**Supplementary Information for Website**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Documentation  |  |  |  |  |  |  |
|  | AB-SD Hybrid Model: Strategic Planning, Crisis & CooptationImplemented in AnyLogic 8  |  |  |
|  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Model time units | months |  |  |  |
|  | Numerical methods |  |  |  |
|  | Differention Equations Method | Euler  |  |  |  |
|  | Algebraic Equations Method | Modified Newton |  |  |  |
|  | Mixed Equations Method | RK45+Newton |  |  |  |
|  | Absolute accuracy | 1.0E-5 |  |  |  |
|  | Time accuracy | 1.0E-5 |  |  |  |
|  | Relative accuracy | 1.0E-5 |  |  |  |
|  | Fixed time step | 0.001 |  |  |  |
|  |  |  |  |
|  | Agent Type: ExternalStakeholder |  |  |
|  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | Agent in flowcharts |  |  |  |
|  | Use in flowcharts as | Agent |  |  |  |
|  | Dimensions and movement |  |  |  |
|  | Speed | (10 : MPS) |  |  |  |
|  | Rotate animation towards movement | true |  |  |  |
|  | Rotate vertically as well (along Z-axis) | true |  |  |  |
|  | Space and network |  |  |  |
|  | Space Type | Continuous |  |  |  |
|  | Advanced Java |  |  |  |
|  | Generic | false |  |  |  |



|  |  |  |  |
| --- | --- | --- | --- |
|  | Parameter: CrisisSalienceFactor |  |  |
|  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Array | false |  |  |  |
|  | Default value | triangular(0, 100, 20)  |  |  |  |
|  | Type | double |  |  |  |
|  | Show at runtime | true |  |  |  |
|  | Show name | true |  |  |  |
|  | Value editor |  |  |  |
|  | Editor control | Text |  |  |  |
|  | Advanced |  |  |  |
|  | Name | Value |  |  |  |
|  | System dynamics units | false |  |  |  |
|  | Save in snapshot | true |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | Stock: CrisisSalience |  |  |
|  |  |  |  |  |  |  |  |
|  | Description: Salience of crises: initially, 0 (no crises in memory). |  |  |
|  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Equation mode | Classic |  |  |  |
|  | Initial value | 0 |  |  |  |
|  | Array | false |  |  |  |
|  | Show at runtime | true |  |  |  |
|  | Public | false |  |  |  |
|  | Show name | true |  |  |  |
|  | Advanced |  |  |  |
|  | System dynamics units | false |  |  |  |
|  | Description |  |  |  |
|  | Description | Salience of crises: initially, 0 (no crises in memory). |  |  |  |
|  |  |  |  |  |  |
|  | Dynamic Variable: SalienceAdjustmentTime |  |  |
|  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Formula | CrisisSalienceFactor >= CrisisSalience ? TimeConstant\_Increasing : TimeConstant\_Decreasing |  |  |  |
|  | Constant | false |  |  |  |
|  | External | false |  |  |  |
|  | Array | false |  |  |  |
|  | Show at runtime | true |  |  |  |
|  | Public | false |  |  |  |
|  | Show name | true |  |  |  |
|  | Advanced |  |  |  |
|  | System dynamics units | false |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | Dynamic Variable: TimeConstant\_Decreasing |  |  |
|  |  |  |  |  |  |  |  |
|  | Description: Time constant governing adjustment when output is decreasing |  |  |
|  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Value | 9 |  |  |  |
|  | Constant | true |  |  |  |
|  | External | false |  |  |  |
|  | Array | false |  |  |  |
|  | Show at runtime | true |  |  |  |
|  | Public | false |  |  |  |
|  | Show name | true |  |  |  |
|  | Advanced |  |  |  |
|  | System dynamics units | false |  |  |  |
|  | Description |  |  |  |
|  | Description | Time constant governing adjustment when output is decreasing |  |  |  |
|  |  |  |  |  |  |  |  |
|  | Dynamic Variable: CrisisSalienceFactor |  |  |
|  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Formula | main.fiscalResilienceGap |  |  |  |
|  | Constant | false |  |  |  |
|  | External | false |  |  |  |
|  | Array | false |  |  |  |
|  | Show at runtime | true |  |  |  |
|  | Public | false |  |  |  |
|  | Show name | true |  |  |  |
|  | Advanced |  |  |  |
