

# MM, FN, AR and Efficiency

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## **Abstract**

Experiment with a MM a FN and multiples TT. The MM and FN parameters are such that the two agents are in equilibrium.

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# 1 inp gammaFN-002000 gammaTT-002000 agentTTCash 005000 agentFNCash-005000

## 1.1 Parameters

techTraderList-0	7	sn	5
		linearDF	FALSE
		infiniteCredit	FALSE
		fixedWealth	0
		contexts	0
consumptionFactor	0		
account	cash   50		
6	6	sn	4
		linearDF	FALSE
		infiniteCredit	FALSE
		fixedWealth	0
		contexts	0
consumptionFactor	0		
account	cash   50		
5	5	sn	3
		linearDF	FALSE
		infiniteCredit	FALSE
		fixedWealth	0
		contexts	0
consumptionFactor	0		
account	cash   50		
2	2	sn	2
		linearDF	FALSE
		infiniteCredit	FALSE
		fixedWealth	0
		contexts	0
consumptionFactor	0		
account	cash   50		
1	1	sn	1
		linearDF	FALSE
		infiniteCredit	FALSE
		fixedWealth	0
		contexts	0
consumptionFactor	0		
account	cash   50		
3	3	sn	0
		linearDF	FALSE
		infiniteCredit	FALSE
		fixedWealth	0
		contexts	0
consumptionFactor	0		
account	cash   50		
0	0	sn	0
		linearDF	FALSE
		infiniteCredit	FALSE
		fixedWealth	0
		contexts	0
consumptionFactor	0		
account	cash   50		

## 1.2 Graphs

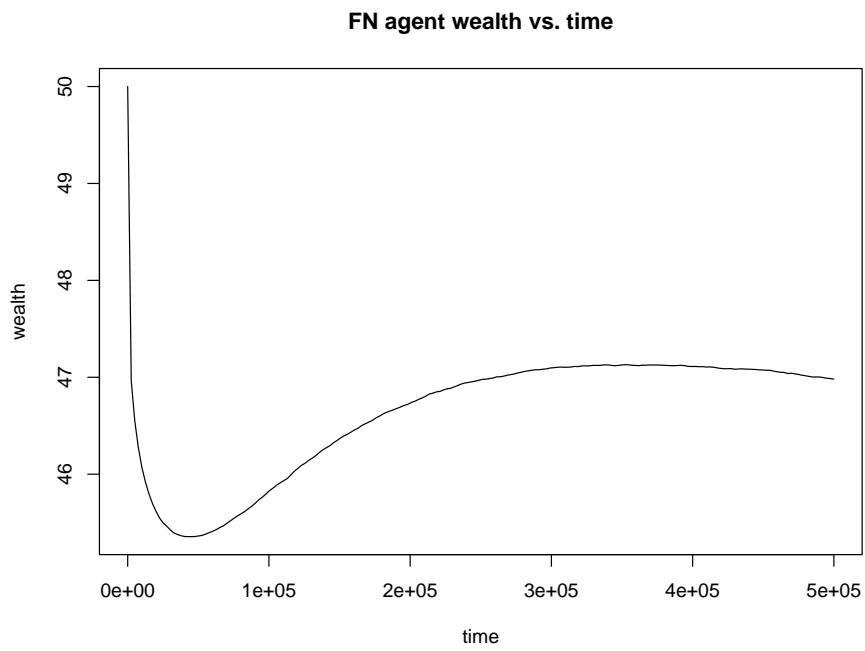


Figure 1: FN agent wealth vs. time



Figure 2: MM agent wealth vs. time

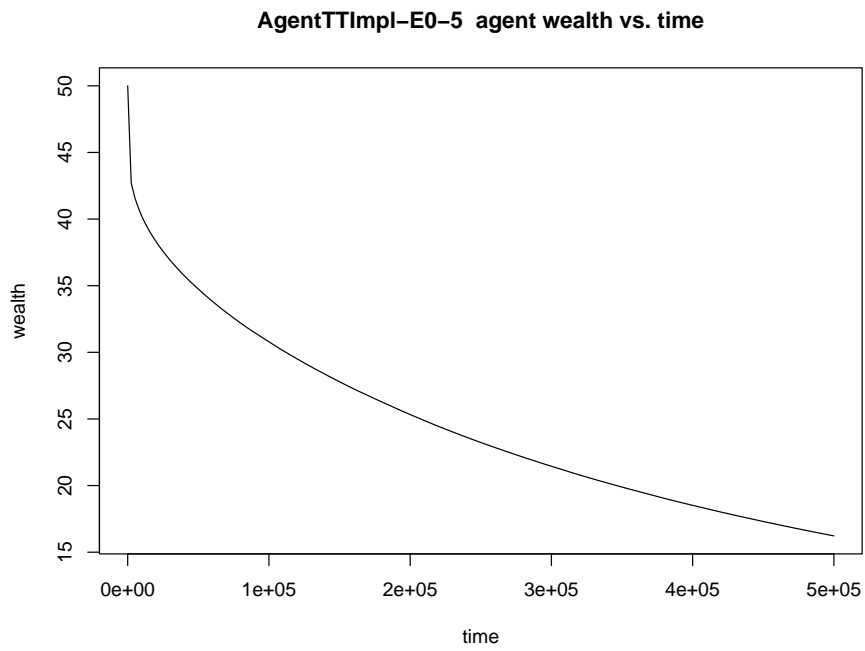


Figure 3: AgentTTImpl-E0-5 agent wealth vs. time

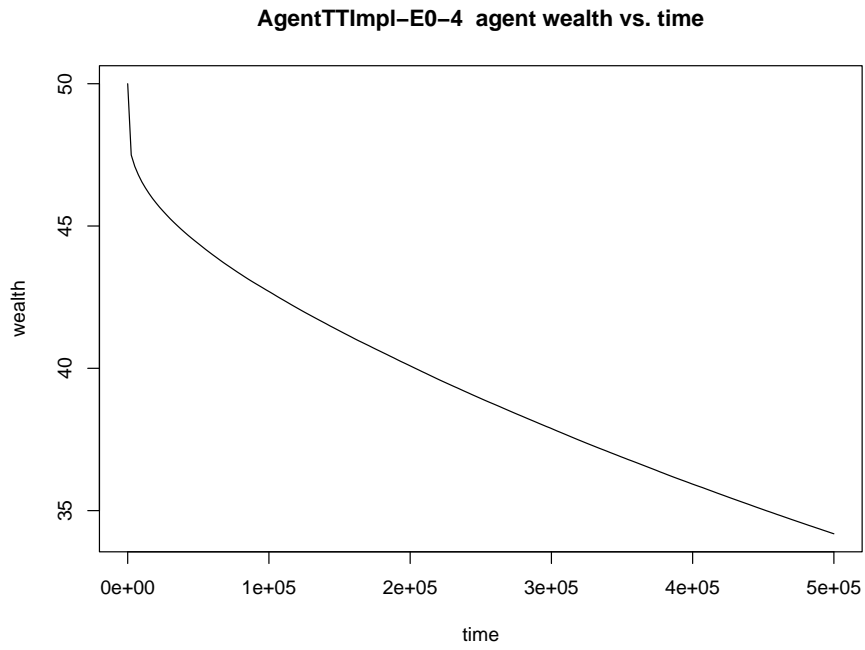


Figure 4: AgentTTImpl-E0-4 agent wealth vs. time

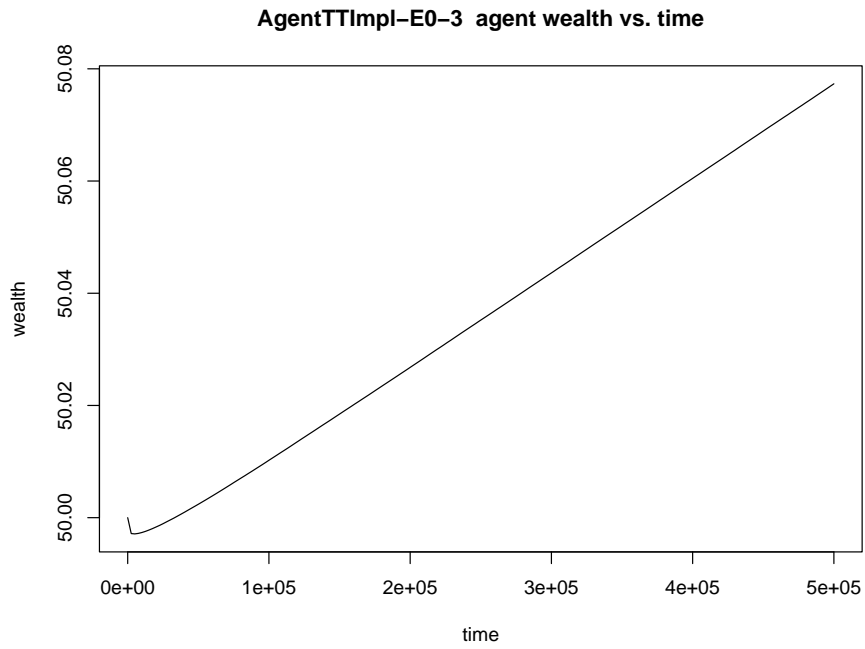


Figure 5: AgentTTImpl-E0-3 agent wealth vs. time

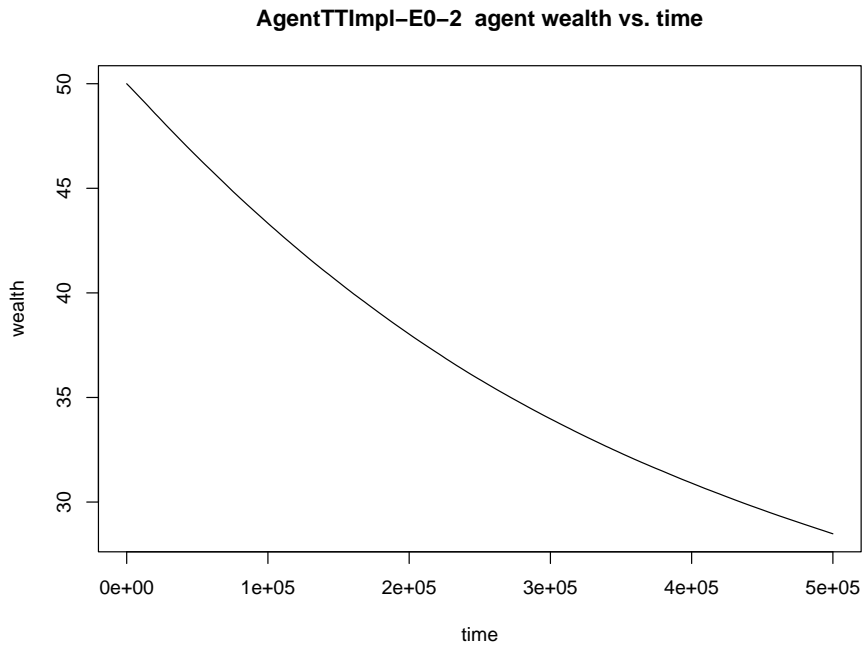


Figure 6: AgentTTImpl-E0-2 agent wealth vs. time

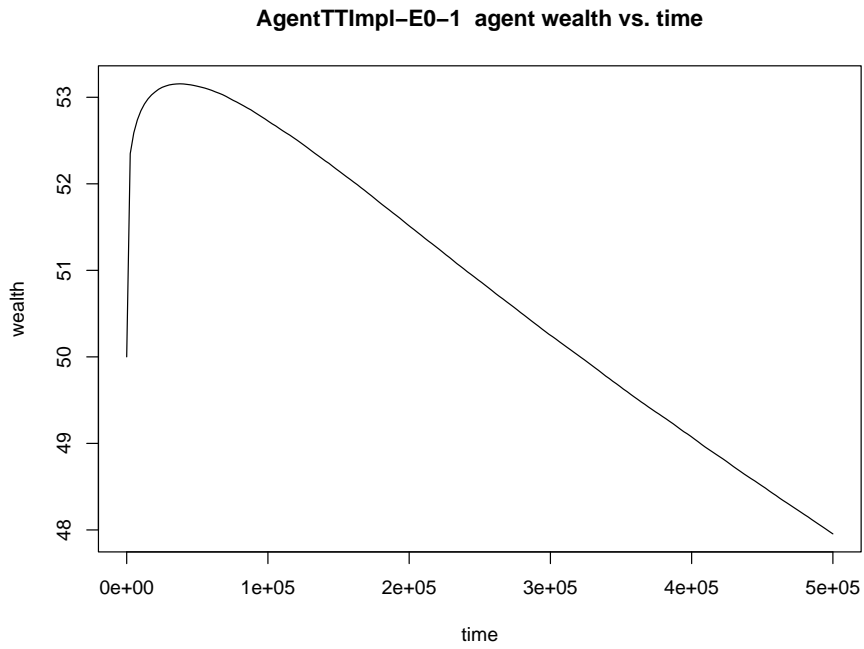


Figure 7: AgentTTImpl-E0-1 agent wealth vs. time

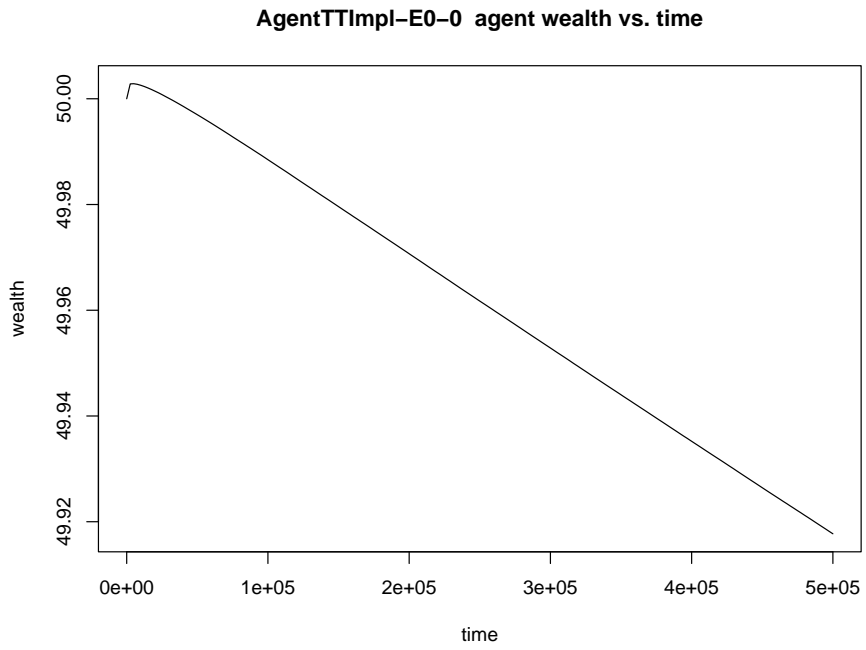


Figure 8: AgentTTImpl-E0-0 agent wealth vs. time

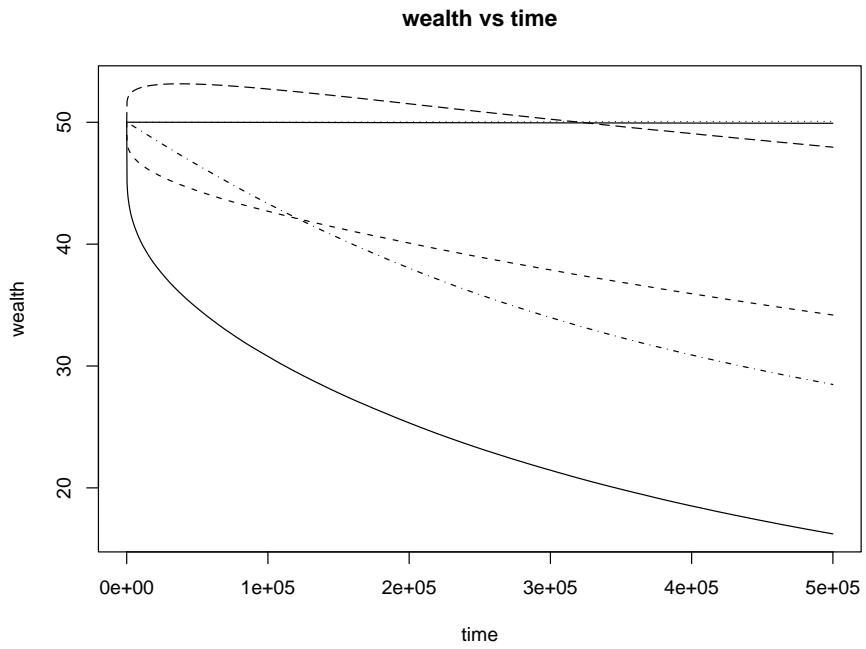


Figure 9: Technical Traders wealth vs time

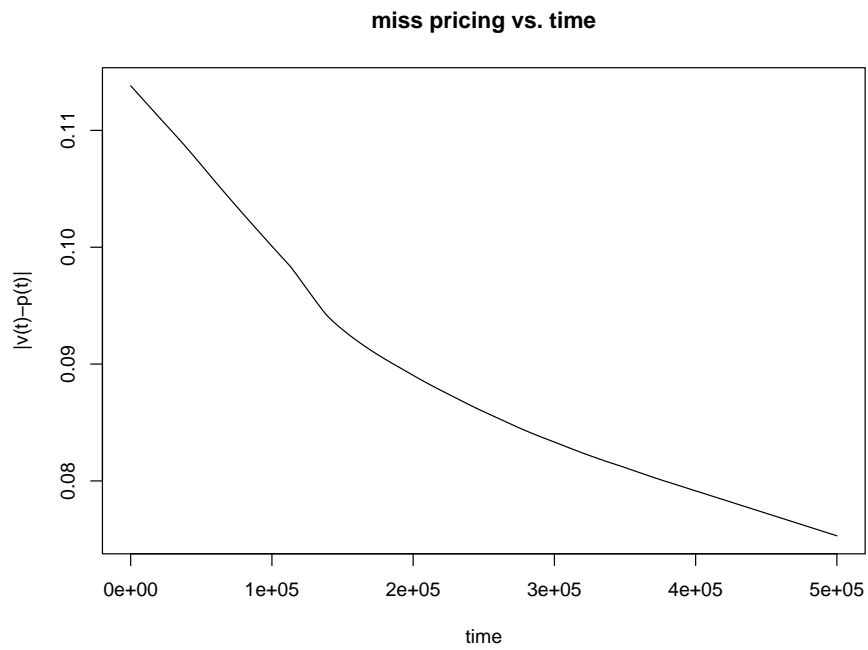


Figure 10: miss pricing vs. time

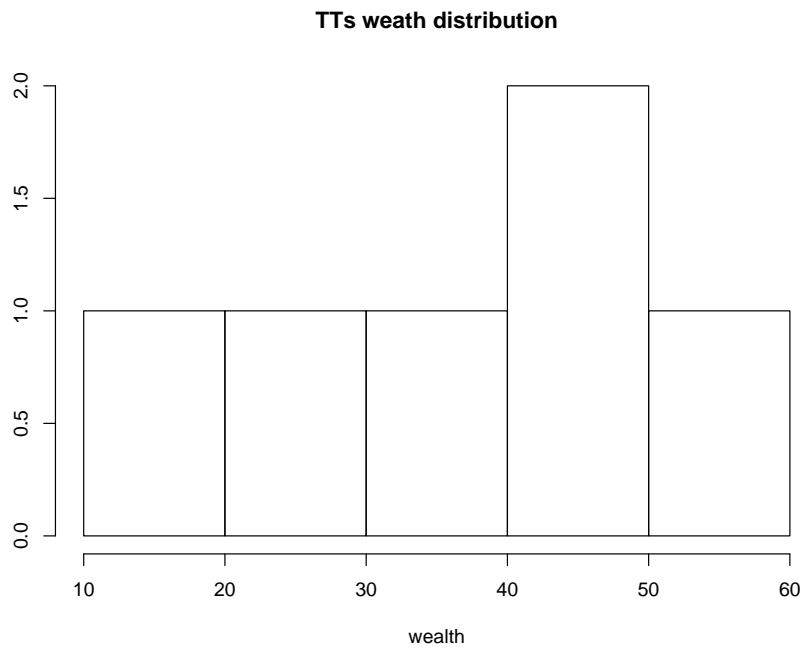


Figure 11: Technical Traders final wealth distribution



# 2 inp gammaFN-002000 gammaTT-002000 agentTTCash 005000 agentFNCash-000100

## 2.1 Parameters

techTraderList-0	7	sn	5
		linearDF	FALSE
		infiniteCredit	FALSE
		fixedWealth	0
		contexts	0
consumptionFactor	0		
account	cash   50		
priceBufferSize	sn	0	
priceBufferPosition	2	0	
position	0	0	
lastSignal	0	0	
lastPrice	0	0	
k	-1	20	
gamma	20	TRUE	
expMovingAverageFlag	TRUE	TRUE	
dollarsFlag	TRUE	0.6	
c	0.6	TRUE	
allowShortPositions	TRUE	a	
a	1		
sn	4		
linearDF	FALSE		
infiniteCredit	FALSE		
fixedWealth	0		
contexts	0		
consumptionFactor	0		
account	cash   50		
priceBufferSize	sn	0	
priceBufferPosition	2	0	
position	0	0	
lastSignal	0	0	
lastPrice	0	0	
k	-1	20	
gamma	20	TRUE	
expMovingAverageFlag	TRUE	TRUE	
dollarsFlag	TRUE	0.6	
c	0.6	TRUE	
allowShortPositions	TRUE	a	
a	0.5005		
sn	3		
linearDF	FALSE		
infiniteCredit	FALSE		
fixedWealth	0		
contexts	0		
consumptionFactor	0		
account	cash   50		
priceBufferSize	sn	0	
priceBufferPosition	2	0	
position	0	0	
lastSignal	0	0	
lastPrice	0	0	
k	-1	20	
gamma	20	TRUE	
expMovingAverageFlag	TRUE	TRUE	
dollarsFlag	TRUE	0.6	
c	0.6	TRUE	
allowShortPositions	TRUE	a	
a	0.001		
sn	2		
linearDF	FALSE		
infiniteCredit	FALSE		
fixedWealth	0		
contexts	0		
consumptionFactor	0		
account	cash   50		
priceBufferSize	sn	0	
priceBufferPosition	2	0	
position	0	0	
lastSignal	0	0	
lastPrice	0	0	
k	1	20	
gamma	20	TRUE	
expMovingAverageFlag	TRUE	TRUE	
dollarsFlag	TRUE	0.6	
c	0.6	TRUE	
allowShortPositions	TRUE	a	
a	1		
sn	1		
linearDF	FALSE		
infiniteCredit	FALSE		
fixedWealth	0		
contexts	0		
consumptionFactor	0		
account	cash   50		
priceBufferSize	sn	0	
priceBufferPosition	2	0	
position	0	0	
lastSignal	0	0	
lastPrice	0	0	
k	1	20	
gamma	20	TRUE	
expMovingAverageFlag	TRUE	TRUE	
dollarsFlag	TRUE	0.6	
c	0.6	TRUE	
allowShortPositions	TRUE	a	
a	0.5005		
sn	0		
linearDF	FALSE		
infiniteCredit	FALSE		
fixedWealth	0		

