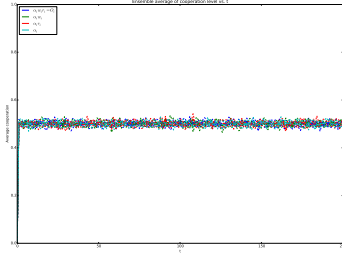


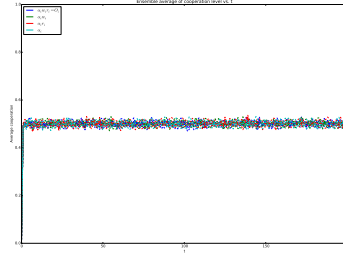
Progress report

Madis Ollikainen

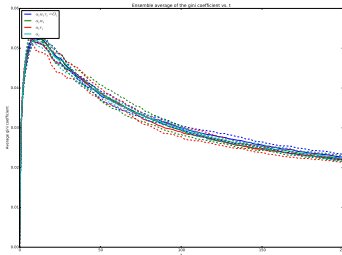
July 31, 2015



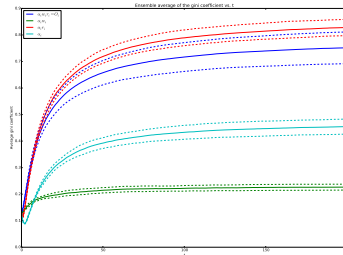
(a) Cooperation (Nash eq. UU)



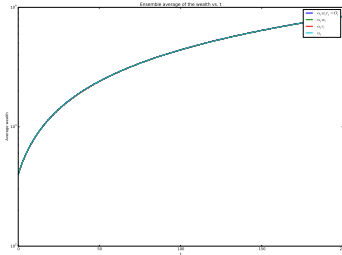
(b) Cooperation (Nash eq. DD)



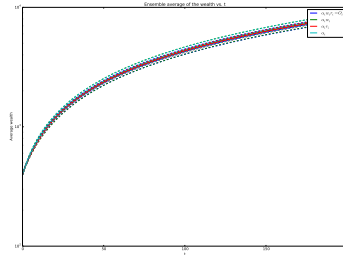
(c) Gini (Nash eq. UU)



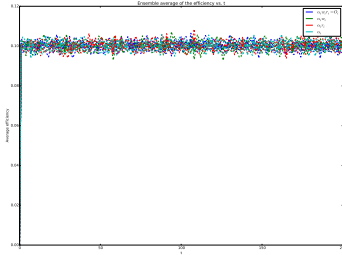
(d) Gini ((Nash eq. DD)



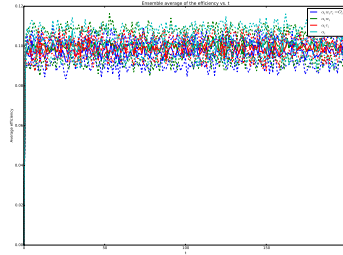
(e) Total wealth (Nash eq. UU)



(f) Total wealth (Nash eq. DD)

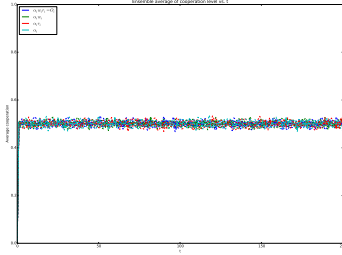


(g) Efficiency (Nash eq. UU)

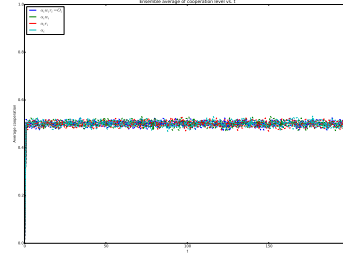


(h) Efficiency (Nash eq. DD)

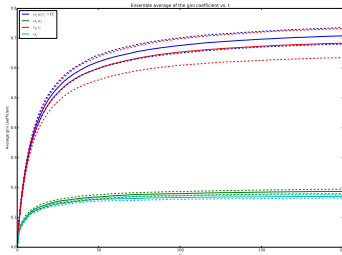
Figure 1: Comparison of Nash eq. simulations for uniformly distributed investment talent and investment cap (UU) and Gaussian distributed investment talent and cap (DD). Number of agents $N = 400$, size of ensemble $NE = 5$, simulation duration $T = 200$, beta $\beta = 0.05$.