|  | System dynamics units | false |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  | Dynamic Variable: TimeConstant\_Increasing |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Value | 3 |  |  |  |
|  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | Constant | true |  |  |  |
|  | External | false |  |  |  |
|  | Array | false |  |  |  |
|  | Show at runtime | true |  |  |  |
|  | Public | false |  |  |  |
|  | Show name | true |  |  |  |
|  | Advanced |  |  |  |
|  | System dynamics units | false |  |  |  |
|  | Description |  |  |  |
|  | Description | Time constant that characterizes the adjustment when the output is increasing (when delay X exceeds or equals the output X'). |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  | Flow: ChangeInCrisisSalience |  |  |
|  |  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Formula | ( CrisisSalienceFactor - CrisisSalience ) / SalienceAdjustmentTime |  |  |  |
|  | Constant | false |  |  |  |
|  | External | false |  |  |  |
|  | Array | false |  |  |  |
|  | Show at runtime | true |  |  |  |
|  | Public | false |  |  |  |
|  | Show name | true |  |  |  |
|  | Advanced |  |  |  |
|  | System dynamics units | false |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  | Flow: ChangeInCrisisSalience |  |  |
|  |  |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Formula | ( CrisisSalienceFactor - CrisisSalience ) / SalienceAdjustmentTime |  |  |  |
|  | Constant | false |  |  |  |
|  | External | false |  |  |  |
|  | Array | false |  |  |  |
|  | Show at runtime | true |  |  |  |
|  | Public | false |  |  |  |
|  | Show name | true |  |  |  |
|  | Advanced |  |  |  |
|  | System dynamics units | false |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  | Stock: Cooptation |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Equation mode | Classic |  |  |  |
|  | Initial value | 0 |  |  |  |
|  | Array | false |  |  |  |
|  | Show at runtime | true |  |  |  |
|  | Public | false |  |  |  |
|  | Show name | true |  |  |  |
|  | Advanced |  |  |  |
|  | System dynamics units | false |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  | Flow: AccumulatingCooptation |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Formula | inState( Coopter ) ? 10 : 0 |  |  |  |
|  | Constant | false |  |  |  |
|  | External | false |  |  |  |
|  | Array | false |  |  |  |
|  | Show at runtime | true |  |  |  |  |
|  | Public | false |  |  |  |  |
|  | Show name | true |  |  |  |  |
|  | Advanced |  |  |  |  |
|  | System dynamics units | false |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  | Statechart Entry Point: statechart |  |  |
|  |  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |  |
|  | General |  |  |  |  |
|  | Logging | true |  |  |  |  |
|  | Show at runtime | true |  |  |  |  |
|  | Show name | true |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  | Transition: ManagerialNetworking |  |  |
|  |  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |  |
|  | General |  |  |  |
|  | Rate | (main.NetworkingIndex : PER\_MONTH) |  |  |  |
|  | Trigger type | Rate |  |  |  |
|  | Show name | true |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | Transition: SalienceEffects |  |  |
|  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Condition | CrisisSalience > 40 |  |  |  |
|  | Trigger type | Condition |  |  |  |
|  | Show name | true |  |  |  |
|  |  |  |  |  |  |  |  |
|  | Transition: Disassociation |  |  |
|  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Condition | CrisisSalience < 60 |  |  |  |
|  | Trigger type | Condition |  |  |  |
|  | Show name | true |  |  |  |
|  |  |  |  |  |  |  |  |
|  | State: ExtStakeholder |  |  |
|  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Exit action |   |  |  |  |
|  | Entry action | shapeBody.setFillColor(yellow) |  |  |  |
|  | Fill color | white |  |  |  |
|  | Show name | true |  |  |  |
|  |  |  |  |  |  |  |  |
|  | State: ExtStrategicPlanner |  |  |
|  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Entry action | shapeBody.setFillColor(lime); |  |  |  |
|  | Fill color | white |  |  |  |
