

**SPSS Program for GlouDEMANS' COD Tolerance Test
SPSS (VERSION 13.0)**

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1. Overview

CODTEST.SPS computes the confidence interval for the COD, the maximum acceptable COD, and the tolerance factor. In addition, it tests the hypothesis that the COD meets the required or the target standard.

For appraisal ratio studies, the program could be used to test the hypothesis that the COD meets the performance standards for the uniformity of assessments.

The CODTEST command takes, as input, a one scale variable. In appraisal ratio studies, this variable could be the appraisal or assessment ratios.

2. Syntax Diagram

```
! CODTEST  
  [VAR= varname]  
  [STDR={ 15 }]  
    { value }  
  [ALPHA={ 0.05 }]  
    { value }
```

VAR=varname: the user MUST specify the name of the variable on which the command is to be performed.

STDR= #. The user could set the value of the required or the target standard. This is optional. The default is 15.

ALPHA= #. The user could specify the level of significance. This is optional. The default is 0.05.

3. Installation

Here are the recommended steps for using the CODTEST command:

- The user needs to download the CODTEST.SPS program.
- The user needs an SPSS data file which will be used as the active file for the program.

- The user needs to write a syntax file which will INSERT the program, GET the SPSS data file, and execute the CODTEST command. Here is an example:

```
INSERT FILE=' C:\Temp\CODTEST.sps' .
GET FILE= ' C:\Temp\\ratiostudy.sav'.
!CODTEST VAR=ratio STDR=20 ALPHA=0.05.
```

The user does not need to change the program, but only should create a syntax file similar to the example above. The user might even copy the example into their syntax file changing the parts given in bold type with the proper location of the CODTEST.SPS program and the SPSS data file, the name of the SPSS data file, and the desired options for the CODTEST command.

To practice, please save the package attached to this document into the directory: C:\Temp. Then copy the example above to a new syntax file and execute it as it is. You should obtain the following output:

GlouDEMANS' COD Tolerance Test

Confidence Interval for the COD**

| | |
|---------------|----------|
| Lower Bound : | 19.57124 |
| Upper Bound : | 33.03577 |

Ho: COD # CODSTD

| | |
|----------------------------------|----------|
| Coefficient of Dispersion (%) : | 26.78740 |
| Degree of freedom: | 29.00000 |
| Chi-square value : | 52.02344 |
| Critical value : | 42.55697 |
| P-value(1-tail) : | .00542 |
| Tolerance Factor (TF): | 1.21140 |
| Maximum Acceptable COD (MAXCOD): | 24.22793 |

**Assume Normality

Please, email me (vmamoun@yahoo.com) if you have any question, comment, or recommendation.

4. References

- I.A.A.O. (International Association of Assessing Officers). (1999). Standard on ratio studies. Chicago: International Association of Assessing Officers.
- Gloudemans, R. J. (2001). Confidence Intervals for the COD: Limitations and Solutions. Retrieved April 12, 2006 from the World Wide Web:
<http://www.agjd.com/COD.pdf>.