2. Click on *Stata Journal*.
3. Click on *sj7-2*.
4. Click on *gr0001_3*.
5. Click on *click here to install*.

or you could instead do the following:

1. Navigate to the appropriate SJ issue:
 - a. Type `net` from <https://www.stata-journal.com/software>
Type `net cd sj7-2`or
 - b. Type `net` from <https://www.stata-journal.com/software/sj7-2>
2. Type `net describe gr0001_3`
3. Type `net install gr0001_3`

To download and install the Jenkins `sumdist` command from the Internet, for instance, you could

1. Select **Help > SJ and community-contributed features**.
2. Click on *STB*.
3. Click on *stb48*.
4. Click on *sg104*.
5. Click on *click here to install*.

or you could instead do the following:

1. Navigate to the appropriate STB issue:
 - a. Type `net` from <https://www.stata.com>
`Type net cd stb`
`Type net cd stb48`
 - or
 - b. Type `net` from <https://www.stata.com/stb/stb48>
2. Type `net describe sg104`
3. Type `net install sg104`

[Max Otto Lorenz](#) (1876–1959) was born in Burlington, Iowa. He did his undergraduate studies at the University of Iowa and received his PhD from the University of Wisconsin–Madison in 1906. In 1905, he published his only article, “Methods of measuring the concentration of wealth”, in a scientific journal. In the article, he introduces what we now call the Lorenz curve, a term first introduced in a statistics textbook in 1912.

Lorenz worked all of his life in governmental statistical institutions. He was the Deputy Commissioner of Labor and Industrial Statistics for Wisconsin, worked for the U.S. Bureau of the Census and the Bureau of Railway Economics, and was the Director of the Bureau of Statistics and the Bureau of Transport and Economic Statistics.

His hobbies included calendar reform and Interlingua, a proposed international language.

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