|  | Show name | true |  |  |  |
|  |  |  |  |  |  |  |  |
|  | State: Coopter |  |  |
|  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Exit action | Cooptation = 0; |  |  |  |
|  | Entry action | shapeBody.setFillColor(red); |  |  |  |
|  | Fill color | white |  |  |  |
|  | Show name | true |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | Data Set: CooptationDS |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Dataset Samples To Keep | 500 |  |  |  |
|  | Axis Data Vertical Y Axis | Cooptation |  |  |  |
|  | Axis Data Freeze X Axis | true |  |  |  |
|  | Show at runtime | true |  |  |  |
|  | Show name | true |  |  |  |
|  | Data update |  |  |  |
|  | Analysis auto update | true |  |  |  |
|  | ANALYSIS\_UPDATE\_TIME\_PROPERTIES |  - Recurring Event Properties |  |  |  |
|  | Logging | true |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |
|  | Data Set: CrisisSalienceDS |  |  |
|  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Dataset Samples To Keep | 500 |  |  |  |
|  | Axis Data Vertical Y Axis | CrisisSalience |  |  |  |
|  | Axis Data Freeze X Axis | true |  |  |  |
|  | Show at runtime | true |  |  |  |
|  | Show name | true |  |  |  |
|  | Data update |  |  |  |
|  | Analysis auto update | true |  |  |  |
|  | ANALYSIS\_UPDATE\_TIME\_PROPERTIES |  - Recurring Event Properties |  |  |  |
|  | Logging | true |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  | Group: person |  |  |
|  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Show at runtime | true |  |  |  |
|  | Lock | false |  |  |  |
|  | Embedded icon | false |  |  |  |
|  | Public | true |  |  |  |
|  | Position and size |  |  |  |
|  | x | 0.0 |  |  |  |
|  | y | 0.0 |  |  |  |
|  | z | 0.0 |  |  |  |
|  | Rotation | 0.0 |  |  |  |
|  | Advanced |  |  |  |
|  | Show in | 2D only |  |  |  |
|  | Show name | false |  |  |  |
|  |  |  |  |  |  |  |  |
|  | Curve: shapeBody |  |  |
|  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Polyline closed | true |  |  |  |
|  | Show at runtime | true |  |  |  |
|  | Lock | false |  |  |  |
|  | Public | true |  |  |  |
|  | Appearance |  |  |  |
|  | Fill color | black |  |  |  |
|  | Line width | 1.0 |  |  |  |
|  | Line style | SOLID |  |  |  |
|  | Position and size |  |  |  |
|  | x | -2.0 |  |  |  |
|  | y | -7.0 |  |  |  |
|  | Advanced |  |  |  |
|  | Control points are set automatically | true |  |  |  |
|  | Show name | false |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | Link to agents: connections |  |  |
|  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Show at runtime | true |  |  |  |
|  | Show name | true |  |  |  |
|  | Communication |  |  |  |
|  | Message type | Object |  |  |  |
|  | Animation |  |  |  |
|  | Draw line | false |  |  |  |
|  |  |  |  |  |  |  |  |
|  | Agent Type: Main |  |  |
|  | Name | Value |  |  |  |
|  | Use in flowcharts as | Agent |  |  |  |
|  | Dimensions and movement |  |  |  |
|  | Speed | (10 : MPS) |  |  |  |
|  | Rotate animation towards movement | true |  |  |  |
|  | Rotate vertically as well (along Z-axis) | false |  |  |  |
|  | Space and network |  |  |  |
|  | Space Type | Continuous |  |  |  |
|  | Dynamic: Width | 500 |  |  |  |
|  | Dynamic: Height | 500 |  |  |  |
|  | Dynamic: z Height | 0 |  |  |  |
|  | Layout Type | Random |  |  |  |
|  | Layout Type Apply On Startup | true |  |  |  |
|  | Network type | Random |  |  |  |
|  | Network Type Apply On Startup | true |  |  |  |
|  | Connections per agent | 2 |  |  |  |
|  | Enable steps | false |  |  |  |
|  | Advanced Java |  |  |  |
|  | Generic | false |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  | Parameter: TimeForStrategicInterventions |  |  |
|  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Array | false |  |  |  |
|  | Default value | 12 |  |  |  |
|  | Type | double |  |  |  |
|  | Show at runtime | true |  |  |  |
|  | Show name | true |  |  |  |
|  | Value editor |  |  |  |
|  | Editor control | Slider |  |  |  |
|  | Parameter Editor Minimum Value | 0 |  |  |  |