## 2.2 Graphs

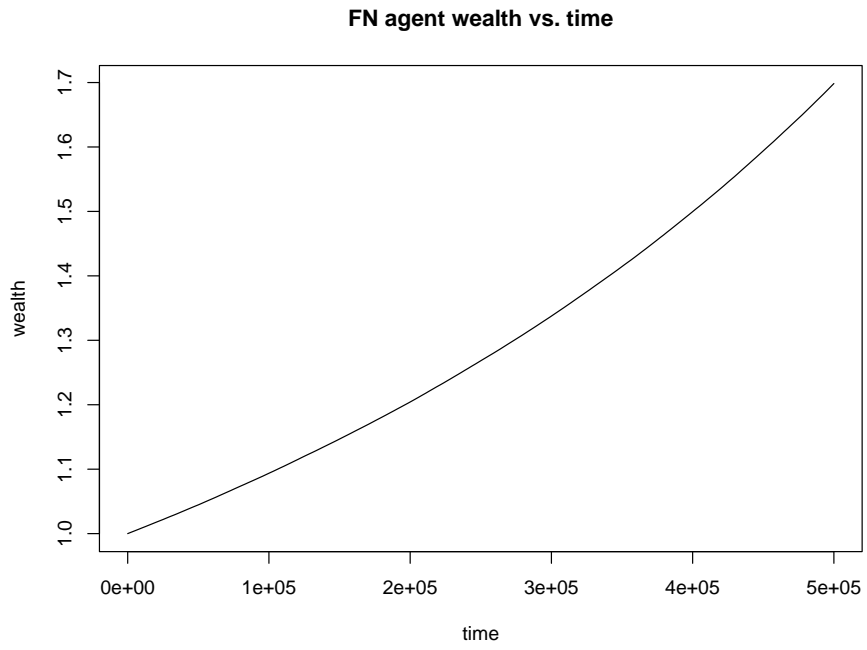


Figure 12: FN agent wealth vs. time

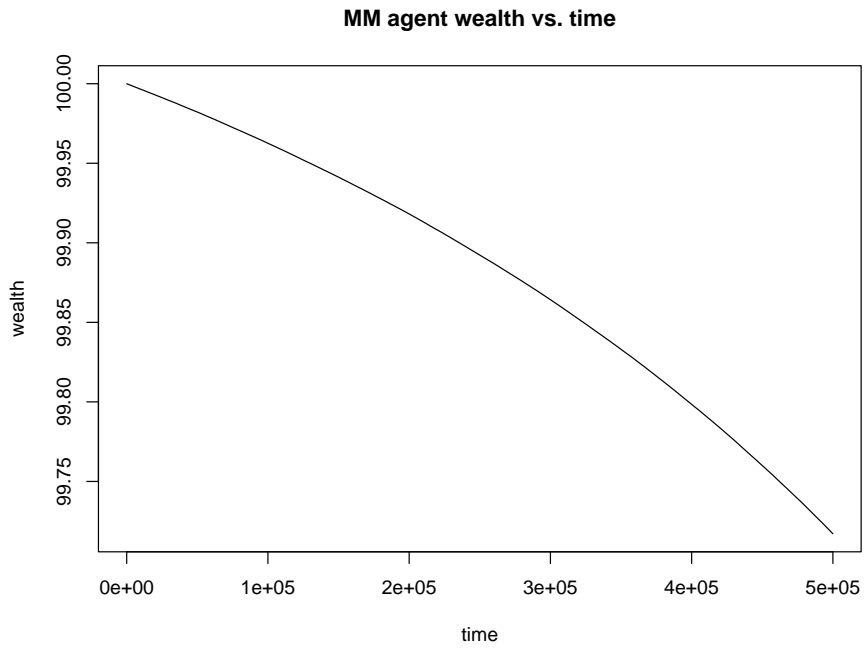


Figure 13: MM agent wealth vs. time

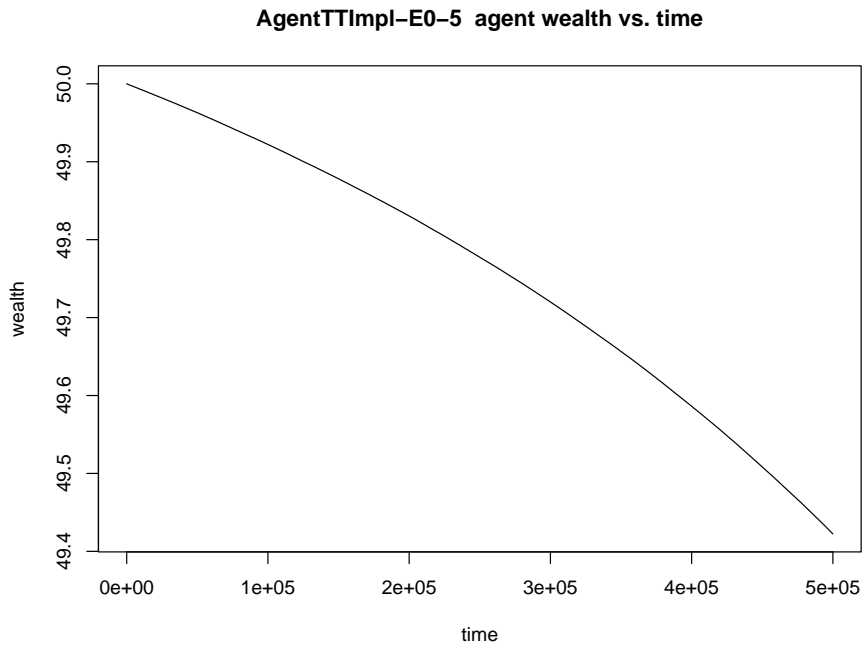


Figure 14: AgentTTImpl-E0-5 agent wealth vs. time

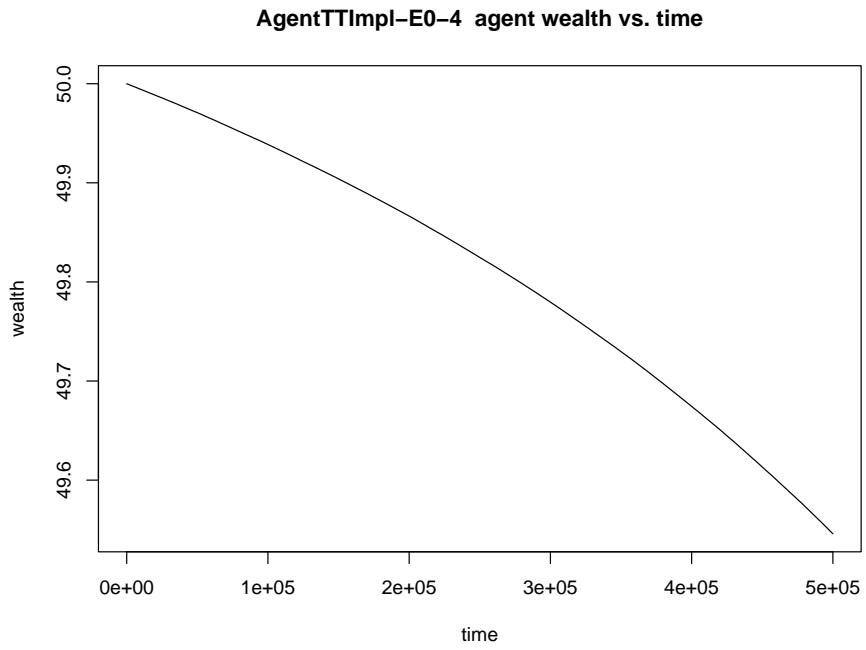


Figure 15: AgentTTImpl-E0-4 agent wealth vs. time

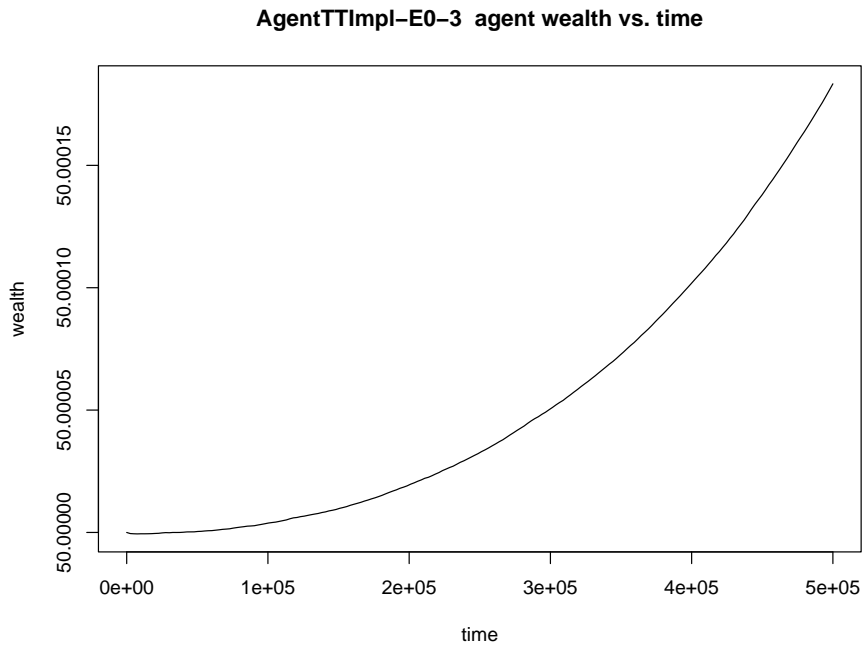


Figure 16: AgentTTImpl-E0-3 agent wealth vs. time

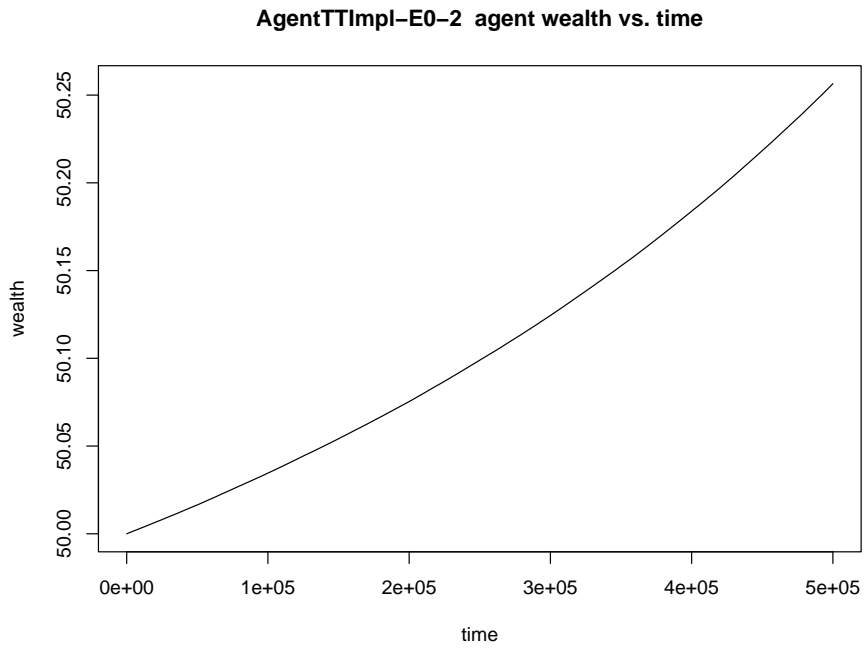


Figure 17: AgentTTImpl-E0-2 agent wealth vs. time

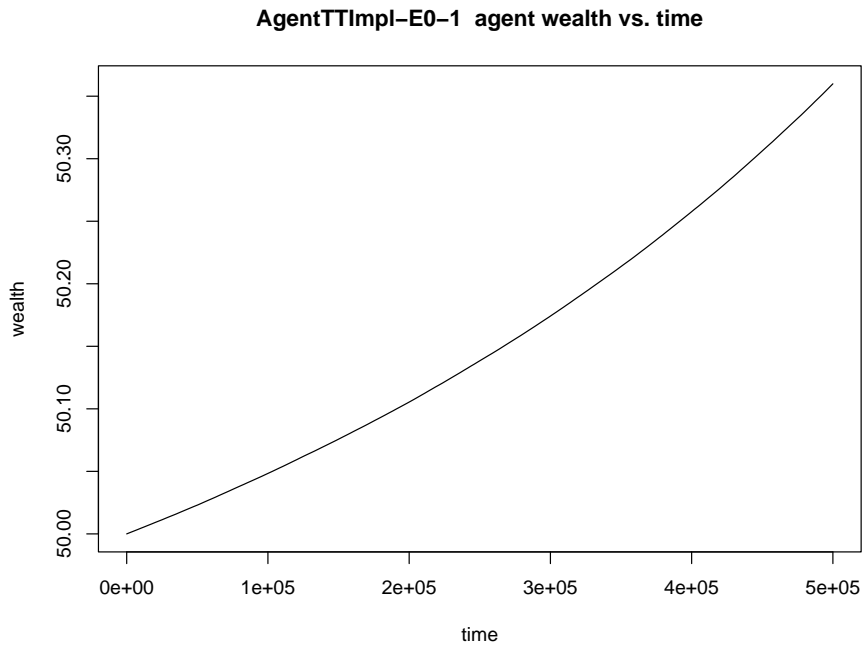


Figure 18: AgentTTImpl-E0-1 agent wealth vs. time

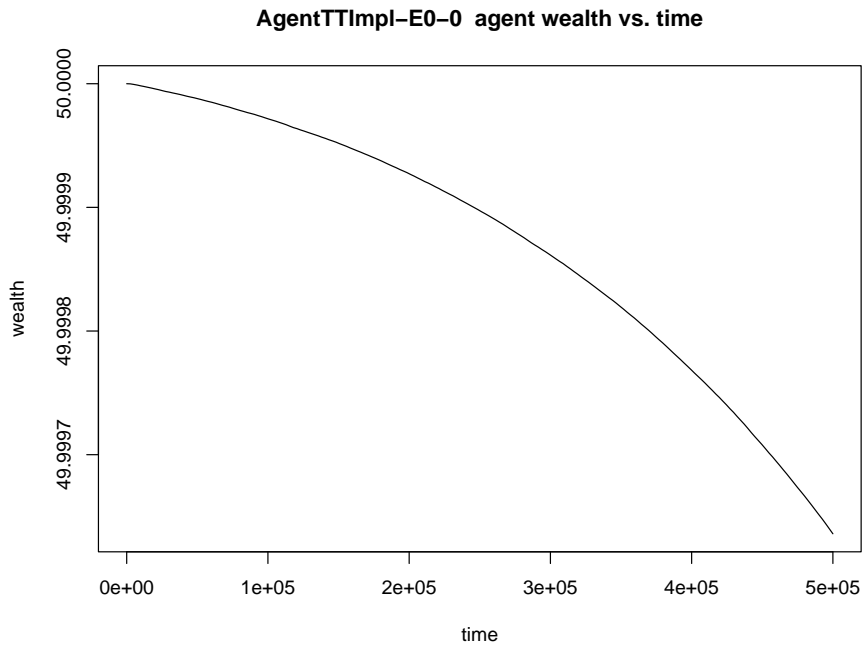


Figure 19: AgentTTImpl-E0-0 agent wealth vs. time

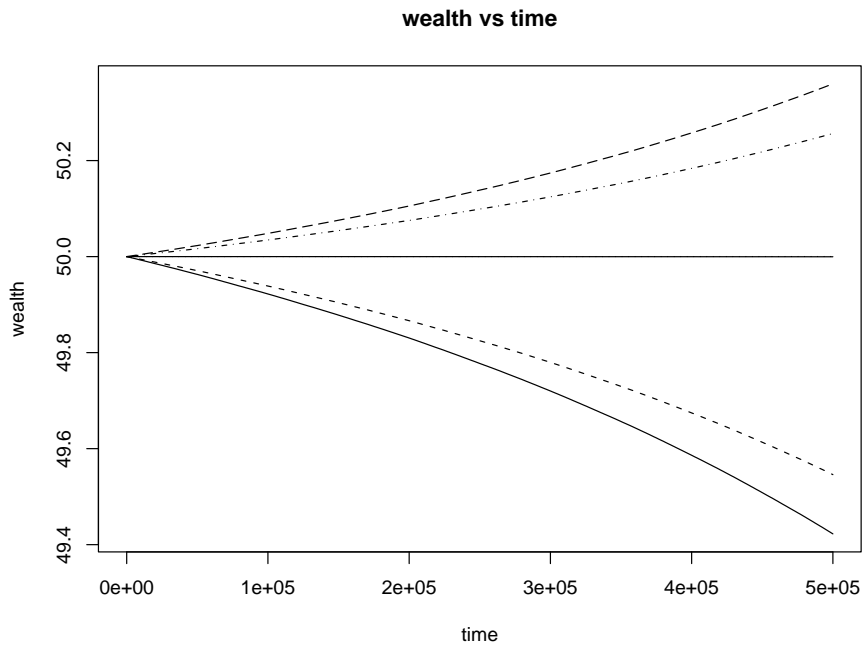


Figure 20: Technical Traders wealth vs time

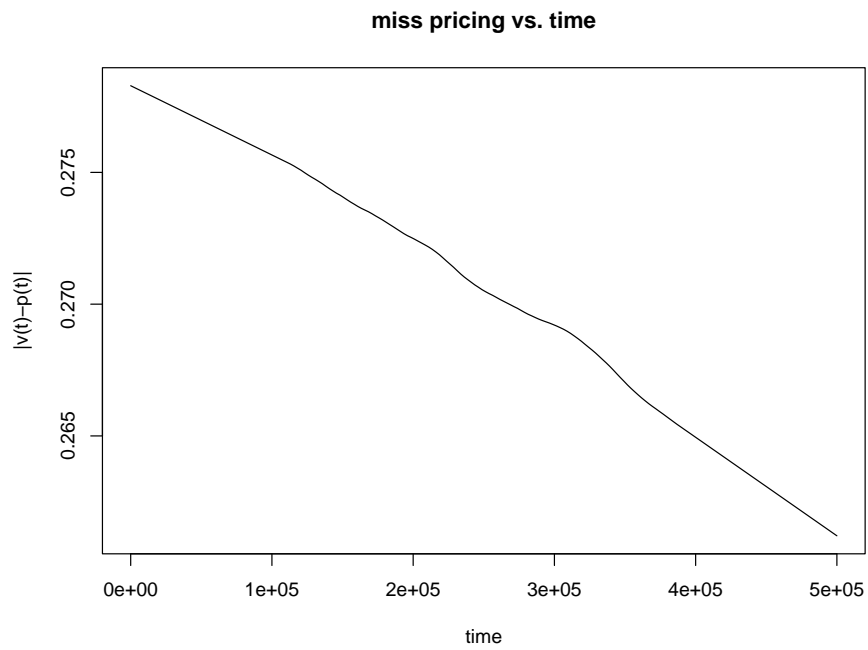


Figure 21: miss pricing vs. time

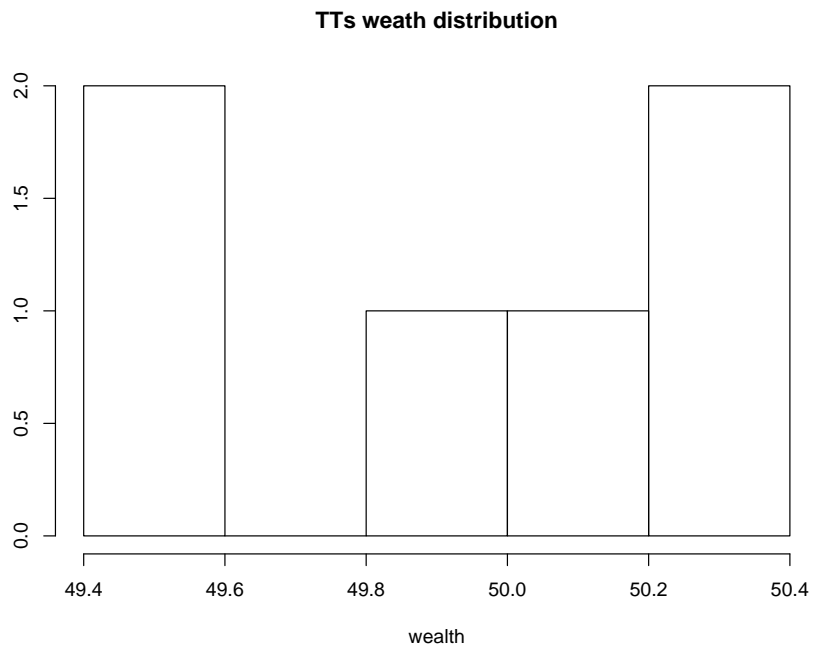


Figure 22: Technical Traders final wealth distribution



# 3 inp gammaFN-002000 gammaTT-002000 agentTTCash 000100 agentFNCash-005000

## 3.1 Parameters

techTraderList-0	7	sn	5
		linearDF	FALSE
		infiniteCredit	FALSE
		fixedWealth	0
		contexts	0
consumptionFactor	0		
account	cash   1		
priceBufferSize	sn	0	
priceBufferPosition	priceBufferSize	2	
position	priceBufferPosition	0	
lastSignal	position	0	
lastPrice	lastSignal	0	
k	lastPrice	0	
gamma	k	-1	
expMovingAverageFlag	gamma	20	
dollarsFlag	expMovingAverageFlag	TRUE	
c	dollarsFlag	TRUE	
allowShortPositions	c	0.6	
a	allowShortPositions	TRUE	
	a	1	
sn	4		
linearDF	FALSE		
infiniteCredit	FALSE		
fixedWealth	0		
contexts	0		
consumptionFactor	0		
account	cash   1		
priceBufferSize	sn	0	
priceBufferPosition	priceBufferSize	2	
position	priceBufferPosition	0	
lastSignal	position	0	
lastPrice	lastSignal	0	
k	lastPrice	0	
gamma	k	-1	
expMovingAverageFlag	gamma	20	
dollarsFlag	expMovingAverageFlag	TRUE	
c	dollarsFlag	TRUE	
allowShortPositions	c	0.6	
a	allowShortPositions	TRUE	
	a	0.5005	
sn	3		
linearDF	FALSE		
infiniteCredit	FALSE		
fixedWealth	0		
contexts	0		
consumptionFactor	0		
account	cash   1		
priceBufferSize	sn	0	
priceBufferPosition	priceBufferSize	2	
position	priceBufferPosition	0	
lastSignal	position	0	
lastPrice	lastSignal	0	
k	lastPrice	0	
gamma	k	-1	
expMovingAverageFlag	gamma	20	
dollarsFlag	expMovingAverageFlag	TRUE	
c	dollarsFlag	TRUE	
allowShortPositions	c	0.6	
a	allowShortPositions	TRUE	
	a	0.001	
sn	2		
linearDF	FALSE		
infiniteCredit	FALSE		
fixedWealth	0		
contexts	0		
consumptionFactor	0		
account	cash   1		
priceBufferSize	sn	0	
priceBufferPosition	priceBufferSize	2	
position	priceBufferPosition	0	
lastSignal	position	0	
lastPrice	lastSignal	0	
k	lastPrice	0	
gamma	k	1	
expMovingAverageFlag	gamma	20	
dollarsFlag	expMovingAverageFlag	TRUE	
c	dollarsFlag	TRUE	
allowShortPositions	c	0.6	
a	allowShortPositions	TRUE	
	a	1	
sn	1		
linearDF	FALSE		
infiniteCredit	FALSE		
fixedWealth	0		
contexts	0		
consumptionFactor	0		
account	cash   1		
priceBufferSize	sn	0	
priceBufferPosition	priceBufferSize	2	
position	priceBufferPosition	0	
lastSignal	position	0	
lastPrice	lastSignal	0	
k	lastPrice	0	
gamma	k	1	
expMovingAverageFlag	gamma	20	
dollarsFlag	expMovingAverageFlag	TRUE	
c	dollarsFlag	TRUE	
allowShortPositions	c	0.6	
a	allowShortPositions	TRUE	
	a	0.5005	
sn	0		
linearDF	FALSE		
infiniteCredit	FALSE		
fixedWealth	0		
contexts	0		
consumptionFactor	0		
account	cash   1		
priceBufferSize	sn	0	
priceBufferPosition	priceBufferSize	2	
position	priceBufferPosition	0	
lastSignal	position	0	
lastPrice	lastSignal	0	
k	lastPrice	0	
gamma	k	1	
expMovingAverageFlag	gamma	20	
dollarsFlag	expMovingAverageFlag	TRUE	
c	dollarsFlag	TRUE	
allowShortPositions	c	0.6	
a	allowShortPositions	TRUE	
	a	0.5005	

## 3.2 Graphs

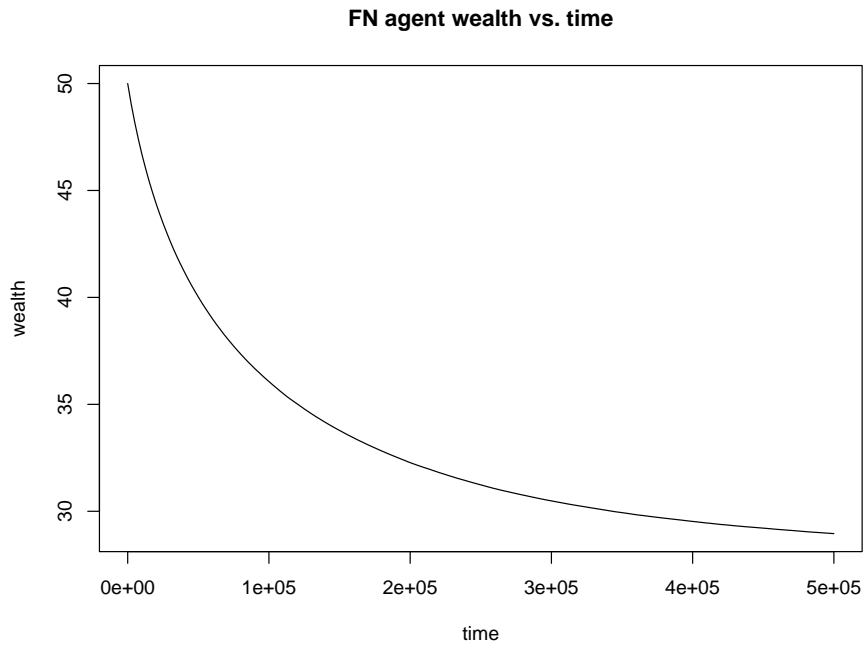


Figure 23: FN agent wealth vs. time



Figure 24: MM agent wealth vs. time

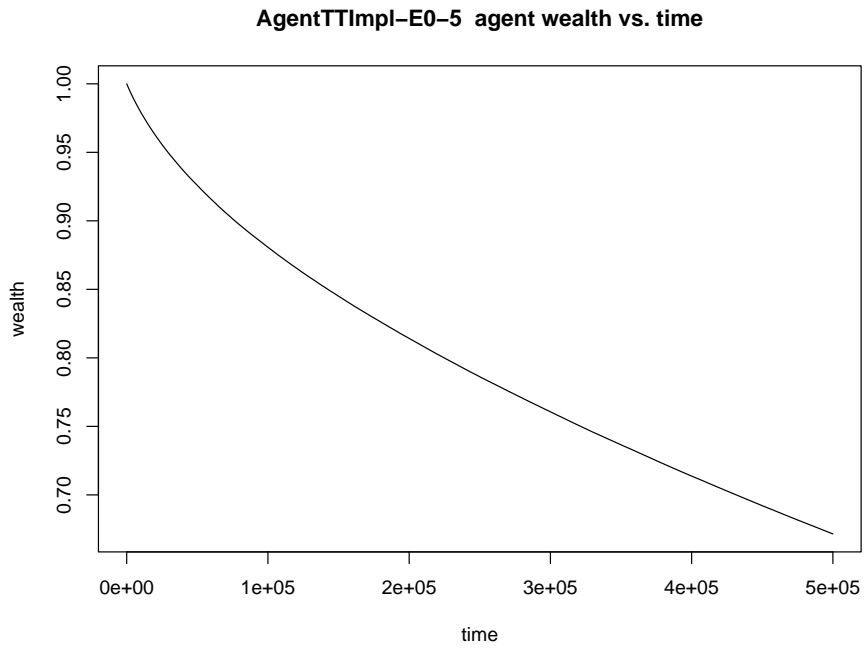


Figure 25: AgentTTImpl-E0-5 agent wealth vs. time

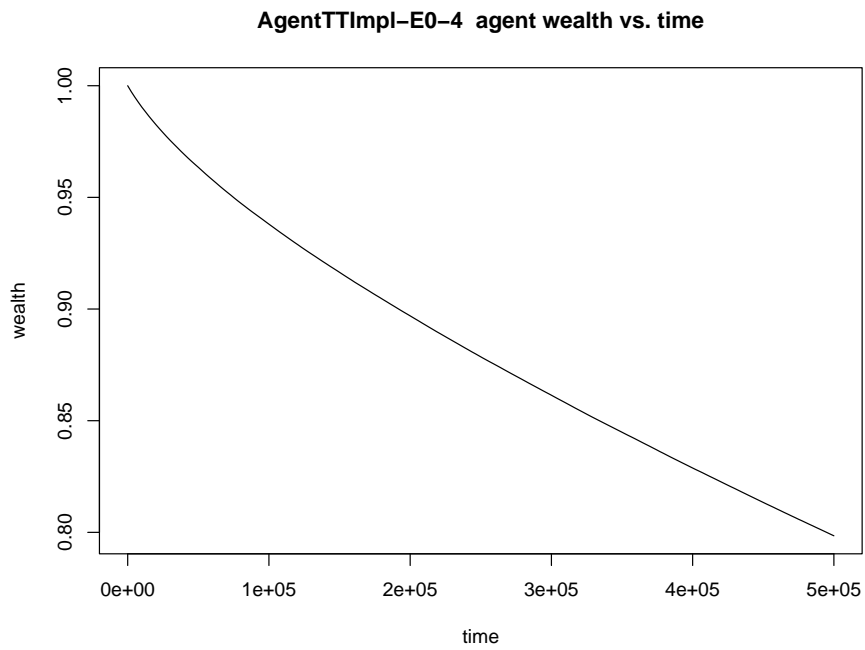


Figure 26: AgentTTImpl-E0-4 agent wealth vs. time

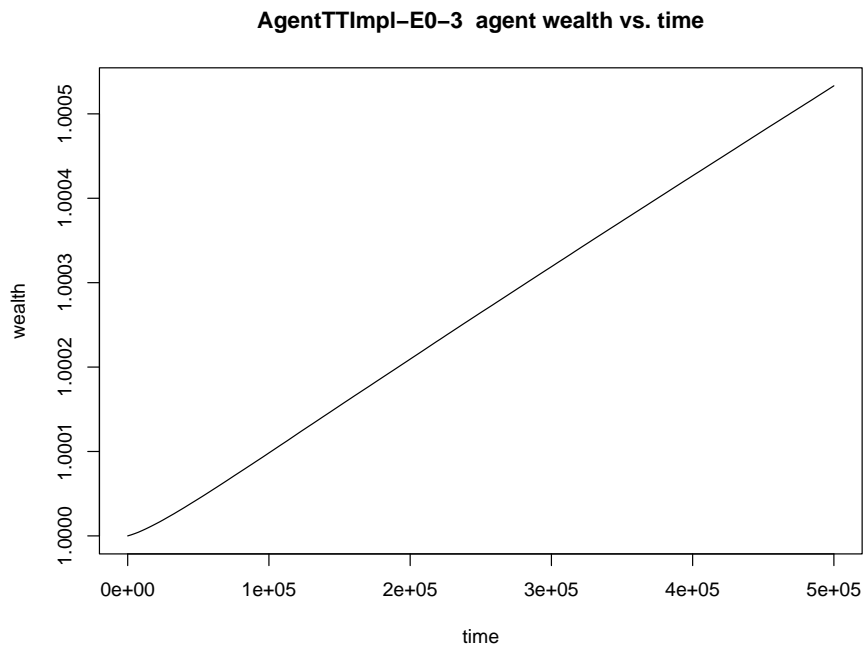


Figure 27: AgentTTImpl-E0-3 agent wealth vs. time

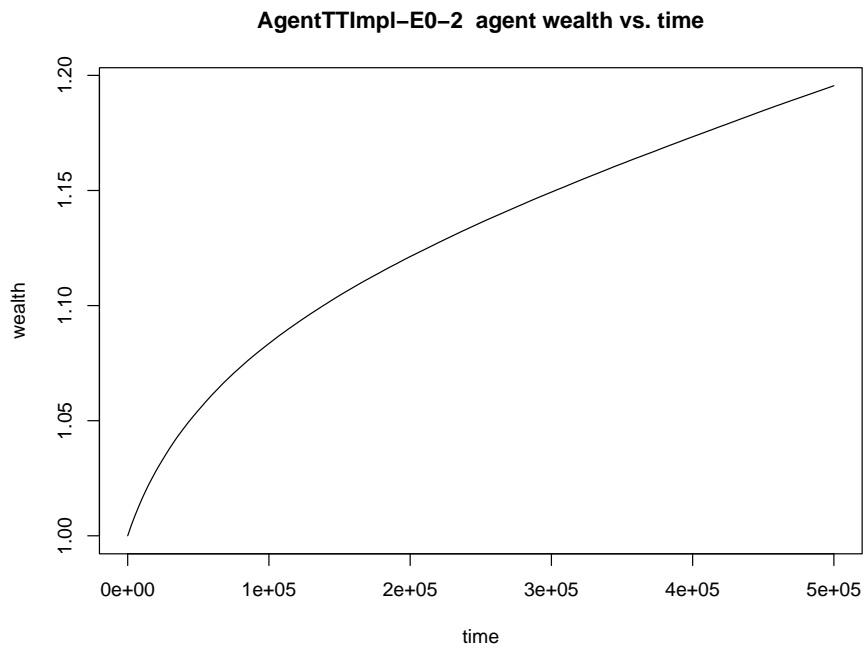


Figure 28: AgentTTImpl-E0-2 agent wealth vs. time

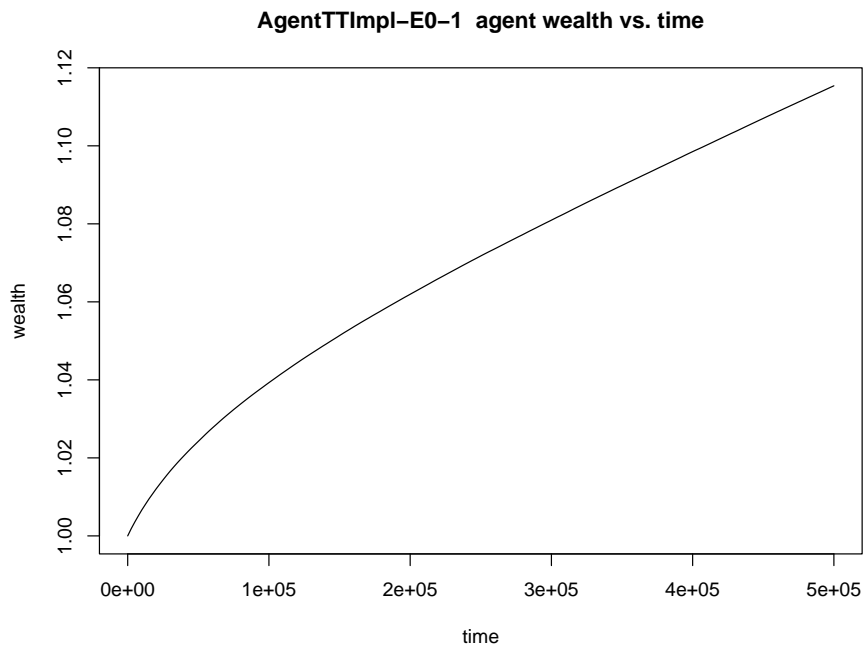


Figure 29: AgentTTImpl-E0-1 agent wealth vs. time

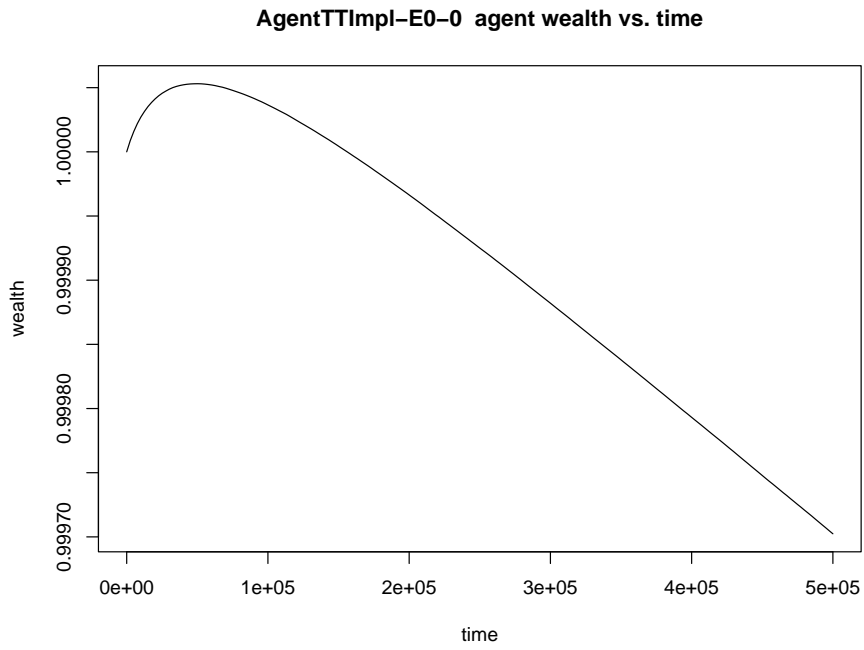


Figure 30: AgentTTImpl-E0-0 agent wealth vs. time

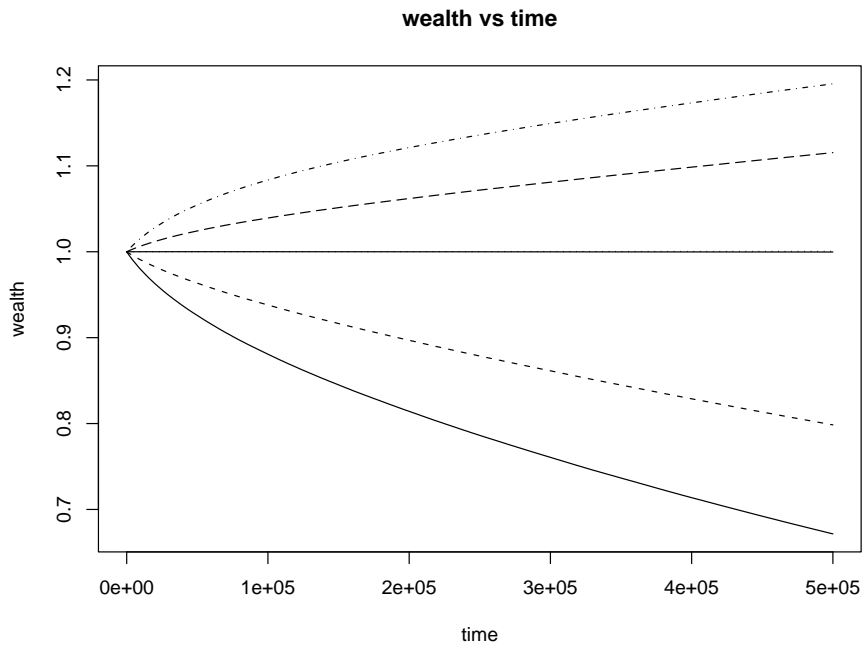


Figure 31: Technical Traders wealth vs time

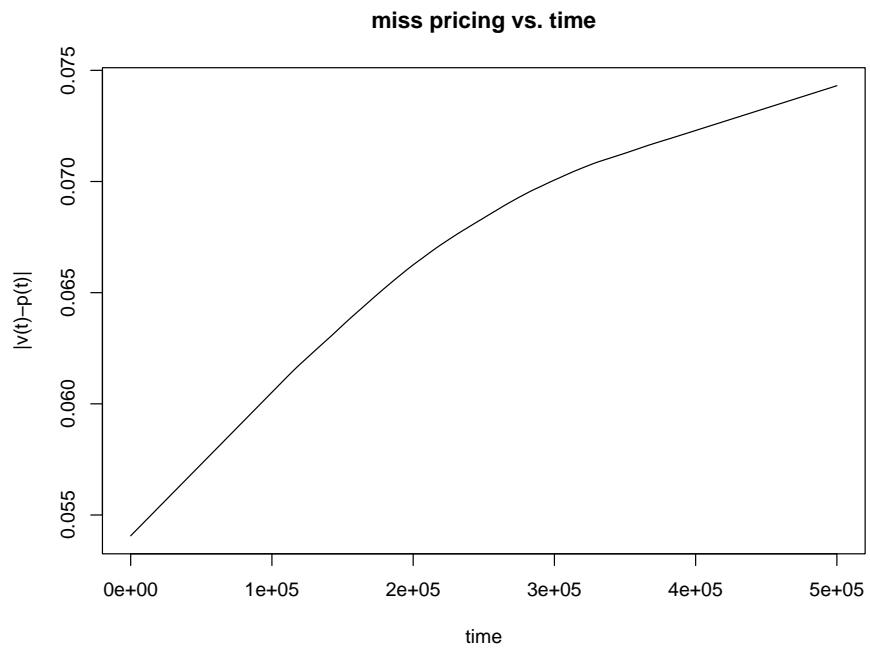


Figure 32: miss pricing vs. time

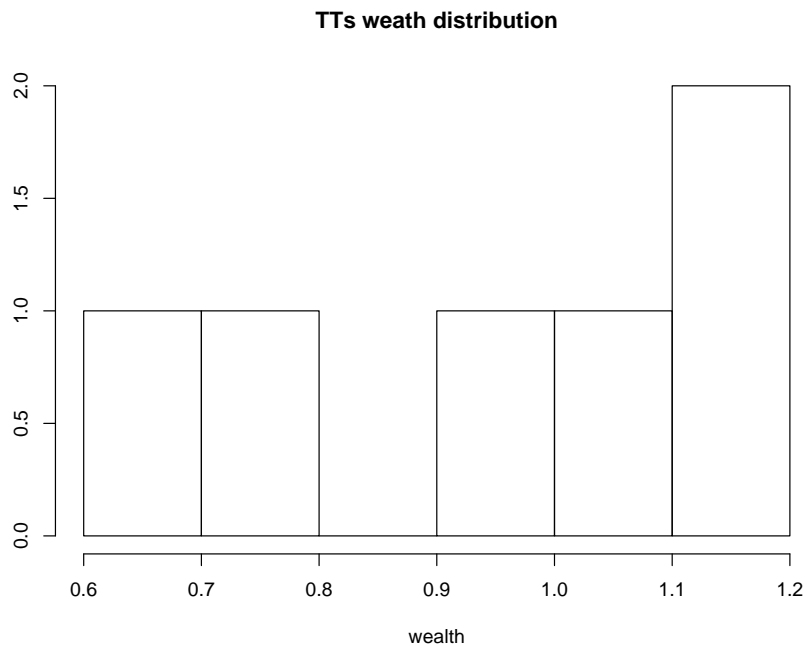


Figure 33: Technical Traders final wealth distribution





## 4.2 Graphs

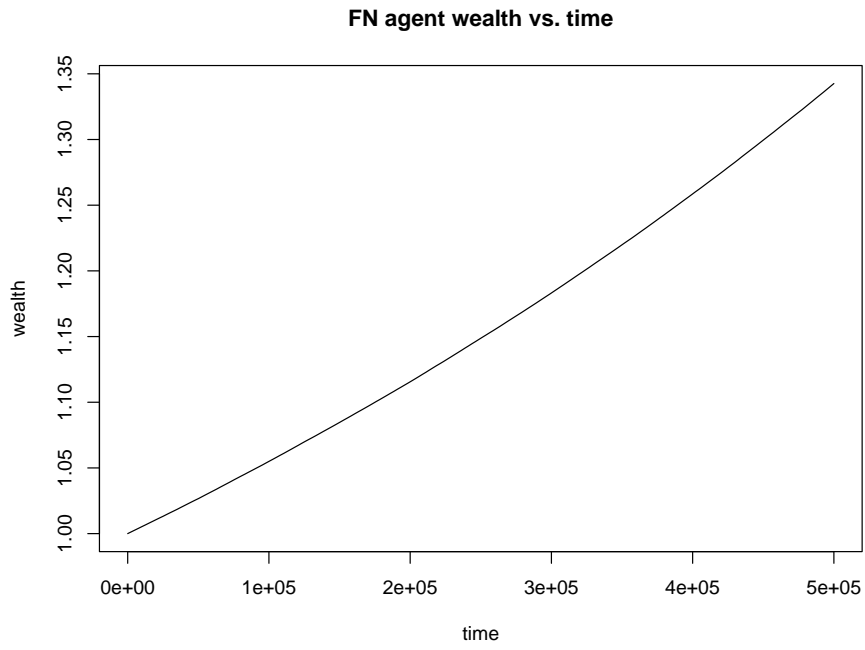


Figure 34: FN agent wealth vs. time



Figure 35: MM agent wealth vs. time

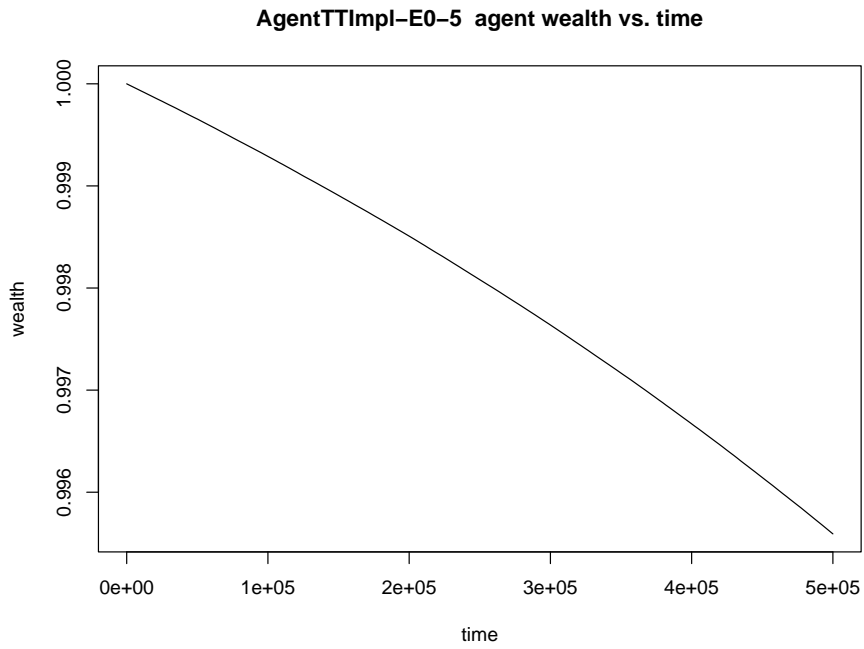


Figure 36: AgentTTImpl-E0-5 agent wealth vs. time

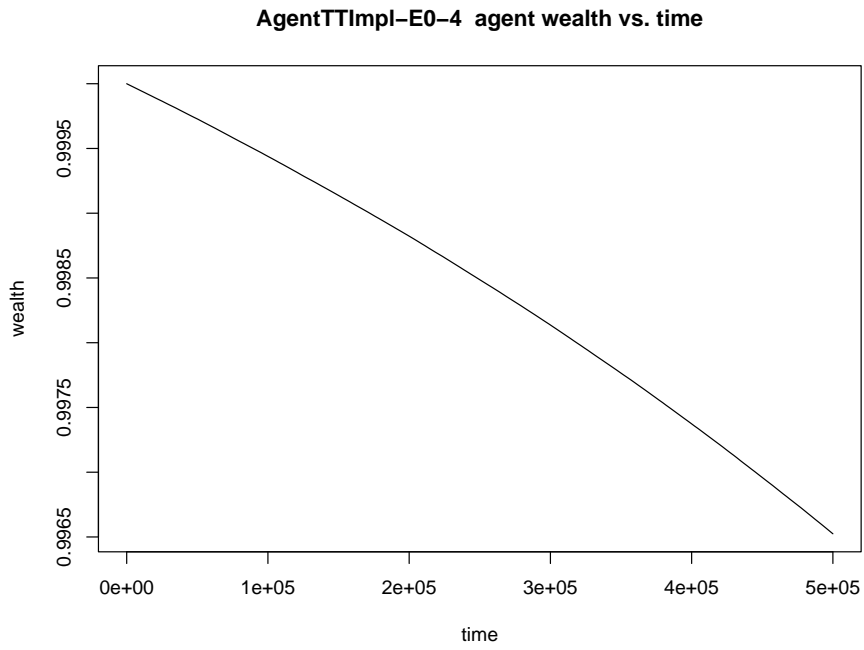


Figure 37: AgentTTImpl-E0-4 agent wealth vs. time

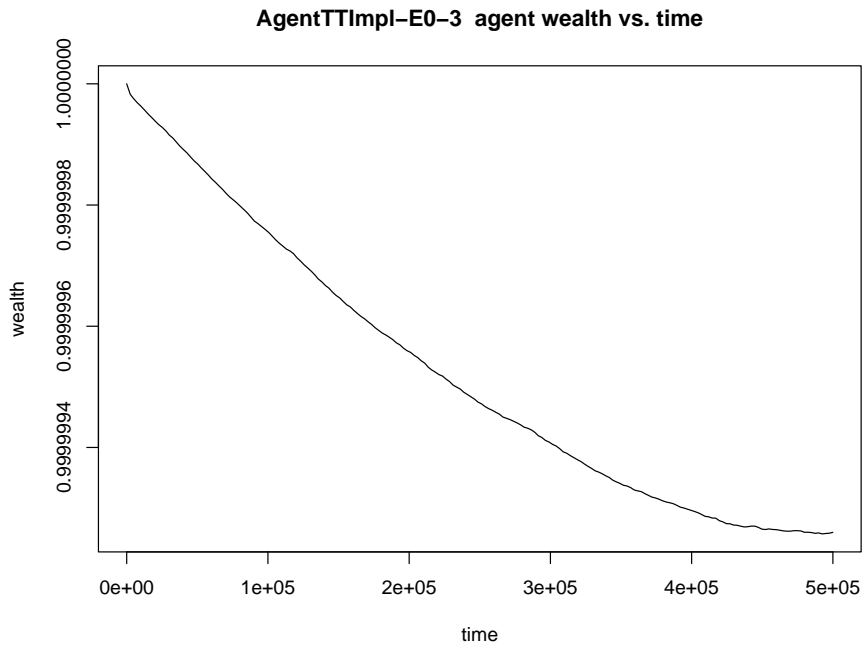


Figure 38: AgentTTImpl-E0-3 agent wealth vs. time

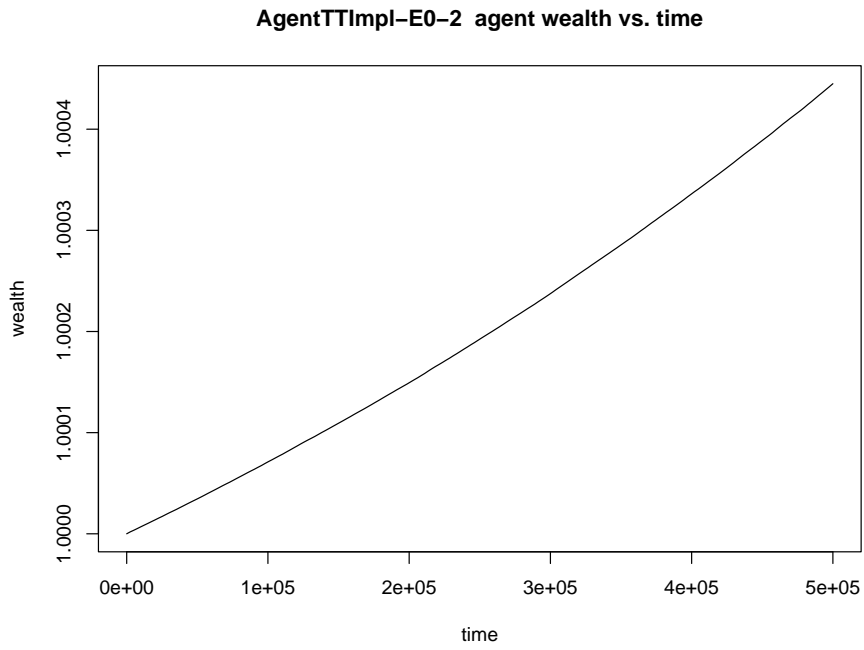


Figure 39: AgentTTImpl-E0-2 agent wealth vs. time

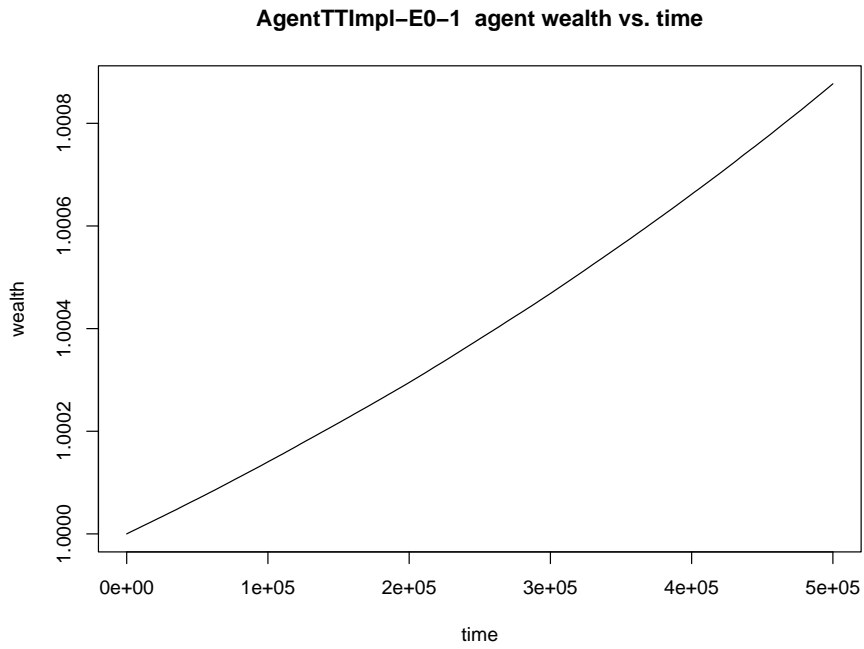


Figure 40: AgentTTImpl-E0-1 agent wealth vs. time

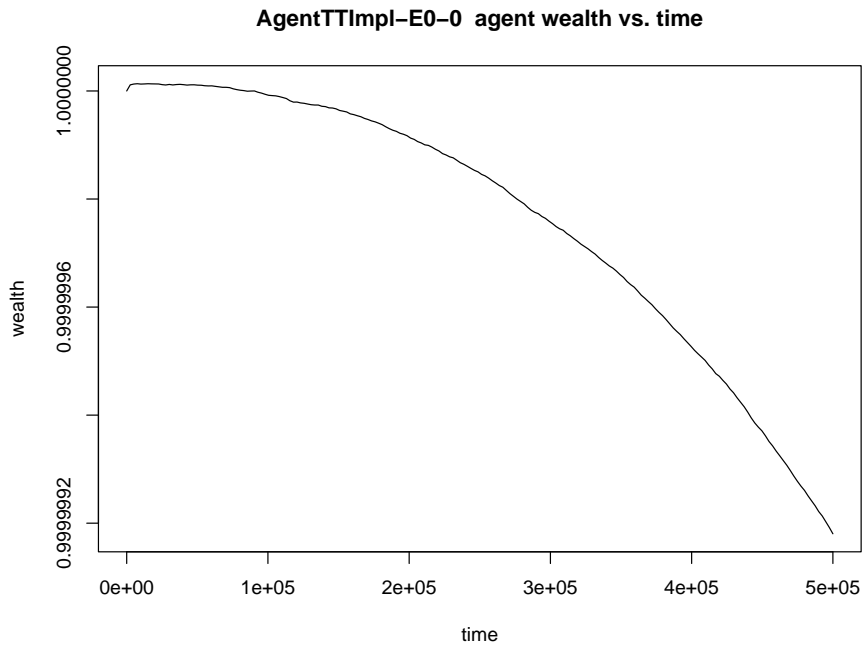


Figure 41: AgentTTImpl-E0-0 agent wealth vs. time

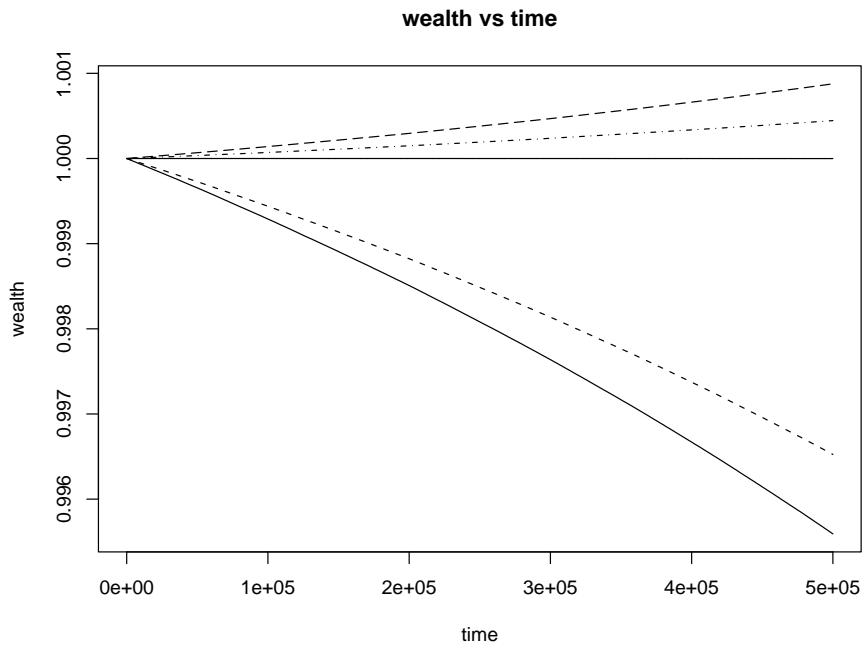


Figure 42: Technical Traders wealth vs time

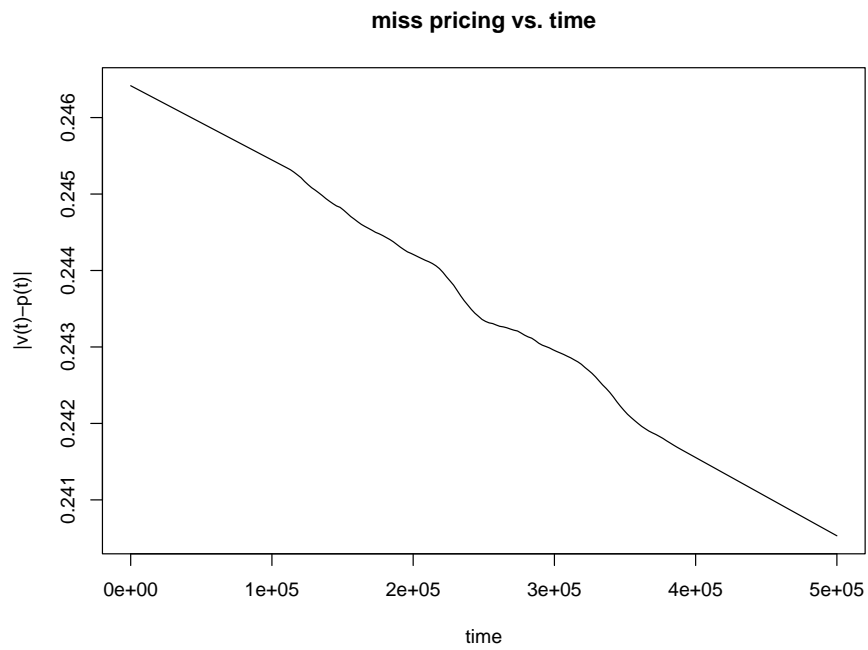


Figure 43: miss pricing vs. time

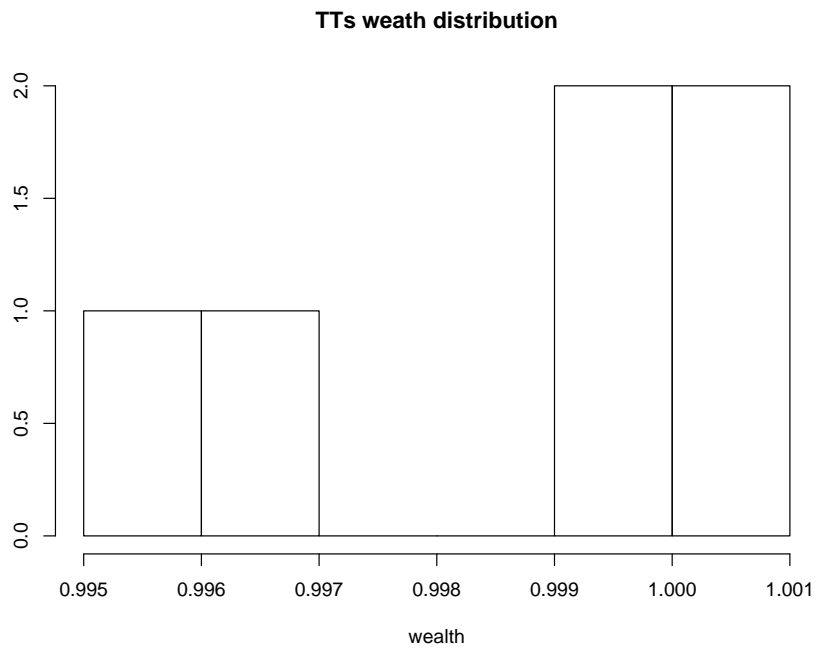


Figure 44: Technical Traders final wealth distribution



# 5 inp gammaFN-002000 gammaTT-000100 agentTTCash 005000 agentFNCash-005000

## 5.1 Parameters

techTraderList-0	7	sn	5
		linearDF	FALSE
		infiniteCredit	FALSE
		fixedWealth	0
		contexts	0
consumptionFactor	0		
account	cash   50		
6	6	sn	4
		linearDF	FALSE
		infiniteCredit	FALSE
		fixedWealth	0
		contexts	0
consumptionFactor	0		
account	cash   50		
5	5	sn	3
		linearDF	FALSE
		infiniteCredit	FALSE
		fixedWealth	0
		contexts	0
consumptionFactor	0		
account	cash   50		
2	2	sn	2
		linearDF	FALSE
		infiniteCredit	FALSE
		fixedWealth	0
		contexts	0
consumptionFactor	0		
account	cash   50		
1	1	sn	1
		linearDF	FALSE
		infiniteCredit	FALSE
		fixedWealth	0
		contexts	0
consumptionFactor	0		
account	cash   50		
		sn	0
		linearDF	FALSE
		infiniteCredit	FALSE
		fixedWealth	0
		contexts	0
consumptionFactor	0		
account	cash   50		

