Introducing Burnout to Economics

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Outline

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What is burnout?

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    - Effort-Recovery model: when individuals do not invest effort in work-related activities ⇒ recuperate **automatically**

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  - ... labour participation / unemployment

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$\Rightarrow$ Tools from economics can help

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  - $\zeta \geq 0$ incorporates into the model the recovery process of the individual

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Objective function

- Utility is state-dependent:

$$u\left(c\left(t\right),g\left(t\right),b\left(t\right)\right)=\left(1-\theta b\left(t\right)\right)\frac{c\left(t\right)^{1-\sigma}-1}{1-\sigma}-\gamma\frac{g\left(t\right)^{1+\alpha}}{1+\alpha} \tag{3}$$

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- The budget constraint limits consumption to equal labour income, with wage $w > 0$ and productivity h:

$$c\left(t\right)=whn\left(t\right) \tag{4}$$

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- Maximising lifetime utility, $U(t) = E_t \int_t^{\infty} e^{-\rho[\tau - t]} u(.)\, d\tau$, subject to (1), (2) and (4) gives us the following Keynes-Ramsey rule for individuals in their normal working state (i.e. out of burnout):

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$\Rightarrow$ hard to disentangle which effect dominates analytically

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$\Rightarrow$ both motives push growth rate of labour supply upward

State-dependent steady-states

- When (1), (7), and (8) are set equal to 0, they describe the zero-motion lines of our optimisation problem

State-dependent steady-states

$$dg(t) = \left[\frac{\phi}{h} n(t) - \zeta g(t)\right] dt \tag{1}$$

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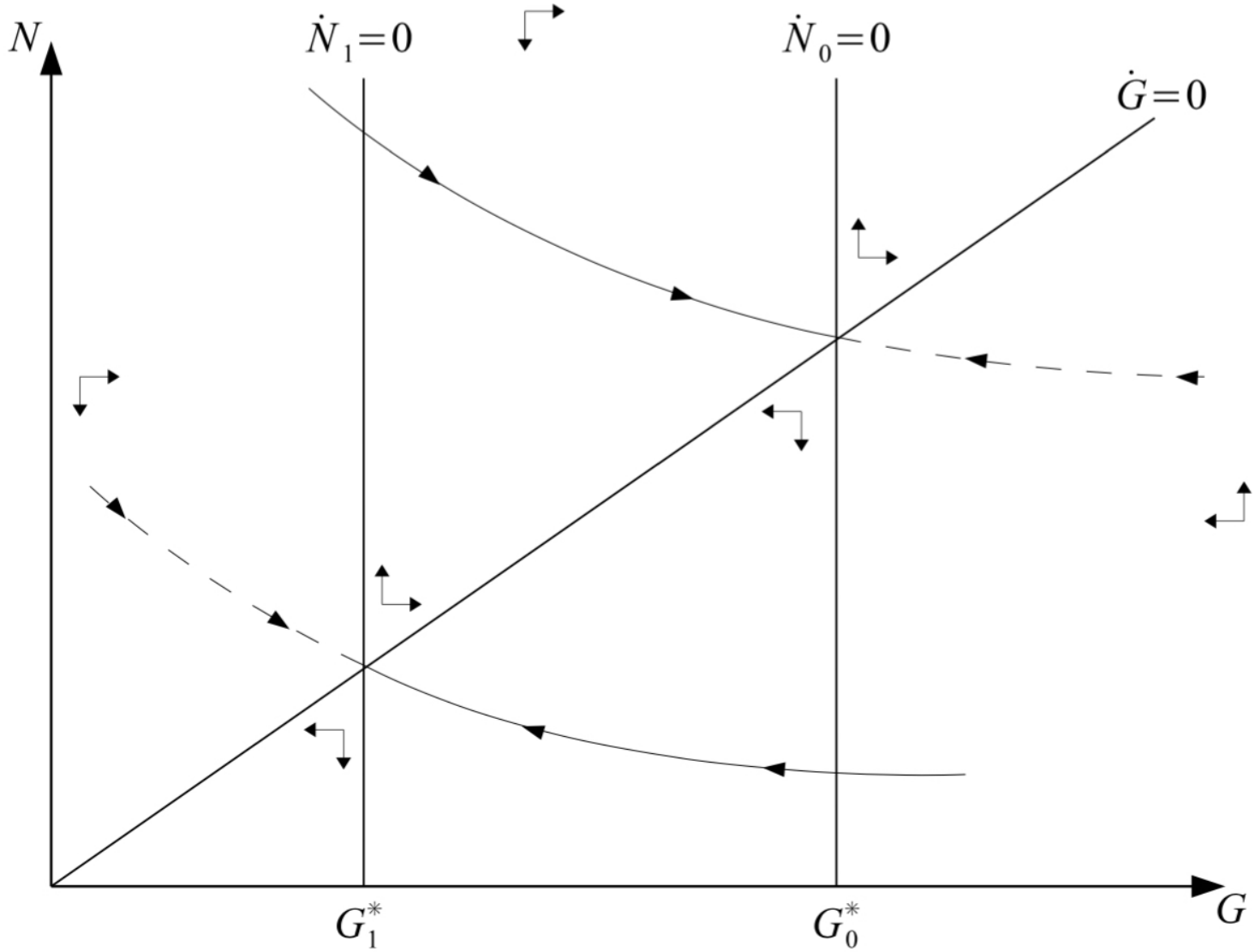
- In the graph below, note that $\dot{n}_0$ is used for the zero-motion line associated with (7), and $\dot{n}_1$ is used for the one associated with (8)

