

FIGURE 1 – Basic model without learning

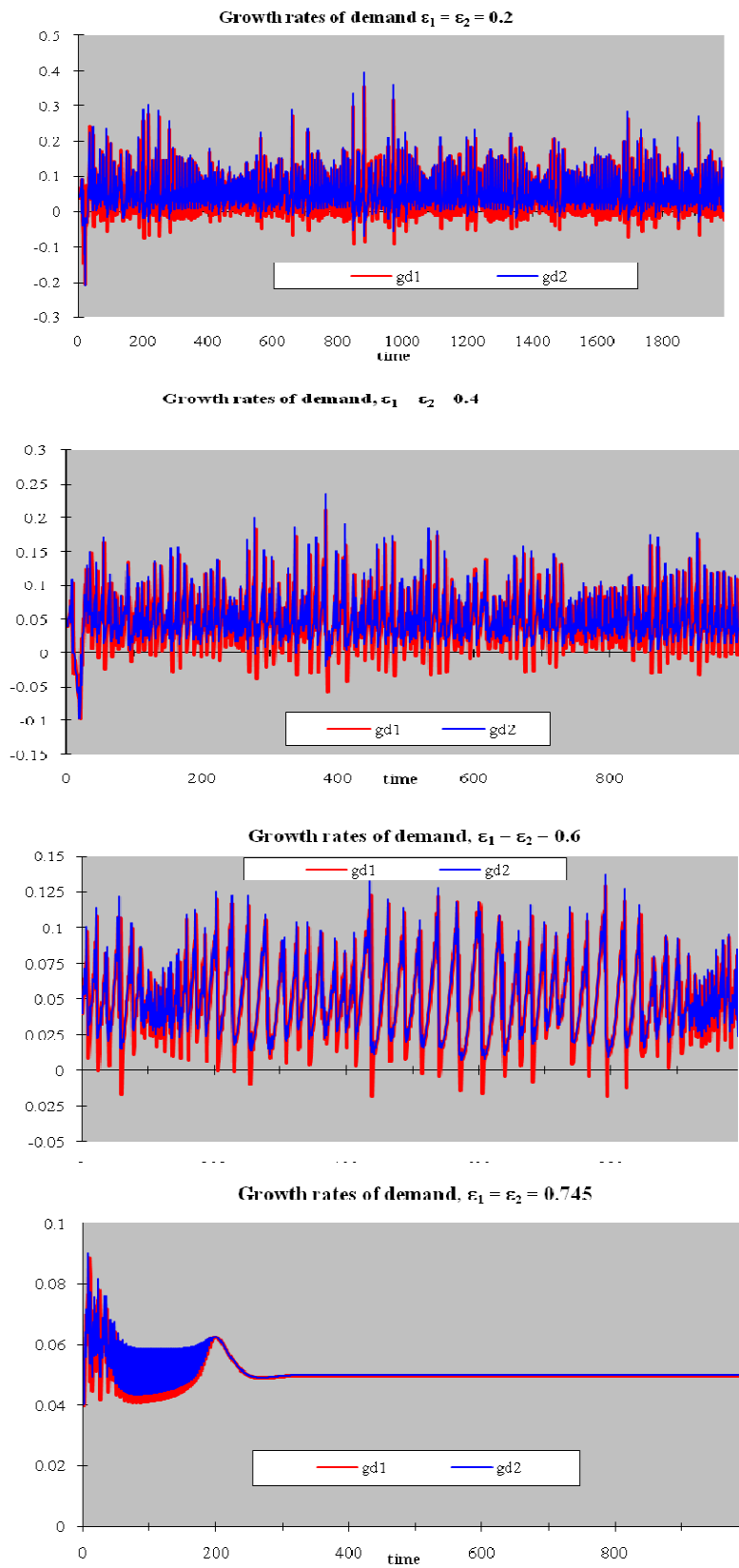
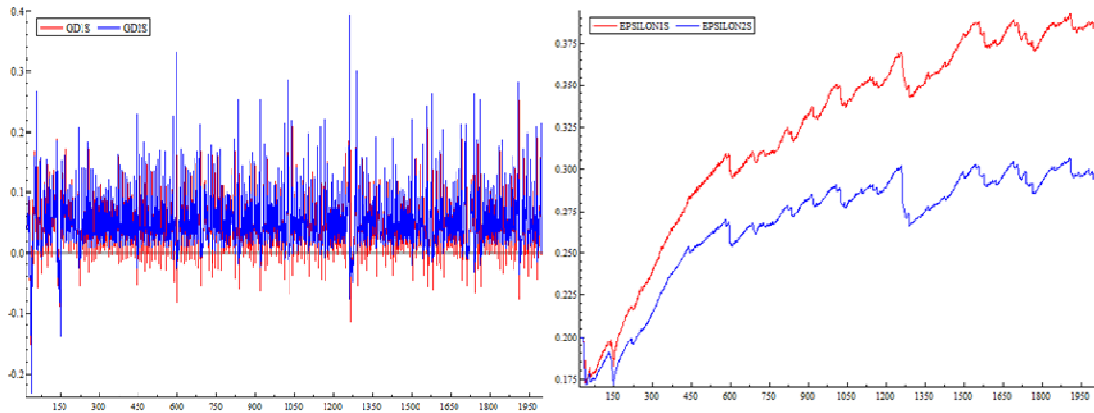
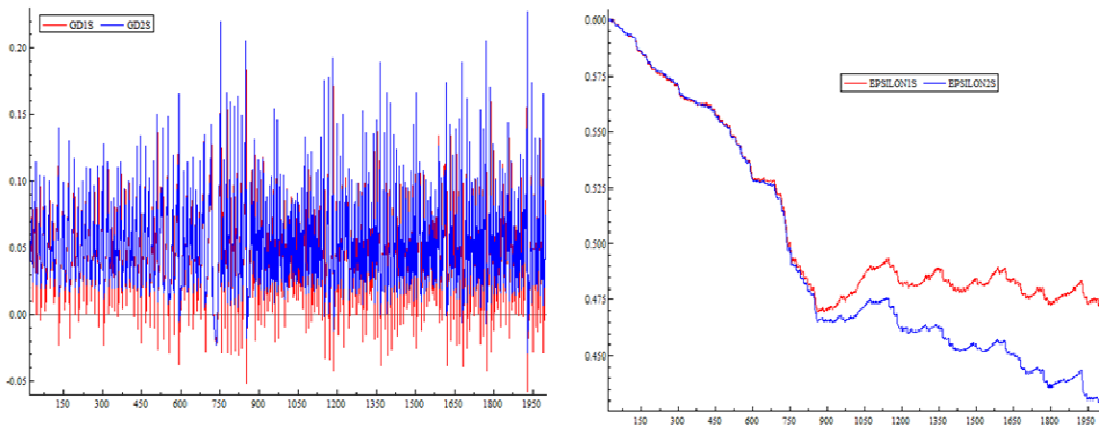