## 5.2 Graphs

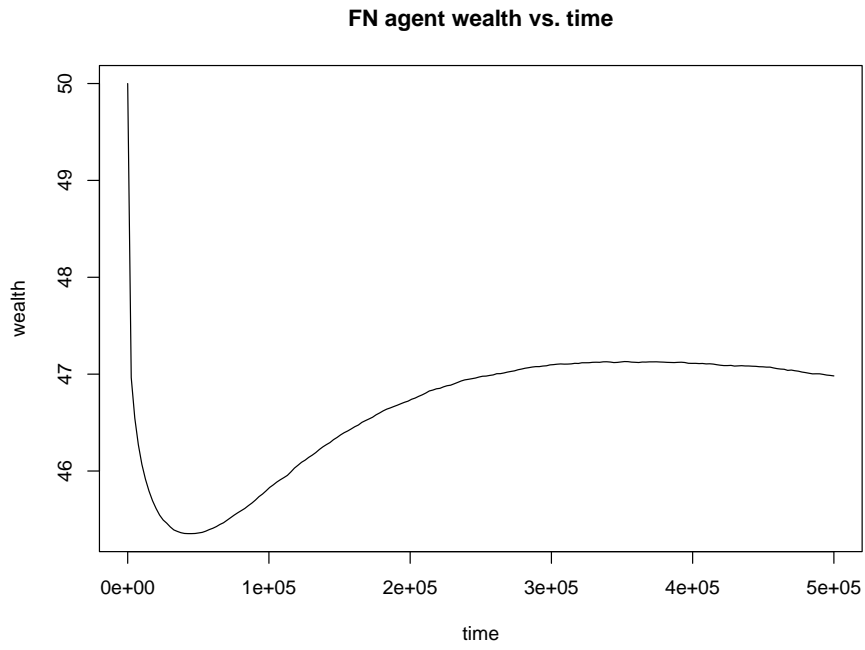


Figure 45: FN agent wealth vs. time

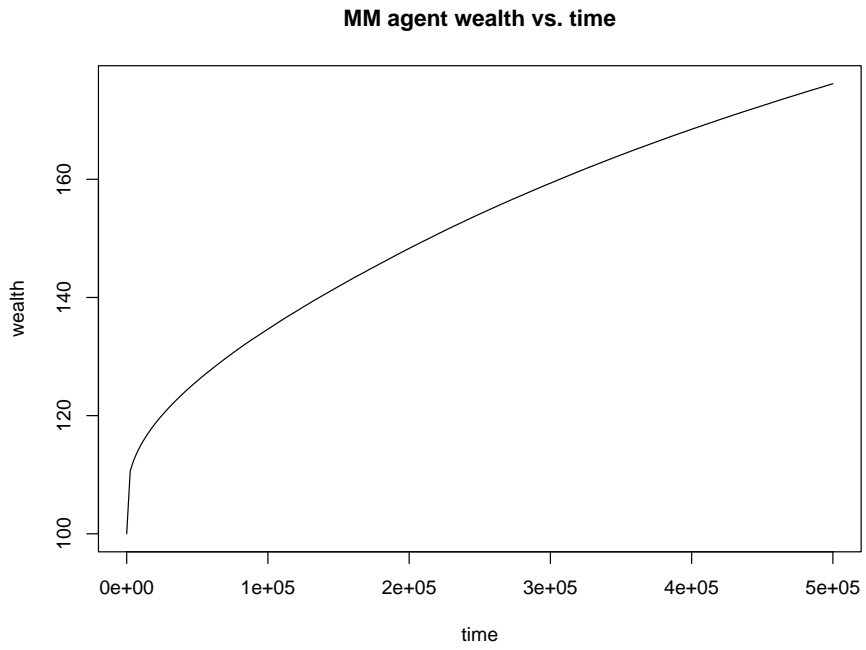


Figure 46: MM agent wealth vs. time

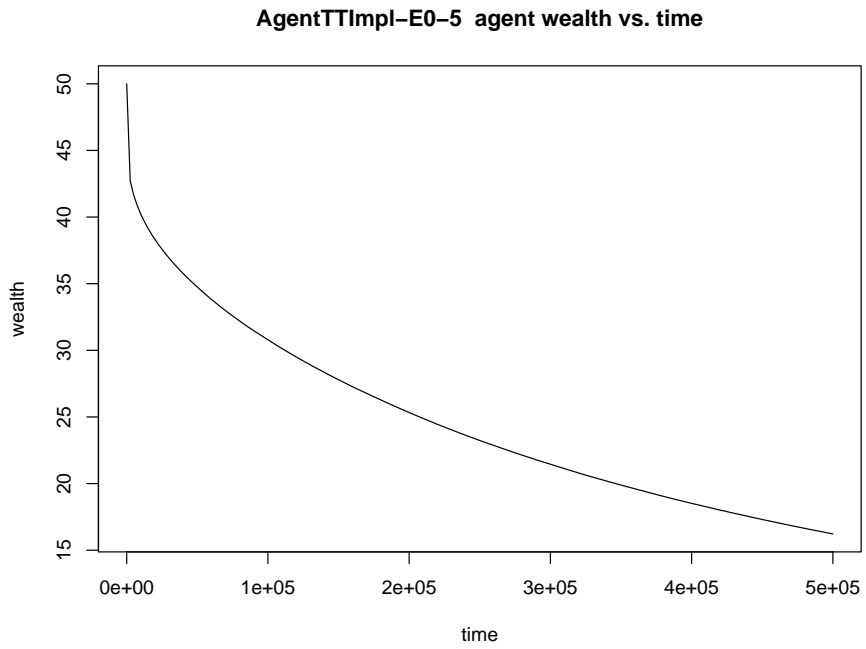


Figure 47: AgentTTImpl-E0-5 agent wealth vs. time

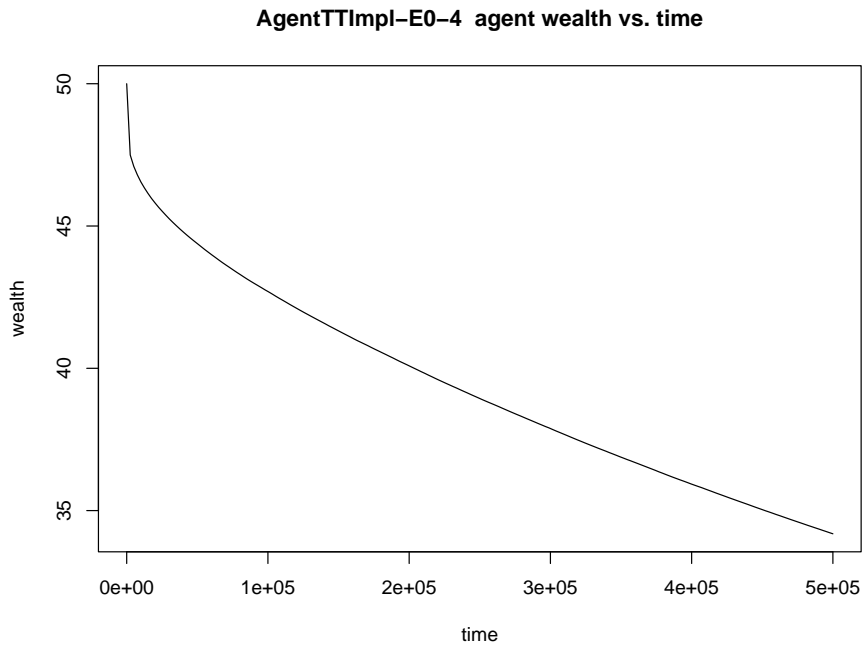


Figure 48: AgentTTImpl-E0-4 agent wealth vs. time

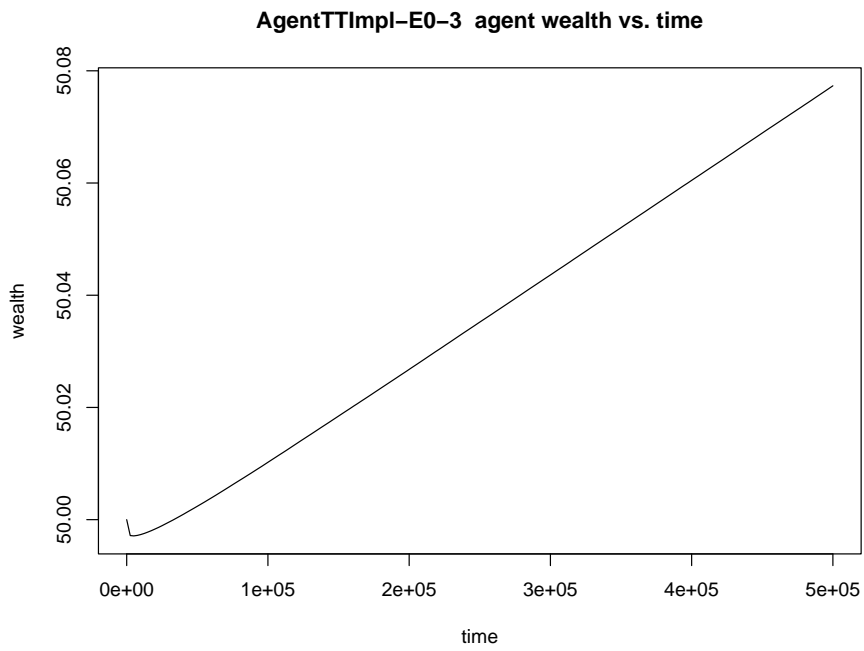


Figure 49: AgentTTImpl-E0-3 agent wealth vs. time

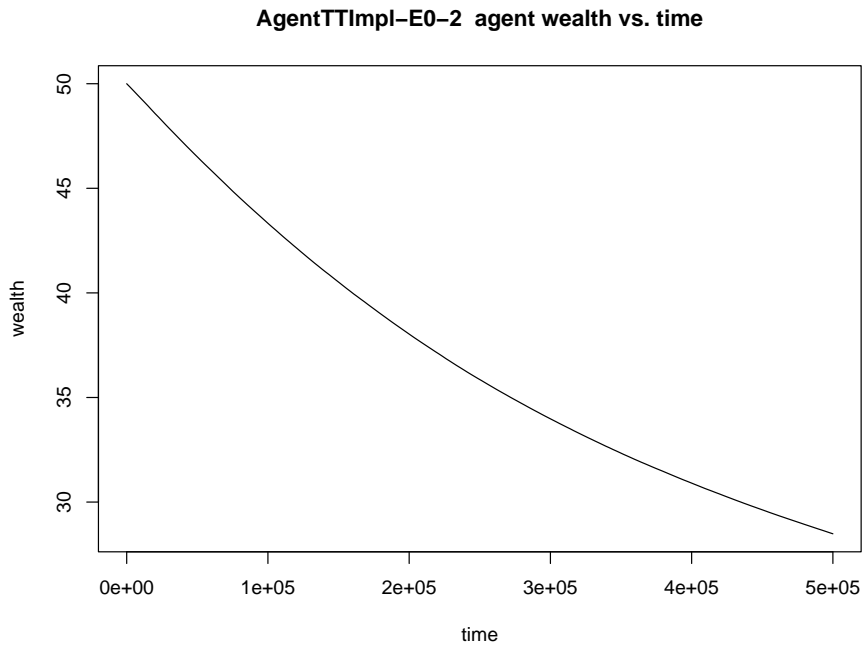


Figure 50: AgentTTImpl-E0-2 agent wealth vs. time

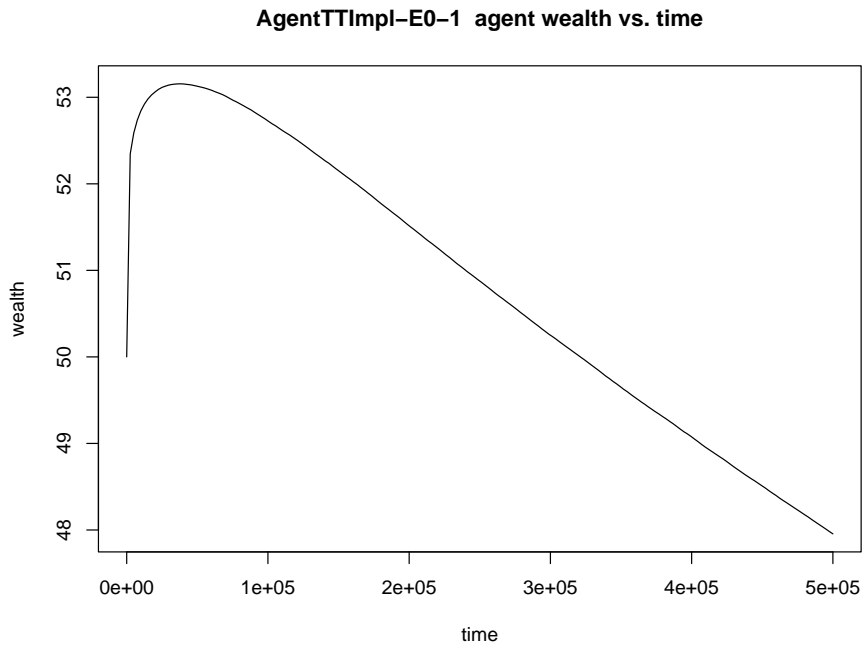


Figure 51: AgentTTImpl-E0-1 agent wealth vs. time

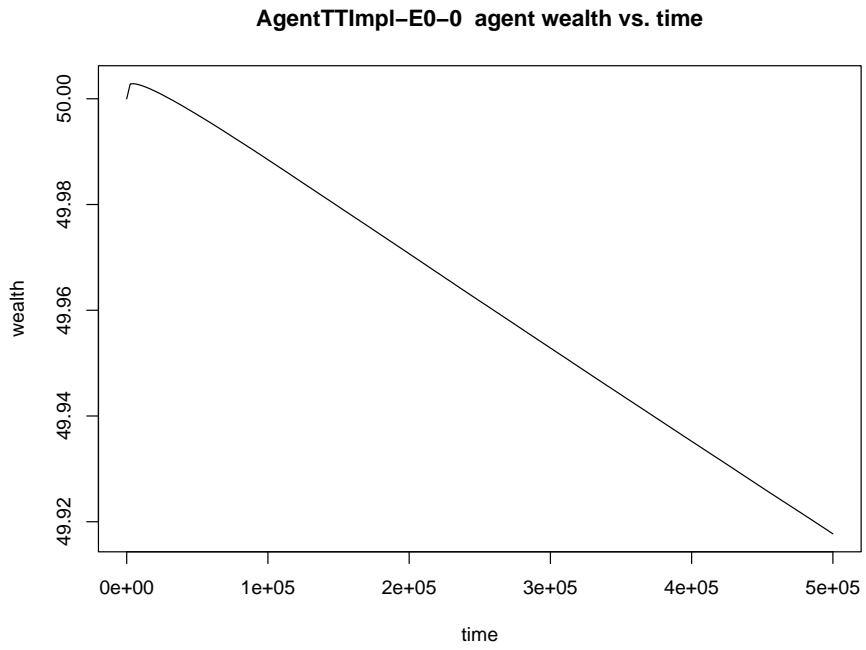


Figure 52: AgentTTImpl-E0-0 agent wealth vs. time

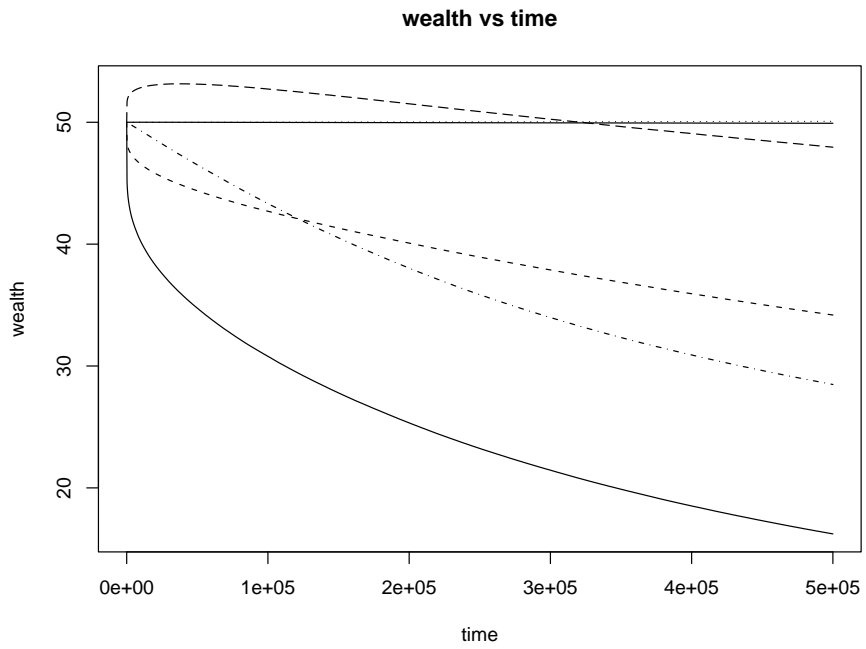


Figure 53: Technical Traders wealth vs time

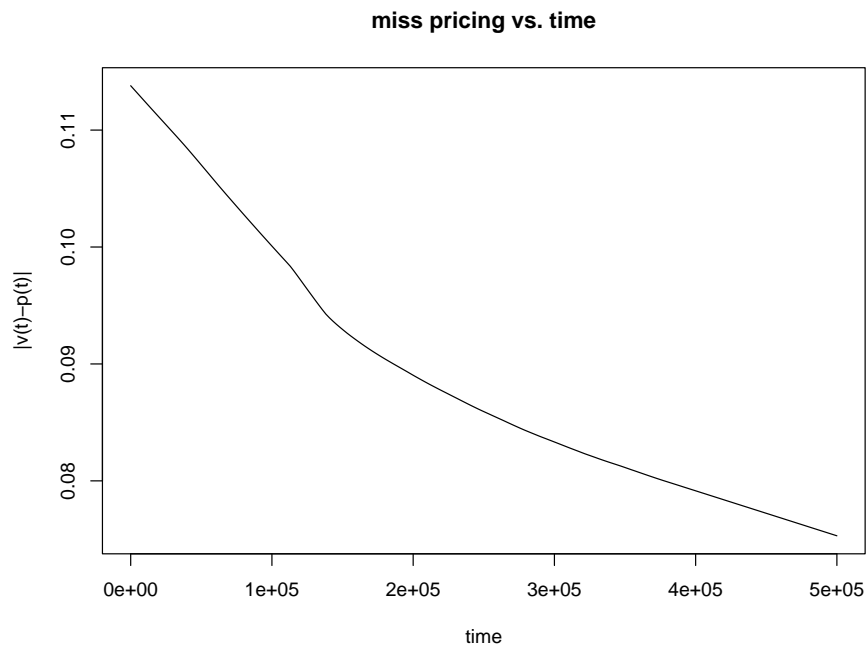


Figure 54: miss pricing vs. time

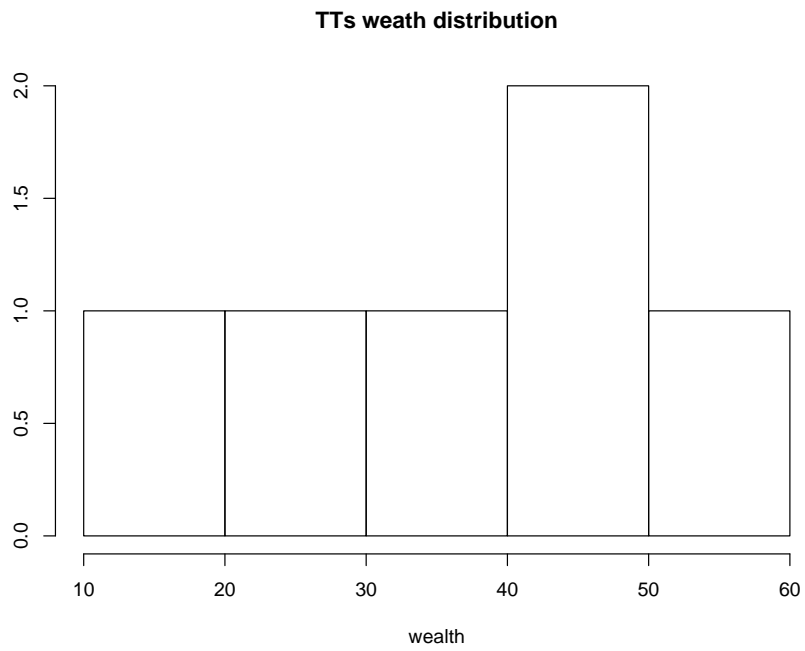


Figure 55: Technical Traders final wealth distribution



# 6 inp gammaFN-002000 gammaTT-000100 agentTTCash 005000 agentFNCash-000100

## 6.1 Parameters

techTraderList-0	7	sn	5
		linearDF	FALSE
		infiniteCredit	FALSE
		fixedWealth	0
		contexts	0
consumptionFactor	0		
account	cash   50		
priceBufferSize	sn	0	
priceBufferPosition	priceBufferSize	2	
position	priceBufferPosition	0	
lastSignal	position	0	
lastPrice	lastSignal	0	
k	lastPrice	0	
gamma	k	-1	
expMovingAverageFlag	gamma	1	
dollarsFlag	expMovingAverageFlag	TRUE	
c	dollarsFlag	TRUE	
allowShortPositions	c	0.6	
a	allowShortPositions	TRUE	
	a	1	
sn	4		
linearDF	FALSE		
infiniteCredit	FALSE		
fixedWealth	0		
contexts	0		
consumptionFactor	0		
account	cash   50		
priceBufferSize	sn	0	
priceBufferPosition	priceBufferSize	2	
position	priceBufferPosition	0	
lastSignal	position	0	
lastPrice	lastSignal	0	
k	lastPrice	0	
gamma	k	-1	
expMovingAverageFlag	gamma	1	
dollarsFlag	expMovingAverageFlag	TRUE	
c	dollarsFlag	TRUE	
allowShortPositions	c	0.6	
a	allowShortPositions	TRUE	
	a	0.5005	
sn	3		
linearDF	FALSE		
infiniteCredit	FALSE		
fixedWealth	0		
contexts	0		
consumptionFactor	0		
account	cash   50		
priceBufferSize	sn	0	
priceBufferPosition	priceBufferSize	2	
position	priceBufferPosition	0	
lastSignal	position	0	
lastPrice	lastSignal	0	
k	lastPrice	0	
gamma	k	-1	
expMovingAverageFlag	gamma	1	
dollarsFlag	expMovingAverageFlag	TRUE	
c	dollarsFlag	TRUE	
allowShortPositions	c	0.6	
a	allowShortPositions	TRUE	
	a	0.001	
sn	2		
linearDF	FALSE		
infiniteCredit	FALSE		
fixedWealth	0		
contexts	0		
consumptionFactor	0		
account	cash   50		
priceBufferSize	sn	0	
priceBufferPosition	priceBufferSize	2	
position	priceBufferPosition	0	
lastSignal	position	0	
lastPrice	lastSignal	0	
k	lastPrice	0	
gamma	k	1	
expMovingAverageFlag	gamma	1	
dollarsFlag	expMovingAverageFlag	TRUE	
c	dollarsFlag	TRUE	
allowShortPositions	c	0.6	
a	allowShortPositions	TRUE	
	a	1	
sn	1		
linearDF	FALSE		
infiniteCredit	FALSE		
fixedWealth	0		
contexts	0		
consumptionFactor	0		
account	cash   50		
priceBufferSize	sn	0	
priceBufferPosition	priceBufferSize	2	
position	priceBufferPosition	0	
lastSignal	position	0	
lastPrice	lastSignal	0	
k	lastPrice	0	
gamma	k	1	
expMovingAverageFlag	gamma	1	
dollarsFlag	expMovingAverageFlag	TRUE	
c	dollarsFlag	TRUE	
allowShortPositions	c	0.6	
a	allowShortPositions	TRUE	
	a	0.5005	
sn	0		
linearDF	FALSE		
infiniteCredit	FALSE		
fixedWealth	0		