|  | Parameter Editor Maximum Value | 60 |  |  |  |
|  | Advanced |  |  |  |
|  | System dynamics units | true |  |  |  |
|  | Unit | months |  |  |  |
|  | Save in snapshot | true |  |  |  |
|  |  |  |  |  |  |  |  |
|  | Parameter: StartingFiscalResilience |  |  |
|  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Array | false |  |  |  |
|  | Default value | 50 |  |  |  |
|  | Type | double |  |  |  |
|  | Show at runtime | true |  |  |  |
|  | Show name | true |  |  |  |
|  | Value editor |  |  |  |
|  | Editor control | Slider |  |  |  |
|  | Parameter Editor Minimum Value | 0 |  |  |  |
|  | Parameter Editor Maximum Value | 100 |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | Parameter: TimeForPlanningGoal |  |  |
|  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Array | false |  |  |  |
|  | Default value | 1 |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | Type | double |  |  |  |
|  | Show at runtime | true |  |  |  |
|  | Show name | true |  |  |  |
|  | Value editor |  |  |  |
|  | Editor control | Slider |  |  |  |
|  | Parameter Editor Minimum Value | 0 |  |  |  |
|  | Parameter Editor Maximum Value | 60 |  |  |  |
|  |  |  |  |  |  |  |  |
|  | Parameter: InitialStrategicGoal |  |  |
|  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Array | false |  |  |  |
|  | Default value | 150 |  |  |  |
|  | Type | double |  |  |  |
|  | Show at runtime | true |  |  |  |
|  | Show name | true |  |  |  |
|  | Value editor |  |  |  |
|  | Editor control | Slider |  |  |  |
|  | Parameter Editor Minimum Value | 0 |  |  |  |
|  | Parameter Editor Maximum Value | 100 |  |  |  |
|  | Advanced |  |  |  |
|  | System dynamics units | true |  |  |  |
|  | Unit | dmls |  |  |  |
|  | Save in snapshot | true |  |  |  |
|  |  |  |  |
|  | Parameter: NetworkingIndex |  |  |
|  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Array | false |  |  |  |
|  | Default value | normal(3.28, 0.94) |  |  |  |
|  | Type | double |  |  |  |
|  | Show at runtime | true |  |  |  |
|  | Show name | true |  |  |  |
|  | Value editor |  |  |  |
|  | Editor control | Text |  |  |  |
|  | Advanced |  |  |  |
|  | System dynamics units | false |  |  |  |
|  | Save in snapshot | true |  |  |  |
|  |  |  |  |  |  |  |  |
|  | Parameter: DisassociationRate |  |  |
|  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Array | false |  |  |  |
|  | Default value | triangular(1,10,3) |  |  |  |
|  | Type | double |  |  |  |
|  | Show at runtime | true |  |  |  |
|  | Show name | true |  |  |  |
|  | Value editor |  |  |  |
|  | Editor control | Text |  |  |  |
|  | Advanced |  |  |  |
|  | System dynamics units | false |  |  |  |
|  | Save in snapshot | true |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  | Function: fiscalResilienceLevel |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Return type | double |  |  |  |
|  | Return type: | Returns value |  |  |  |
|  | Show at runtime | true |  |  |  |
|  | Show name | true |  |  |  |
|  | Function body |  |  |  |
|  | Body | return fiscalResilienceOutput; |  |  |  |
|  | Advanced |  |  |  |
|  | Access type | default |  |  |  |
|  | System dynamics units | false |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | Table Function: tableFunction |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Out of range behavior | Extrapolate |  |  |  |
|  | Interpolation | Linear |  |  |  |
|  | Show at runtime | true |  |  |  |
|  | Show name | true |  |  |  |
|  | Table data |  |  |  |
|  | Load From Database | false |  |  |  |
|  | Advanced |  |  |  |
|  | Access type | public |  |  |  |
|  | System dynamics units | false |  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  | Table Data: |  |
|  |  |  |  |  |  |  |  |  |  |
|  | Argument | Value |  |  |  |  |  |  |
|  | -5.0 | 132.0 |  |  |  |  |  |  |
|  | -4.0 | 138.0 |  |  |  |  |  |  |
|  | -3.0 | 142.0 |  |  |  |  |  |  |
|  | -2.0 | 148.0 |  |  |  |  |  |  |
|  | -1.0 | 150.0 |  |  |  |  |  |  |
|  | 0.0 | 145.0 |  |  |  |  |  |  |
|  | 1.0 | 135.0 |  |  |  |  |  |  |
|  | 2.0 | 125.0 |  |  |  |  |  |  |