FIGURE 2 : Simple learning (gradient-descent rule): growth rates of demand and epsilon values

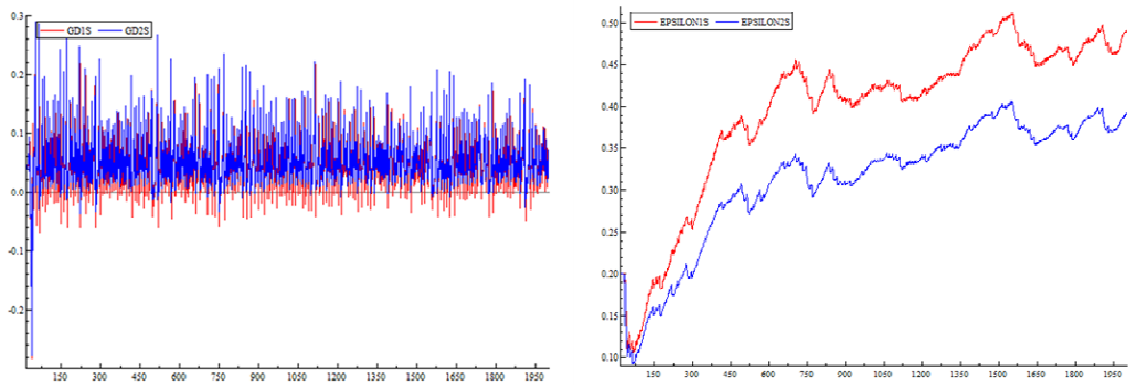
$$\epsilon_1 = \epsilon_2 = 0.2, \eta = 0.5$$



