

## “Rectangularizing” a Data File in Stata<sup>1</sup>

It is sometimes necessary to reshape data so that you can do the kind of analysis that you want to do. If the following example, there are multiple data records for individuals describing events in their lives. An example of this type of file might be arrests. But, you may need to have detailed information about each arrest on one record. This document will demonstrate a couple of ways of creating a one record per case from many. The method you would use would depend on what kind of data you wanted to end up with.

For these examples, I will use the following data - seven arrests for two individuals, and only four variables.

ID	Year	Crime	convicted
1	1988	burglary	1
1	1992	murder	0
1	1993	assault	1
1	1992	DUI	1
2	1989	DUI	1
2	1992	DUI	1
2	1994	Cocaine	1

The Stata commands that show how to do this follow. The necessary commands are in bold. Stata's responses, and commands issued to illustrate what is happening are not in bold.

```
. sort id
. by id: gen cnum = _n
. list
      id      year      crime      convict      cnum
1.      1      1988      burglary      1          1
2.      1      1992      murder      0          2
3.      1      1993      assault      1          3
4.      1      1992      DUI          1          4
5.      2      1989      DUI          1          1
6.      2      1992      DUI          1          2
7.      2      1994      Cocaine      1          3

. reshape cons id
. reshape group cnum 1-4
. reshape vars year crime convict
. reshape query
group var:  cnum
values:    1 2 3 4
cons:     id
vars:     year crime convict

. reshape wide
. list
Observation 1
      id      year1      year2      year3      year4      crime1      crime2      crime3      crime4
convict1      1      1988      1992      1993      1992      burglary      murder      assault      DUI
convict2      0
convict3      1
convict4      1

Observation 2
      id      year1      year2      year3      year4      crime1      crime2      crime3      crime4
convict1      1      1989      1992      1994      .      DUI          DUI          Cocaine
convict2      1
convict3      1
convict4      .
```

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<sup>1</sup>Prepared by Patty Glynn, University of Washington. 7/31/02 C:\all\help\helpnew\rectang\_stata.wpd