|  | 3.0 | 115.0 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | Table Data: |  |
|  |  |  |  |  |  |  |  |  |  |
|  | Argument | Value |  |  |  |  |  |  |
|  | 4.0 | 100.0 |  |  |  |  |  |  |
|  | 5.0 | 95.0 |  |  |  |  |  |  |
|  | 6.0 | 85.0 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | Table Function: tableFunction2 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Out of range behavior | Extrapolate |  |  |  |
|  | Interpolation | Linear |  |  |  |
|  | Show at runtime | true |  |  |  |
|  | Show name | true |  |  |  |
|  | Table data |  |  |  |
|  | Load From Database | true |  |  |  |
|  | Values Query |  - Database Table Function Query |  |  |  |
|  | Advanced |  |  |  |
|  | Access type | public |  |  |  |
|  | System dynamics units | false |  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  | Table Data: |  |
|  |  |  |  |  |  |  |  |  |  |
|  | Argument | Value |  |  |  |  |  |  |
|  | -5.0 | 132.0 |  |  |  |  |  |  |
|  | -4.0 | 138.0 |  |  |  |  |  |  |
|  | -3.0 | 142.0 |  |  |  |  |  |  |
|  | -2.0 | 148.0 |  |  |  |  |  |  |
|  | -1.0 | 150.0 |  |  |  |  |  |  |
|  | 0.0 | 145.0 |  |  |  |  |  |  |
|  | 1.0 | 135.0 |  |  |  |  |  |  |
|  | 2.0 | 125.0 |  |  |  |  |  |  |
|  | 3.0 | 115.0 |  |  |  |  |  |  |
|  | 4.0 | 100.0 |  |  |  |  |  |  |
|  | 5.0 | 95.0 |  |  |  |  |  |  |
|  | 6.0 | 85.0 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | Event: UpdateABM\_Cooptation |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Logging | true |  |  |  |
|  | EVENT\_TIMEOUT\_PROPERTIES |  - Recurring Event Properties |  |  |  |
|  | Mode | Cyclic |  |  |  |
|  | Trigger type | Timeout |  |  |  |
|  | Show at runtime | false |  |  |  |
|  | Show name | true |  |  |  |
|  | Action |  |  |  |
|  | Action | ABM\_Cooptation = externalStakeholders.NumberCoopter(); |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | Flow: ChangingFiscalResilience |  |  |
|  |  |  |  |  |  |  |  |
|  | Description: The net inflow a fraction of the discrepancy between the desired and actual state each period. The adjustment time determines what fraction of the gap is corrected each period. |  |  |
|  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Formula | (FiscalResilienceGoal-FiscalResilience)/TimeForStrategicInterventions |  |  |  |
|  | Constant | false |  |  |  |
|  | External | false |  |  |  |
|  | Array | false |  |  |  |
|  | Show at runtime | true |  |  |  |
|  | Public | false |  |  |  |
|  | Show name | true |  |  |  |
|  | Advanced |  |  |  |
|  | System dynamics units | true |  |  |  |
|  | Unit | dmls/months |  |  |  |
|  | Description |  |  |  |
|  | Description | The net inflow a fraction of the discrepancy between the desired and actual state each period. The adjustment time determines what fraction of the gap is corrected each period. |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | Stock: FiscalResilienceGoal |  |  |
|  |  |  |  |  |  |  |  |
|  | Description: The memory of crises. Initially 0 (no crises in memory) |  |  |
|  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Equation mode | Classic |  |  |  |
|  | Initial value | InitialStrategicGoal |  |  |  |
|  | Array | false |  |  |  |
|  | Show at runtime | true |  |  |  |
|  | Public | false |  |  |  |
|  | Show name | true |  |  |  |
|  | Advanced |  |  |  |
|  | System dynamics units | true |  |  |  |
|  | Unit | dmls/months |  |  |  |
|  | Description |  |  |  |
|  | Description | The memory of crises. Initially 0 (no crises in memory) |  |  |  |
|  |  |  |  |  |  |  |  |
|  | Flow: ChangingStrategicGoal |  |  |
|  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Formula | ((FiscalResilience-FiscalResilienceGoal)\*(ABM\_Cooptation/externalStakeholders.size()))/TimeForPlanningGoal |  |  |  |
|  | Constant | false |  |  |  |
|  | External | false |  |  |  |
|  | Array | false |  |  |  |
|  | Show at runtime | true |  |  |  |
|  | Public | false |  |  |  |
|  | Show name | true |  |  |  |
|  | Advanced |  |  |  |