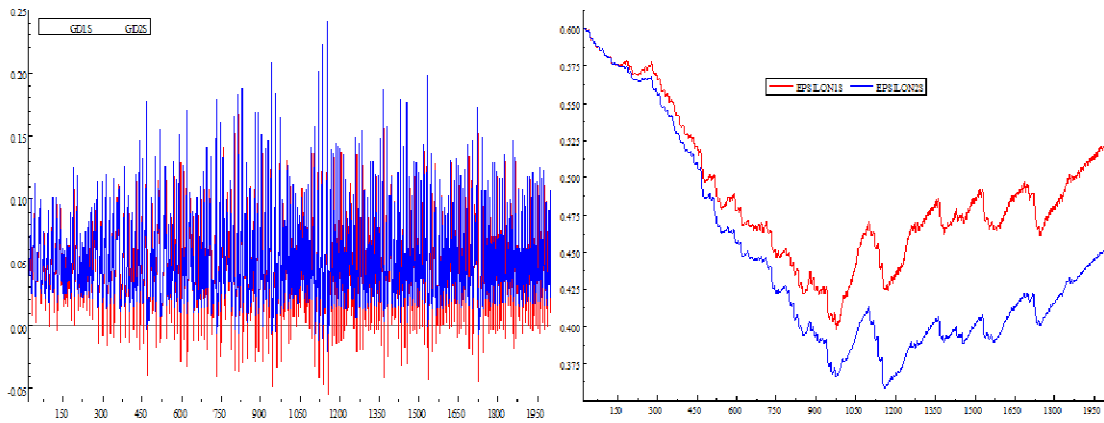
$$\epsilon_1 = \epsilon_2 = 0.6, \eta = 0.5$$



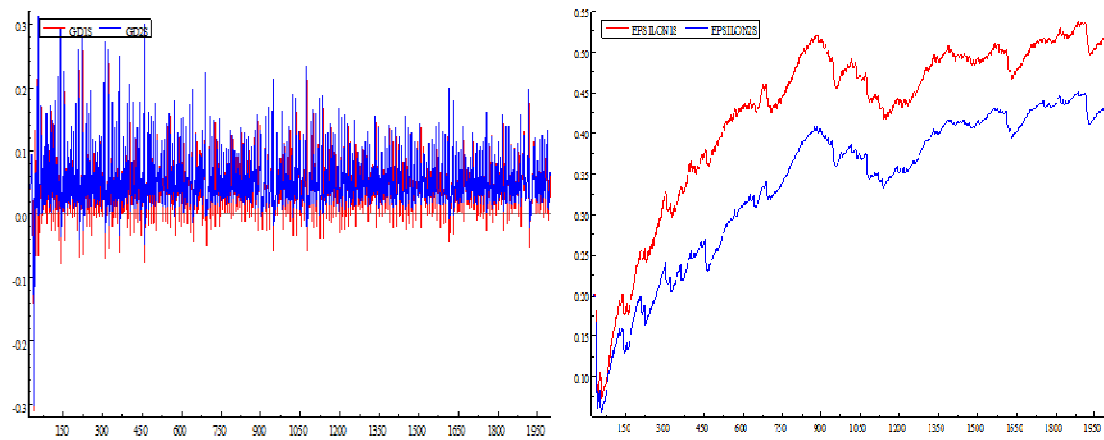
$$\epsilon_1 = \epsilon_2 = 0.2, \eta = 1.5$$



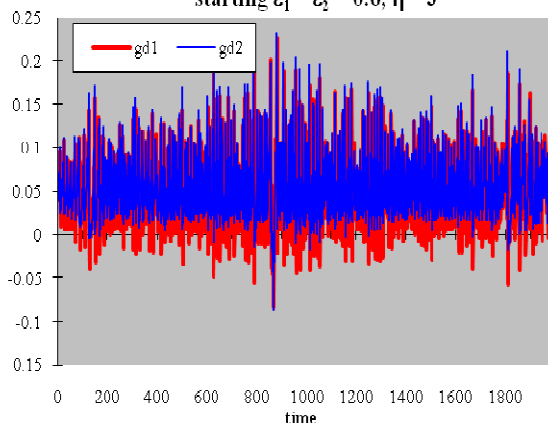
$$\epsilon_1 = \epsilon_2 = 0.6, \eta = 1.5$$



