1. (a) $\xi_\tau = -G_\tau$.

(b) See the slide in the class.

(c) See (b)

(d) It should lead to the same eqm. conditions we covered in class for RBC with fiscal shocks.
(except for the prodnc. func)

(e) $C \downarrow$, $H \uparrow$, $Y \uparrow$.

G multiplier should be below 1.

(f) If θ sufficiently large, productivity increase through government spending would lead to a positive income effect and $C \uparrow$. We still have $H \uparrow$ because (and hence $Y \uparrow$) productivity increase and negative income

effect on labor supply goes in the
same direction.

G multiplier could be above 1.

2.(a) This is basically what we covered in
the class.

(b) Deterministic growth with intratemporal
choice.

$$V(K) = \max_{C, H} \left[\ln C - \varphi H + \beta V(K') \right]$$

s.t. $C + I \leq K^\alpha H^{1-\alpha}$

$K' = (1-\delta)K + I$.

We need to add in step 3 of the VFI
for deterministic growth model that the
constraint $\frac{1}{C}(1-\alpha)\left(\frac{K}{H}\right)^\alpha = \varphi$ has
to hold for all K and candidate K'.