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## 6.2 Graphs

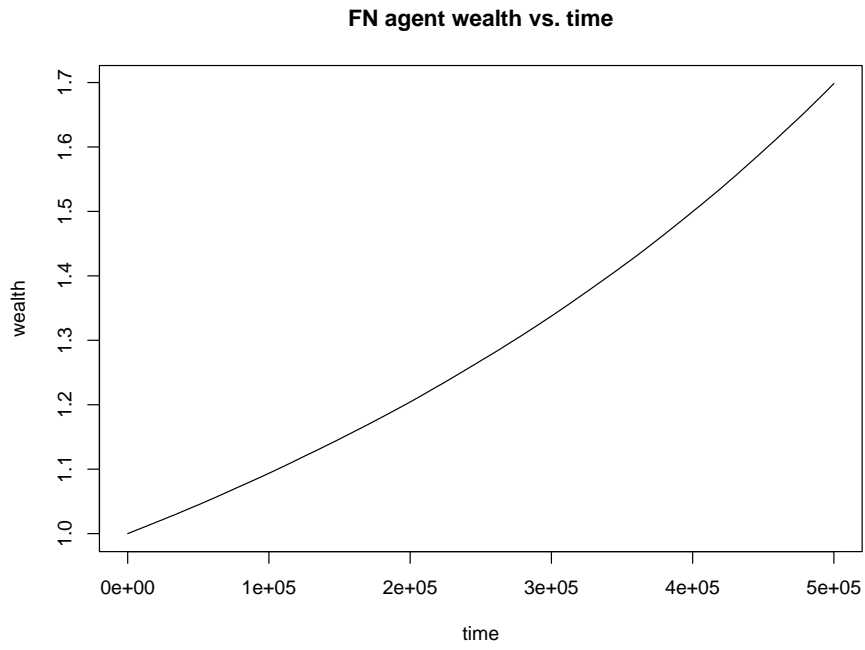


Figure 56: FN agent wealth vs. time



Figure 57: MM agent wealth vs. time

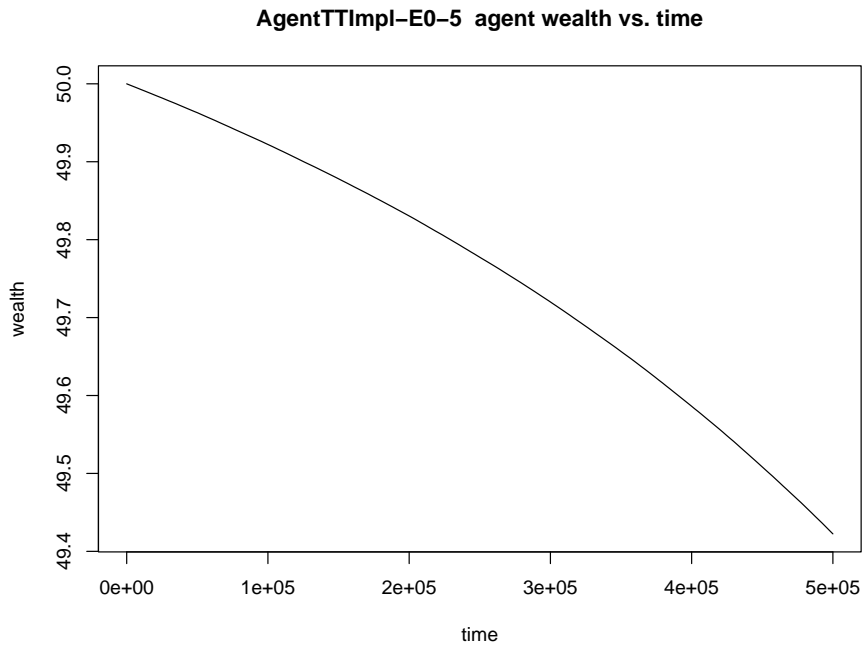


Figure 58: AgentTTImpl-E0-5 agent wealth vs. time

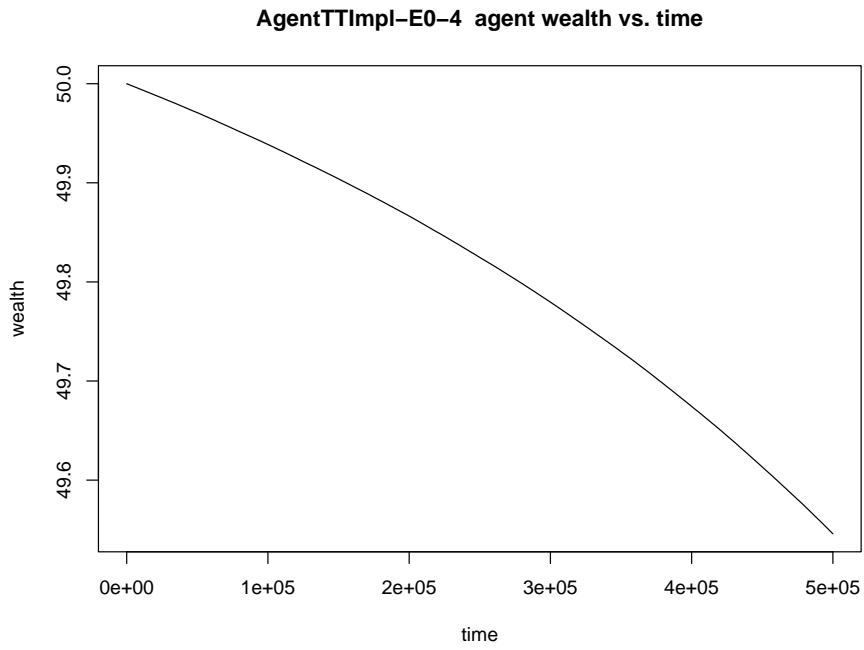


Figure 59: AgentTTImpl-E0-4 agent wealth vs. time

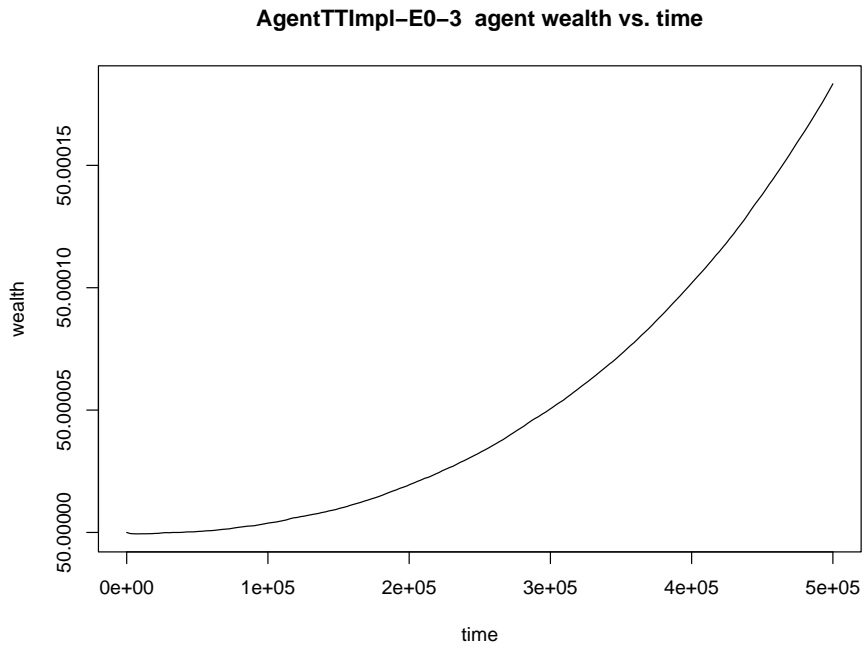


Figure 60: AgentTTImpl-E0-3 agent wealth vs. time

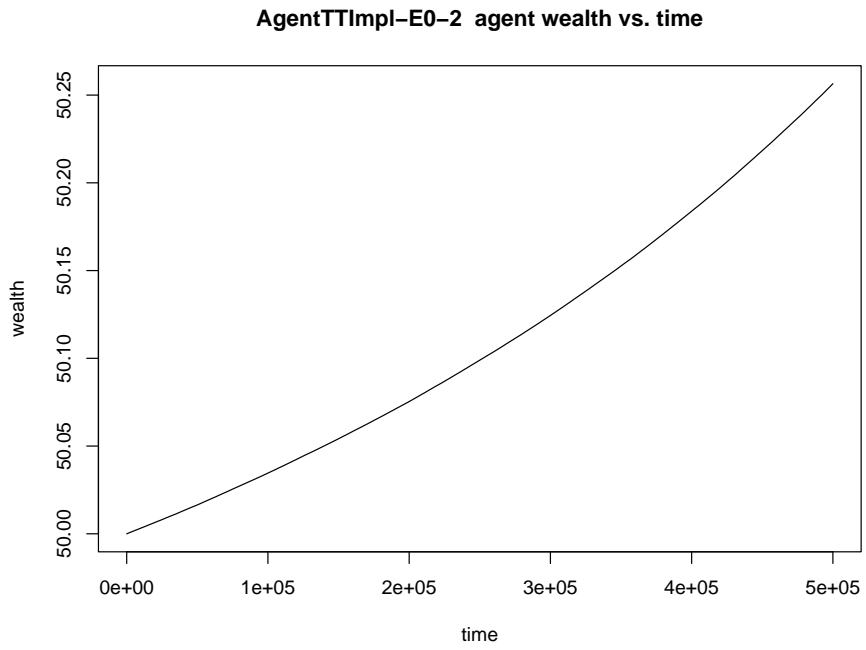


Figure 61: AgentTTImpl-E0-2 agent wealth vs. time

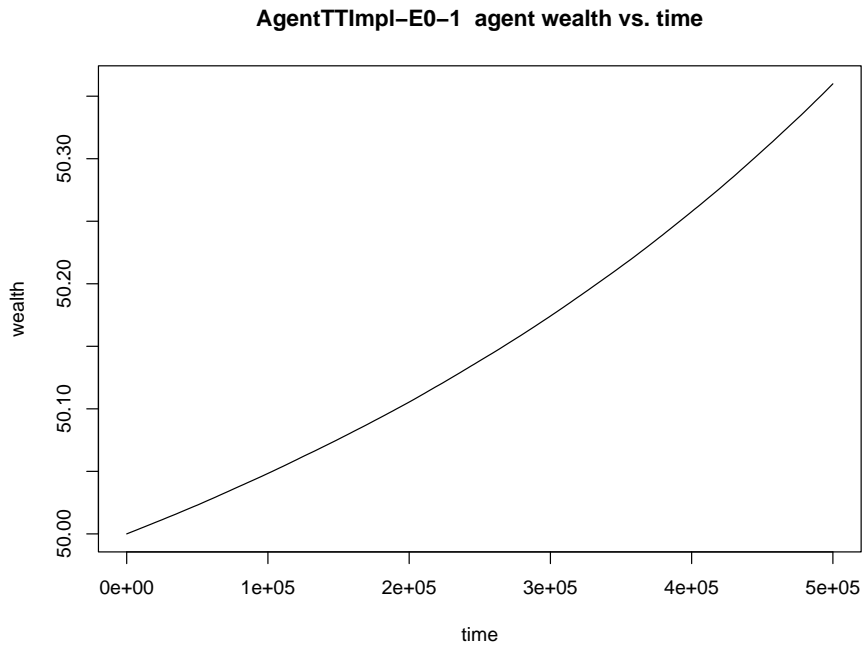


Figure 62: AgentTTImpl-E0-1 agent wealth vs. time

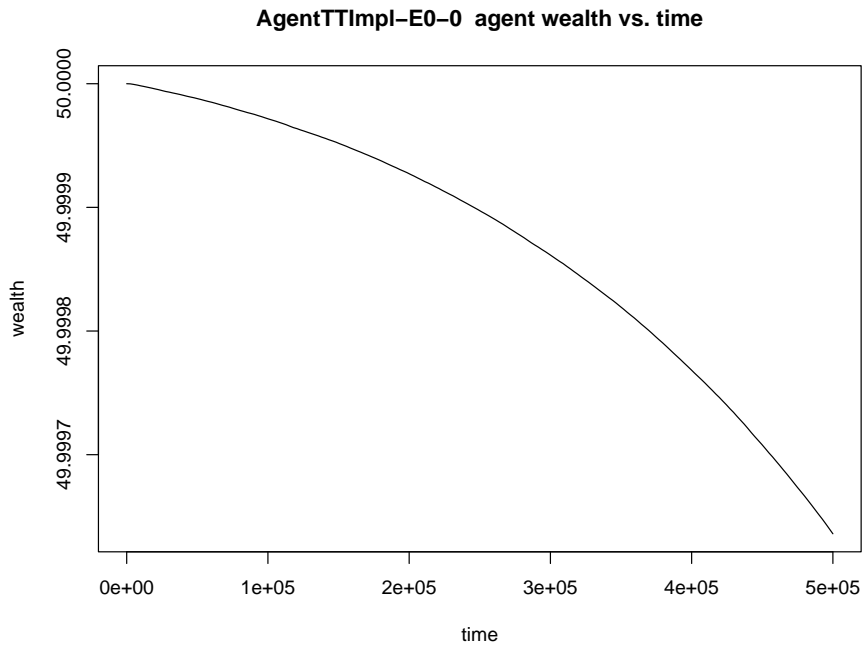


Figure 63: AgentTTImpl-E0-0 agent wealth vs. time

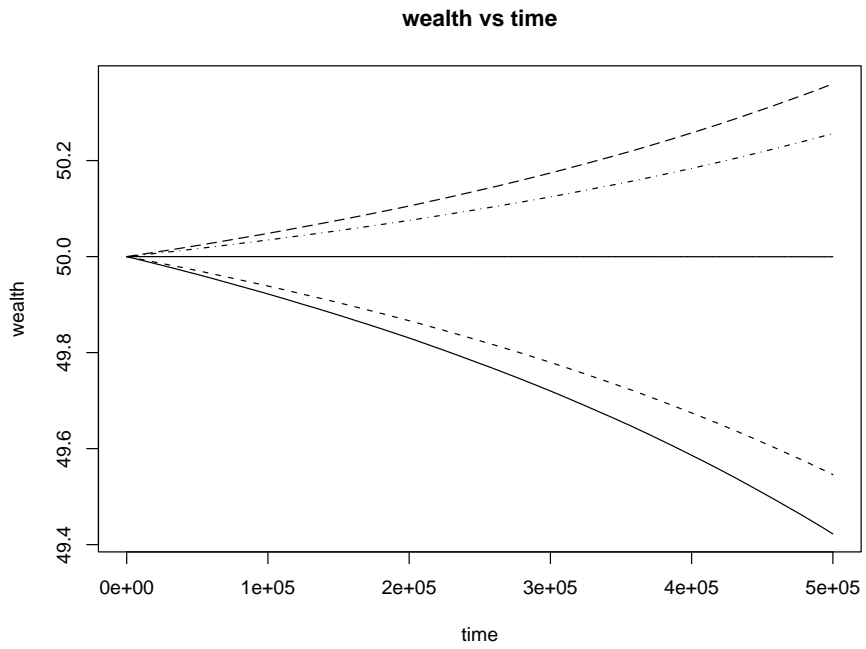


Figure 64: Technical Traders wealth vs time

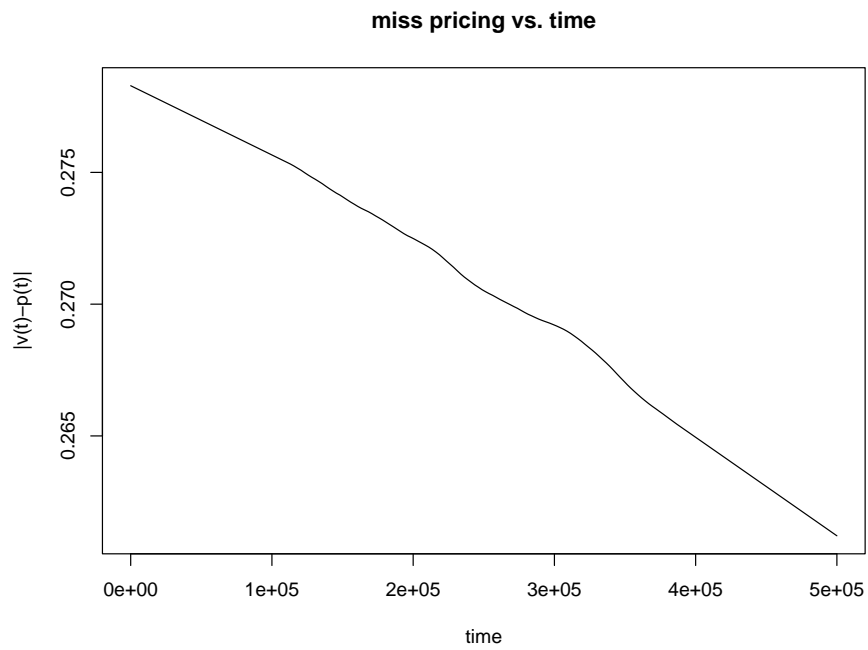


Figure 65: miss pricing vs. time

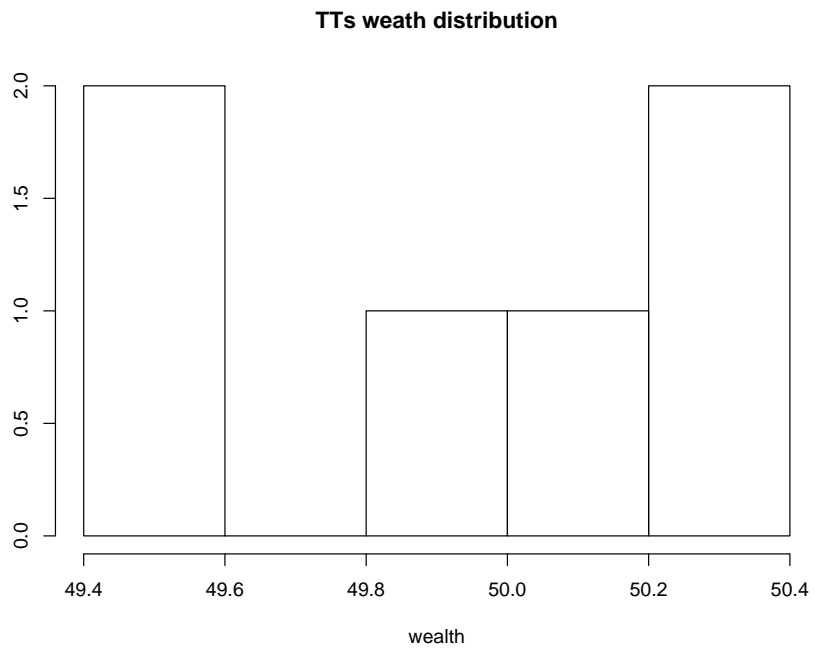


Figure 66: Technical Traders final wealth distribution



# 7 inp gammaFN-002000 gammaTT-000100 agentTTCash 000100 agentFNCash-005000

## 7.1 Parameters

techTraderList-0	7	sn	5
		linearDF	FALSE
		infiniteCredit	FALSE
		fixedWealth	0
		contexts	0
consumptionFactor	0		
account	cash   1		
priceBufferSize	sn	0	
priceBufferPosition	2		
position	0		
lastSignal	0		
lastPrice	0		
k	-1		
gamma	1		
expMovingAverageFlag	TRUE		
dollarsFlag	TRUE		
c	0.6		
allowShortPositions	TRUE		
a	1		
sn	4		
linearDF	FALSE		
infiniteCredit	FALSE		
fixedWealth	0		
contexts	0		
consumptionFactor	0		
account	cash   1		
priceBufferSize	sn	0	
priceBufferPosition	2		
position	0		
lastSignal	0		
lastPrice	0		
k	-1		
gamma	1		
expMovingAverageFlag	TRUE		
dollarsFlag	TRUE		
c	0.6		
allowShortPositions	TRUE		
a	0.5005		
sn	3		
linearDF	FALSE		
infiniteCredit	FALSE		
fixedWealth	0		
contexts	0		
consumptionFactor	0		
account	cash   1		
priceBufferSize	sn	0	
priceBufferPosition	2		
position	0		
lastSignal	0		
lastPrice	0		
k	-1		
gamma	1		
expMovingAverageFlag	TRUE		
dollarsFlag	TRUE		
c	0.6		
allowShortPositions	TRUE		
a	0.001		
sn	2		
linearDF	FALSE		
infiniteCredit	FALSE		
fixedWealth	0		
contexts	0		
consumptionFactor	0		
account	cash   1		
priceBufferSize	sn	0	
priceBufferPosition	2		
position	0		
lastSignal	0		
lastPrice	0		
k	1		
gamma	1		
expMovingAverageFlag	TRUE		
dollarsFlag	TRUE		
c	0.6		
allowShortPositions	TRUE		
a	1		
sn	1		
linearDF	FALSE		
infiniteCredit	FALSE		
fixedWealth	0		
contexts	0		
consumptionFactor	0		
account	cash   1		
priceBufferSize	sn	0	
priceBufferPosition	2		
position	0		
lastSignal	0		
lastPrice	0		
k	1		
gamma	1		
expMovingAverageFlag	TRUE		
dollarsFlag	TRUE		
c	0.6		
allowShortPositions	TRUE		
a	0.5005		
sn	0		
linearDF	FALSE		
infiniteCredit	FALSE		
fixedWealth	0		