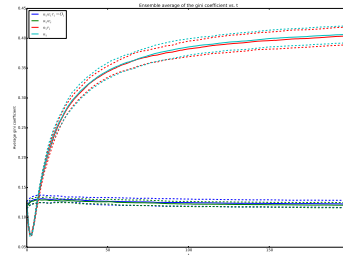
(a) Cooperation (Nash eq. DU)



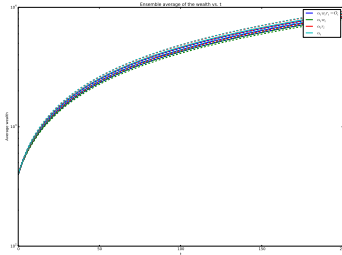
(b) Cooperation (Nash eq. UD)



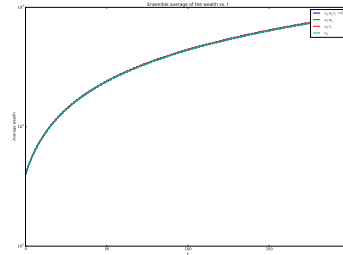
(c) Gini (Nash eq. DU)



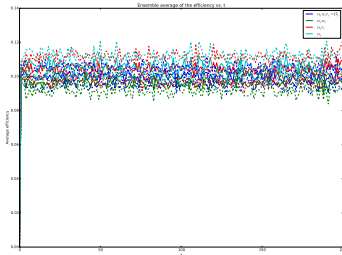
(d) Gini ((Nash eq. UD)



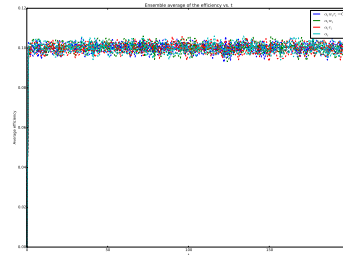
(e) Total wealth (Nash eq. DU)



(f) Total wealth (Nash eq. UD)

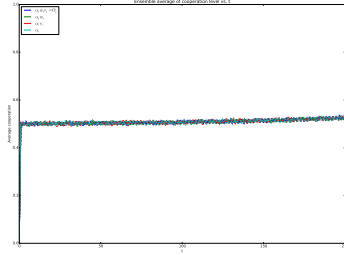


(g) Efficiency (Nash eq. DU)

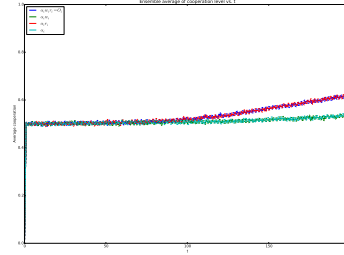


(h) Efficiency (Nash eq. UD)

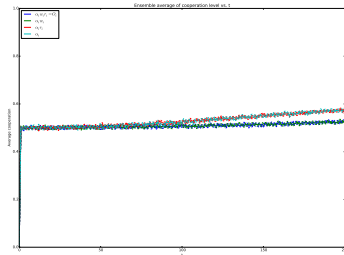
Figure 2: Comparison of Nash eq. simulations for uniformly distributed investment talent and Gaussian distributed investment cap (UD) and Gaussian distributed investment talent and uniformly distributed investment cap (DU). Number of agents $N = 400$, size of ensemble $NE = 5$, simulation duration $T = 200$, beta $\beta = 0.05$.



