

Distribution

In the “Distribution” view you specify the uncertainty about the variables. Note, however, that these specifications are only relevant if the algorithmic settings of the node include local values. These settings are controlled in the “Operators” view.

In DynRisk the uncertainty specifications are separated into two factors: a scaling factor, referred to as the “local factor” and a relative uncertainty distribution. The actual value of the node, i.e., the value it gets during a Monte Carlo simulation, is obtained by multiplying the local factor with a value generated from the relative uncertainty distribution.

The local factor is entered into the “L.fact” field.

The “Incl. stoch. val.” checkbox is used to determine whether or not the node should include any local uncertainty. If you leave this checkbox unchecked, DynRisk will ignore all distribution settings for this node, and its local value will be equal to its local factor. If you leave the checkbox checked, then DynRisk will use both the local factor and the distribution in order to calculate the local node values during a simulation.

To specify the relative uncertainty, you first choose a distribution type by using the “Distrib.” popup menu. The following distributions are available:

- Binary
- Binex
- Cens. normal
- Exponential
- Lognormal
- Normal
- Triangular
- Triangular 2
- Trc. normal
- Uniform

You then complete the uncertainty specifications by entering three parameter values in the “a)”, “b)” and c)” fields.

Sometimes DynRisk needs to adjust the parameters to fit the chosen distribution. This is done automatically every time you run a simulation. If you open a node after a simulation is finished, however, you will still see the same numbers in the parameter fields as you entered. To see the adjusted values, you can click the “Fit” button. To return to your specifications again, click the “Fit” button once more while pressing the “Shift” key on the keyboard.