## 7.2 Graphs

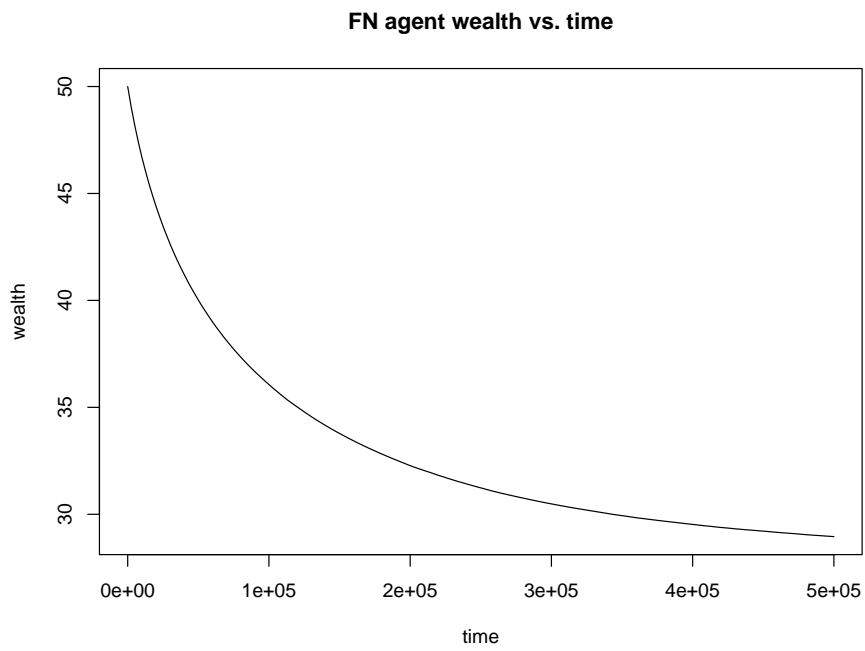


Figure 67: FN agent wealth vs. time



Figure 68: MM agent wealth vs. time

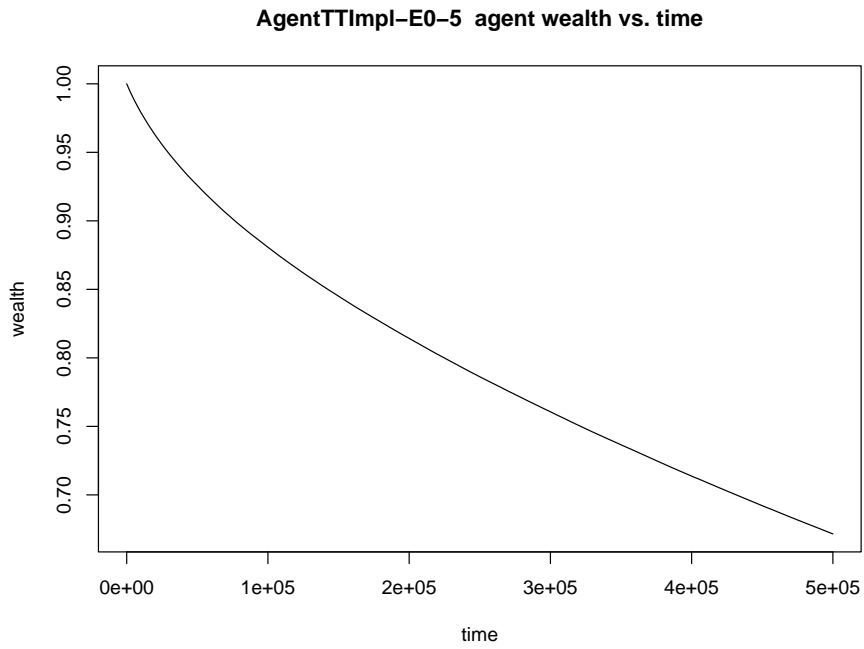


Figure 69: AgentTTImpl-E0-5 agent wealth vs. time

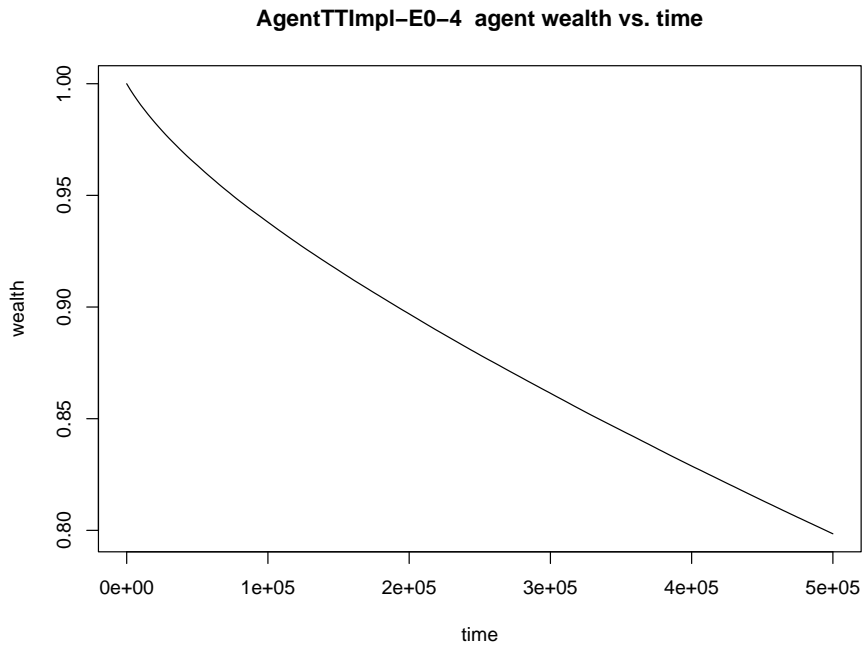


Figure 70: AgentTTImpl-E0-4 agent wealth vs. time

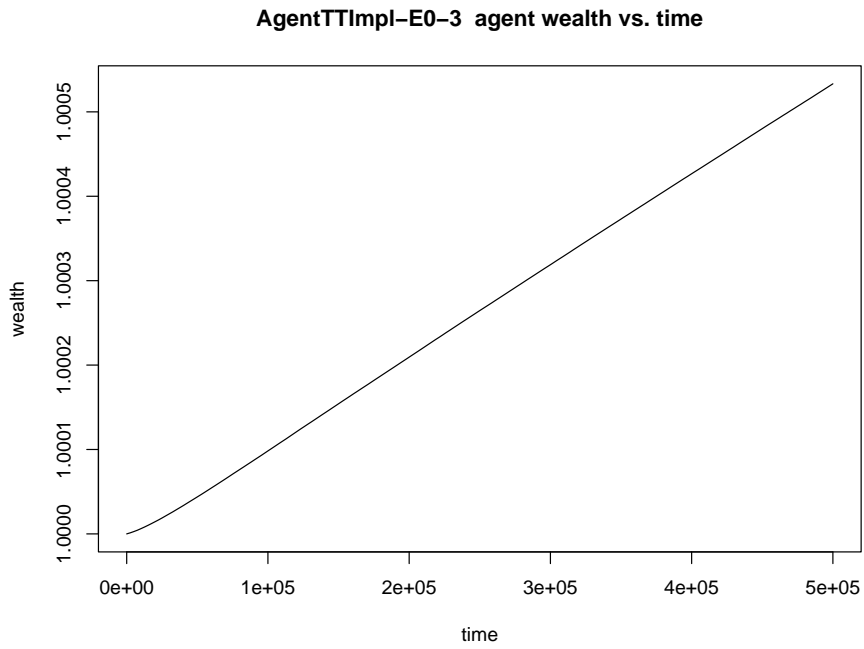


Figure 71: AgentTTImpl-E0-3 agent wealth vs. time

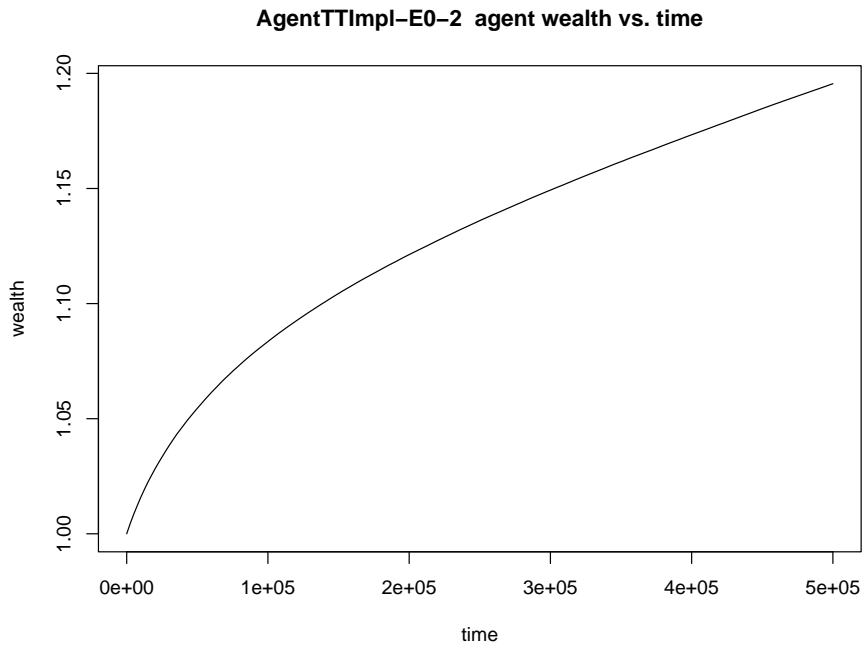


Figure 72: AgentTTImpl-E0-2 agent wealth vs. time

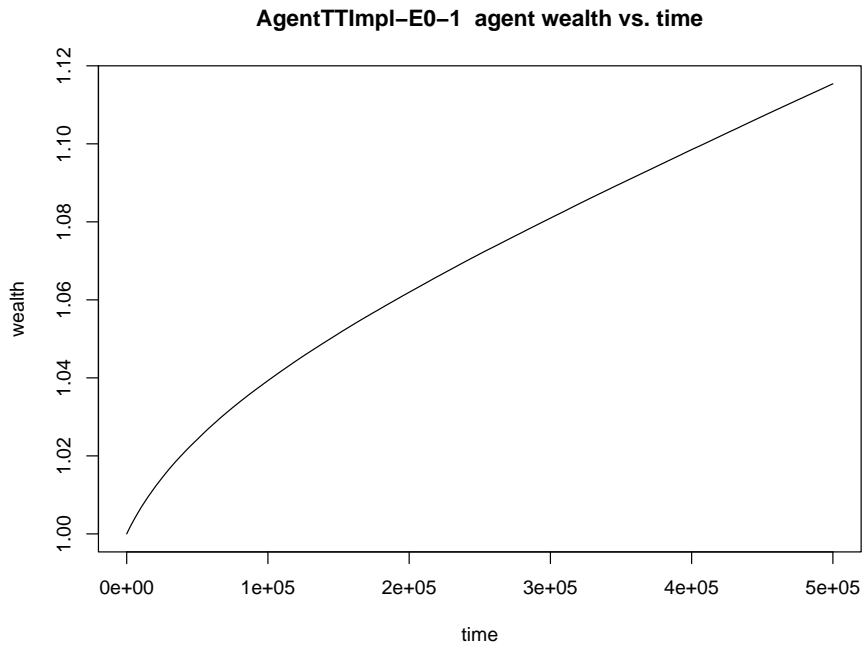


Figure 73: AgentTTImpl-E0-1 agent wealth vs. time

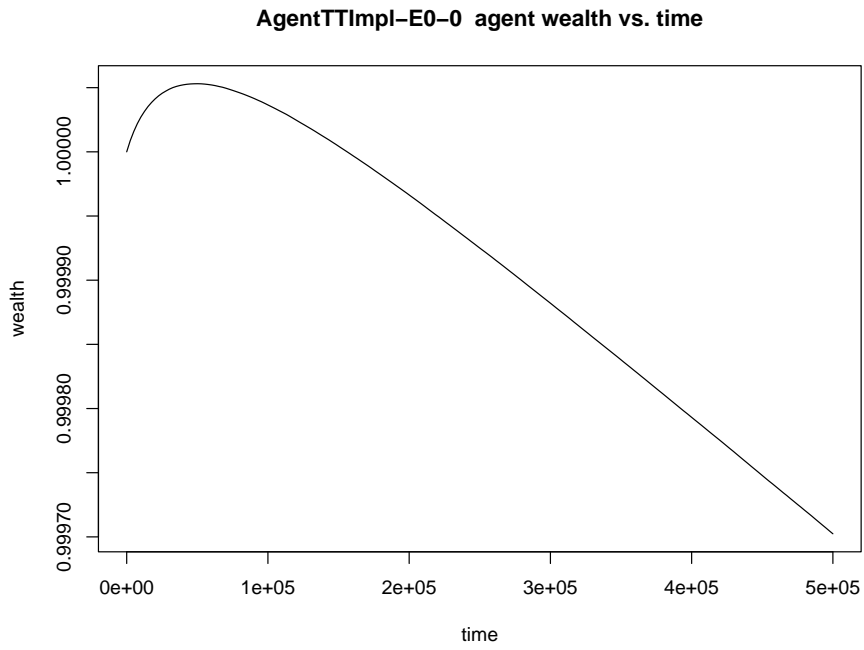


Figure 74: AgentTTImpl-E0-0 agent wealth vs. time

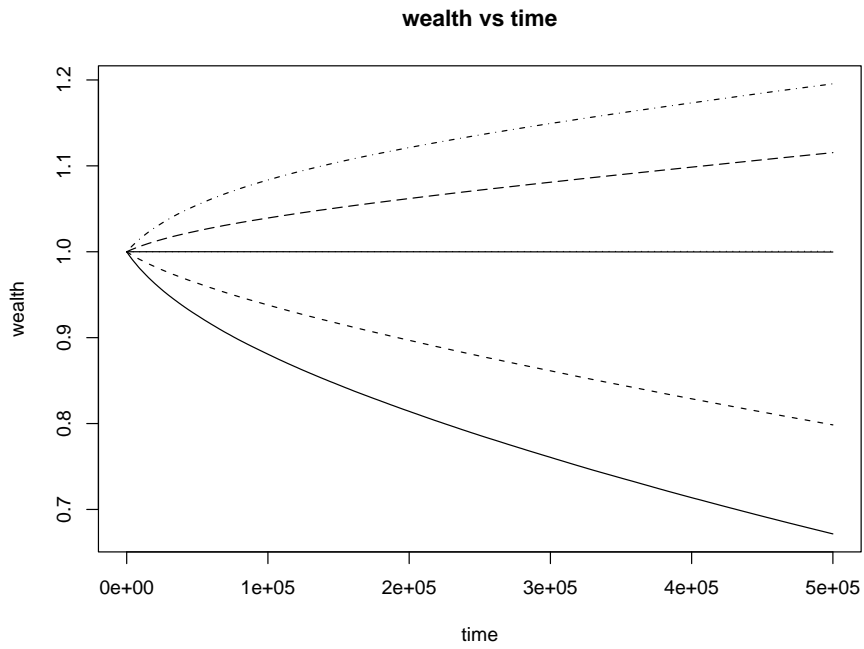


Figure 75: Technical Traders wealth vs time

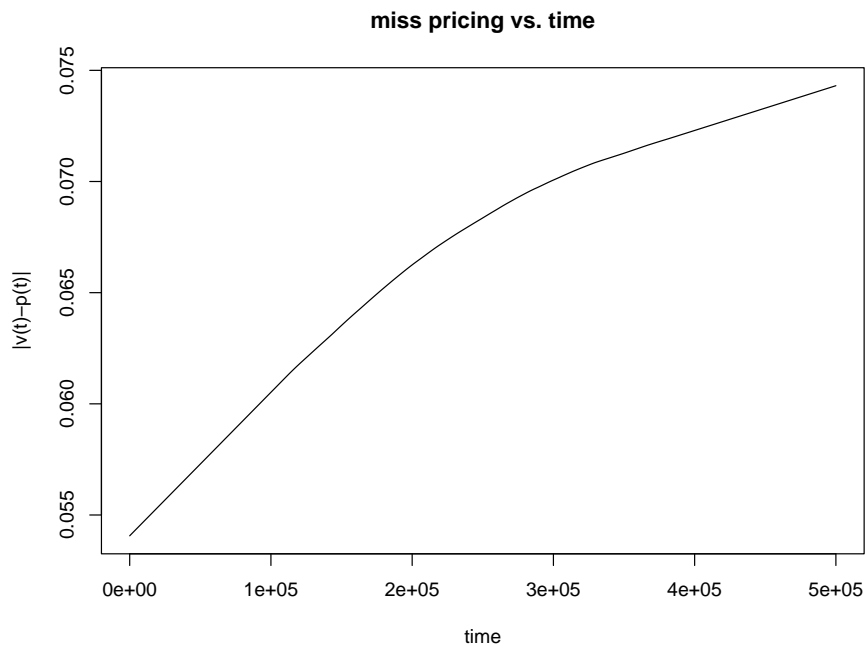


Figure 76: miss pricing vs. time

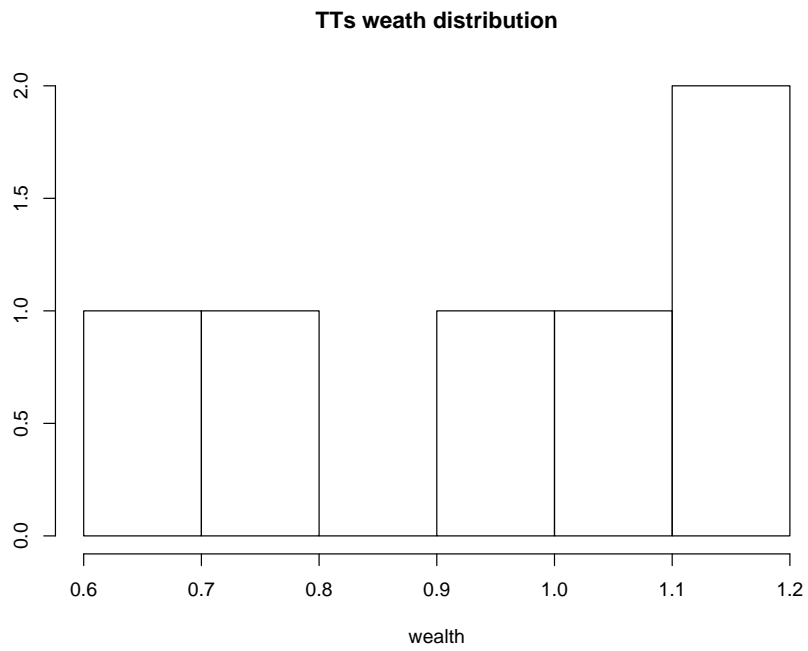


Figure 77: Technical Traders final wealth distribution





## 8.2 Graphs

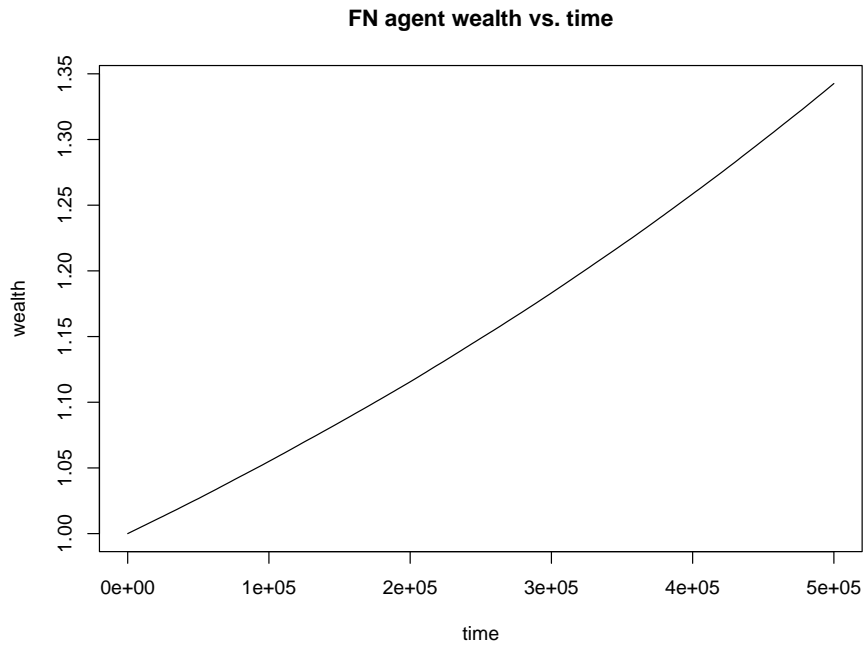


Figure 78: FN agent wealth vs. time



Figure 79: MM agent wealth vs. time

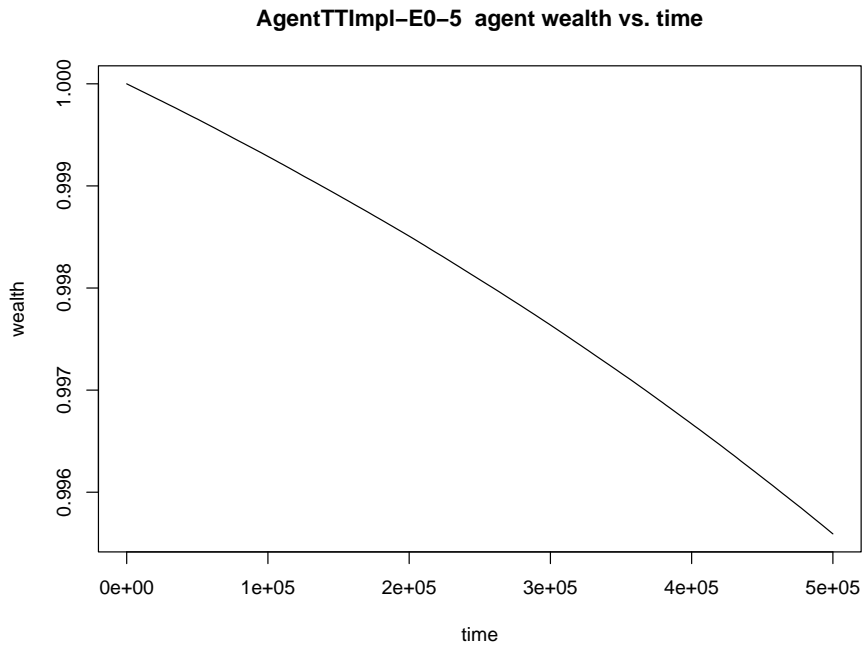


Figure 80: AgentTTImpl-E0-5 agent wealth vs. time

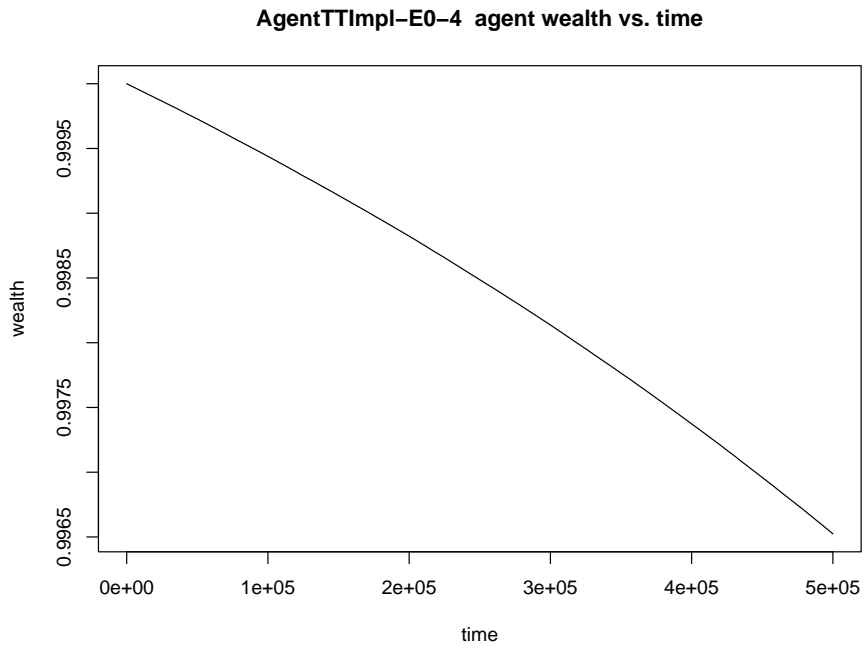


Figure 81: AgentTTImpl-E0-4 agent wealth vs. time

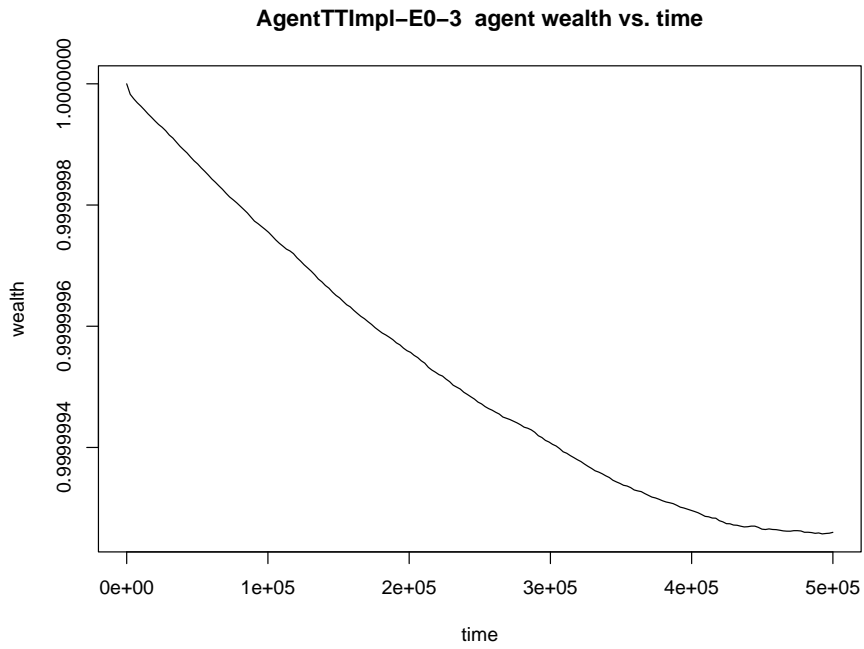


Figure 82: AgentTTImpl-E0-3 agent wealth vs. time

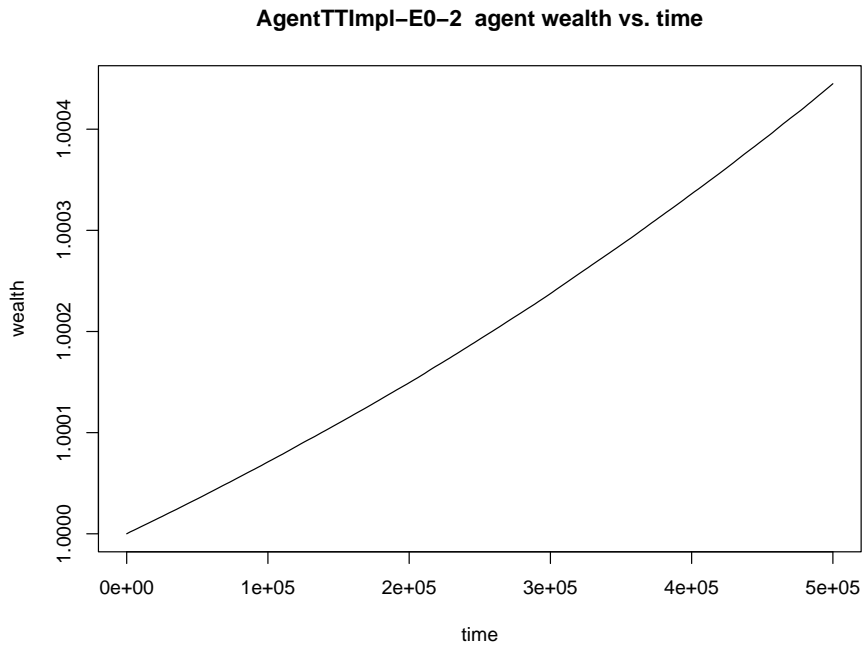


Figure 83: AgentTTImpl-E0-2 agent wealth vs. time

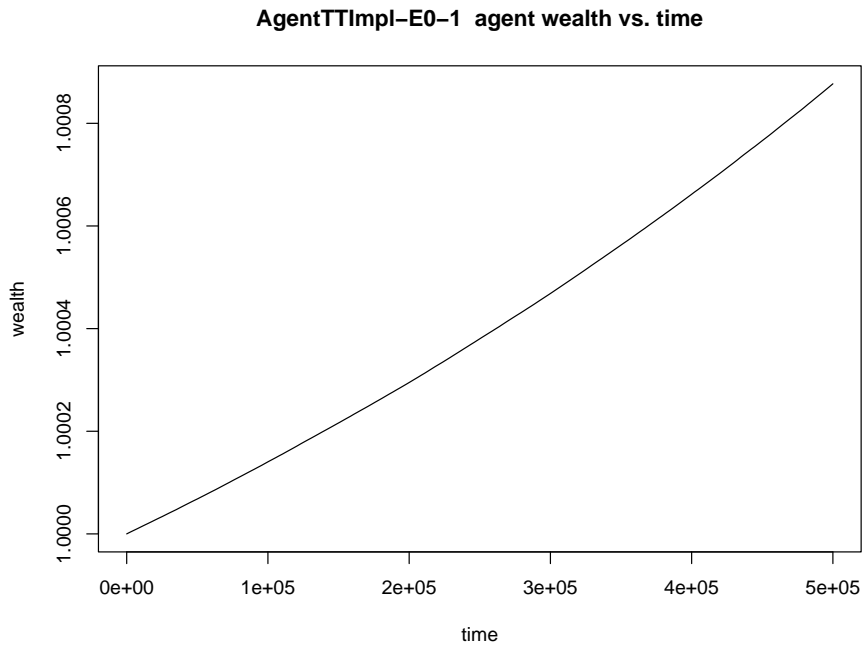


Figure 84: AgentTTImpl-E0-1 agent wealth vs. time

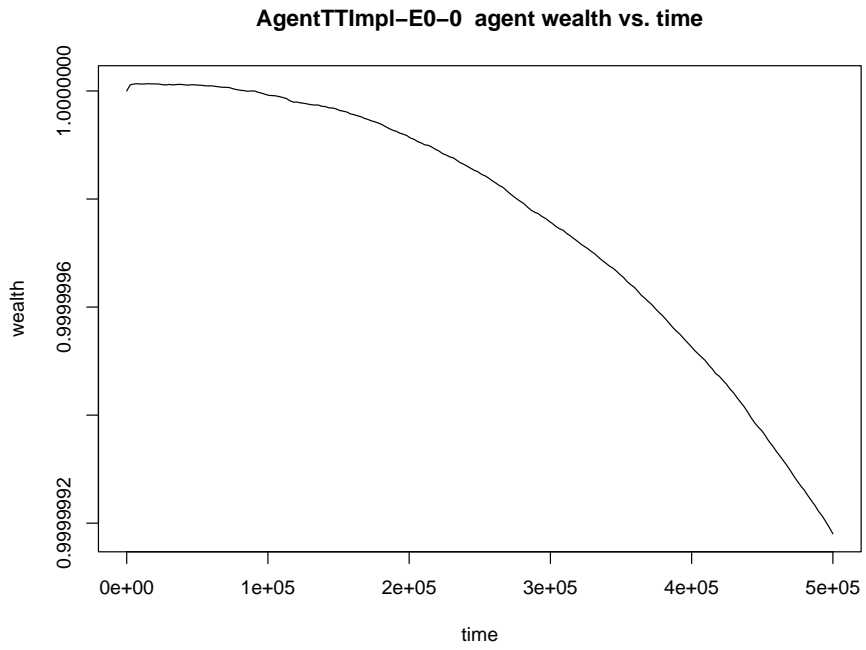


Figure 85: AgentTTImpl-E0-0 agent wealth vs. time

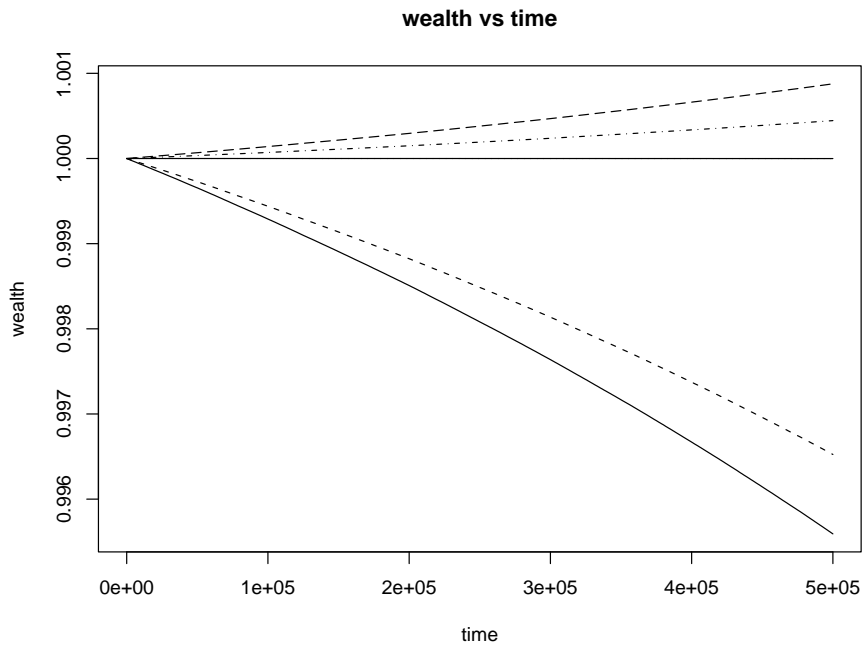


Figure 86: Technical Traders wealth vs time

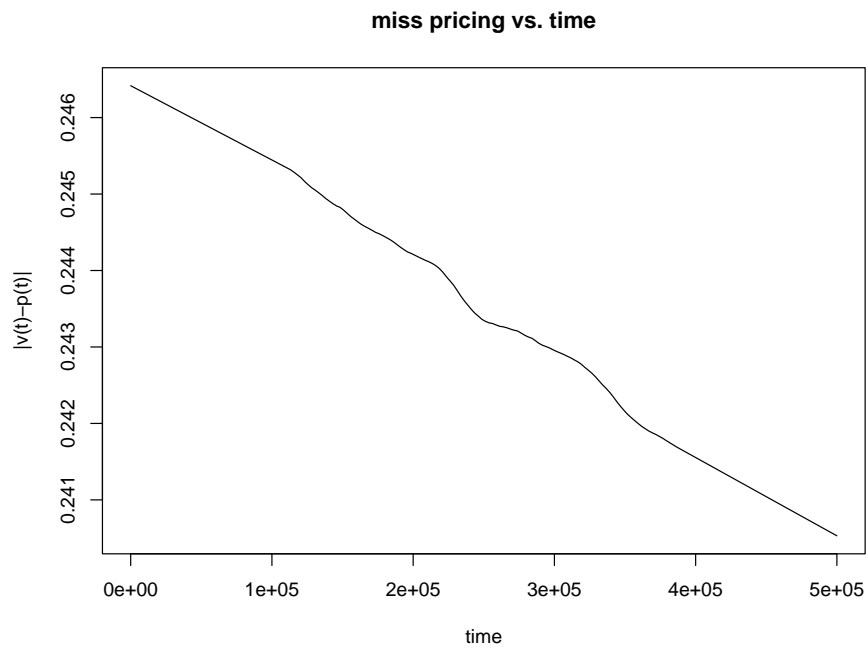


Figure 87: miss pricing vs. time

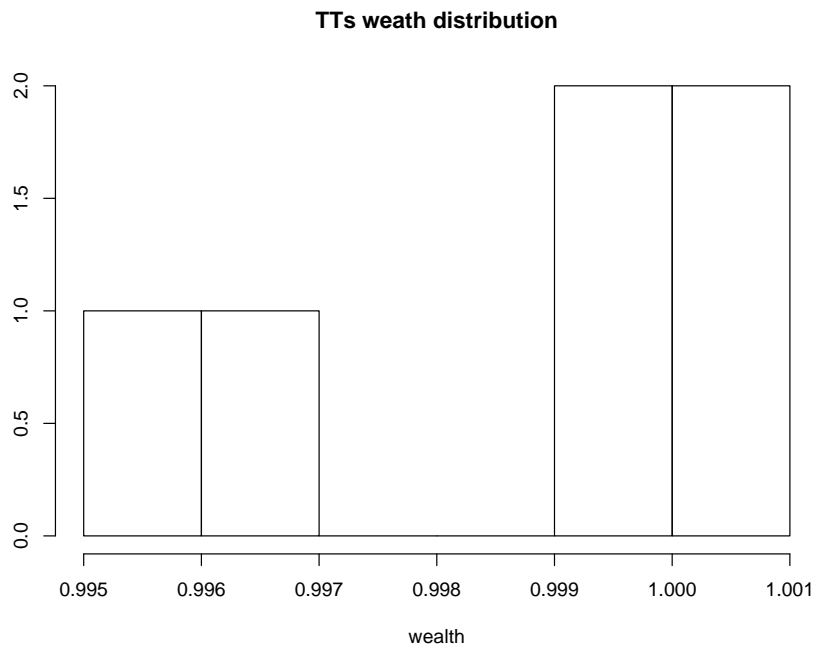


Figure 88: Technical Traders final wealth distribution





## 9.2 Graphs

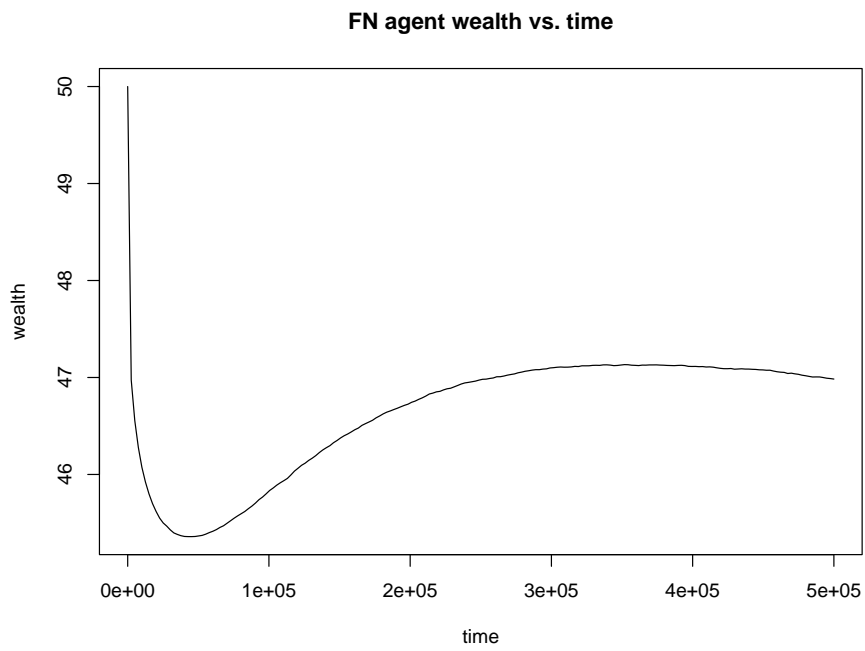


Figure 89: FN agent wealth vs. time



Figure 90: MM agent wealth vs. time

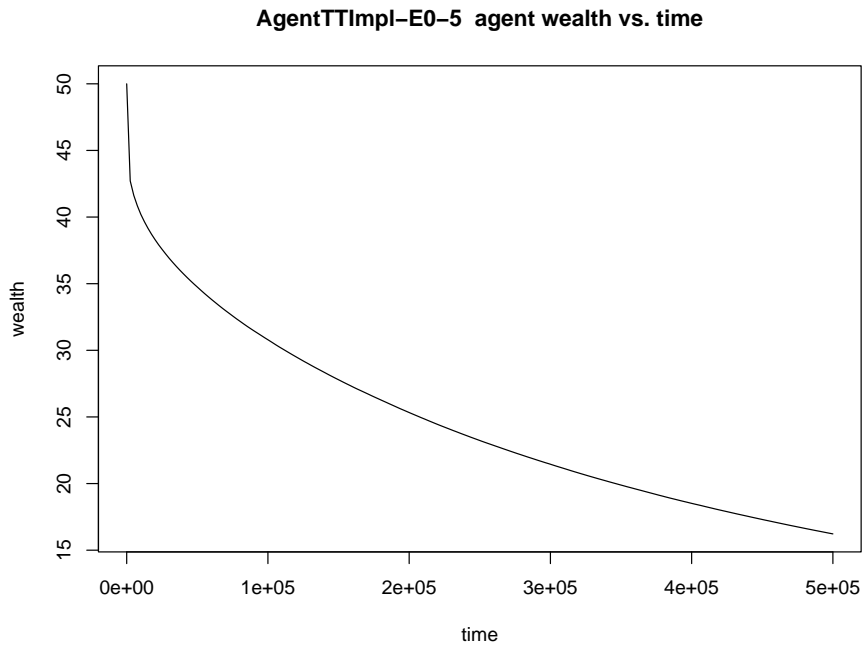


Figure 91: AgentTTImpl-E0-5 agent wealth vs. time

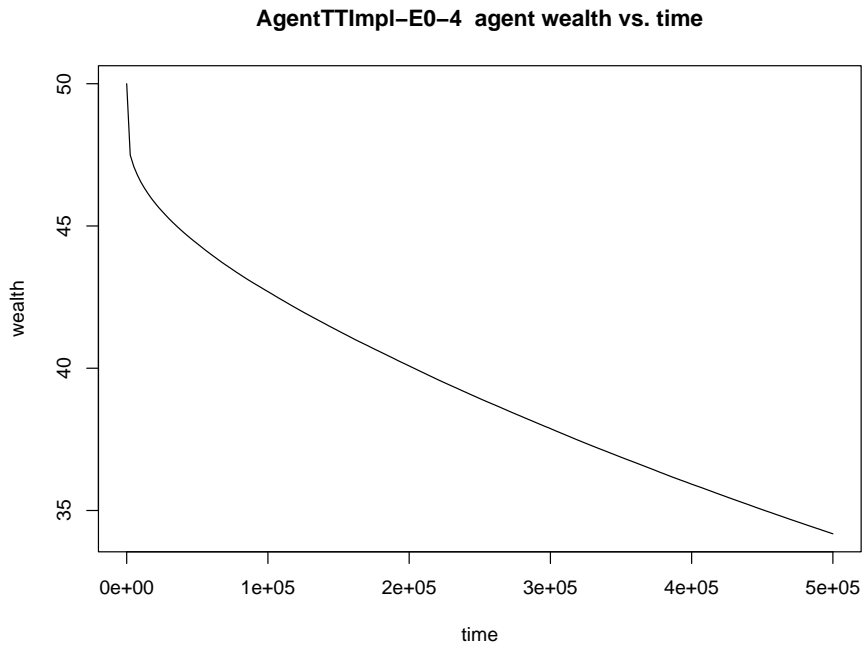


Figure 92: AgentTTImpl-E0-4 agent wealth vs. time

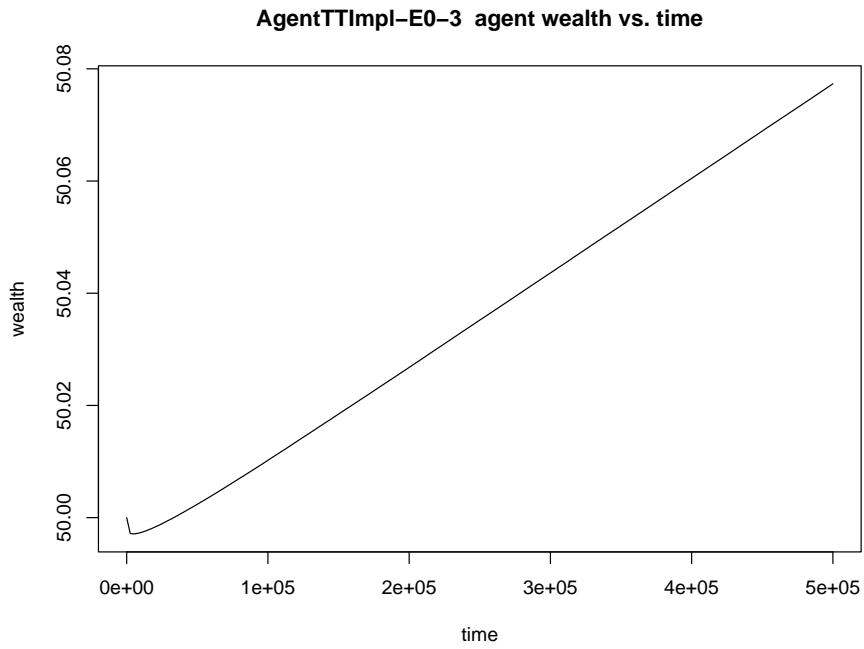


Figure 93: AgentTTImpl-E0-3 agent wealth vs. time

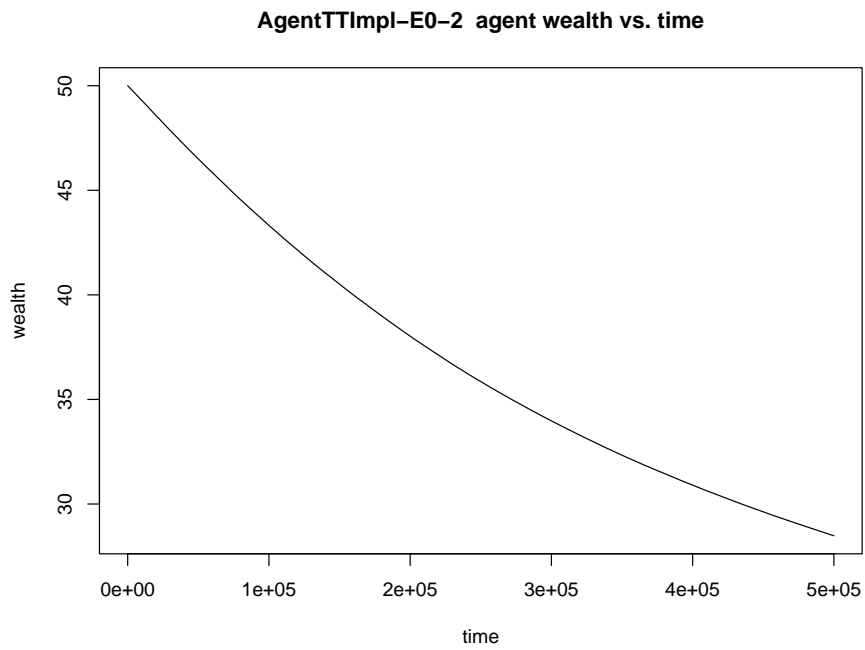


Figure 94: AgentTTImpl-E0-2 agent wealth vs. time

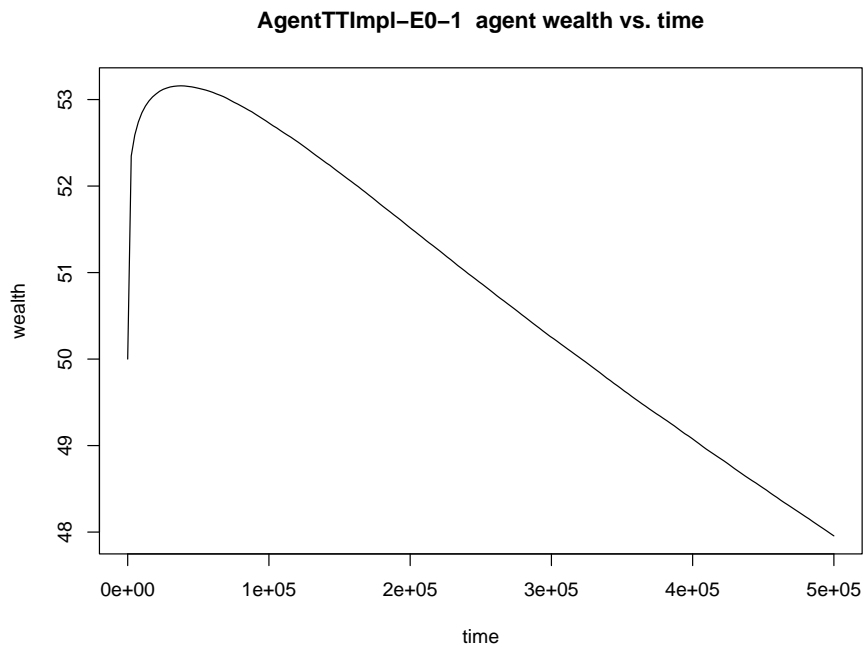


Figure 95: AgentTTImpl-E0-1 agent wealth vs. time

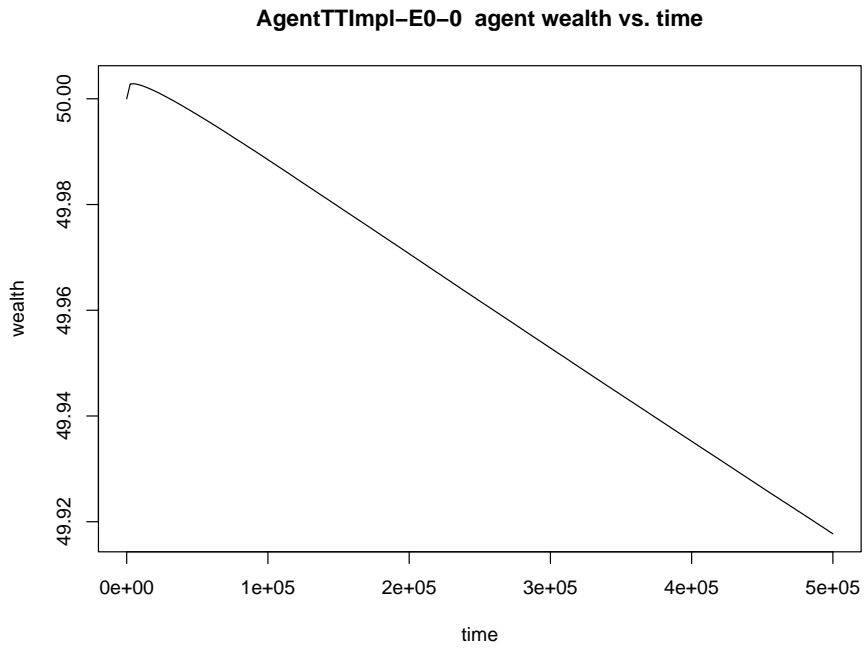


Figure 96: AgentTTImpl-E0-0 agent wealth vs. time

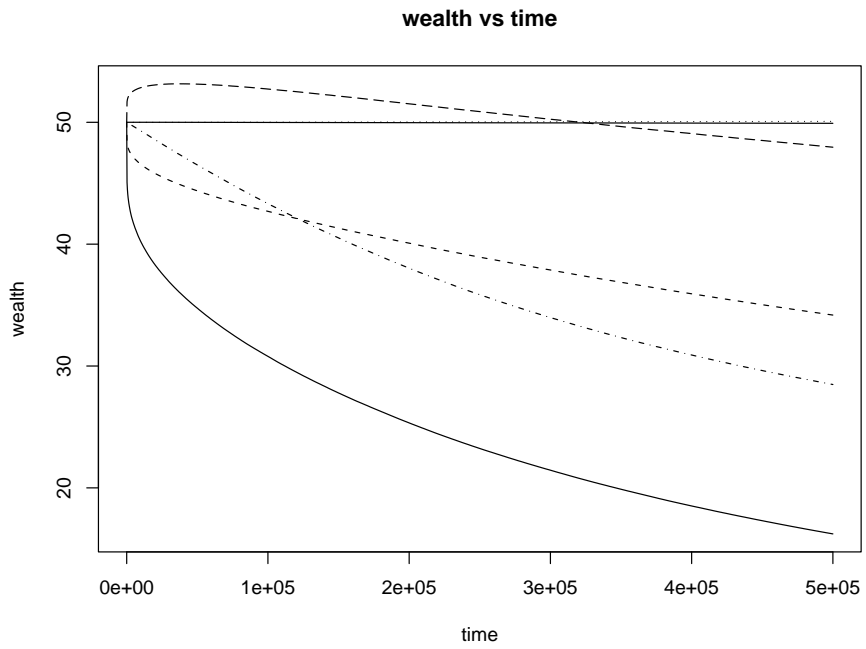


Figure 97: Technical Traders wealth vs time

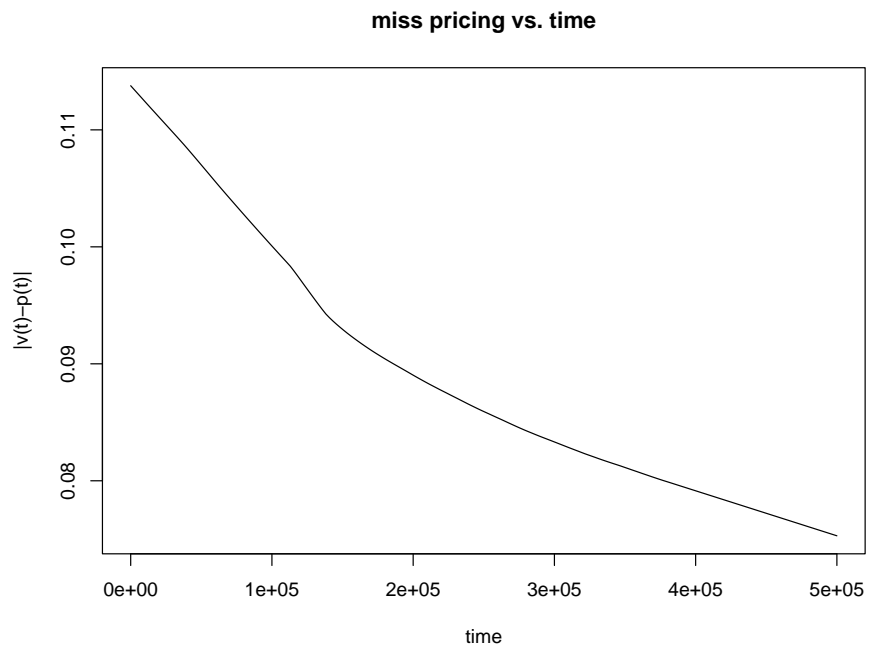


Figure 98: miss pricing vs. time

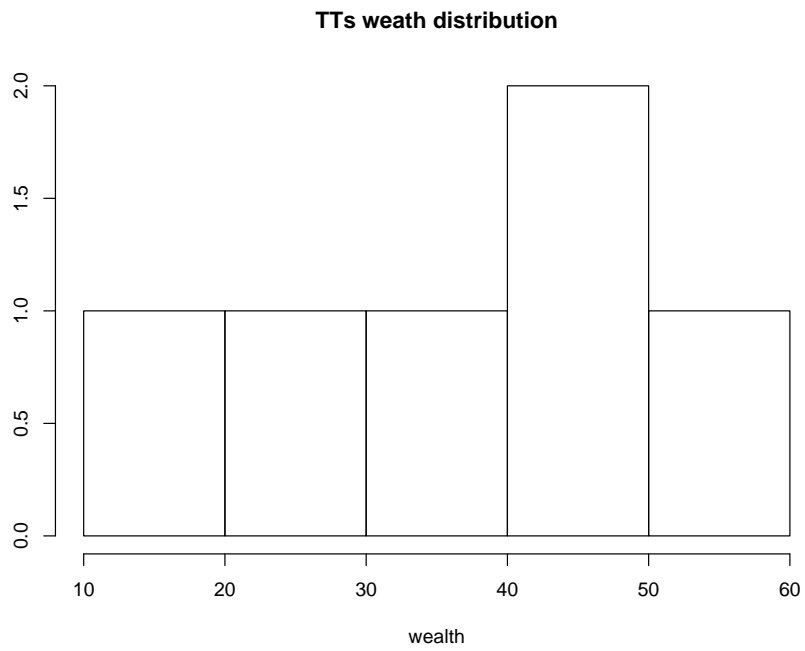


Figure 99: Technical Traders final wealth distribution



# 10 inp gammaFN-000100 gammaTT-002000 agentTTCas 005000 agentFNCash-000100

## 10.1 Parameters

techTraderList-0	7	sn	5
		linearDF	FALSE
		infiniteCredit	FALSE
		fixedWealth	0
		contexts	0
consumptionFactor	0		
account	cash   50		
6	6	sn	4
		linearDF	FALSE
		infiniteCredit	FALSE
		fixedWealth	0
		contexts	0
consumptionFactor	0		
account	cash   50		
5	5	sn	3
		linearDF	FALSE
		infiniteCredit	FALSE
		fixedWealth	0
		contexts	0
consumptionFactor	0		
account	cash   50		
2	2	sn	2
		linearDF	FALSE
		infiniteCredit	FALSE
		fixedWealth	0
		contexts	0
consumptionFactor	0		
account	cash   50		
1	1	sn	1
		linearDF	FALSE
		infiniteCredit	FALSE
		fixedWealth	0
		contexts	0
consumptionFactor	0		
account	cash   50		
		sn	0
		linearDF	FALSE
		infiniteCredit	FALSE
		fixedWealth	0
		contexts	0
		consumptionFactor	0
		account	cash   50
		sn	0
		linearDF	FALSE
		infiniteCredit	FALSE
		fixedWealth	0