|  | System dynamics units | false |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  | Stock: FiscalResilience |  |  |
|  |  |  |  |  |  |  |  |
|  | Description: The state of the system accumulates its net inflow rate. |  |  |
|  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Equation mode | Classic |  |  |  |
|  | Initial value | StartingFiscalResilience |  |  |  |
|  | Array | false |  |  |  |
|  | Show at runtime | true |  |  |  |
|  | Public | false |  |  |  |
|  | Show name | true |  |  |  |
|  | Advanced |  |  |  |
|  | System dynamics units | true |  |  |  |
|  | Unit | dmls |  |  |  |
|  | Description |  |  |  |
|  | Description | The state of the system accumulates its net inflow rate. |  |  |  |
|  |  |  |  |  |  |  |  |
|  | Dynamic Variable: ABM\_Cooptation |  |  |
|  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Value | 0 |  |  |  |
|  | Constant | true |  |  |  |
|  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | External | false |  |  |  |
|  | Array | false |  |  |  |
|  | Show at runtime | true |  |  |  |
|  | Public | false |  |  |  |
|  | Show name | true |  |  |  |
|  | Advanced |  |  |  |
|  | System dynamics units | false |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  | Flow: ChangingFiscalResilience |  |  |
|  |  |  |  |  |  |  |  |
|  | Description: The net inflow a fraction of the discrepancy between the desired and actual state each period. The adjustment time determines what fraction of the gap is corrected each period. |  |  |
|  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Formula | (FiscalResilienceGoal-FiscalResilience)/TimeForStrategicInterventions |  |  |  |
|  | Constant | false |  |  |  |
|  | External | false |  |  |  |
|  | Array | false |  |  |  |
|  | Show at runtime | true |  |  |  |
|  | Public | false |  |  |  |
|  | Show name | true |  |  |  |
|  | Advanced |  |  |  |
|  | System dynamics units | true |  |  |  |
|  | Unit | dmls/months |  |  |  |
|  | Description |  |  |  |
|  | Description | The net inflow a fraction of the discrepancy between the desired and actual state each period. The adjustment time determines what fraction of the gap is corrected each period. |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  | Flow: ChangingStrategicGoal |  |  |
|  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Formula | ((FiscalResilience-FiscalResilienceGoal)\*(ABM\_Cooptation/externalStakeholders.size()))/TimeForPlanningGoal |  |  |  |
|  | Constant | false |  |  |  |
|  | External | false |  |  |  |
|  | Array | false |  |  |  |
|  | Show at runtime | true |  |  |  |
|  | Public | false |  |  |  |
|  | Show name | true |  |  |  |
|  | Advanced |  |  |  |
|  | System dynamics units | false |  |  |  |
|  |  |  |  |  |  |  |  |
|  | Title | Type | Dataset / Value | Point Style | Color | Line | Width | Interpolation |  |  |  |
|  | Cooptation | dataset | ABM\_CooptationDS | NONE | darkOrange | true | 1.0 | LINEAR |  |  |  |
|  | Average Crisis Memory | value |  | NONE | slateBlue | true | 1.0 | LINEAR |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  | Time Stack Chart: chart |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Lock | false |  |  |  |
|  | Public | true |  |  |  |
|  | Data update |  |  |  |
|  | Analysis auto update | true |  |  |  |
|  | ANALYSIS\_UPDATE\_TIME\_PROPERTIES |  - Recurring Event Properties |  |  |  |
|  | Dataset Samples To Keep | 60 |  |  |  |
|  | Scale |  |  |  |
|  | Time window | 60 |  |  |  |
|  | Time | model time units |  |  |  |
|  | Vertical scale | Auto |  |  |  |
|  | Appearance |  |  |  |
|  | Labels horizontal position | DEFAULT |  |  |  |
|  | Labels vertical position | DEFAULT |  |  |  |
|  | Label format | Model time units |  |  |  |
|  | Labels Text Color | darkGray |  |  |  |
|  | Chart Area Grid Color | darkGray |  |  |  |
|  | Position and size |  |  |  |
|  | x | 0.0 |  |  |  |
|  | Width | 300.0 |  |  |  |
|  | y | 100.0 |  |  |  |
|  | Height | 310.0 |  |  |  |
|  | Legend |  |  |  |
|  | Show legend | true |  |  |  |
|  | Legend size | 70.0 |  |  |  |
