ECON 210C PROBLEM SET # 3

MINKI KIM

1. Variable labor supply in the RBC model

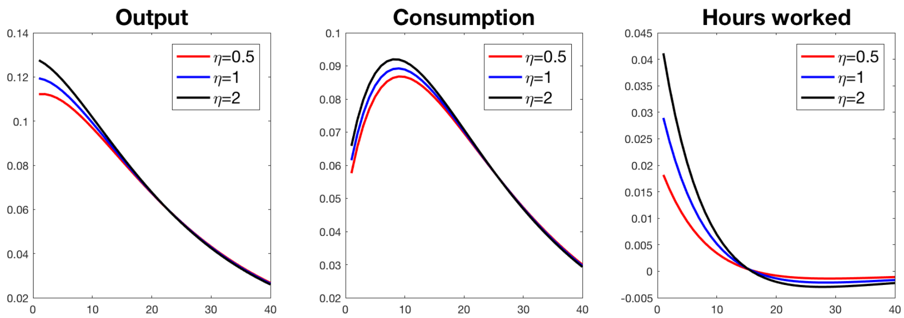

Figure 1. Impulse responses with varying η

	$\eta = 0.5$	$\eta = 1$	$\eta = 2$	Data
$Stdev(Y)$	1.54	1.64	1.74	1.72
$Stdev(C)$	0.97	1.02	1.08	1.27
$Stdev(L)$	0.23	0.37	0.53	1.59

Table 1. Response to a transitory discount factor shock

As one would expect, the fits get better as we calibrate the Frisch elasticity to bigger values. A large Frisch elasticity generates stronger intertemporal substitution of labor suppply, and hence amplifies the effect of shocks. However, even with a large Frisch elasticity, consumption is too smooth, and the volatility of hours generated from the model falls short of the empirical counterpart.