## 10.2 Graphs

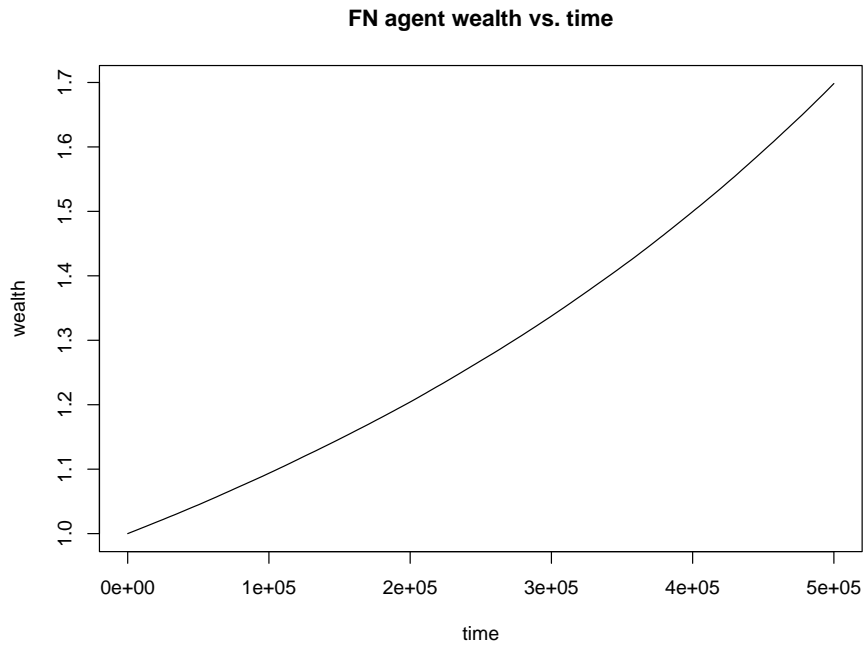


Figure 100: FN agent wealth vs. time



Figure 101: MM agent wealth vs. time

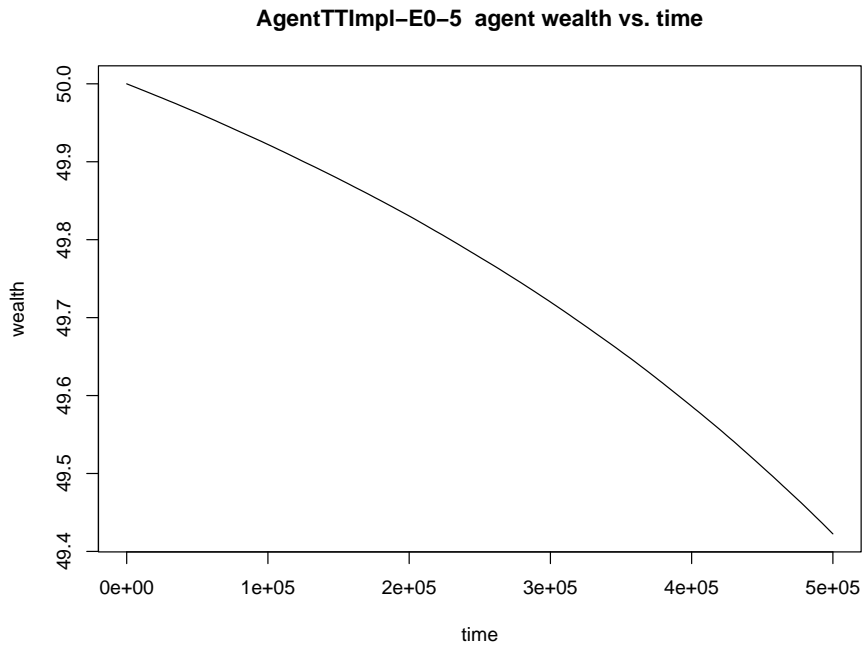


Figure 102: AgentTTImpl-E0-5 agent wealth vs. time

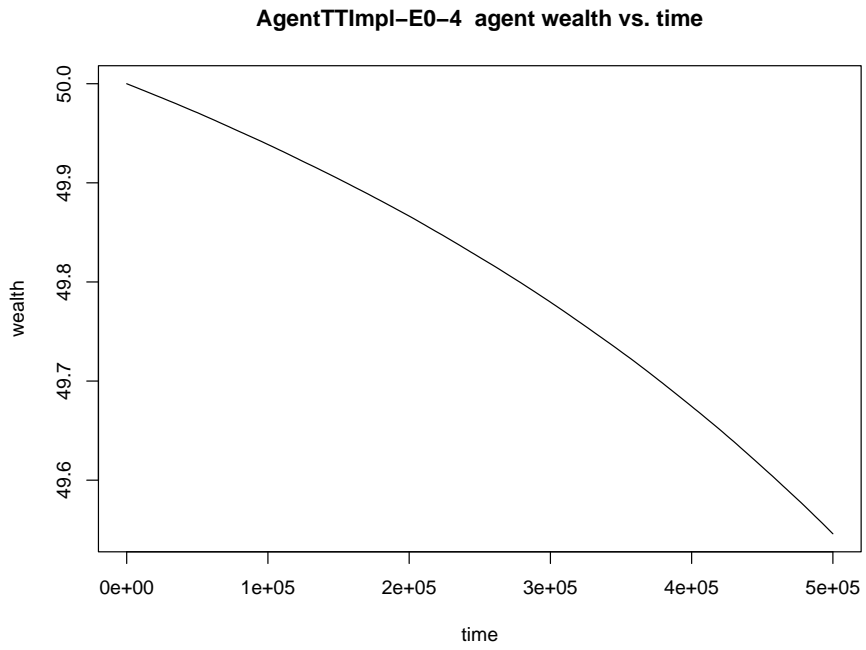


Figure 103: AgentTTImpl-E0-4 agent wealth vs. time

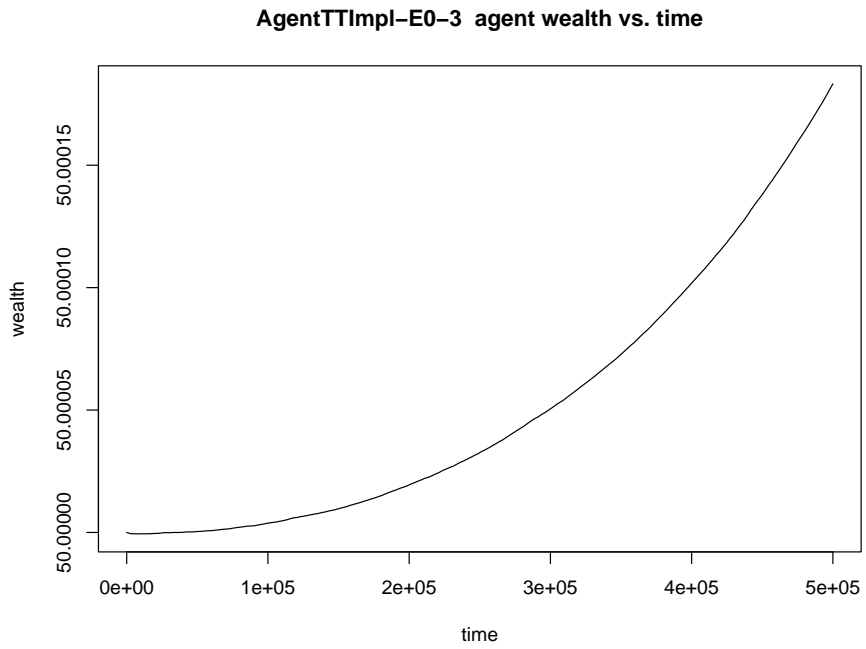


Figure 104: AgentTTImpl-E0-3 agent wealth vs. time

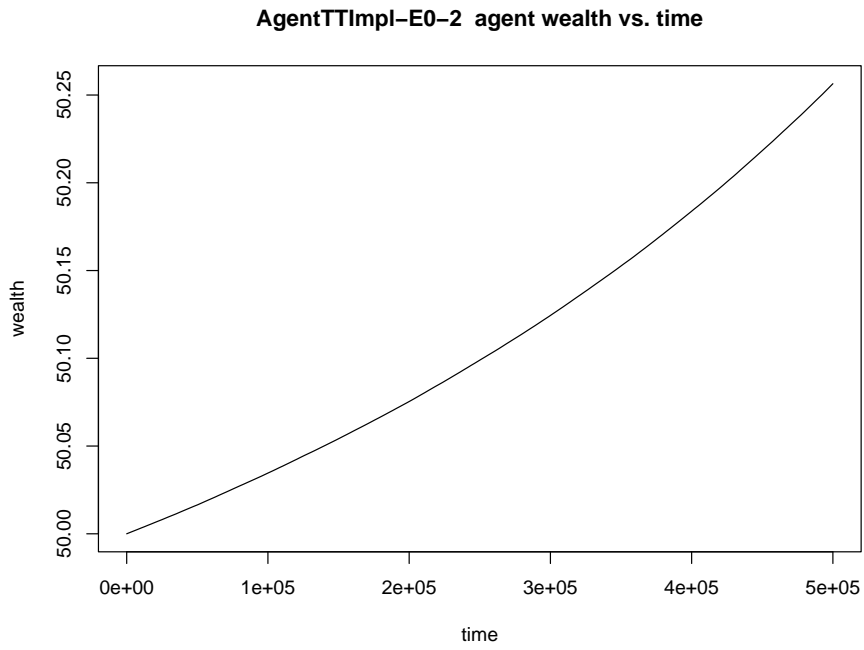


Figure 105: AgentTTImpl-E0-2 agent wealth vs. time

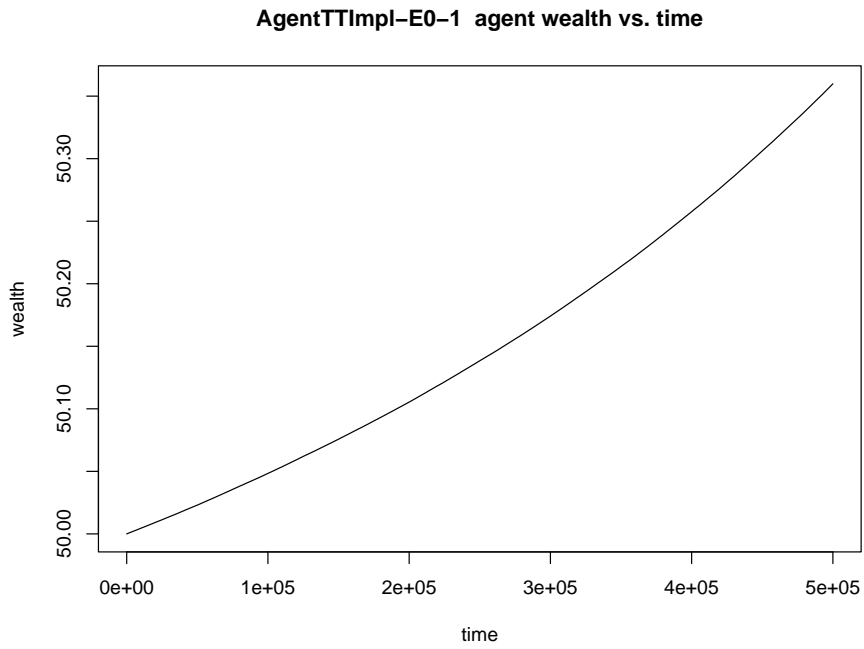


Figure 106: AgentTTImpl-E0-1 agent wealth vs. time

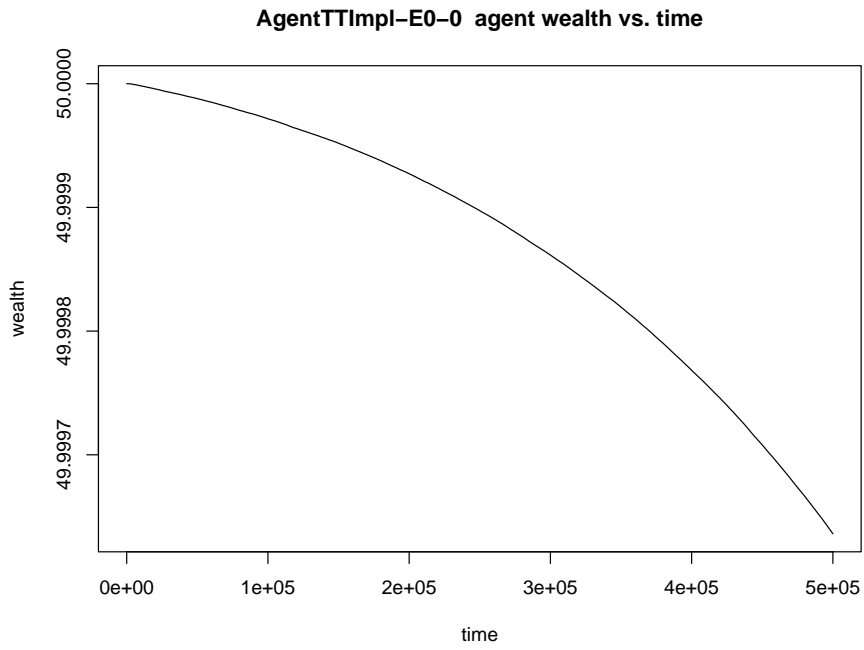


Figure 107: AgentTTImpl-E0-0 agent wealth vs. time

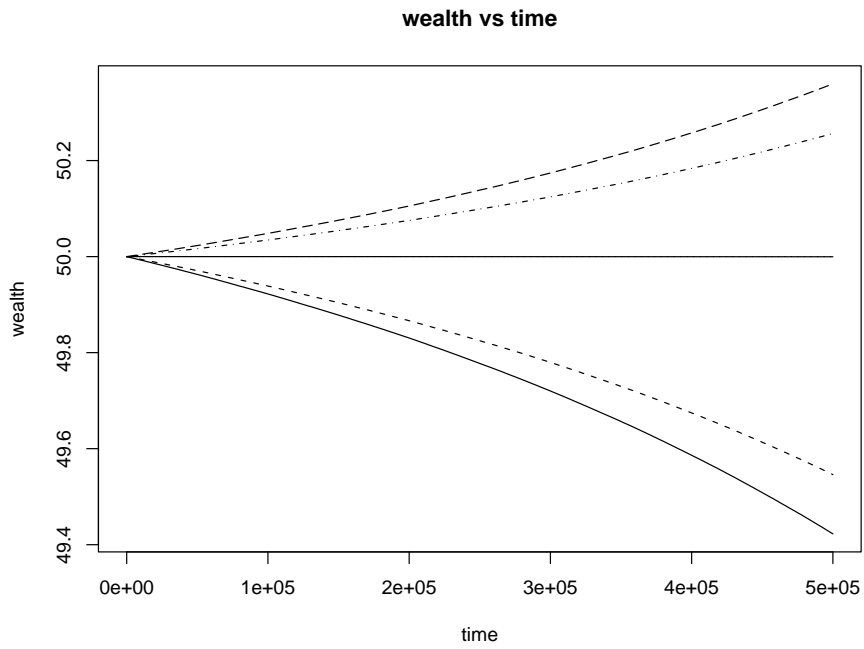


Figure 108: Technical Traders wealth vs time

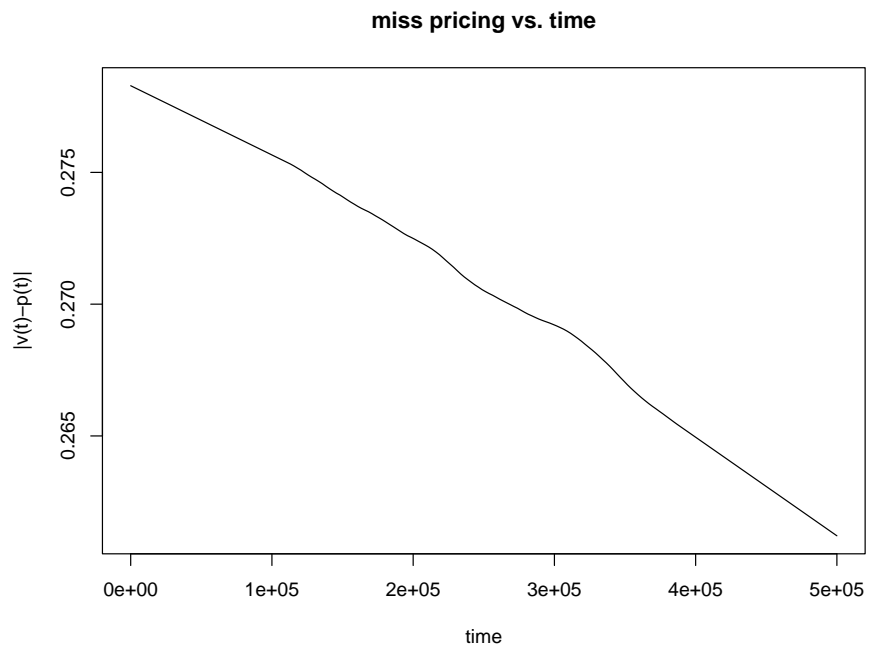


Figure 109: miss pricing vs. time

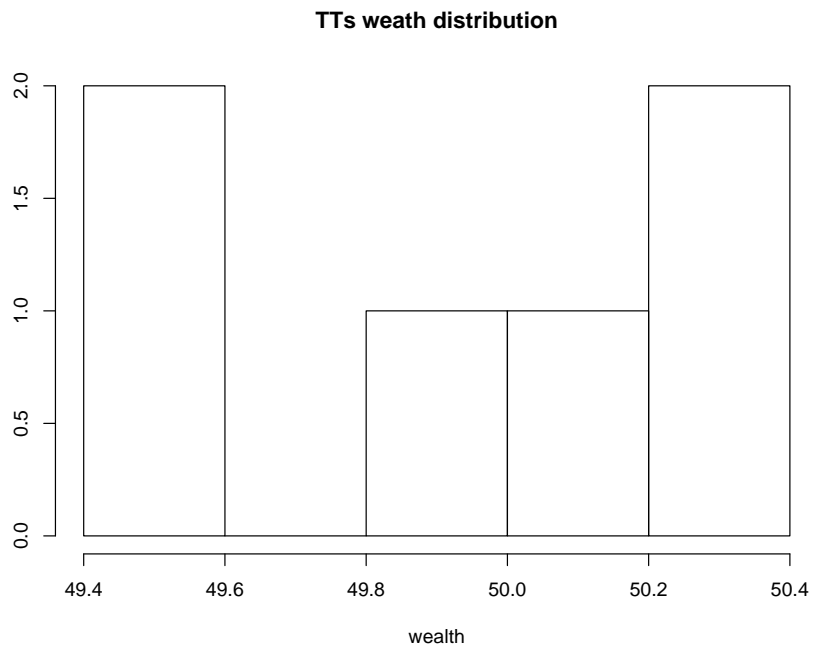


Figure 110: Technical Traders final wealth distribution



# 11 inp gammaFN-000100 gammaTT-002000 agentTTCas 000100 agentFNCash-005000

## 11.1 Parameters

techTraderList-0	7	sn	5
		linearDF	FALSE
		infiniteCredit	FALSE
		fixedWealth	0
		contexts	0
consumptionFactor	0		
account	cash   1		
		sn	0
		price BufferSize	2
		price BufferPosition	0
		position	0
		lastSignal	0
		last Price	0
		k	-1
		gamma	20
		expMovingAverageFlag	TRUE
		dollarsFlag	TRUE
		c	0.6
		allowShortPositions	TRUE
		a	1
		consumptionFactor	0
		account	cash   1
		sn	4
		linearDF	FALSE
		infiniteCredit	FALSE
		fixedWealth	0
6	6	sn	4
		linearDF	FALSE
		infiniteCredit	FALSE
		fixedWealth	0
		contexts	0
consumptionFactor	0		
account	cash   1		
		sn	0
		price BufferSize	2
		price BufferPosition	0
		position	0
		lastSignal	0
		last Price	0
		k	-1
		gamma	20
		expMovingAverageFlag	TRUE
		dollarsFlag	TRUE
		c	0.6
		allowShortPositions	TRUE
		a	0.5005
		consumptionFactor	0
		account	cash   1
		sn	3
		linearDF	FALSE
		infiniteCredit	FALSE
		fixedWealth	0
5	5	sn	3
		linearDF	FALSE
		infiniteCredit	FALSE
		fixedWealth	0
		contexts	0
consumptionFactor	0		
account	cash   1		
		sn	0
		price BufferSize	2
		price BufferPosition	0
		position	0
		lastSignal	0
		last Price	0
		k	-1
		gamma	20
		expMovingAverageFlag	TRUE
		dollarsFlag	TRUE
		c	0.6
		allowShortPositions	TRUE
		a	0.001
		consumptionFactor	0
		account	cash   1
		sn	2
		linearDF	FALSE
		infiniteCredit	FALSE
		fixedWealth	0
2	2	sn	2
		linearDF	FALSE
		infiniteCredit	FALSE
		fixedWealth	0
		contexts	0
consumptionFactor	0		
account	cash   1		
		sn	0
		price BufferSize	2
		price BufferPosition	0
		position	0
		lastSignal	0
		last Price	0
		k	1
		gamma	20
		expMovingAverageFlag	TRUE
		dollarsFlag	TRUE
		c	0.6
		allowShortPositions	TRUE
		a	1
		consumptionFactor	0
		account	cash   1
		sn	1
		linearDF	FALSE
		infiniteCredit	FALSE
		fixedWealth	0
1	1	sn	1
		linearDF	FALSE
		infiniteCredit	FALSE
		fixedWealth	0
		contexts	0
consumptionFactor	0		
account	cash   1		
		sn	0
		price BufferSize	2
		price BufferPosition	0
		position	0
		lastSignal	0
		last Price	0
		k	1
		gamma	20
		expMovingAverageFlag	TRUE
		dollarsFlag	TRUE
		c	0.6
		allowShortPositions	TRUE
		a	0.5005
		consumptionFactor	0
		account	cash   1
		sn	0
		linearDF	FALSE
		infiniteCredit	FALSE
		fixedWealth	0