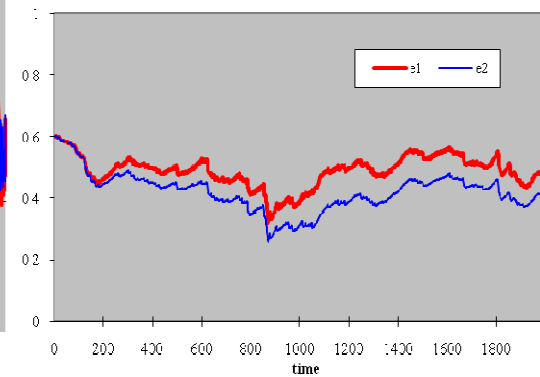
$$\epsilon_1 = \epsilon_2 = 0.2, \eta = 2$$



Growth rates of demand,
starting $\epsilon_1 = \epsilon_2 = 0.6, \eta = 3$



Epsilon values



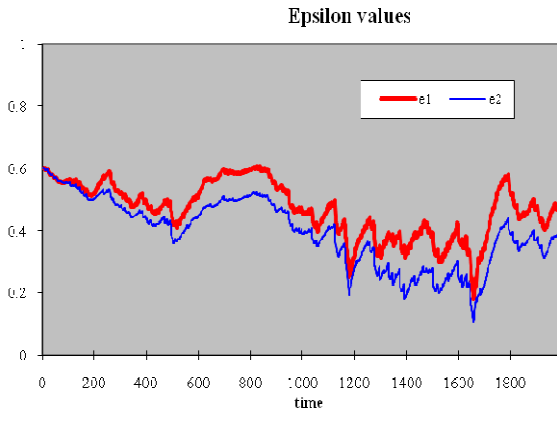
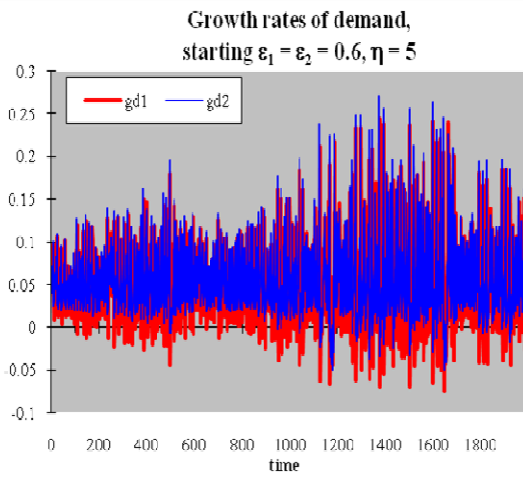
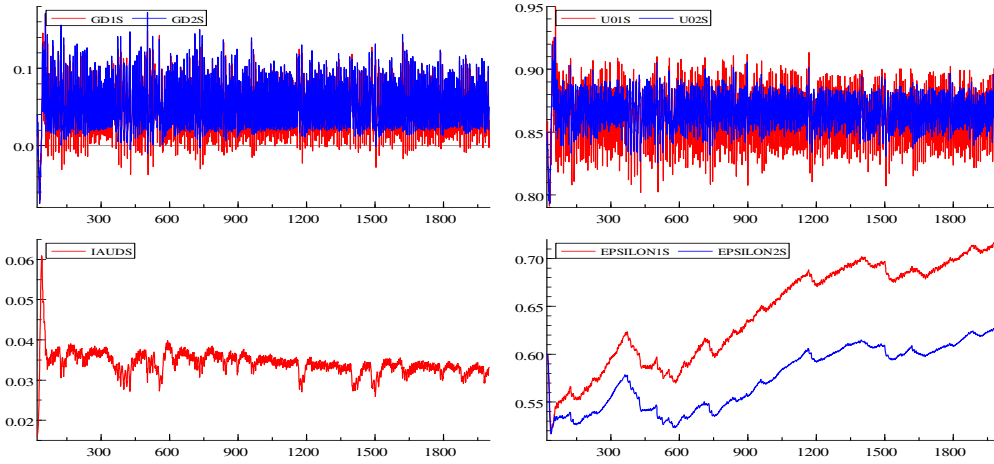
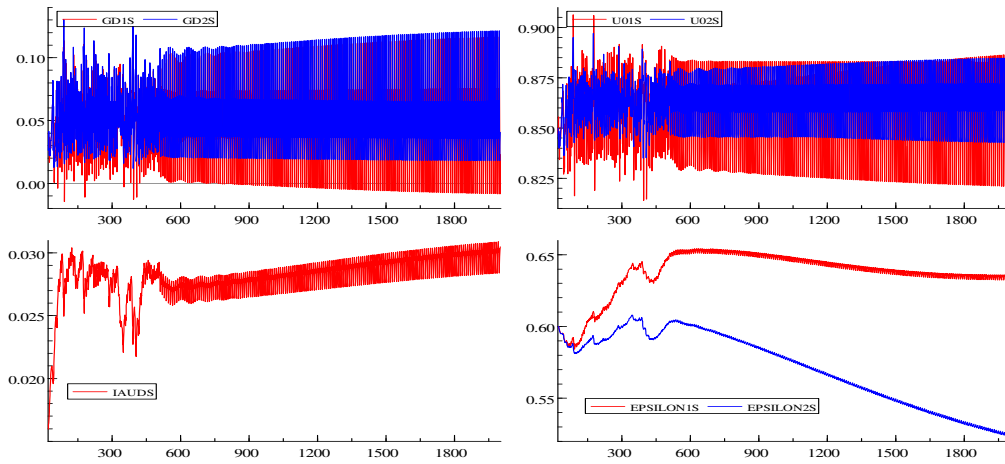


