IDENT

IDENT *equation name variable name=algebraic expression* ;
IDENT *equation name algebraic expression* ;

Function:

IDENT defines identities for TSP. These identities can be used to complete simultaneous equations model for full information maximum likelihood estimation with FIML or for simulation with SIML or SOLVE.

Usage:

There are two forms of the IDENT statement: the first has the name to be given to the equation, followed by an equation in normalized form, that is, with the name of the dependent variable on the left hand side of the equal sign and an algebraic expression for that variable on the right hand side. The expression must be composed according to the rules given in the Basic Rules section in this manual. These rules are the same wherever an equation is used in TSP: in IF statements, GENR, SET, FRML, and IDENT.

The second form of the IDENT statement is "implicit": there is no equal sign but simply an algebraic expression. This is used for fully simultaneous models, where it might not be possible to normalize the equations. The FIML and SIML procedures can process implicit equations, although the SOLVE procedure cannot.

Equations defined by IDENT are the same as those defined by FRML except that the estimation procedures assume that a FRML has an implied additive disturbance tacked on the end, while an IDENT does not. The distinction is useful only in FIML, where identities may be necessary to complete (square) the Jacobian.

An equation defined by a IDENT statement can contain numbers, parameters, constants, and series. The equation can always be computed at any point by use of GENR (see GENR for the form of the statement). When it is computed, the parameters and constants are supplied with their current values before computation, and the identity is computed for all the values of the series in the current sample.

Example:

This example is the identity which completes the five equation illustrative model:

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IDENT GNPID GNP = CONS+I+G ;
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This identity states that GNP (Gross National Product) is always equal to the sum of CONS (consumption), I (investment), and G (government expenditures).

Output:

IDENT produces no output. A single equation is stored in data storage.