## 11.2 Graphs

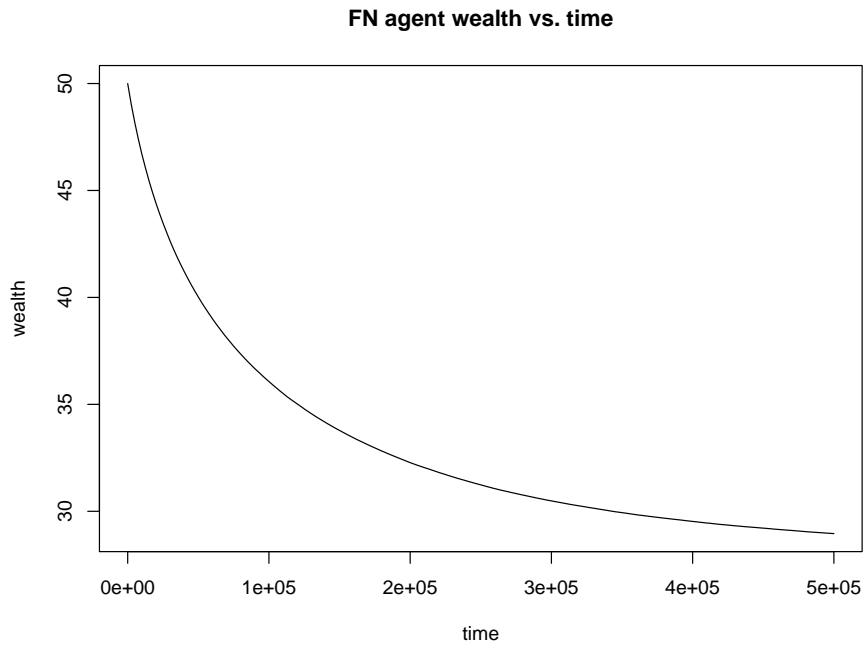


Figure 111: FN agent wealth vs. time



Figure 112: MM agent wealth vs. time

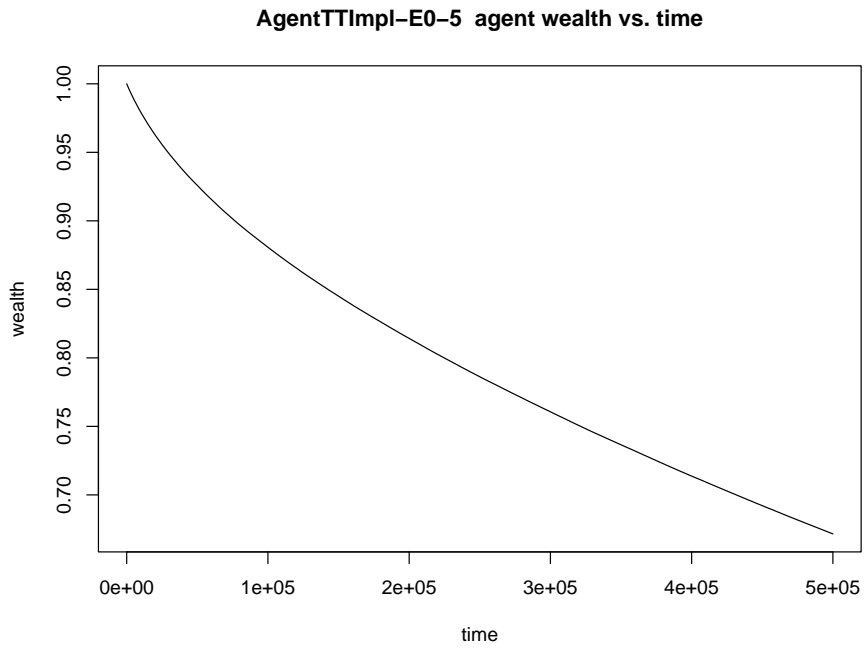


Figure 113: AgentTTImpl-E0-5 agent wealth vs. time

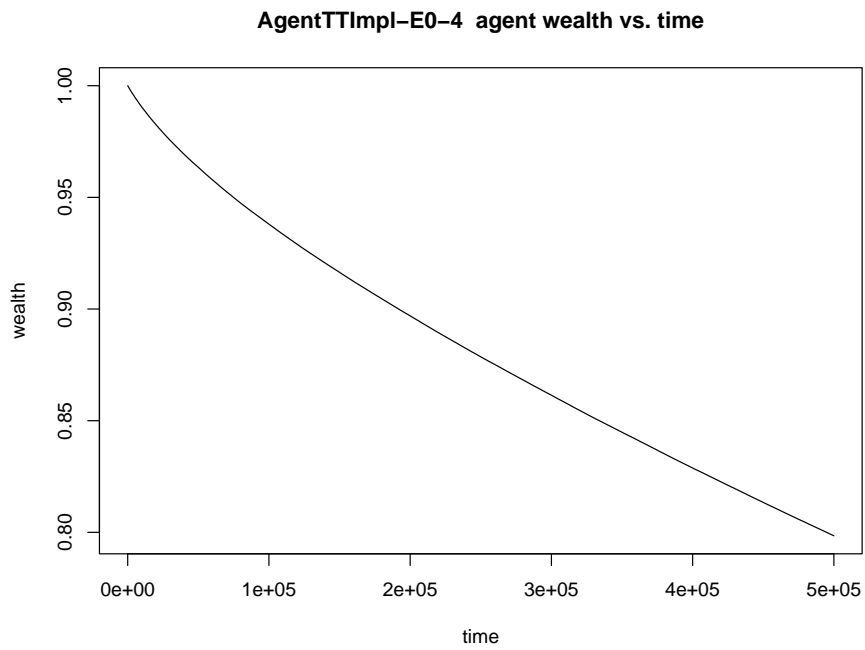


Figure 114: AgentTTImpl-E0-4 agent wealth vs. time

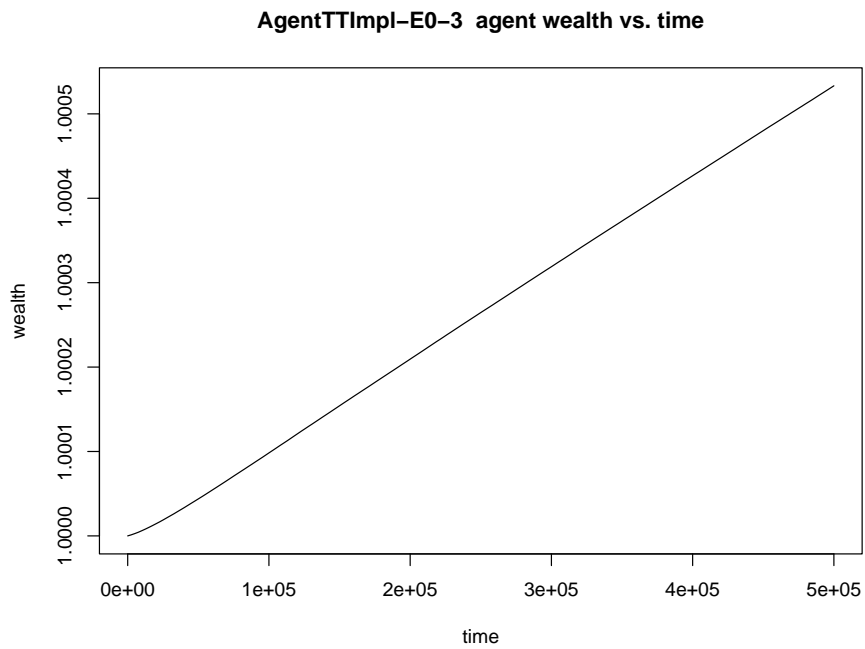


Figure 115: AgentTTImpl-E0-3 agent wealth vs. time

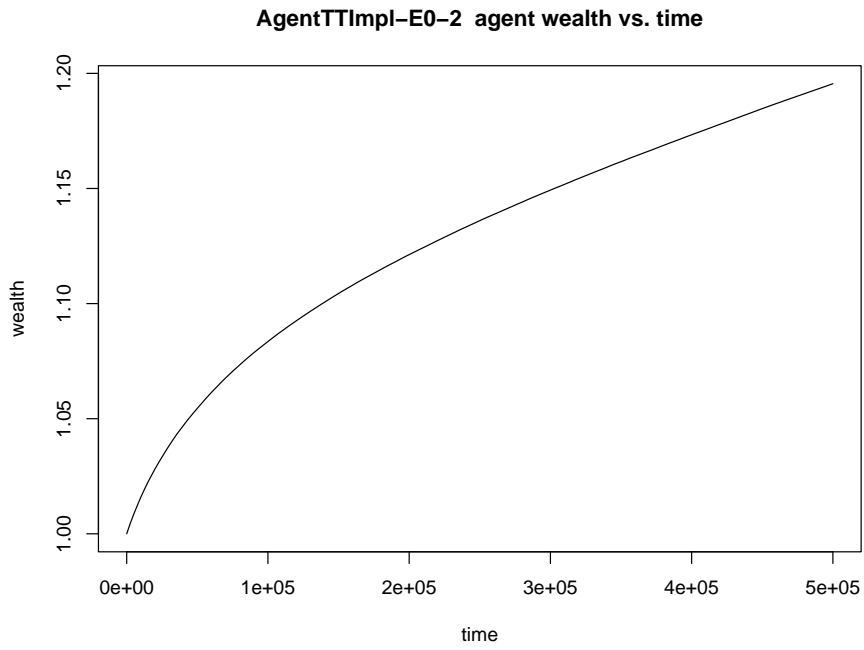


Figure 116: AgentTTImpl-E0-2 agent wealth vs. time

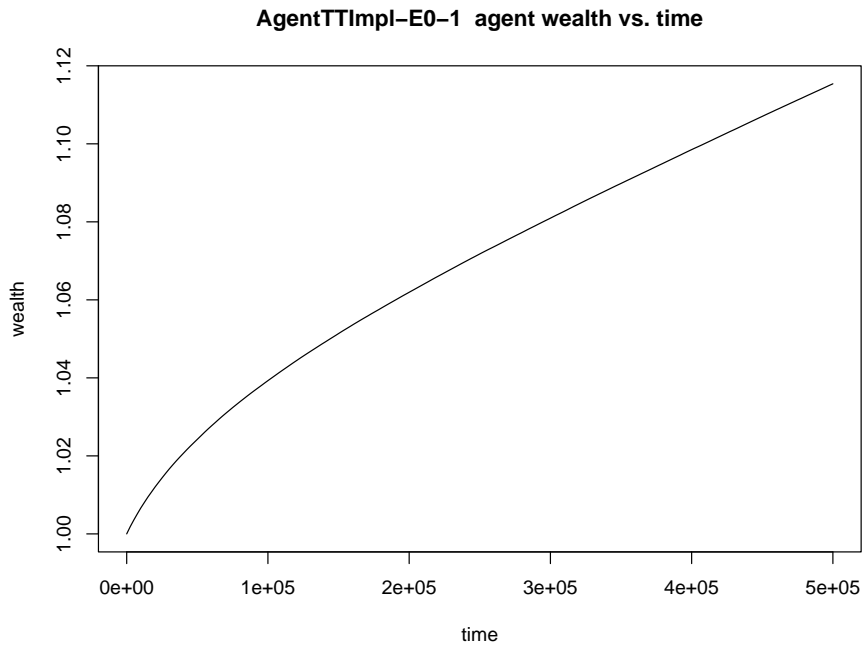


Figure 117: AgentTTImpl-E0-1 agent wealth vs. time

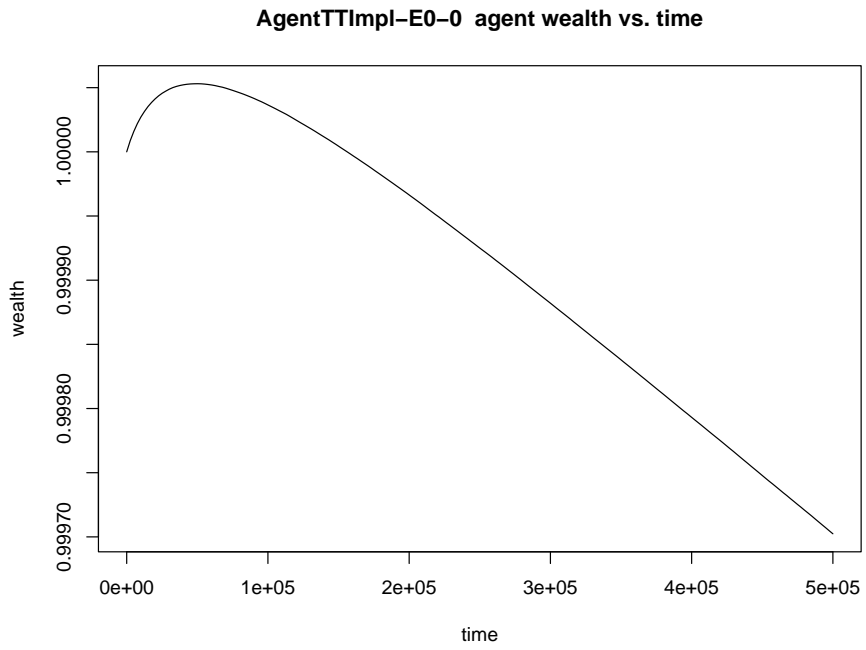


Figure 118: AgentTTImpl-E0-0 agent wealth vs. time

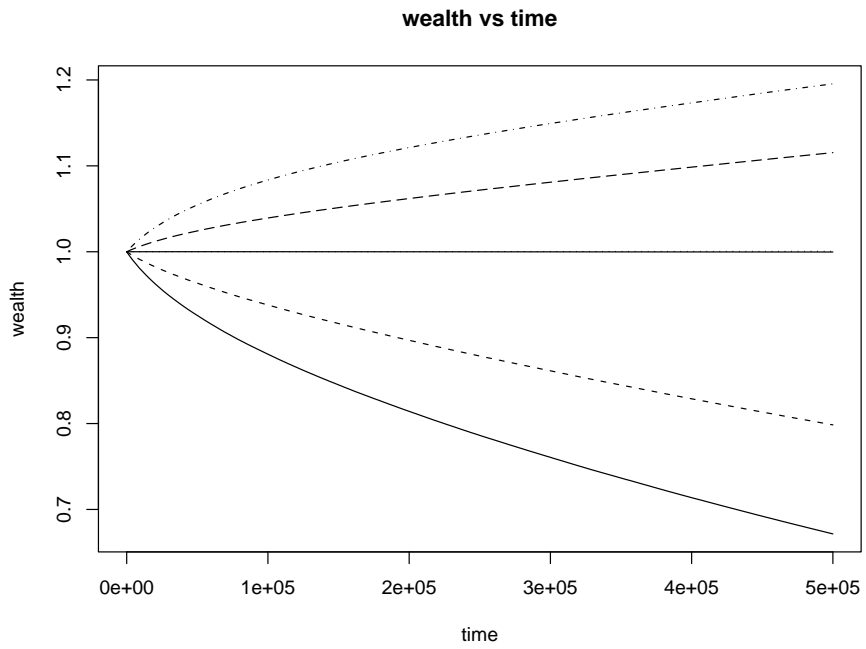


Figure 119: Technical Traders wealth vs time

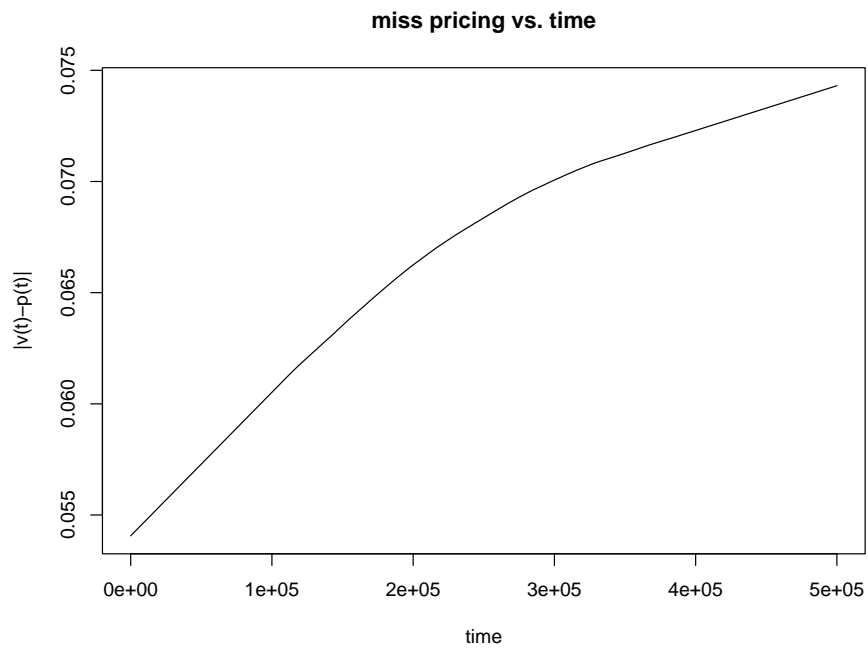


Figure 120: miss pricing vs. time

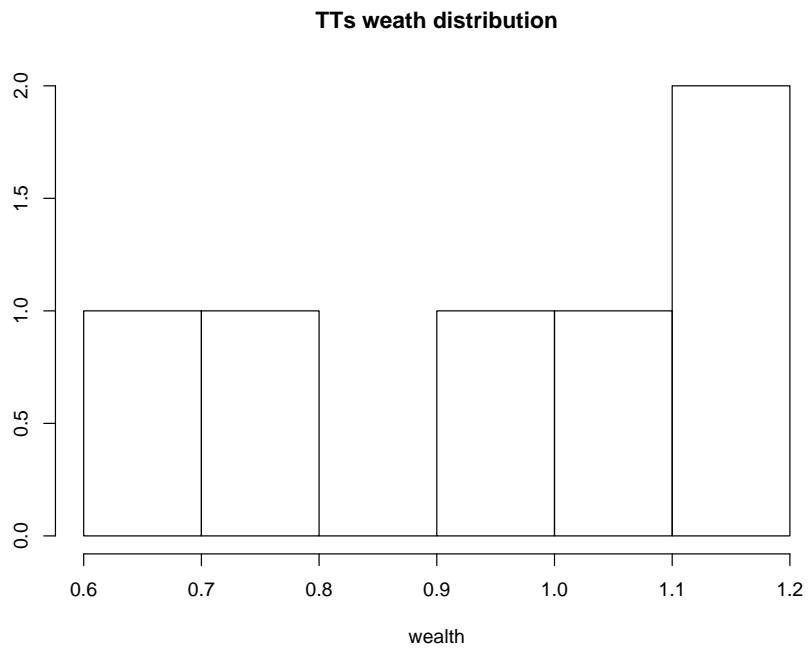


Figure 121: Technical Traders final wealth distribution





## 12.2 Graphs

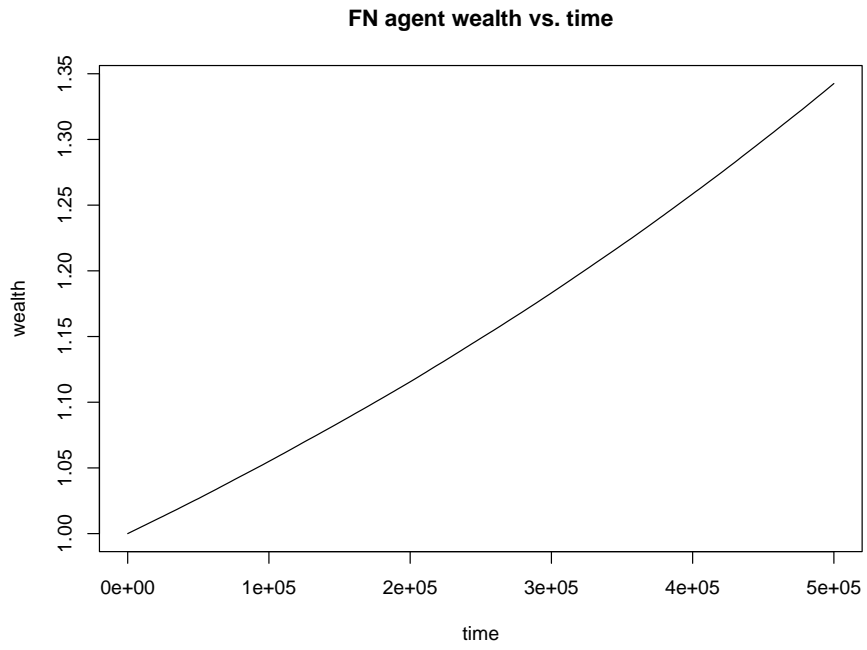


Figure 122: FN agent wealth vs. time



Figure 123: MM agent wealth vs. time

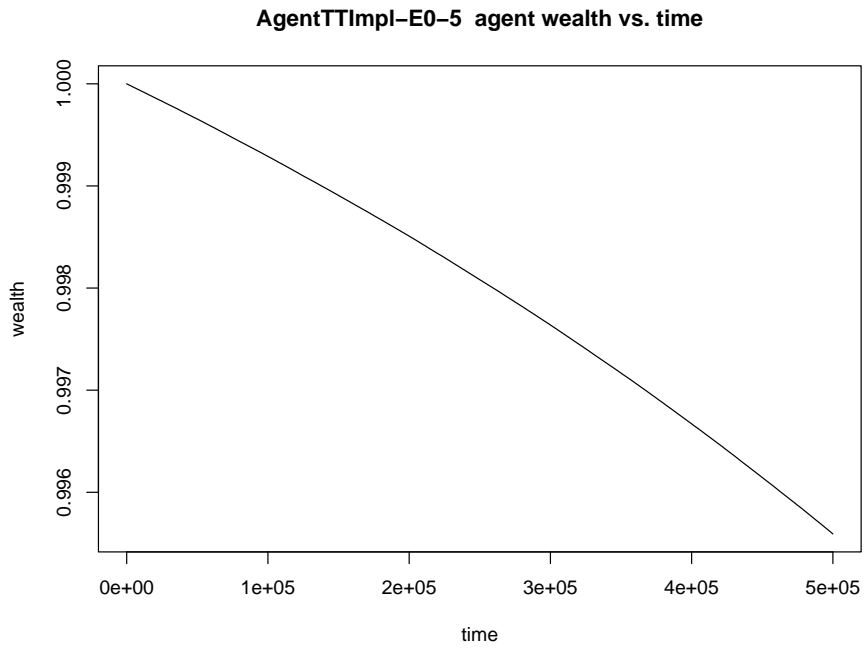


Figure 124: AgentTTImpl-E0-5 agent wealth vs. time

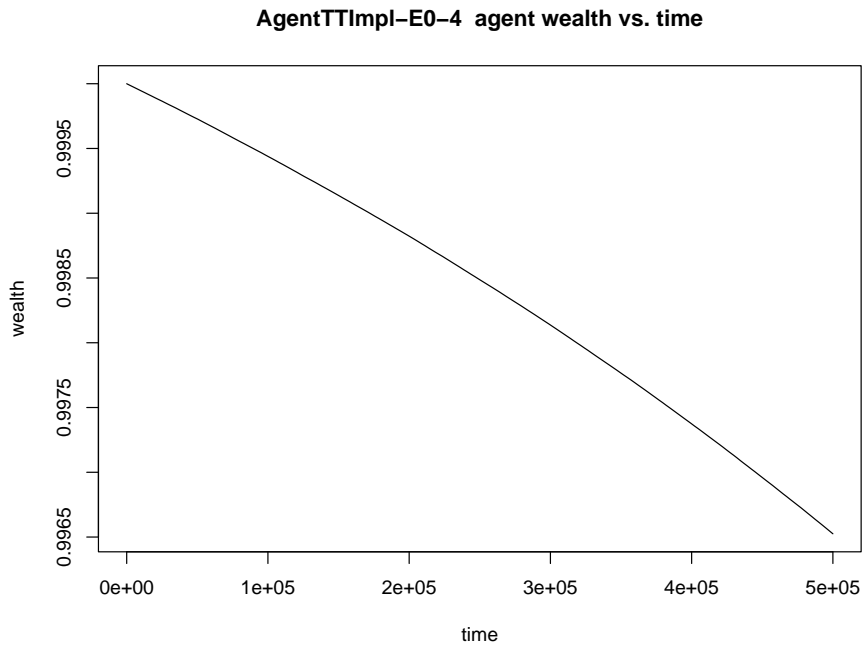


Figure 125: AgentTTImpl-E0-4 agent wealth vs. time

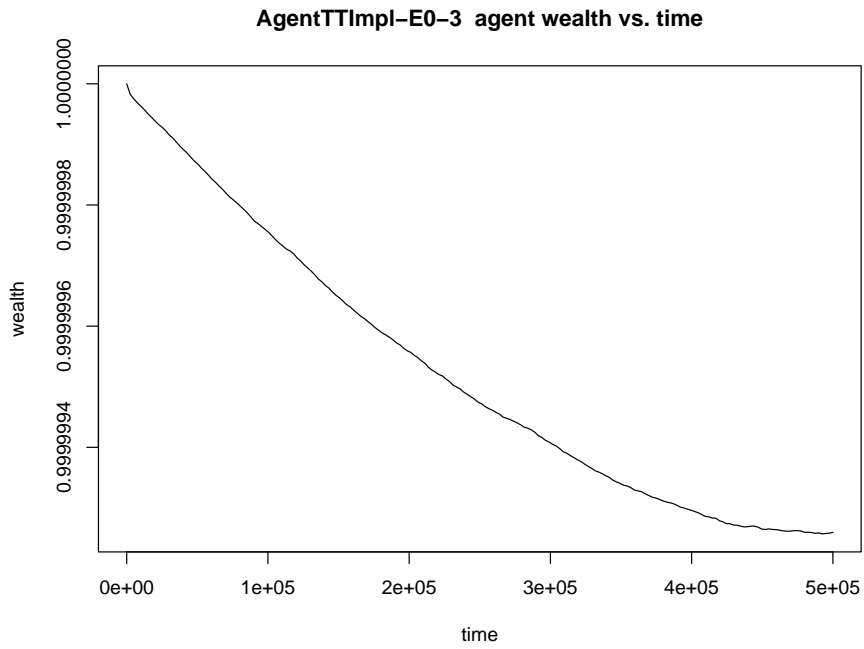


Figure 126: AgentTTImpl-E0-3 agent wealth vs. time

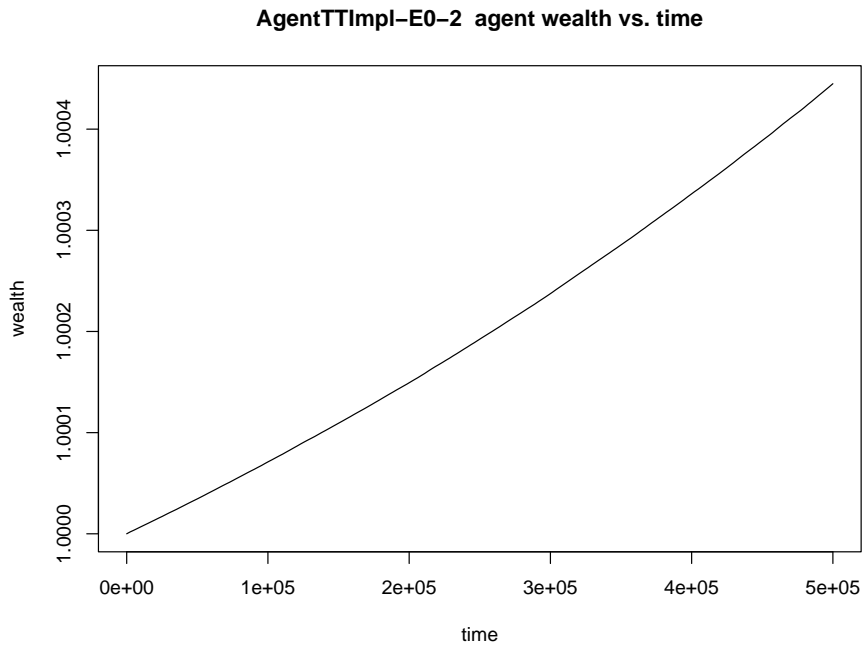


Figure 127: AgentTTImpl-E0-2 agent wealth vs. time

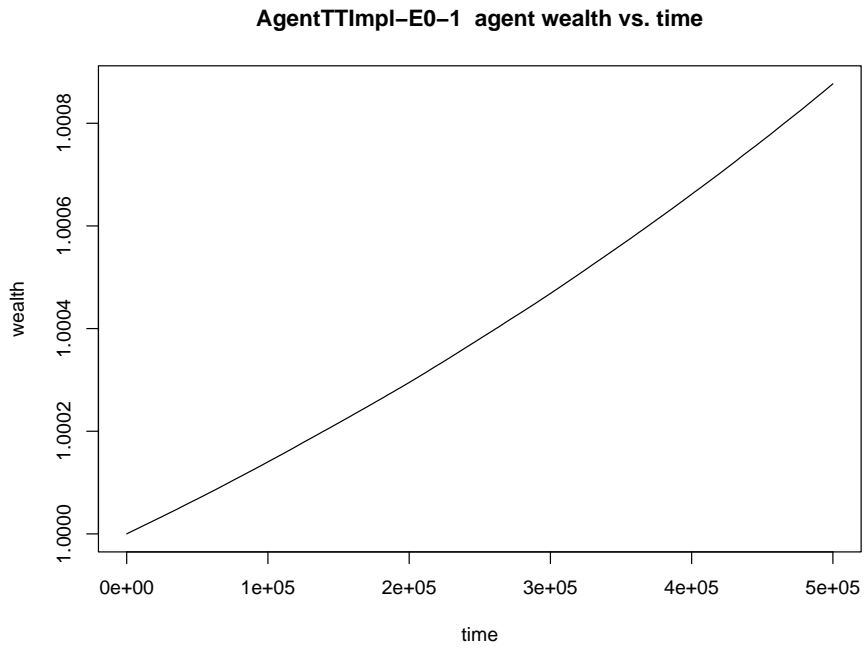


Figure 128: AgentTTImpl-E0-1 agent wealth vs. time

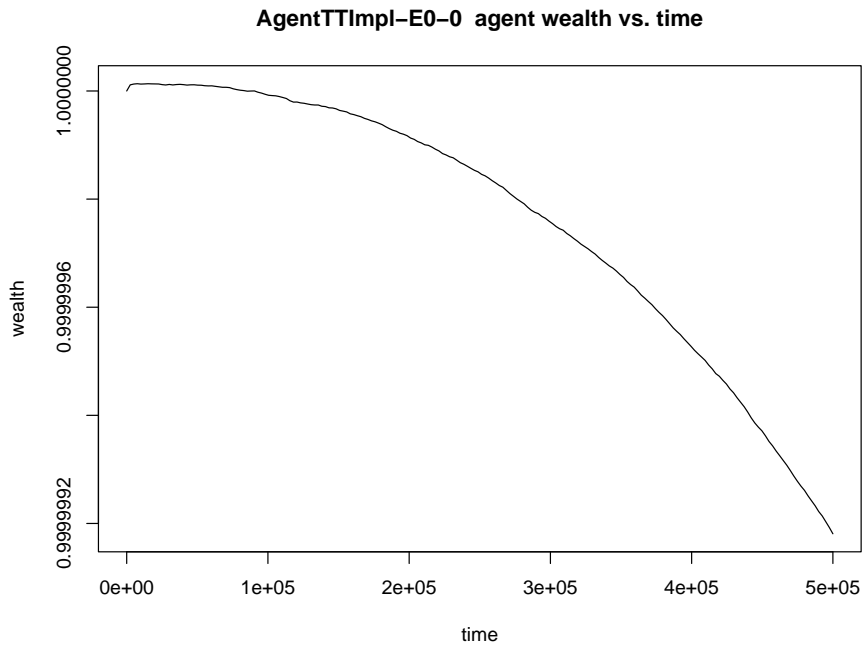


Figure 129: AgentTTImpl-E0-0 agent wealth vs. time

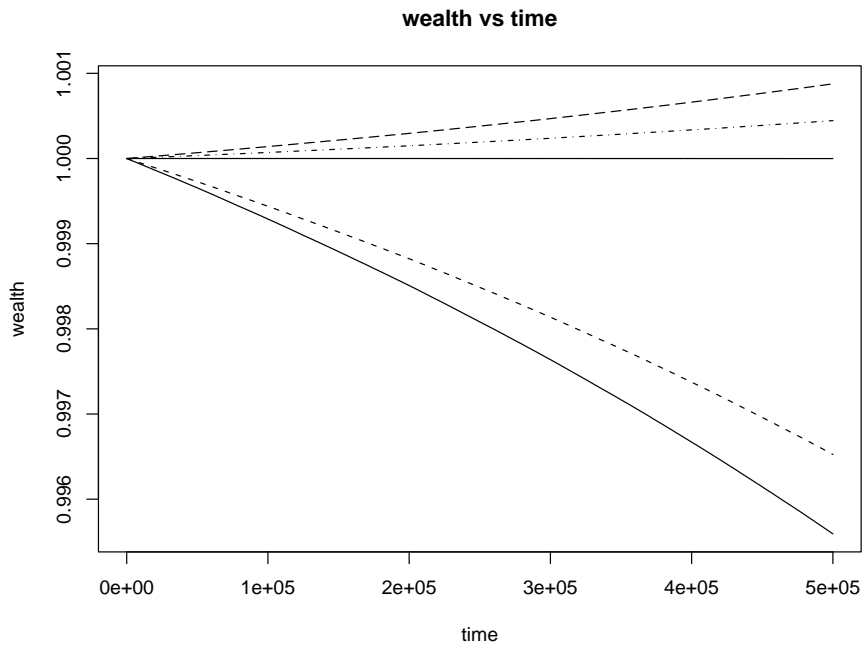


Figure 130: Technical Traders wealth vs time

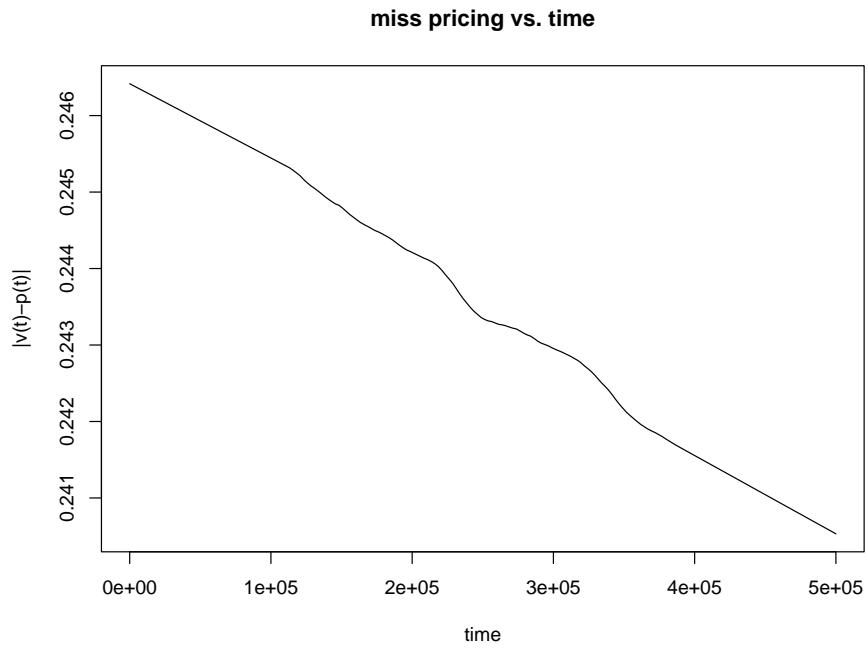


Figure 131: miss pricing vs. time

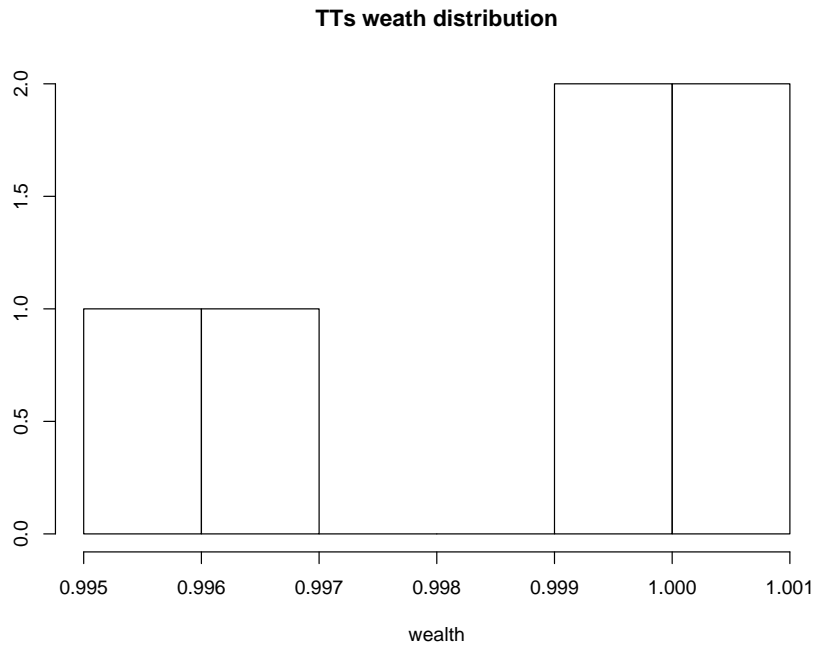


Figure 132: Technical Traders final wealth distribution





## 13.2 Graphs

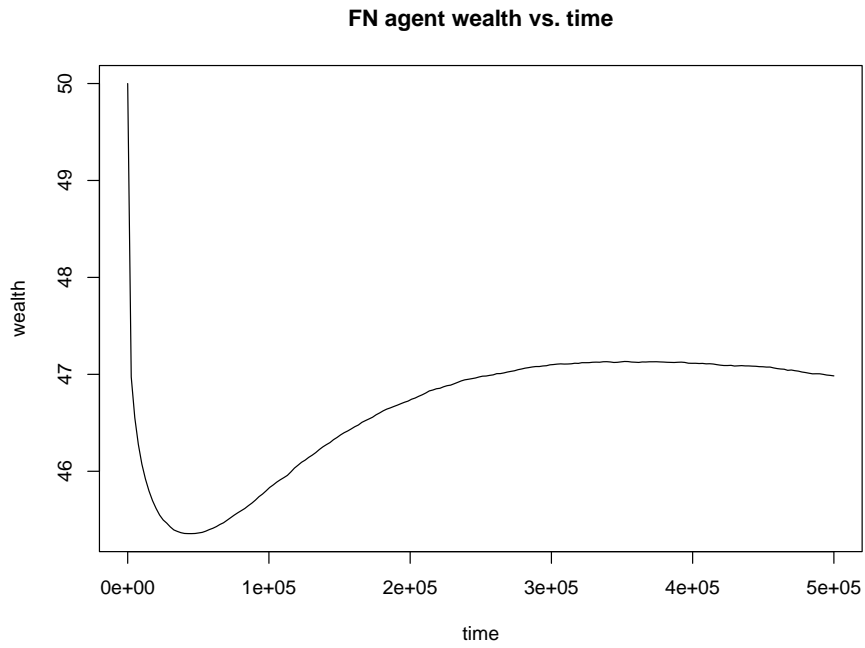


Figure 133: FN agent wealth vs. time



Figure 134: MM agent wealth vs. time

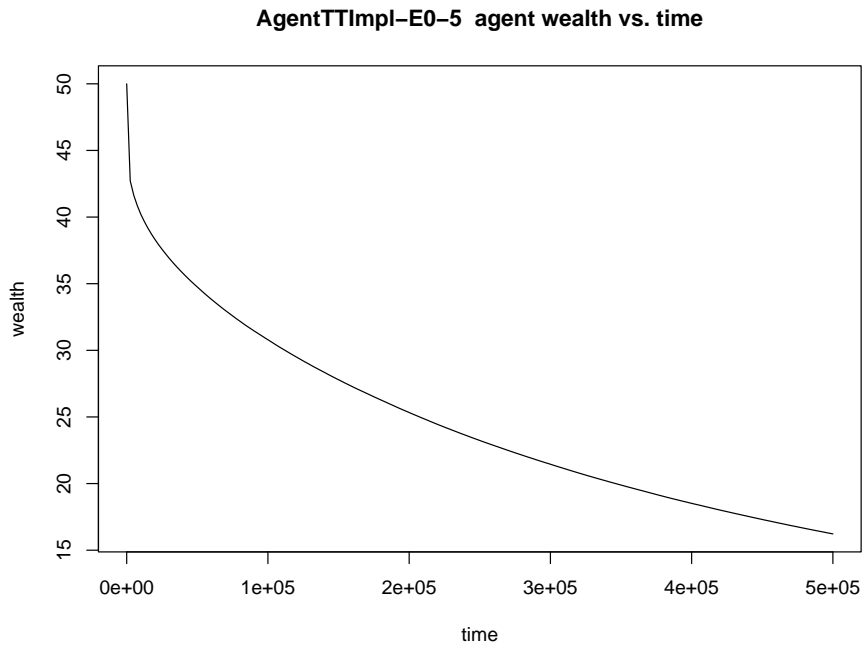


Figure 135: AgentTTImpl-E0-5 agent wealth vs. time

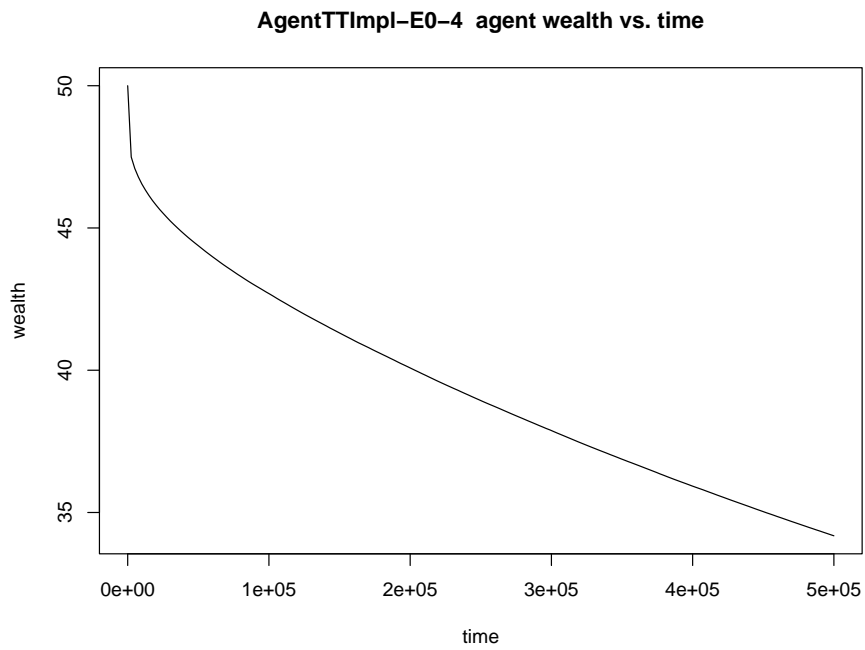


Figure 136: AgentTTImpl-E0-4 agent wealth vs. time

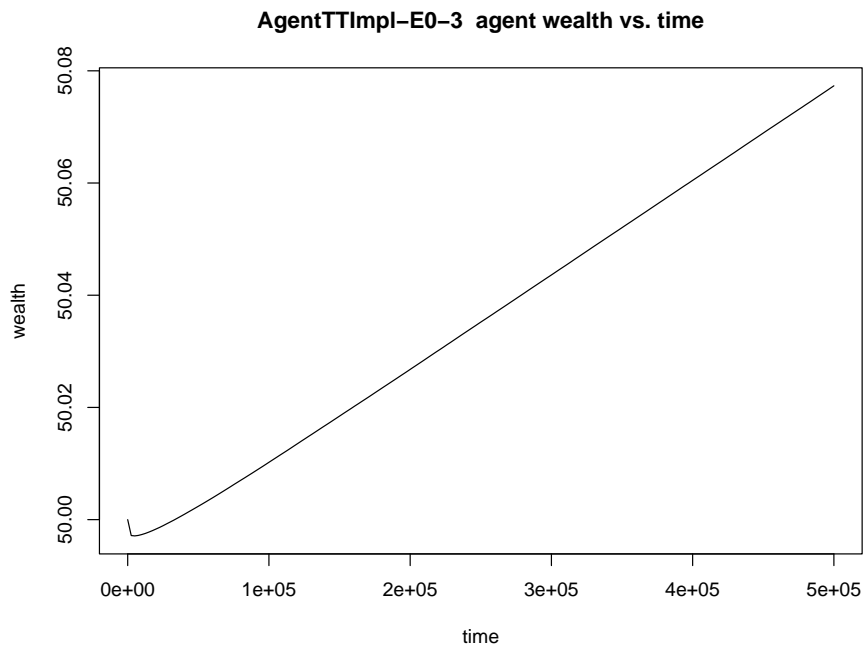


Figure 137: AgentTTImpl-E0-3 agent wealth vs. time

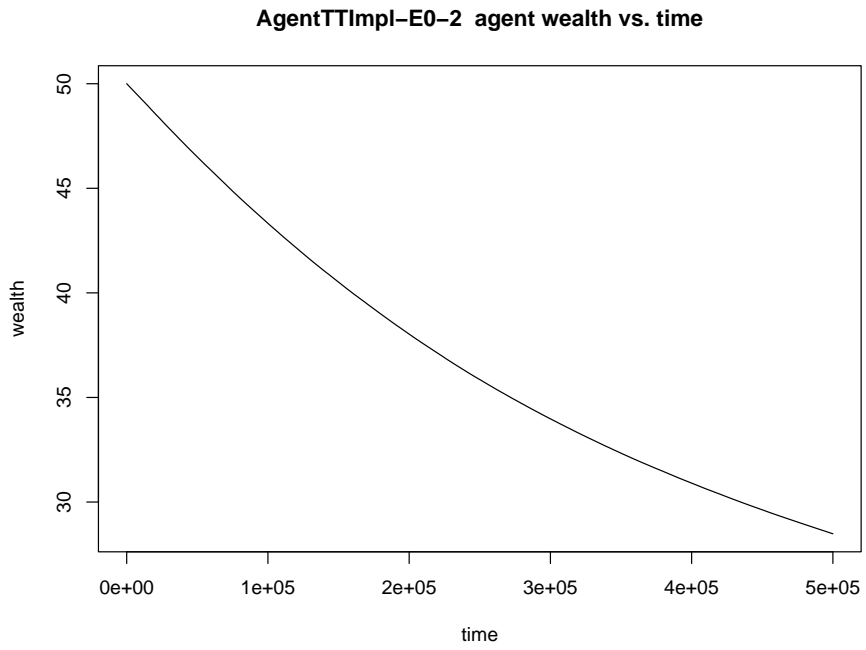


Figure 138: AgentTTImpl-E0-2 agent wealth vs. time

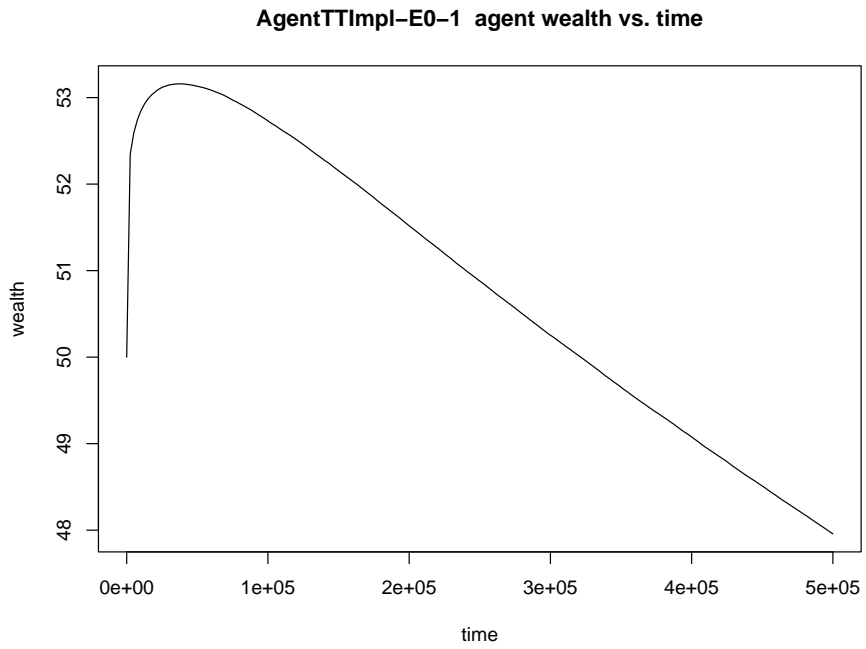


Figure 139: AgentTTImpl-E0-1 agent wealth vs. time

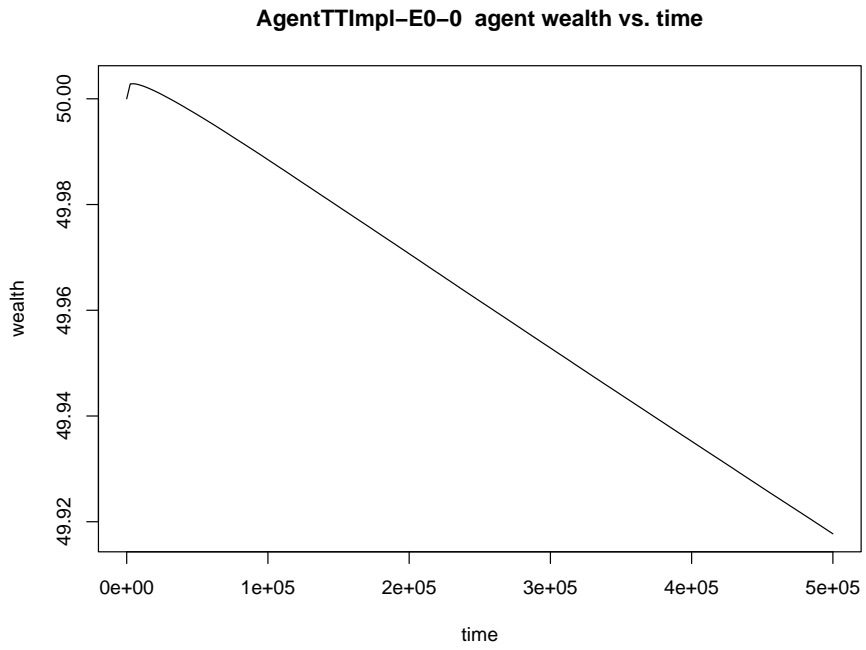


Figure 140: AgentTTImpl-E0-0 agent wealth vs. time

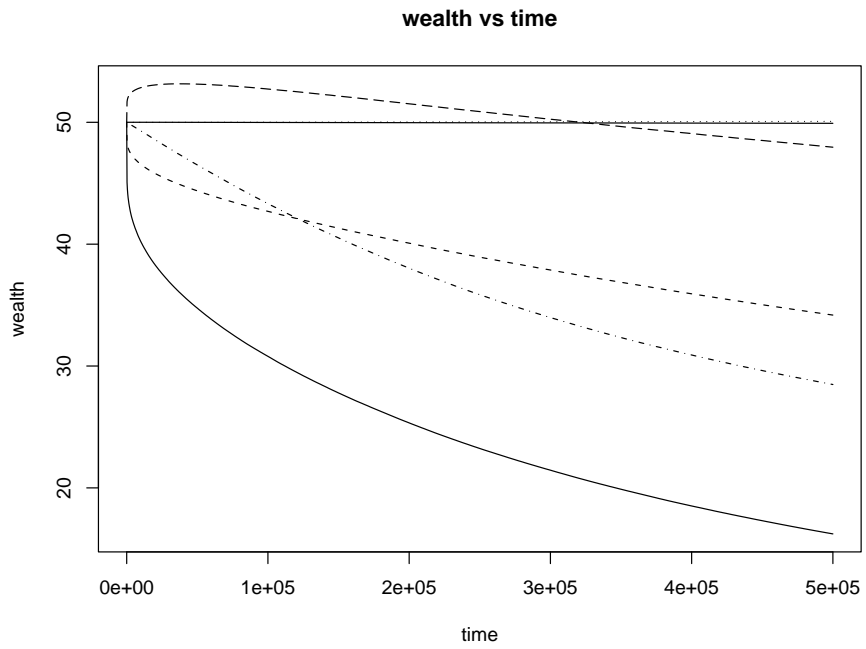


Figure 141: Technical Traders wealth vs time

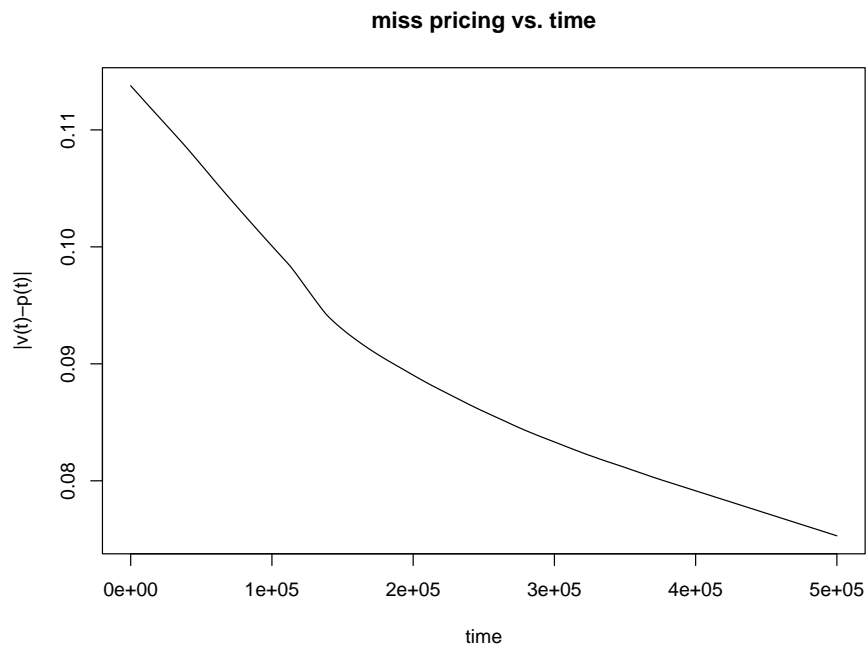


Figure 142: miss pricing vs. time

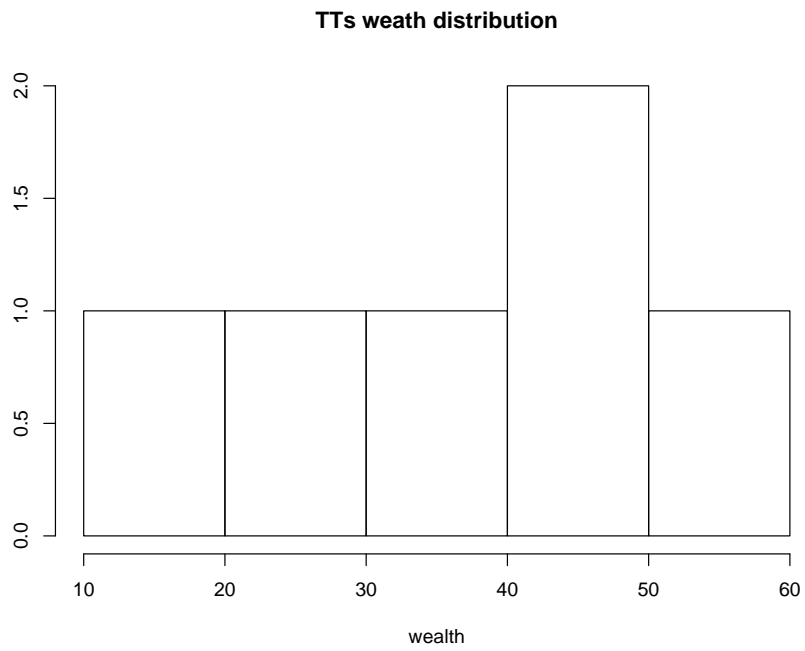


Figure 143: Technical Traders final wealth distribution