|  | Legend text color | black |  |  |  |
|  | Chart area |  |  |  |
|  | Chart Area: X Offset | 50.0 |  |  |  |
|  | Chart Area: Width | 220.0 |  |  |  |
|  | Chart Area: Y Offset | 30.0 |  |  |  |
|  | Chart Area: Height | 180.0 |  |  |  |
|  | Chart Area: Background Color | white |  |  |  |
|  | Chart area border color | black |  |  |  |
|  |  |  |
|  | Plot Items: |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  | Title | Type | Dataset / Value | Color |  |  |  |  |
|  | External Network Stakeholders  | value | externalStakeholders.NumberExternalStakeholder() | yellow |  |  |  |  |
|  | Strategic Planners (External Stakeholders) | value | externalStakeholders.NumberExternalStrategicPlanner() | lime |  |  |  |  |
|  | Coopting Stakeholders (External) | value | externalStakeholders.NumberCoopter() | red |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  | Data Set: FiscalResilienceDS |  |  |
|  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Dataset Samples To Keep | 2000 |  |  |  |
|  | Axis Data Vertical Y Axis | FiscalResilience |  |  |  |
|  | Axis Data Freeze X Axis | true |  |  |  |
|  | Show at runtime | true |  |  |  |
|  | Show name | true |  |  |  |
|  | Data update |  |  |  |
|  | Analysis auto update | true |  |  |  |
|  | ANALYSIS\_UPDATE\_TIME\_PROPERTIES |  - Recurring Event Properties |  |  |  |
|  | Logging | true |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  | Data Set: FiscalResilienceGoalDS |  |  |
|  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Dataset Samples To Keep | 2000 |  |  |  |
|  | Axis Data Vertical Y Axis | FiscalResilienceGoal |  |  |  |
|  | Axis Data Freeze X Axis | true |  |  |  |
|  | Show at runtime | true |  |  |  |
|  | Show name | true |  |  |  |
|  | Data update |  |  |  |
|  | Analysis auto update | true |  |  |  |
|  | ANALYSIS\_UPDATE\_TIME\_PROPERTIES |  - Recurring Event Properties |  |  |  |
|  | Logging | true |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  | Data Set: ABM\_CooptationDS |  |  |
|  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Dataset Samples To Keep | 2000 |  |  |  |
|  | Axis Data Vertical Y Axis | ABM\_Cooptation |  |  |  |
|  | Axis Data Freeze X Axis | true |  |  |  |
|  | Show at runtime | true |  |  |  |
|  | Show name | true |  |  |  |
|  | Data update |  |  |  |
|  | Analysis auto update | true |  |  |  |
|  | ANALYSIS\_UPDATE\_TIME\_PROPERTIES |  - Recurring Event Properties |  |  |  |
|  | Logging | true |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  | Agent Presentation: externalStakeholders\_presentation |  |  |
|  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Show at runtime | true |  |  |  |
|  | Public | true |  |  |  |
|  | Position and size |  |  |  |
|  | x | 310.0 |  |  |  |
|  | y | 110.0 |  |  |  |
|  | z | 0.0 |  |  |  |
|  | Rotation | 0.0 |  |  |  |
|  | Scale | Automatically calculated |  |  |  |
|  | Advanced |  |  |  |
|  | Show in | 2D and 3D |  |  |  |
|  | Draw agent with offset to this position | true |  |  |  |
|  | Show name | false |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | Simulation Experiment: Simulation |  |  |
|  |  |  |  |  |  |  |  |
|  | Name | Value |  |  |  |
|  | General |  |  |  |
|  | Maximum available memory | 512 |  |  |  |
|  | Agent type | Main |  |  |  |
|  | Model time |  |  |  |
|  | Execution mode | Real time with scale |  |  |  |
|  | Real time scale | 1.0 |  |  |  |
|  | Stop option | Never |  |  |  |
|  | Initial time | 0.0 |  |  |  |
|  | Initial date | Sun Nov 17 00:00:00 GMT 2019 |  |  |  |
|  | Randomness |  |  |  |
|  | Random Number Generation Type | Random seed (unique simulation runs) |  |  |  |
|  | Selection mode for simultaneous events | LIFO (in the reverse order of scheduling) |  |  |  |
|  | Window |  |  |  |
|  | Title | StrategicPlanningTheoryExample : Simulation |  |  |  |
|  | Enable zoom and panning | true |  |  |  |
|  | Enable developer panel | true |  |  |  |
|  | Show developer panel on start | false |  |  |  |
|  | Advanced |  |  |  |
|  | Load root from snapshot | false |  |  |  |