Figure 3: "True" learning: exogenous ρ and ω

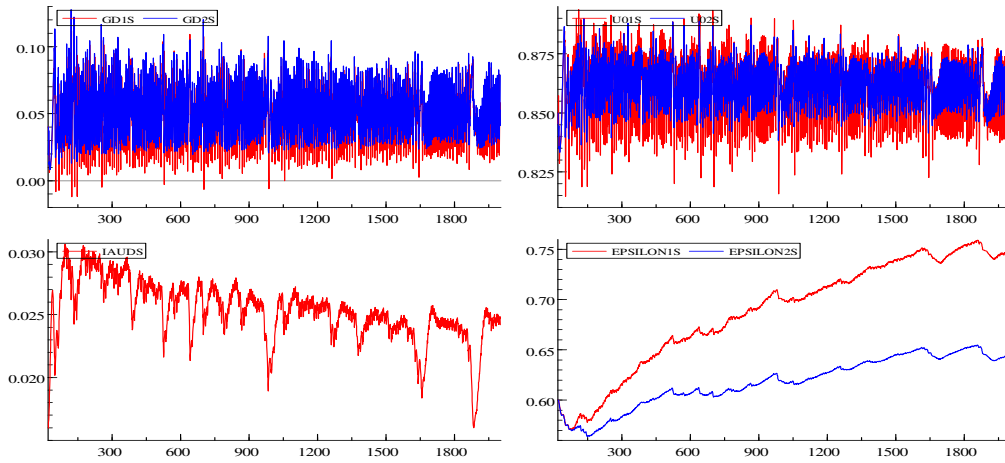
Starting ϵ 's = 0.6, $\eta = 1.5$, $\rho = 0.1$, $\omega = 0.5$



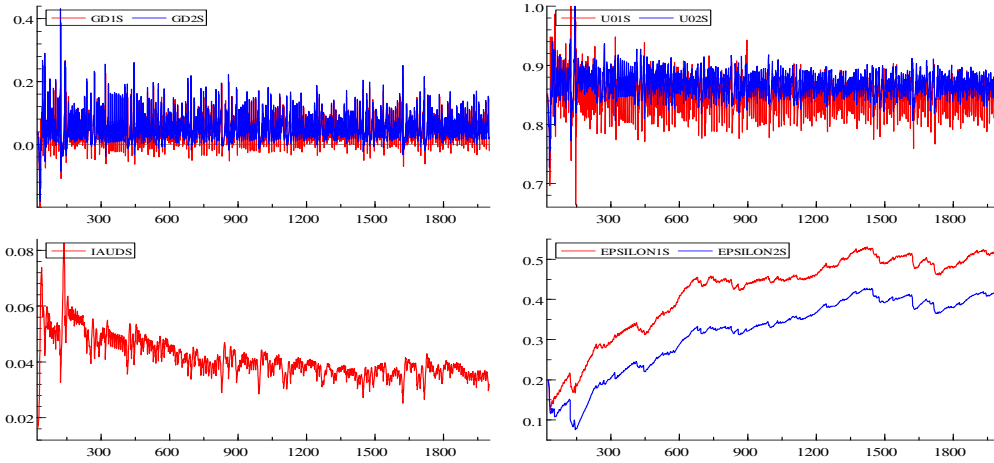
Starting ϵ 's = 0.6, $\eta = 1.5$, $\rho = 0.25$, $\omega = 0.5$