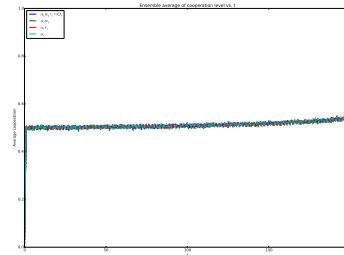
(a) SML UUU



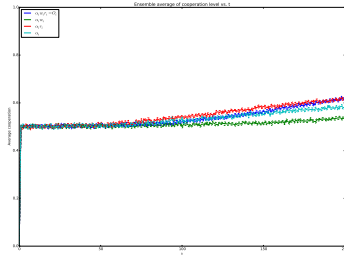
(b) SML DUU



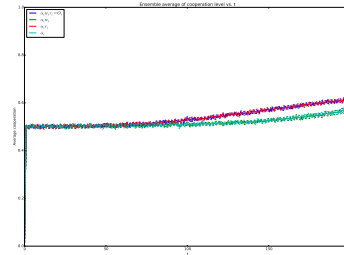
(c) SML UDU



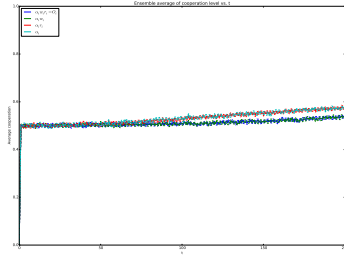
(d) SML UUD



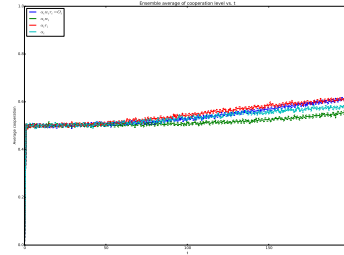
(e) SML DDU



(f) SML DUD



(g) SML UDD



(h) SML DDD

