Remarks and examples

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*).

<table>
<thead>
<tr>
<th>Issue</th>
<th>Insert</th>
<th>Author(s)</th>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SJ-12-3</td>
<td>st0266</td>
<td>I. Almás, T. Havnes, M. Mogstad</td>
<td><code>adgini</code></td>
<td>Adjusting for age effects in cross-sectional distributions</td>
</tr>
<tr>
<td>SJ-17-1</td>
<td>st0467</td>
<td>D. W. K. Andrews, W. Kim, X. Shi</td>
<td><code>cmi_test</code>, <code>cmi_interval</code></td>
<td>Testing conditional moment inequalities and equalities</td>
</tr>
<tr>
<td>STB-48</td>
<td>gr35</td>
<td>N. J. Cox</td>
<td><code>psm</code>, <code>qsm</code>, <code>pdagum</code>, <code>qdagum</code></td>
<td>Diagnostic plots for assessing Singh–Maddala and Dagum distributions fit by MLE</td>
</tr>
<tr>
<td>STB-23</td>
<td>sg31</td>
<td>R. Goldstein</td>
<td><code>rspread</code></td>
<td>Measures of diversity: Absolute and relative</td>
</tr>
<tr>
<td>SJ-18-3</td>
<td>st0539</td>
<td>L. Hong, G. Alfani, C. Gigliarano, M. Bonetti</td>
<td><code>survbound</code>, <code>survgini</code>, <code>survlsl</code></td>
<td>Measuring inequality from incomplete and survival data</td>
</tr>
<tr>
<td>SJ-16-4</td>
<td>st0457</td>
<td>B. Jann</td>
<td><code>lorenz</code></td>
<td>Lorenz and concentration curves</td>
</tr>
<tr>
<td>SJ-16-2</td>
<td>st0432</td>
<td>B. Jann</td>
<td><code>pshare</code></td>
<td>Assessing inequality using percentile shares</td>
</tr>
<tr>
<td>STB-48</td>
<td>sg104</td>
<td>S. P. Jenkins</td>
<td><code>sumdist</code>, <code>xfrac</code>, <code>ineqdeco</code>, <code>geivars</code>, <code>ineqfac</code>, <code>povdeco</code></td>
<td>Analysis of income distributions</td>
</tr>
<tr>
<td>STB-48</td>
<td>sg106</td>
<td>S. P. Jenkins</td>
<td><code>smfit</code>, <code>dagumfit</code></td>
<td>Fitting Singh–Maddala and Dagum distributions by maximum likelihood</td>
</tr>
<tr>
<td>STB-51</td>
<td>sg115</td>
<td>D. Jolliffe, B. Krushelnytskyjy</td>
<td><code>ineqerr</code></td>
<td>Bootstrap standard errors for indices of inequality</td>
</tr>
<tr>
<td>STB-51</td>
<td>sg117</td>
<td>D. Jolliffe, A. Semykina</td>
<td><code>sepov</code></td>
<td>Robust standard errors for the Foster–Greer–Thorbecke class of poverty indices</td>
</tr>
</tbody>
</table>

1
### Inequality — Inequality measures

<table>
<thead>
<tr>
<th>Issue, cont.</th>
<th>Insert, cont.</th>
<th>Author(s), cont.</th>
<th>Command, cont.</th>
<th>Description, cont.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SJ-8-4</td>
<td>st0100_1</td>
<td>A. López-Feldman</td>
<td>descogini</td>
<td>Decomposing inequality and obtaining marginal effects</td>
</tr>
<tr>
<td>SJ-6-4</td>
<td>snp15_7</td>
<td>R. Newson</td>
<td>somersd</td>
<td>Gini coefficient is a special case of Somers’s D</td>
</tr>
<tr>
<td>SJ-7-2</td>
<td>gr0001_3</td>
<td>S. P. Van Kerm, P. Jenkins</td>
<td>glcurve</td>
<td>Generalized Lorenz curves and related graphs</td>
</tr>
<tr>
<td>STB-48</td>
<td>sg108</td>
<td>P. Van Kerm</td>
<td>poverty</td>
<td>Computing poverty indices</td>
</tr>
<tr>
<td>STB-23</td>
<td>sg30</td>
<td>E. Whitehouse</td>
<td>lorenz, inequal, atkinson, relsgini</td>
<td>Measures of inequality in Stata</td>
</tr>
</tbody>
</table>

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 commands**.
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 commands**.
2. Click on **STB**.
3. Click on **stb48**.
4. Click on **sg104**.
5. Click on **click here to install**.
Inequality — Inequality measures

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.

References