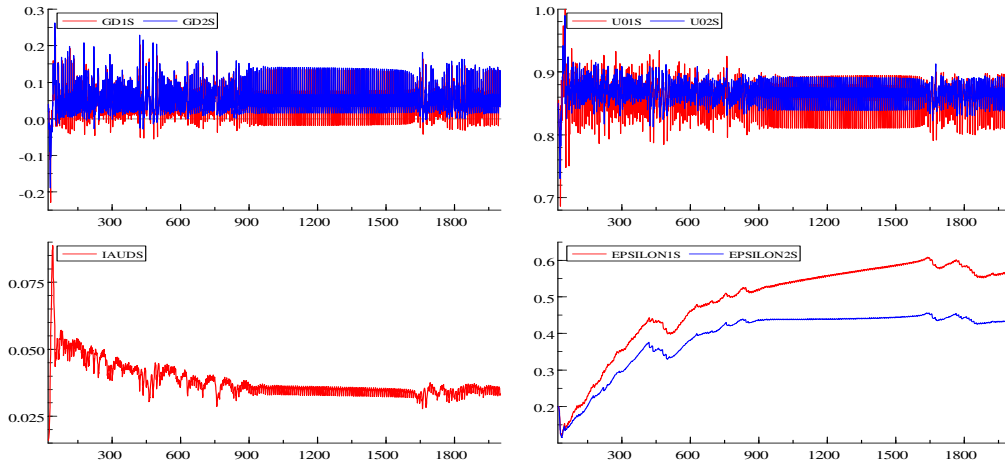
Starting ϵ 's = 0.6, $\eta = 1.5$, $\rho = 0.25$, $\omega = 0.75$