## 14.2 Graphs

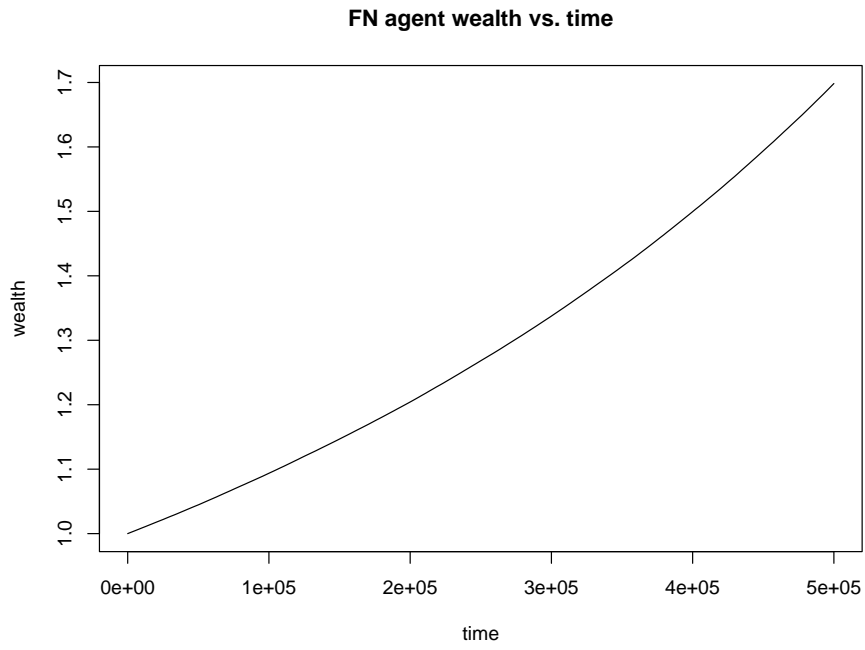


Figure 144: FN agent wealth vs. time

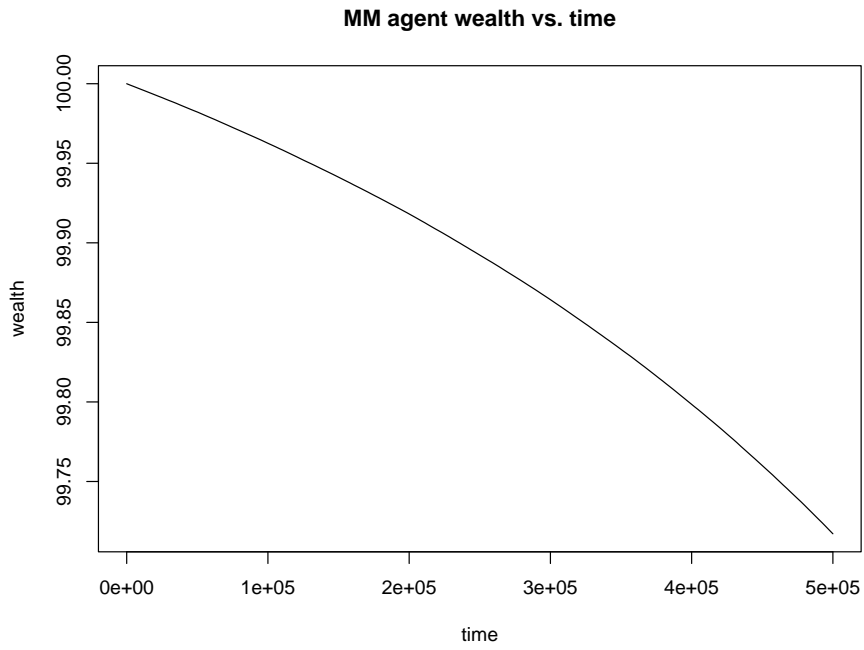


Figure 145: MM agent wealth vs. time

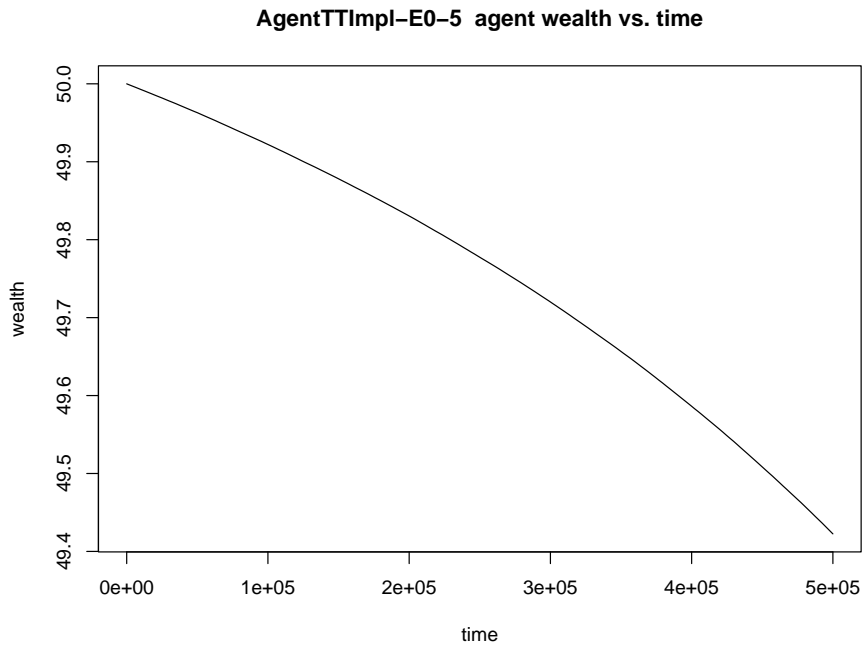


Figure 146: AgentTTImpl-E0-5 agent wealth vs. time

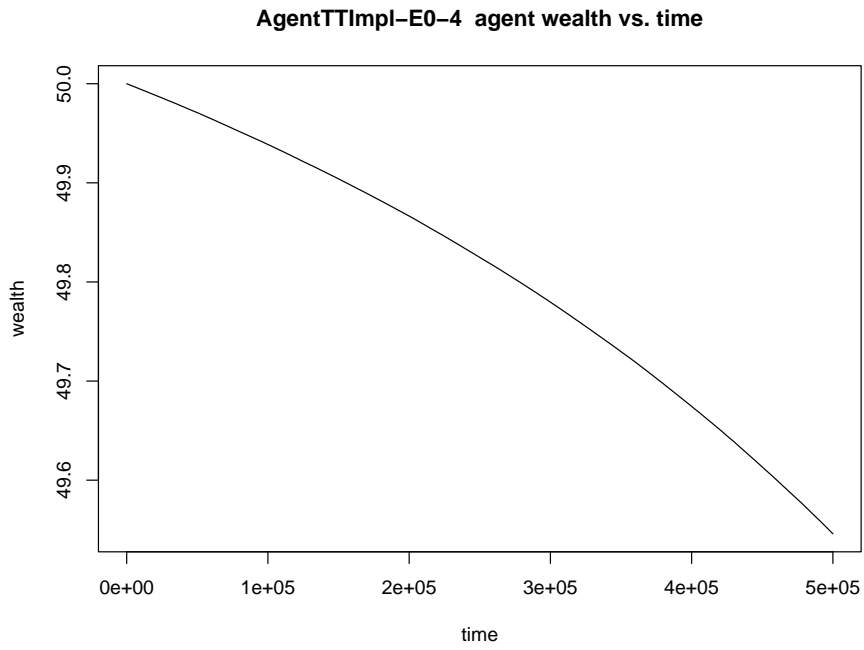


Figure 147: AgentTTImpl-E0-4 agent wealth vs. time

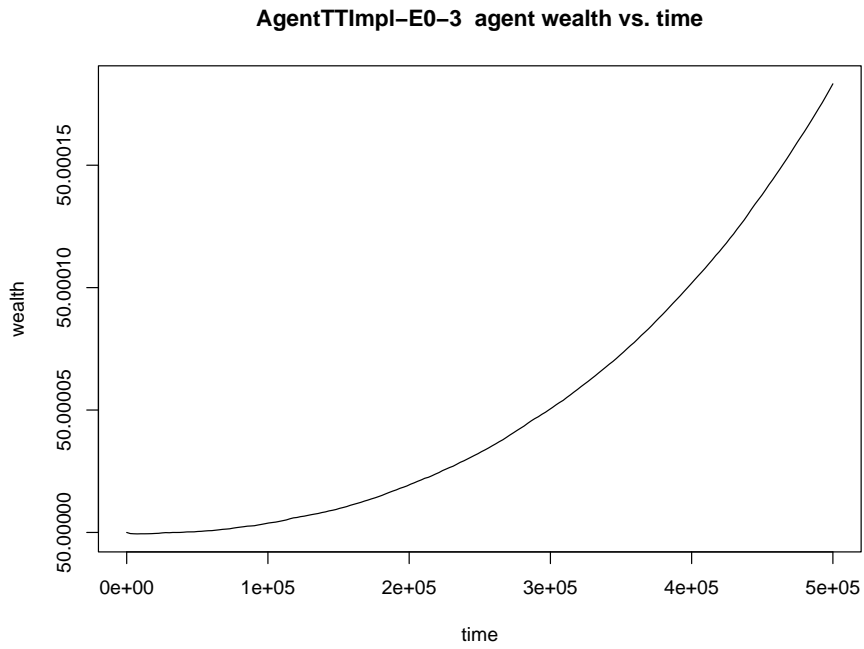


Figure 148: AgentTTImpl-E0-3 agent wealth vs. time

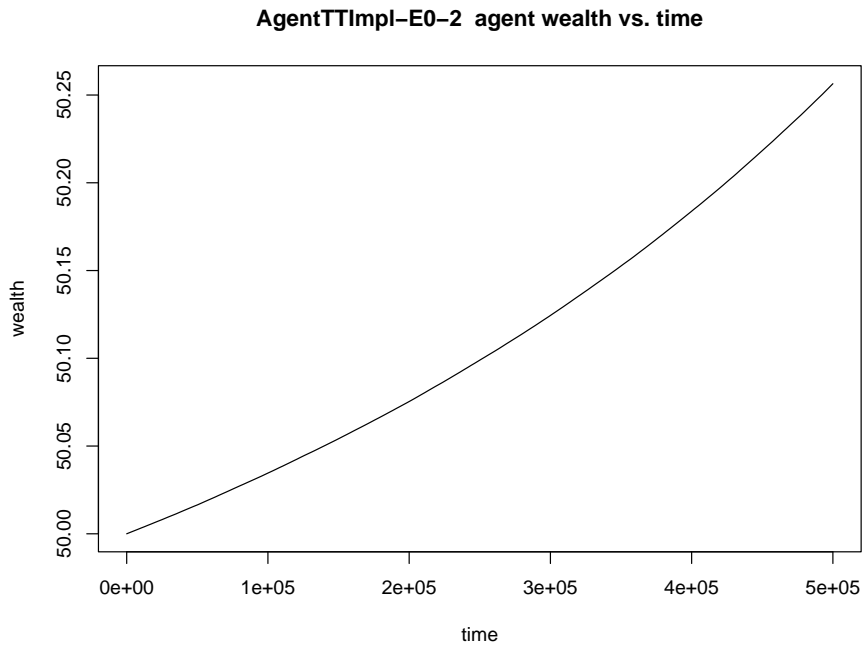


Figure 149: AgentTTImpl-E0-2 agent wealth vs. time

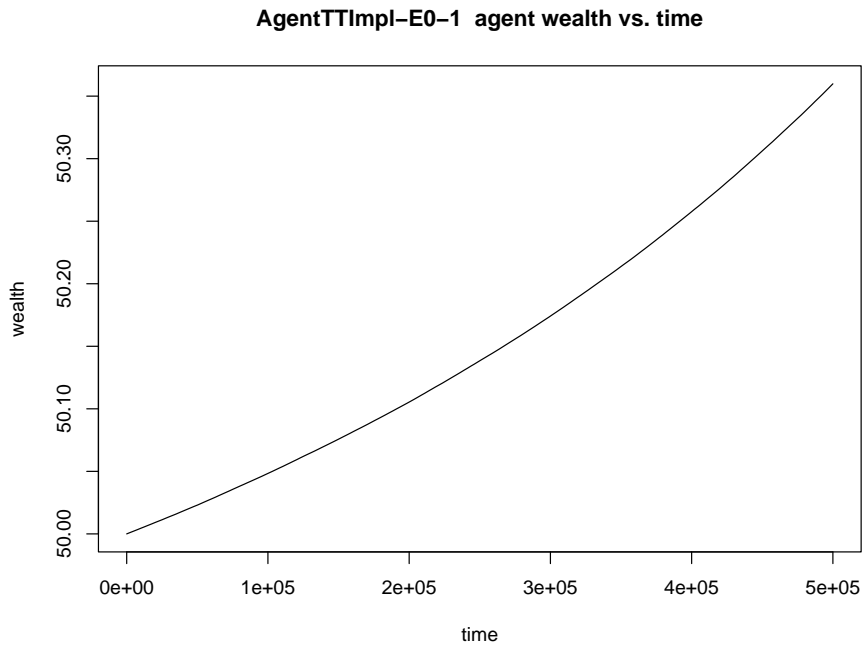


Figure 150: AgentTTImpl-E0-1 agent wealth vs. time

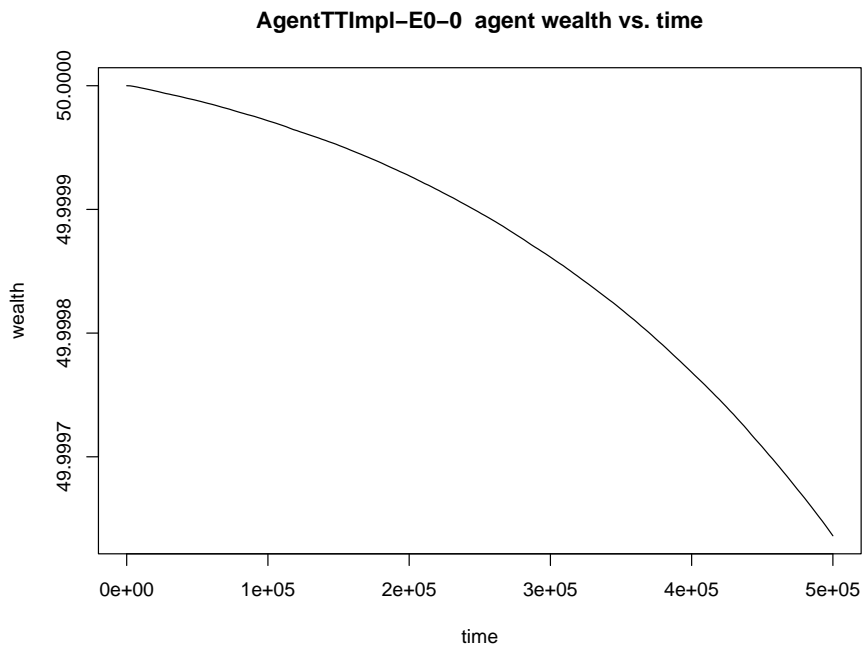


Figure 151: AgentTTImpl-E0-0 agent wealth vs. time

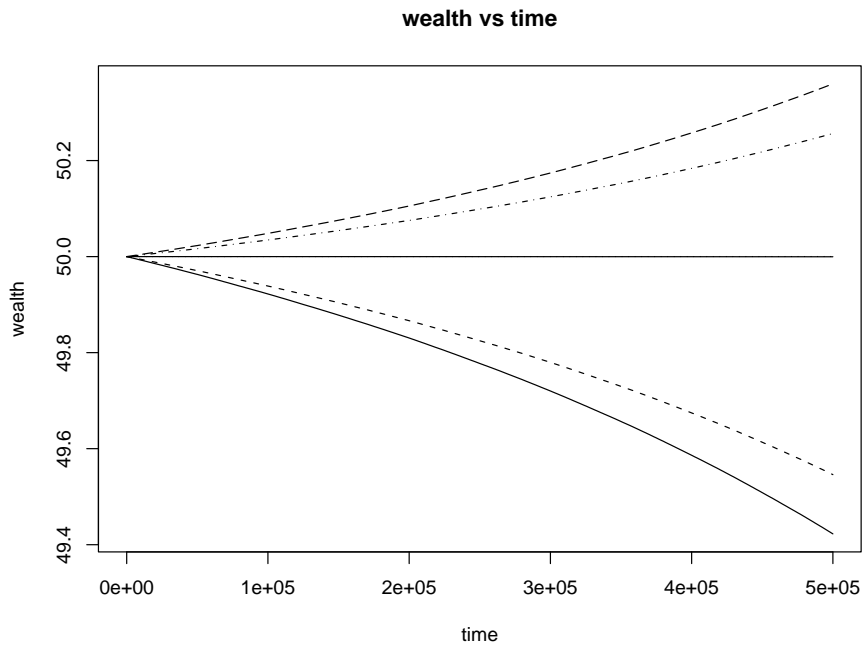


Figure 152: Technical Traders wealth vs time

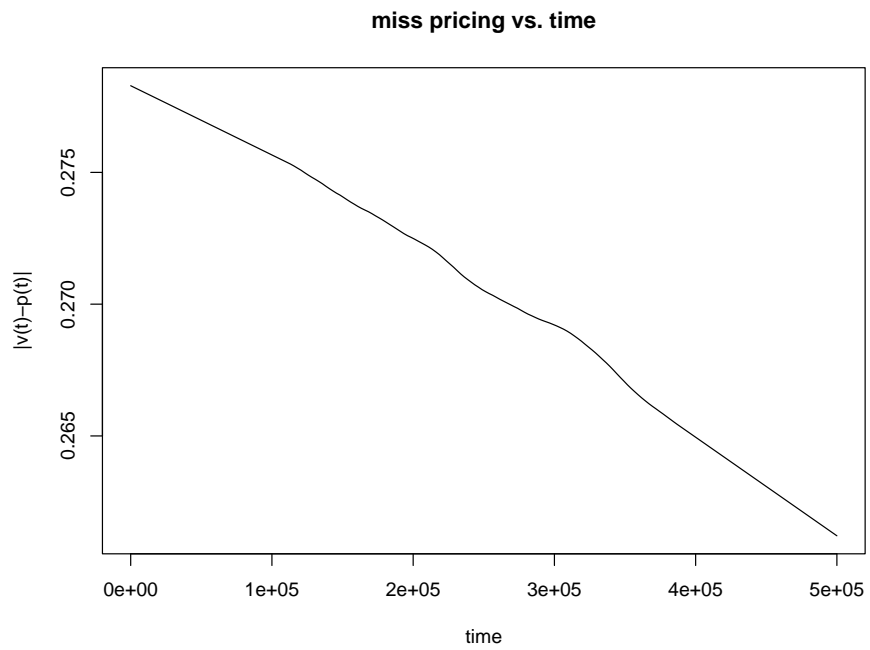


Figure 153: miss pricing vs. time

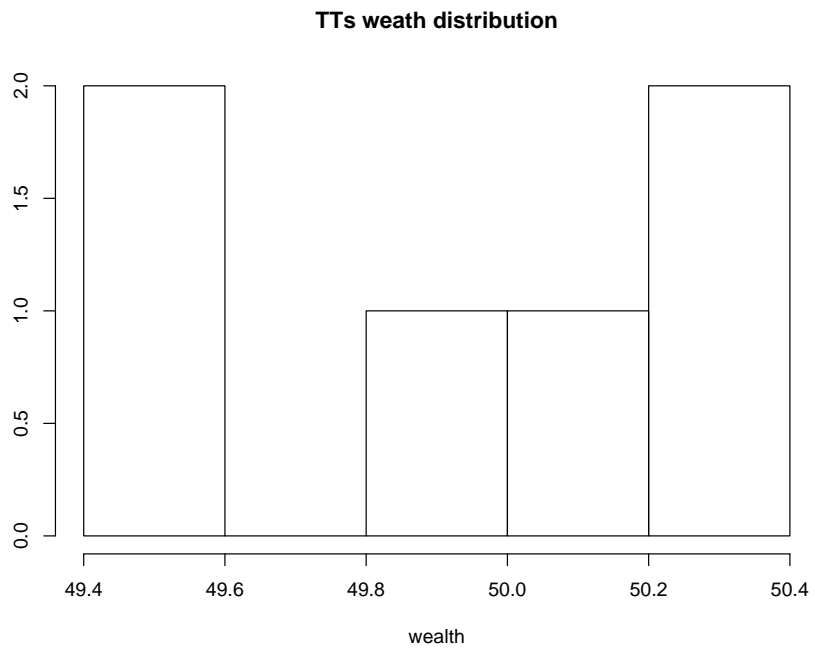


Figure 154: Technical Traders final wealth distribution





## 15.2 Graphs

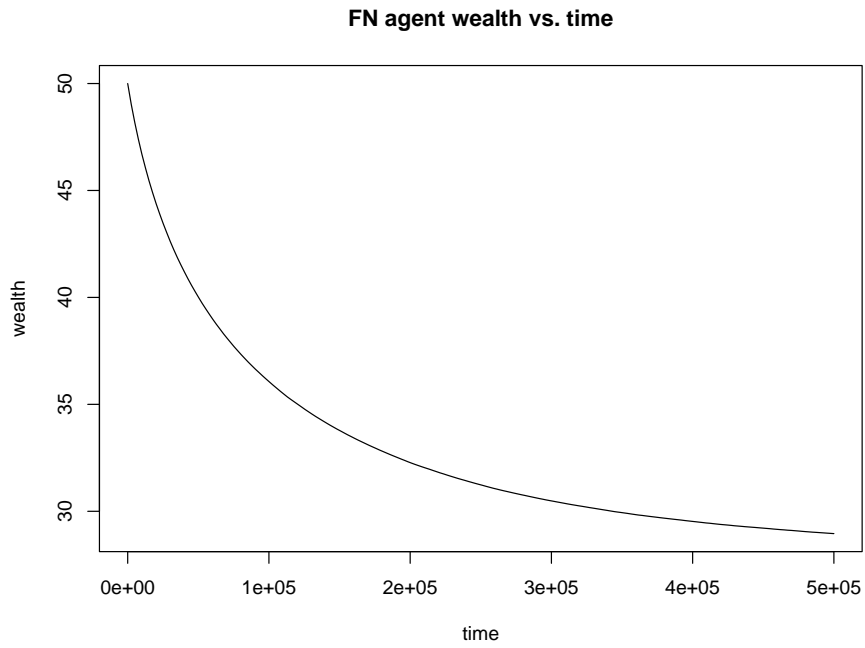


Figure 155: FN agent wealth vs. time



Figure 156: MM agent wealth vs. time

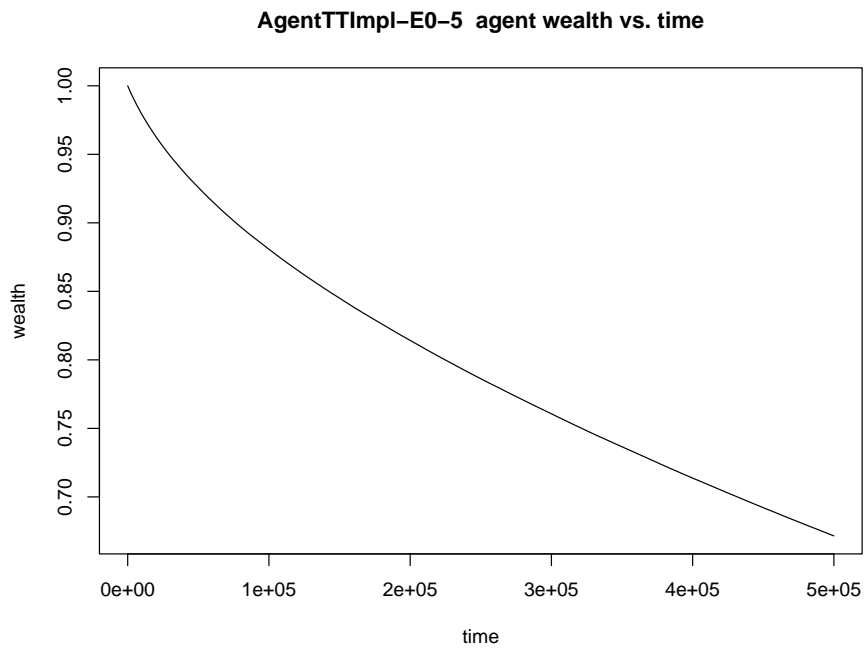


Figure 157: AgentTTImpl-E0-5 agent wealth vs. time

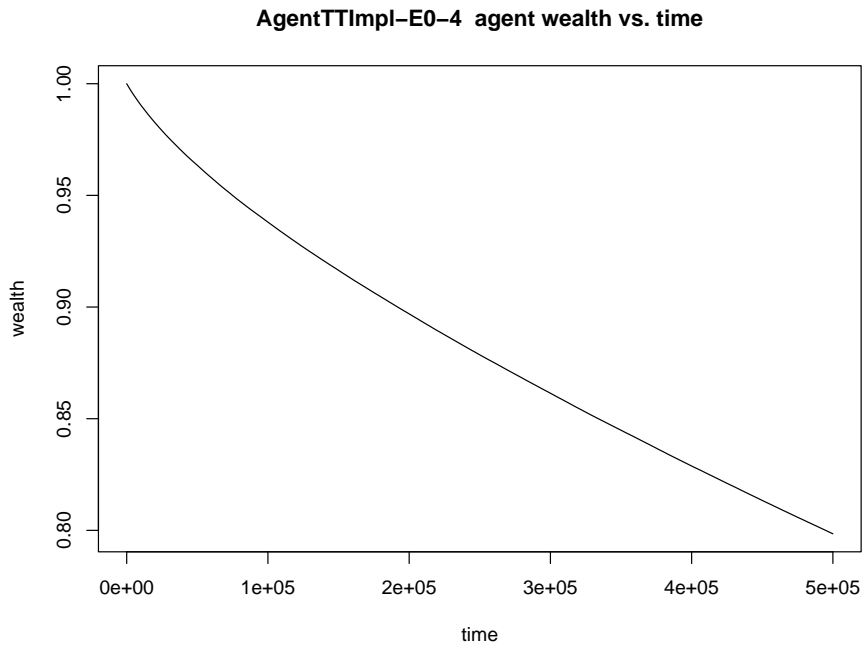


Figure 158: AgentTTImpl-E0-4 agent wealth vs. time

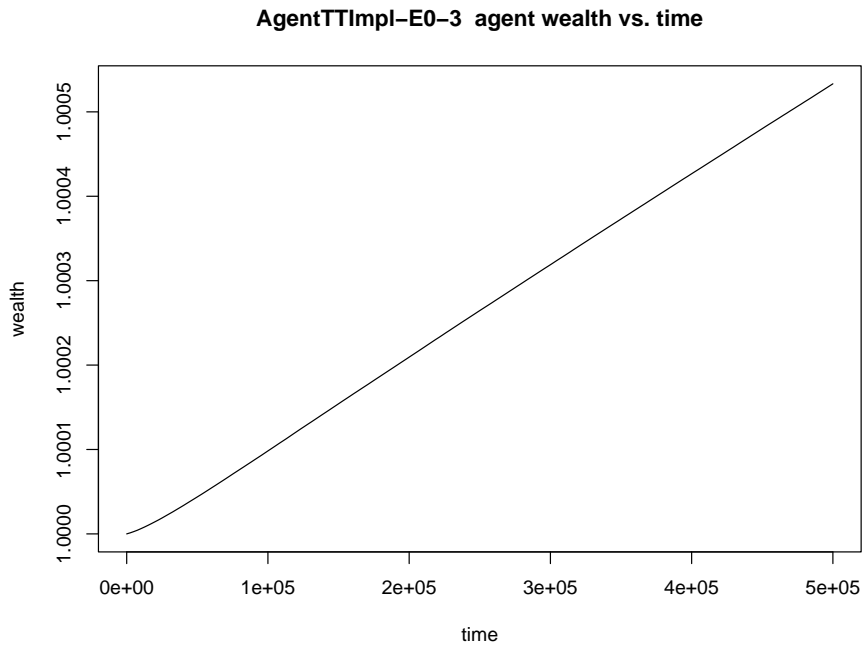


Figure 159: AgentTTImpl-E0-3 agent wealth vs. time

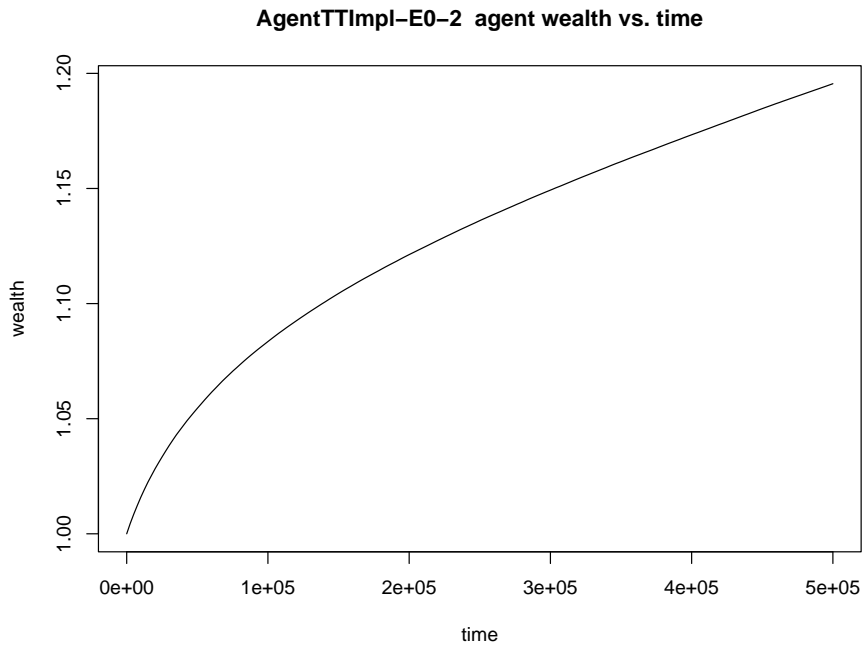


Figure 160: AgentTTImpl-E0-2 agent wealth vs. time

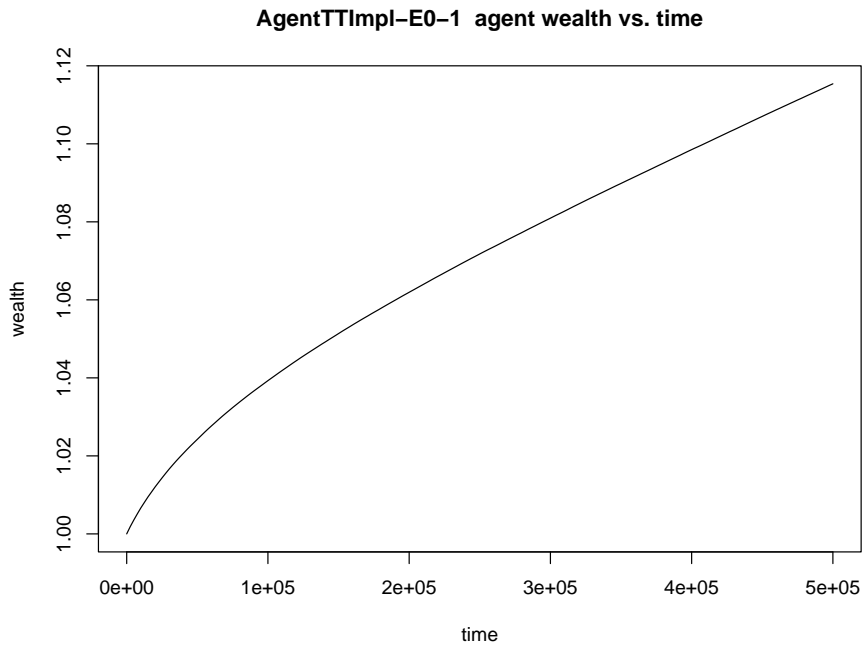


Figure 161: AgentTTImpl-E0-1 agent wealth vs. time

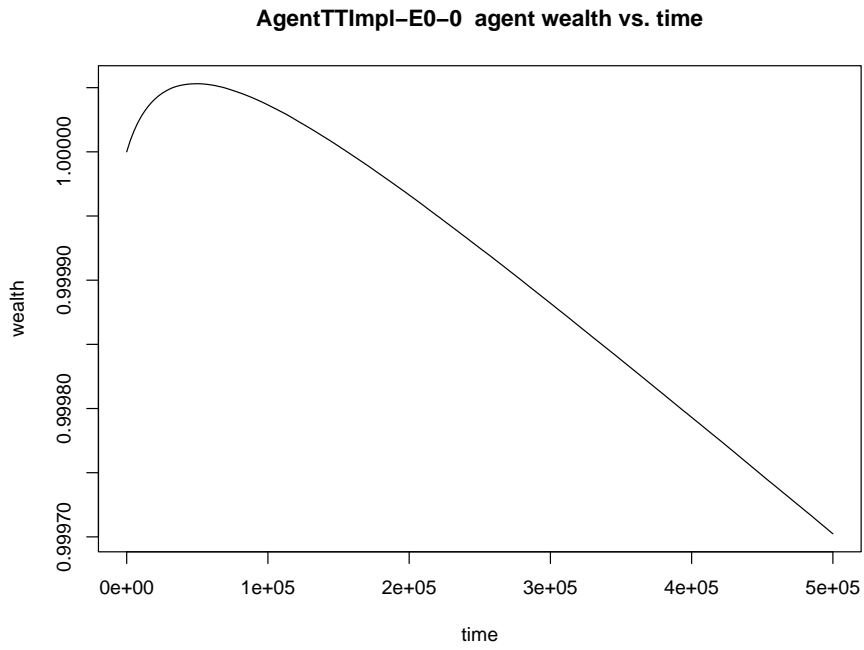


Figure 162: AgentTTImpl-E0-0 agent wealth vs. time

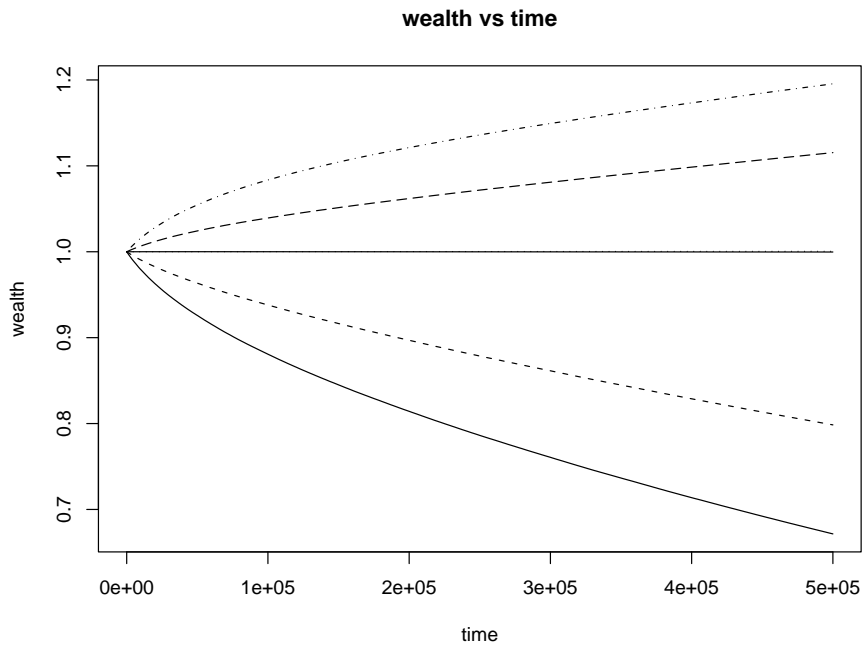


Figure 163: Technical Traders wealth vs time

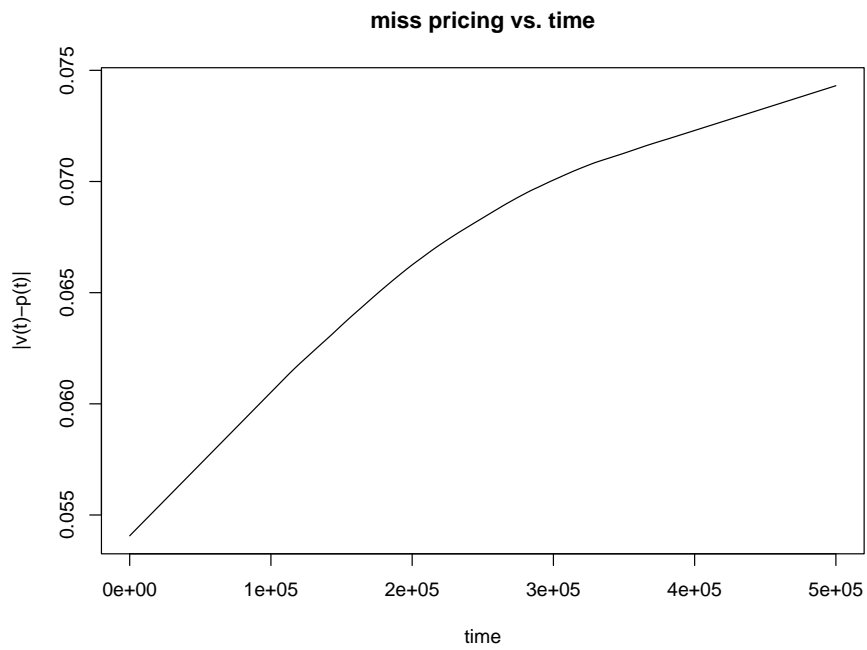


Figure 164: miss pricing vs. time

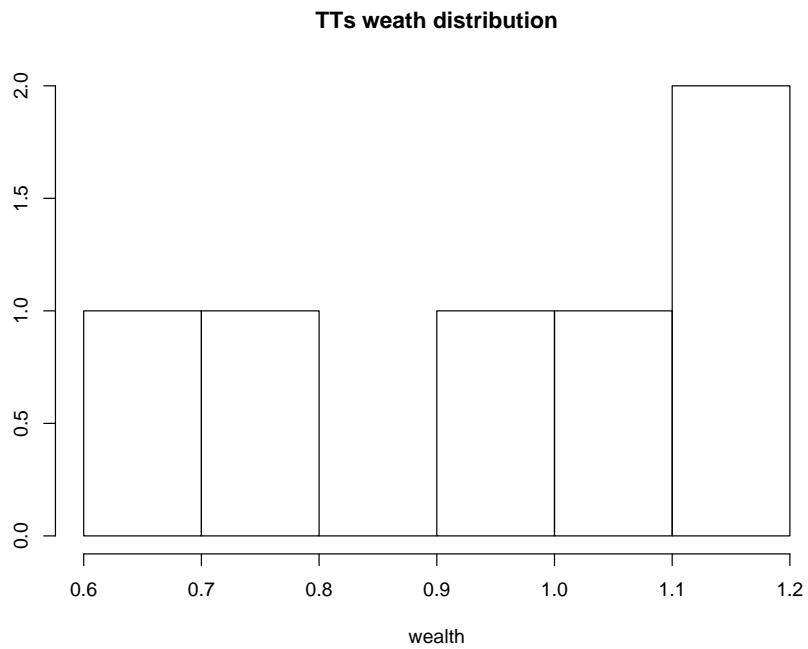


Figure 165: Technical Traders final wealth distribution





## 16.2 Graphs

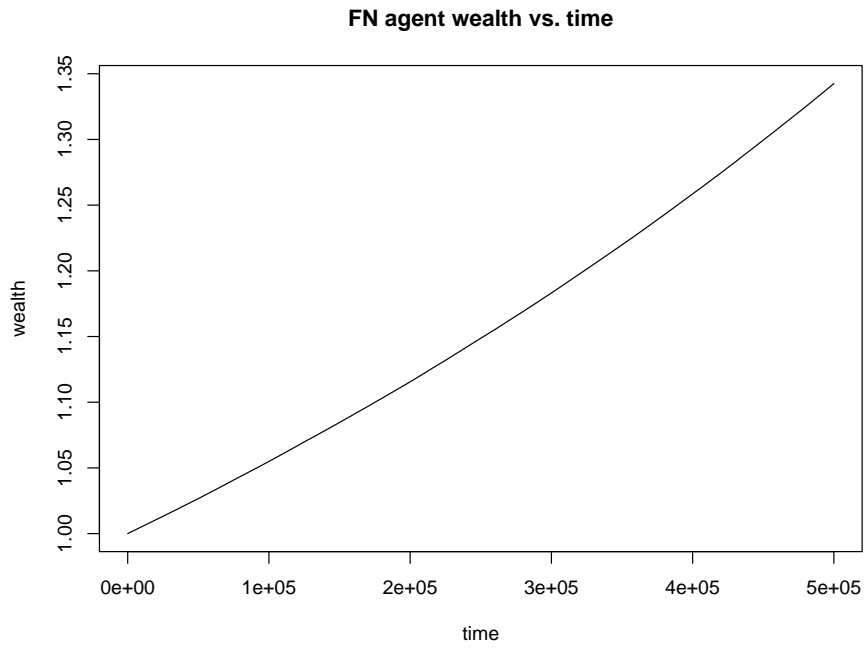


Figure 166: FN agent wealth vs. time



Figure 167: MM agent wealth vs. time

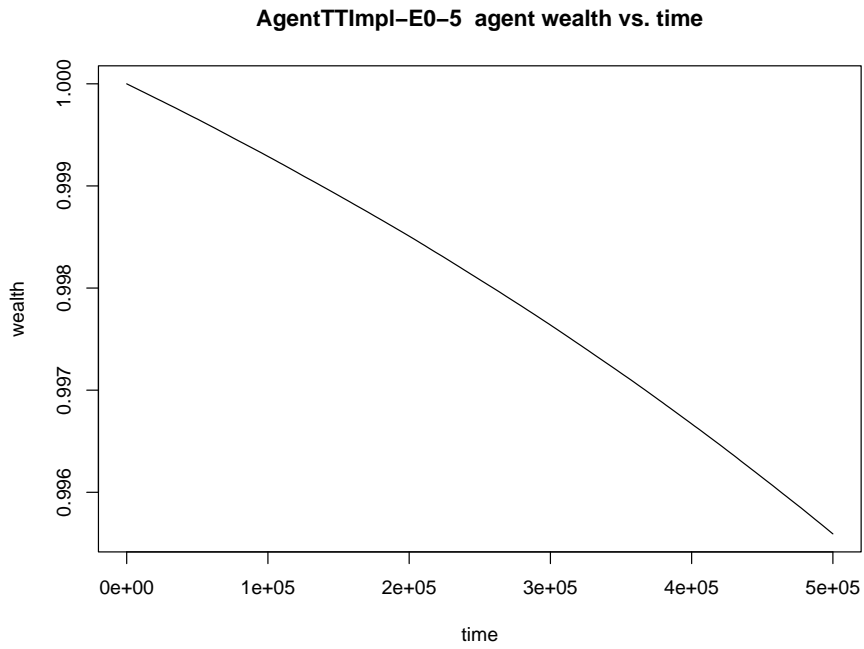


Figure 168: AgentTTImpl-E0-5 agent wealth vs. time

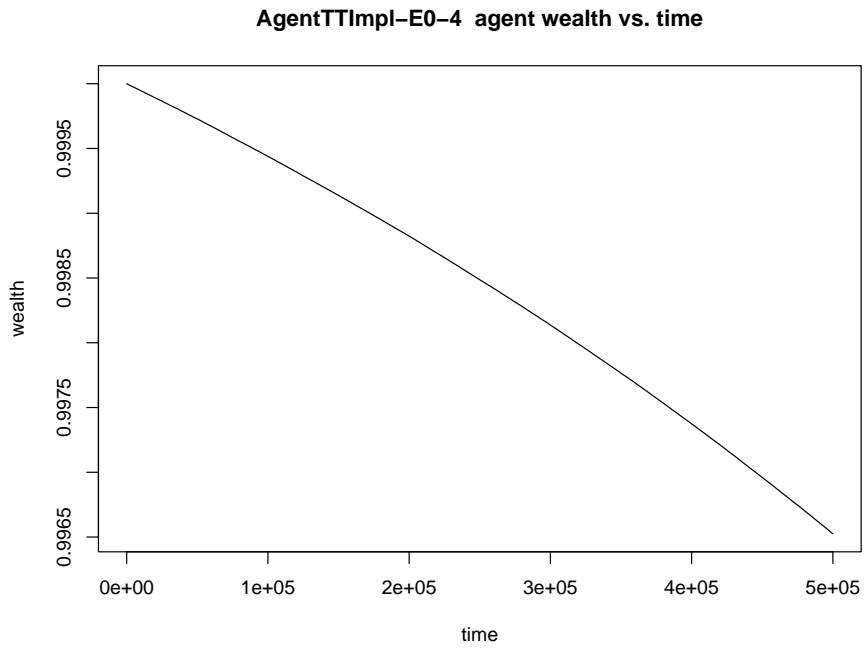


Figure 169: AgentTTImpl-E0-4 agent wealth vs. time

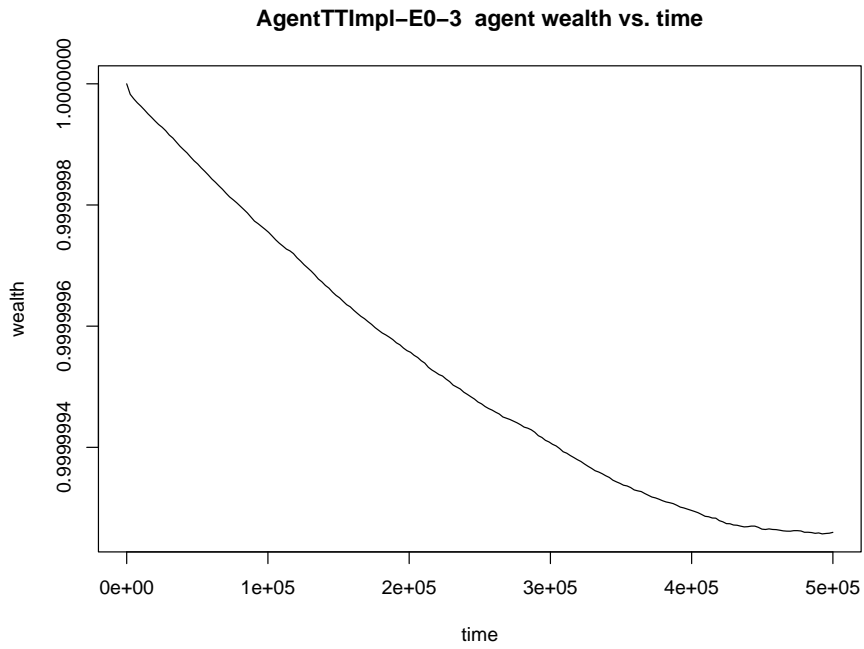


Figure 170: AgentTTImpl-E0-3 agent wealth vs. time

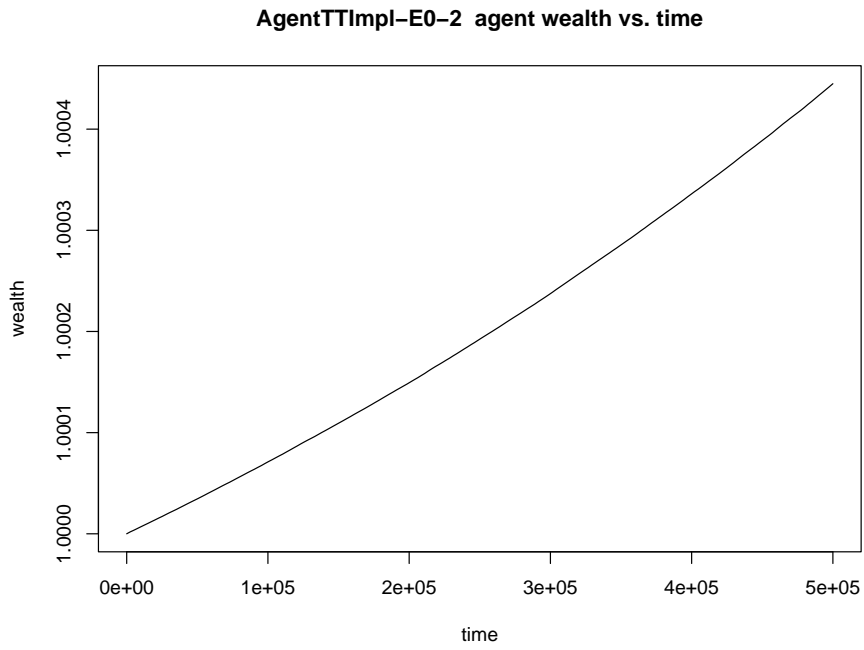


Figure 171: AgentTTImpl-E0-2 agent wealth vs. time

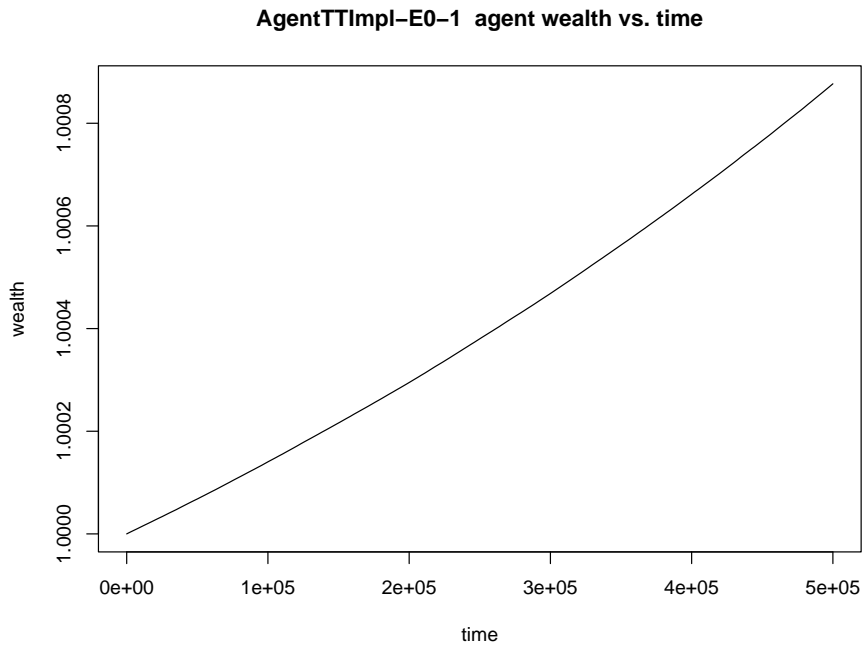


Figure 172: AgentTTImpl-E0-1 agent wealth vs. time

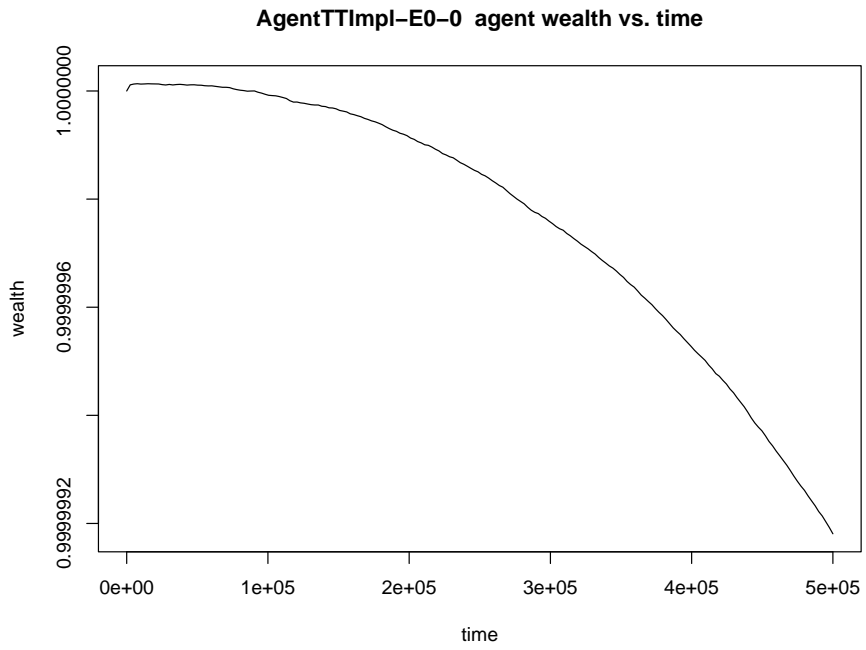


Figure 173: AgentTTImpl-E0-0 agent wealth vs. time

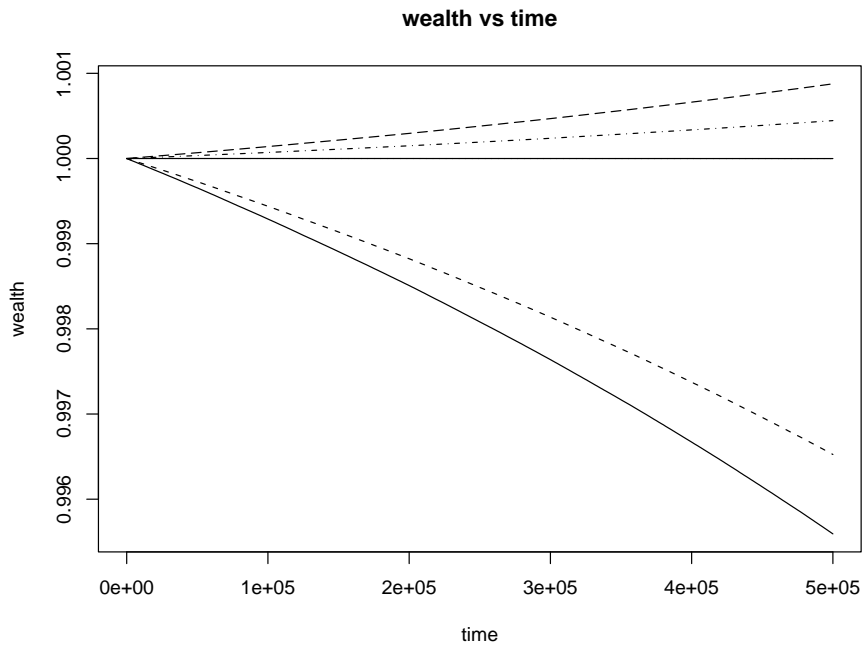


Figure 174: Technical Traders wealth vs time

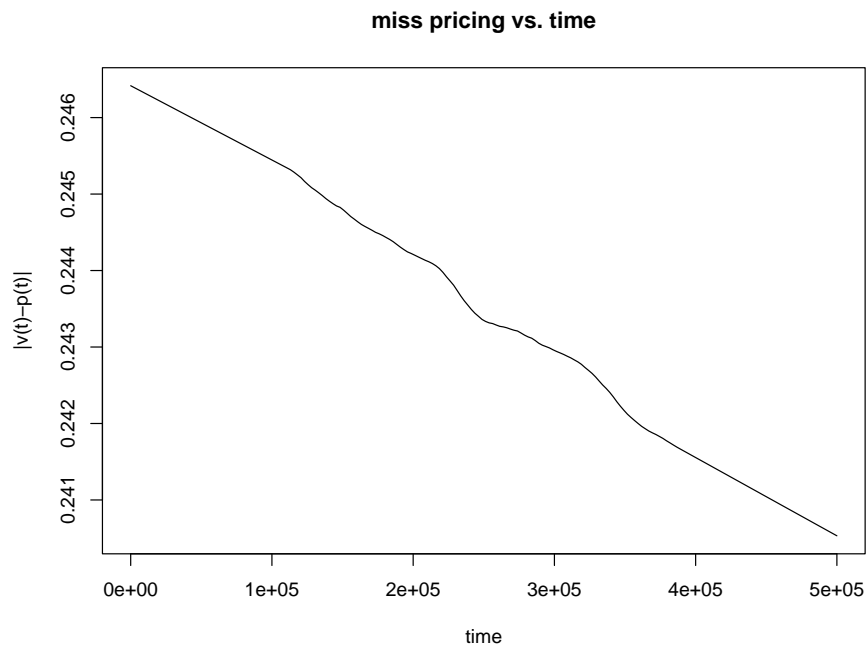


Figure 175: miss pricing vs. time

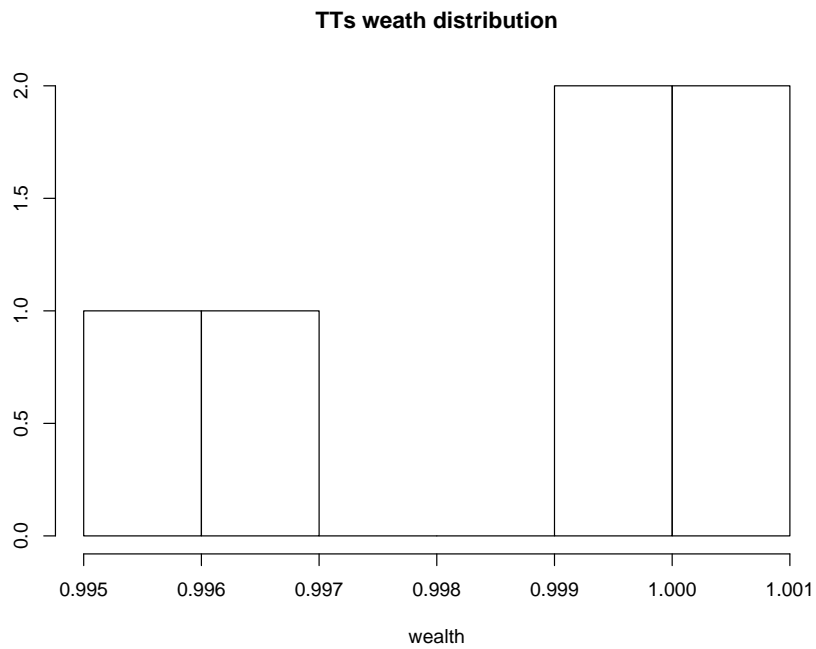


Figure 176: Technical Traders final wealth distribution