Figure 3: Comparison of Simple Memory Learning (SML) schema cooperation for different distribution (code: Invest.Talent - Invest.Cap - Learning Talent): U - uniform, D - Gaussian. Number of agents $N = 400$, size of ensemble $NE = 25$, simulation duration $T = 200$, beta $\beta = 0.05$.

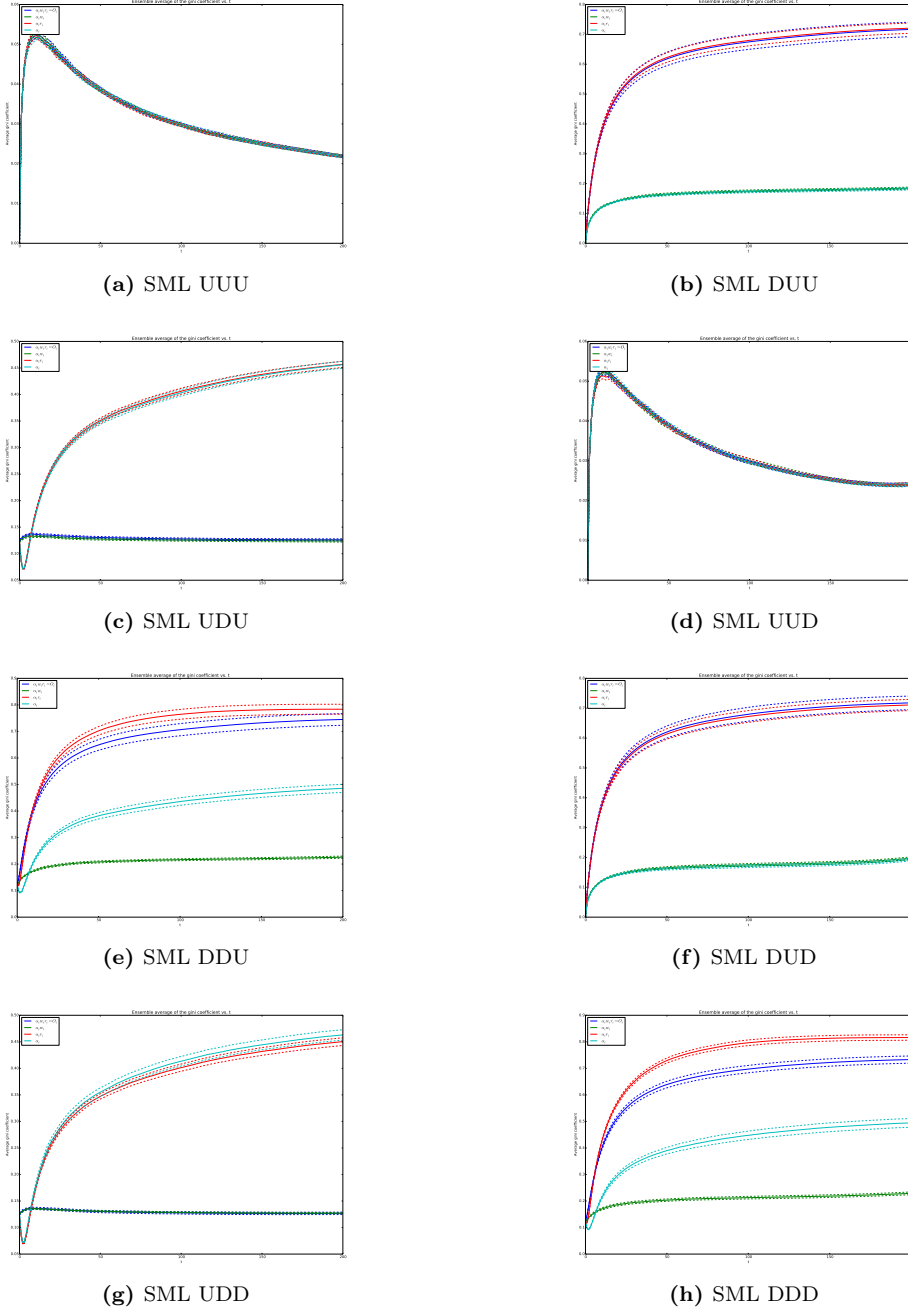
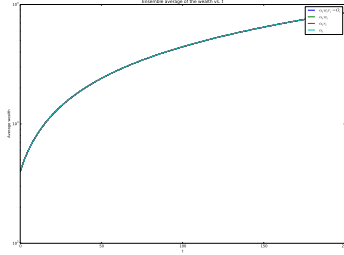
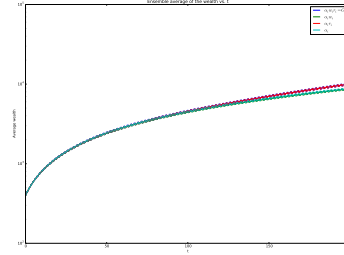