Starting ϵ 's = 0.2, $\eta = 1.5$, $\rho = 0.1$, $\omega = 0.5$



Starting ϵ 's = 0.2, $\eta = 1.5$, $\rho = 0.25$, $\omega = 0.5$



Starting ϵ 's = 0.2, $\eta = 1.5$, $\rho = 0.25$, $\omega = 0.75$

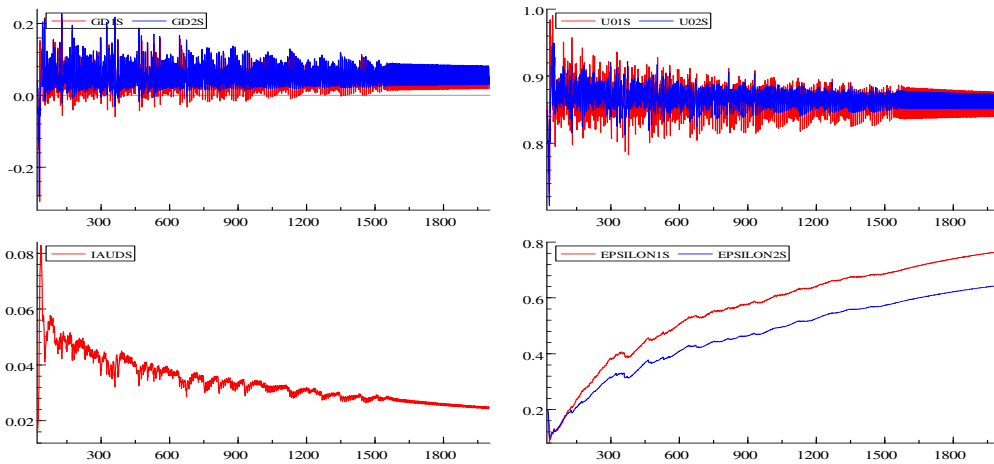
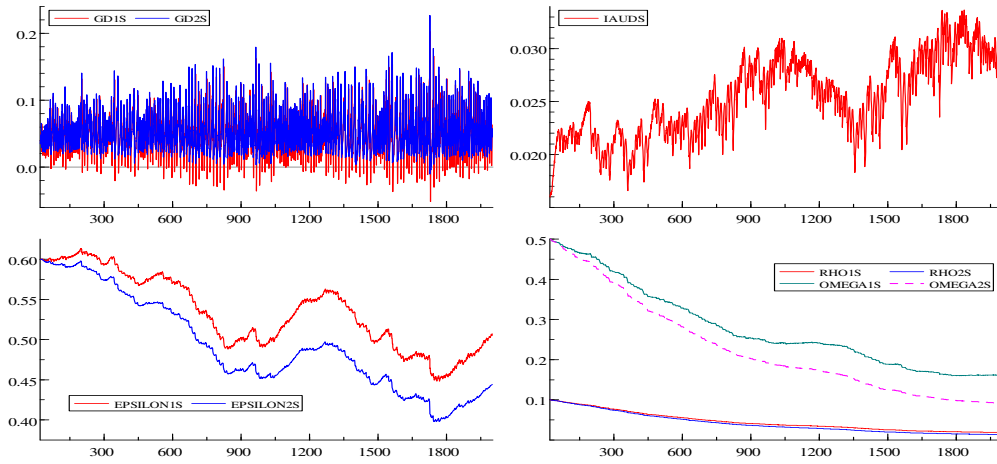
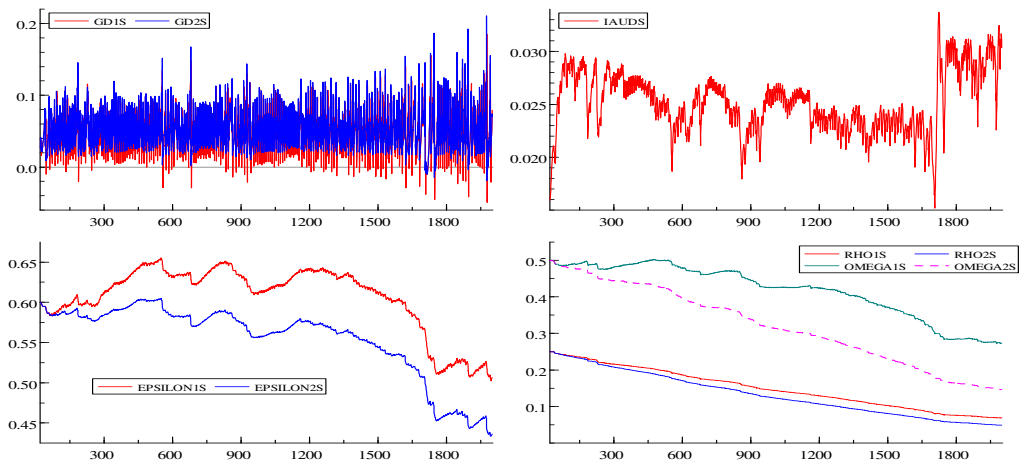


Figure 4: "True" learning: endogenous ρ and ω

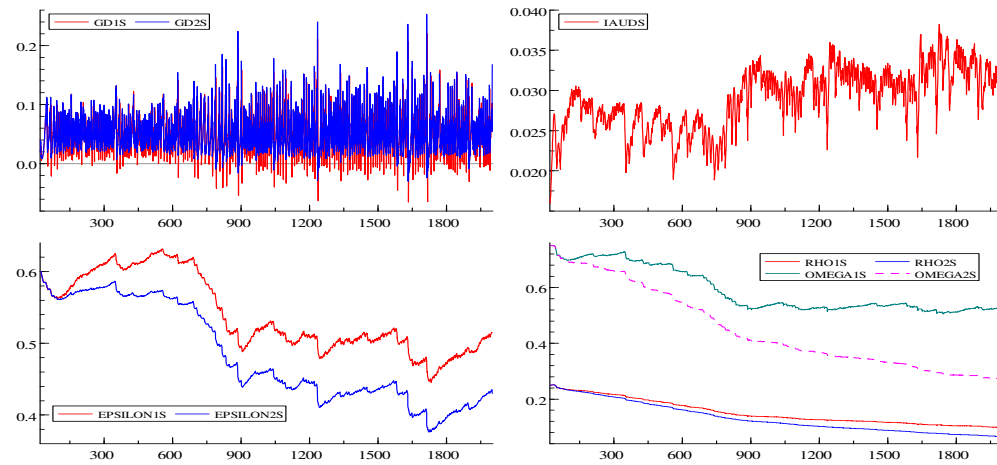
(a) Starting ϵ 's = 0.6, $\eta = 1.5$, $\rho = 0.1$, $\omega = 0.5$



