

"Quasi-Hyperbolic Discounting"=

```
IF THEN ELSE( Time <= INITIAL TIME + 1, 1, "beta =  $\beta$ " * Exponential Discounting t)
~ Dmnl
~ :SUPPLEMENTARY
|
```

"beta =  $\beta$ "=

```
0.6
~ Dmnl
~ |
```

Chge in Exponential Discounting t 1=

```
IF THEN ELSE(Time = INTEGER (Time), ( Exponential Discounting t - Exponential Discounting
t 1\
) / TIME STEP, 0)
~ Dmnl / Year
~ |
```

Discount Factor Delta=

```
0.97
~ Dmnl
~ |
```

"Exponential Discounting t - 1"=

```
IF THEN ELSE(Time = INTEGER(Time), Exponential Discounting t 1, Lagged Exponential
Discounting t 1\
)
~ Dmnl
~ |
```

Exponential Discounting t=

```
Discount Factor Delta * "Exponential Discounting t - 1"
~ Dmnl
~ |
```

Exponential Discounting t 1= INTEG (

```
Chge in Exponential Discounting t 1,
```

Initial Exponential Discounting t 1)

~ Dmnl

~ |

Initial Exponential Discounting t 1=

1

~ Dmnl

~ |

Lagged Exponential Discounting t 1=

DELAY FIXED( Exponential Discounting t 1, 1 , Exponential Discounting t 1 )

~ Dmnl

~ |

\*\*\*\*\*

.Control

\*\*\*\*\*~

Simulation Control Parameters

|

FINAL TIME = 48

~ Year

~ The final time for the simulation.

|

INITIAL TIME = 0

~ Year

~ The initial time for the simulation.

|

SAVEPER =

TIME STEP

~ Year [0,?]

~ The frequency with which output is stored.

|

TIME STEP = 0.0078125

~ Year [0,?]

~ The time step for the simulation.

|

\\---// Sketch information - do not modify anything except names

V300 Do not put anything below this section - it will be ignored

\*View 1

\$192-192-192,0,Open Sans|10||0-0-0|0-0-0|0-0-255|-1--1--1|255-255-255|96,96,100,0

10,1,Exponential Discounting t 1,501,254,50,28,3,131,0,0,0,0,0,0,0,0,0,0,0

12,2,48,263,250,10,8,0,3,0,0,-1,0,0,0,0,0,0,0,0

1,3,5,1,4,0,0,22,0,0,0,-1--1--1,,1|(409,250)|

1,4,5,2,100,0,0,22,0,0,0,-1--1--1,,1|(314,250)|

11,5,48,361,250,6,8,34,3,0,0,3,0,0,0,0,0,0,0,0

10,6,Chge in Exponential Discounting t 1,361,224,62,18,40,3,0,0,-1,0,0,0,0,0,0,0,0

10,7,Lagged Exponential Discounting t 1,703,319,62,18,8,3,0,0,0,0,0,0,0,0,0,0

10,8,"Exponential Discounting t - 1",603,419,51,18,8,3,0,0,0,0,0,0,0,0,0,0

10,9,Exponential Discounting t,419,480,42,18,8,3,0,0,0,0,0,0,0,0,0,0

10,10,Discount Factor Delta,286,551,50,18,8,3,0,0,0,0,0,0,0,0,0,0

1,11,1,5,1,0,0,0,0,128,0,-1--1--1,,1|(447,296)|

1,12,1,7,1,0,0,0,0,128,0,-1--1--1,,1|(616,258)|

1,13,7,8,1,0,0,0,0,128,0,-1--1--1,,1|(677,372)|

1,14,1,8,1,0,0,0,0,128,0,-1--1--1,,1|(511,328)|

1,15,8,9,1,0,0,0,0,128,0,-1--1--1,,1|(538,460)|

1,16,10,9,1,0,0,0,0,128,0,-1--1--1,,1|(326,508)|

1,17,9,5,1,0,0,0,0,128,0,-1--1--1,,1|(368,394)|

10,18,Initial Exponential Discounting t 1,492,169,57,18,8,3,0,0,0,0,0,0,0,0,0,0

1,19,18,1,0,0,0,0,128,1,-1--1--1,,1|(494,199)|

10,20,Time,290,145,24,10,8,2,1,3,-1,0,0,0,128-128-128,0-0-0,|10||128-128-128,0,0,0,0,0,0

1,21,20,6,1,1,0,0,0,64,0,-1--1--1,,1|(324,173)|

10,22,TIME STEP,221,197,40,10,8,2,1,3,-1,0,0,0,128-128-128,0-0-0,|10||128-128-128,0,0,0,0,0,0

1,23,22,6,1,1,0,0,0,64,0,-1--1--1,,1|(270,216)|

10,24,Time,640,487,24,10,8,2,1,3,-1,0,0,0,128-128-128,0-0-0,|10||128-128-128,0,0,0,0,0,0

1,25,24,8,0,1,0,0,0,64,0,-1--1--1,,1|(626,463)|

10,26,"Quasi-Hyperbolic Discounting",584,543,55,18,8,3,0,0,0,0,0,0,0,0,0,0

10,27,"beta =  $\beta$ ",458,592,26,10,8,3,0,0,0,0,0,0,0,0,0,0

1,28,27,26,1,0,0,0,0,128,0,-1--1--1,,1| (513,591) |

10,29,INITIAL TIME,629,626,48,10,8,2,1,3,-1,0,0,0,128-128-128,0-0-0,|10||128-128-128,0,0,0,0,0

1,30,29,26,1,1,0,0,0,64,0,-1--1--1,,1| (623,582) |

10,31,Time,773,551,24,10,8,2,1,3,-1,0,0,0,128-128-128,0-0-0,|10||128-128-128,0,0,0,0,0,0

1,32,31,26,1,1,0,0,0,64,0,-1--1--1,,1| (704,520) |

1,33,9,26,1,0,0,0,0,128,0,-1--1--1,,1| (494,502) |