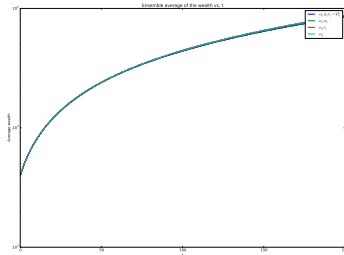
Figure 4: Comparison of Simple Memory Learning (SML) schema gini for different distribution (code: Invest.Talent - Invest.Cap - Learning Talent): U - uniform, D - Gaussian. Number of agents $N = 400$, size of ensemble $NE = 25$, simulation duration $T = 200$, beta $\beta = 0.05$.



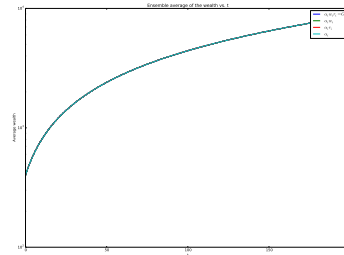
(a) SML UUU



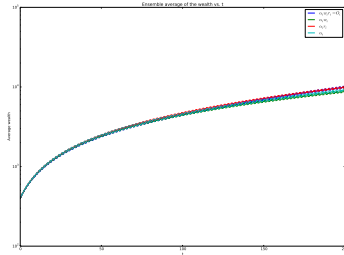
(b) SML DUU



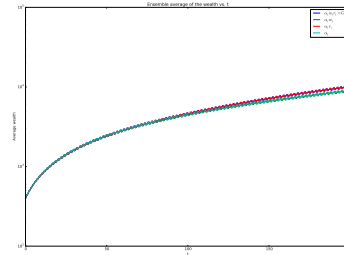
(c) SML UDU



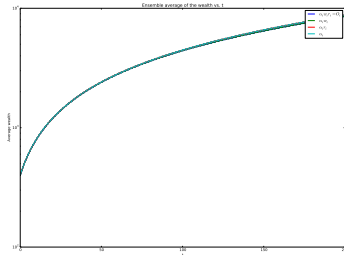
(d) SML UUD



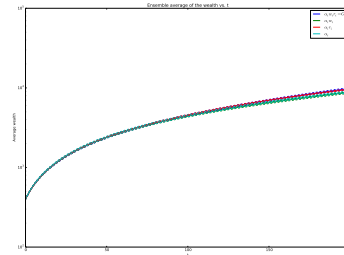
(e) SML DDU



(f) SML DUD

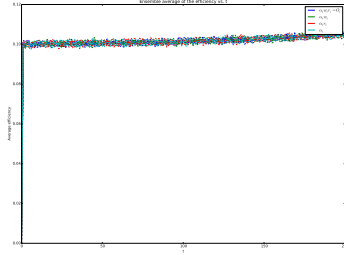


(g) SML UDD

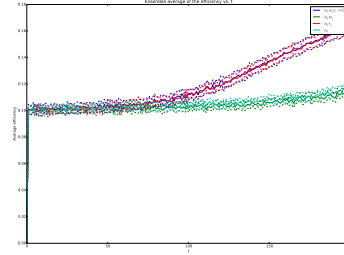


(h) SML DDD

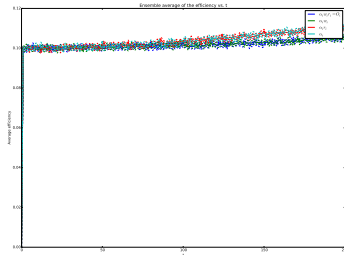
Figure 5: Comparison of Simple Memory Learning (SML) schema wealth for different distribution (code: Invest.Talent - Invest.Cap - Learning Talent): U - uniform, D - Gaussian. Number of agents $N = 400$, size of ensemble $NE = 25$, simulation duration $T = 200$, beta $\beta = 0.05$.



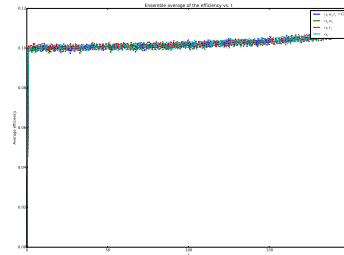
(a) SML UUU



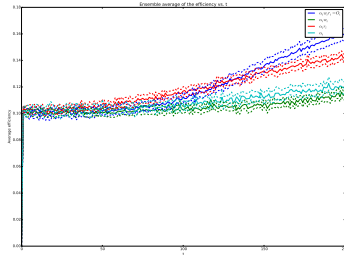
(b) SML DUU



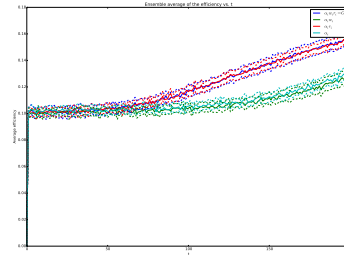
(c) SML UDU



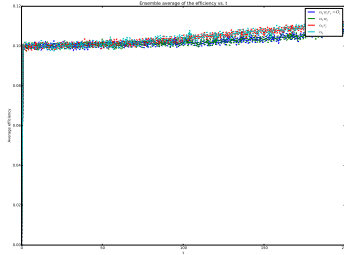
(d) SML UUD



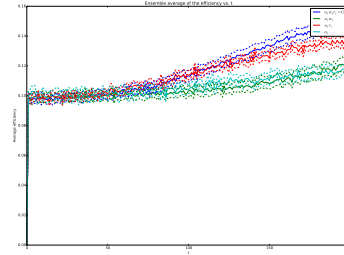
(e) SML DDU



(f) SML DUD



(g) SML UDD



(h) SML DDD

Figure 6: Comparison of Simple Memory Learning (SML) schema efficiency for different distribution (code: Invest.Talent - Invest.Cap - Learning Talent): U - uniform, D - Gaussian. Number of agents $N = 400$, size of ensemble $NE = 25$, simulation duration $T = 200$, beta $\beta = 0.05$.