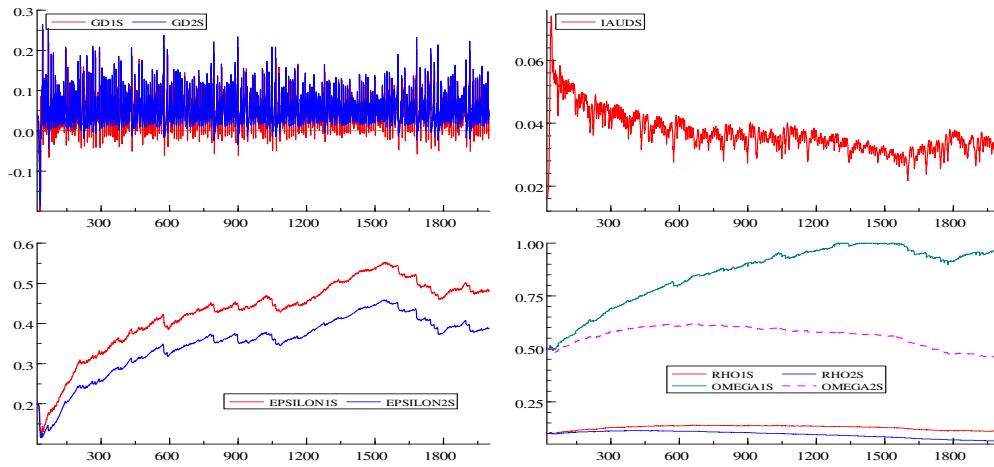
(b) Starting ϵ 's = 0.6, $\eta = 1.5$, $\rho = 0.25$, $\omega = 0.5$



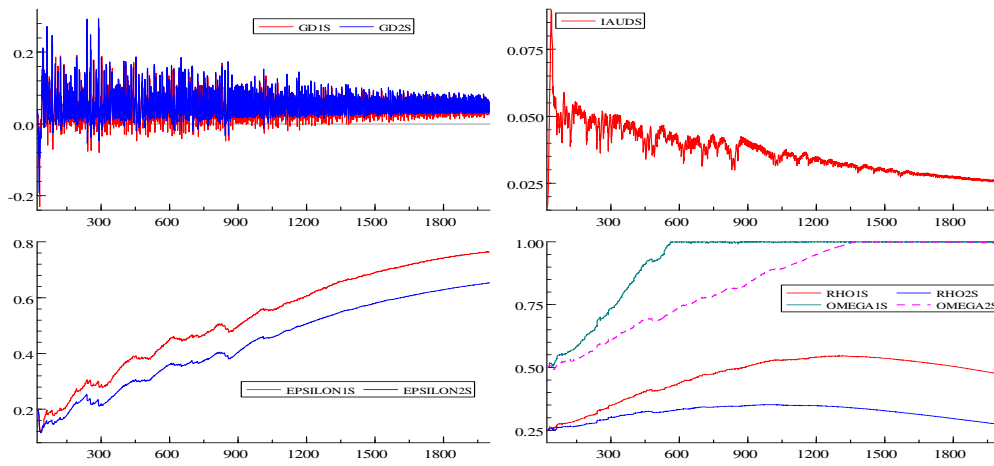
(c) Starting ϵ 's = 0.6, $\eta = 1.5$, $\rho = 0.25$, $\omega = 0.75$



(d) Starting ϵ 's = 0.2, $\eta = 1.5$, $\rho = 0.1$, $\omega = 0.5$



(e) Starting ϵ 's = 0.2, $\eta = 1.5$, $\rho = 0.25$, $\omega = 0.5$



(f) Starting ϵ 's = 0.2, $\eta = 1.5$, $\rho = 0.25$, $\omega = 0.75$