State-dependent steady-states



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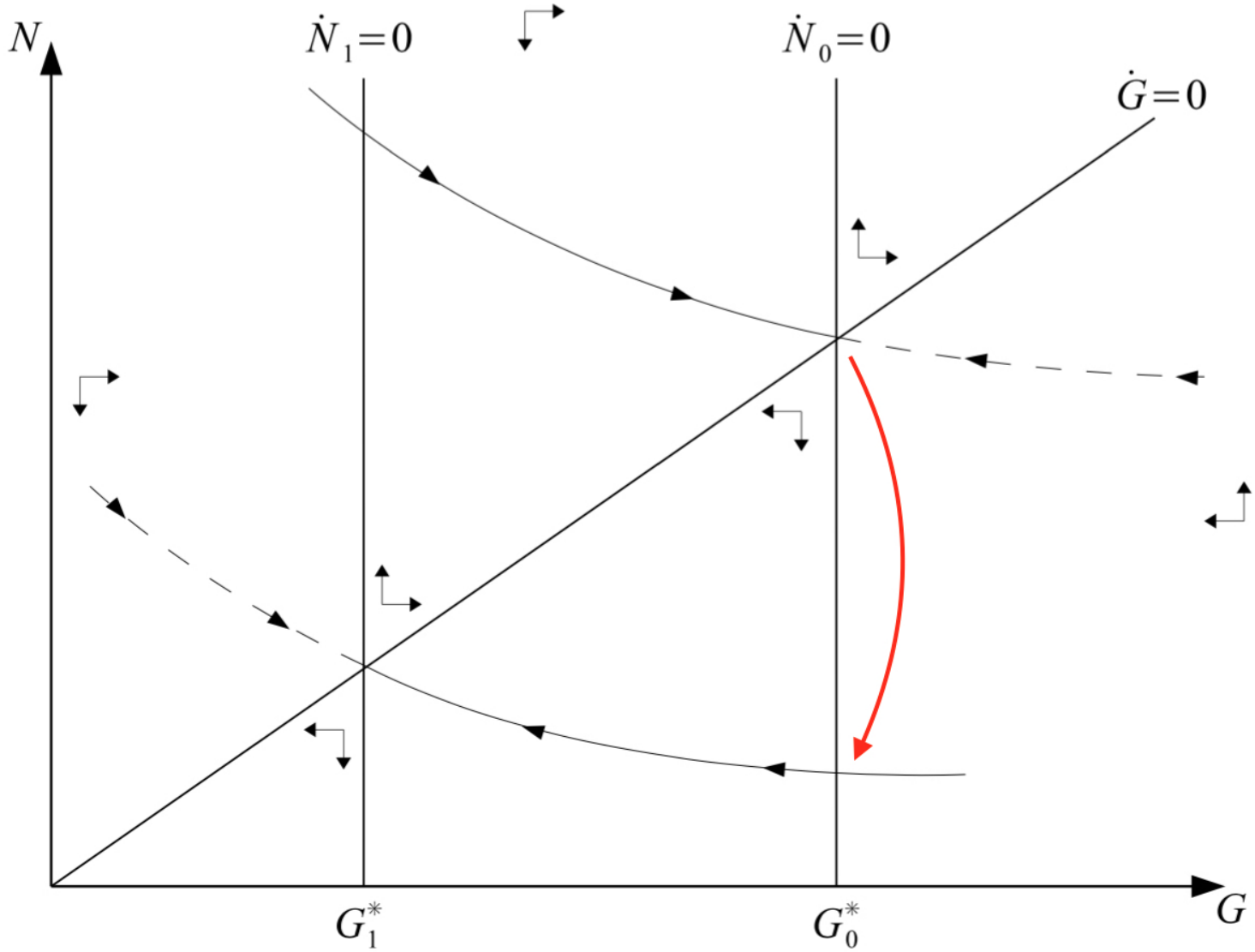

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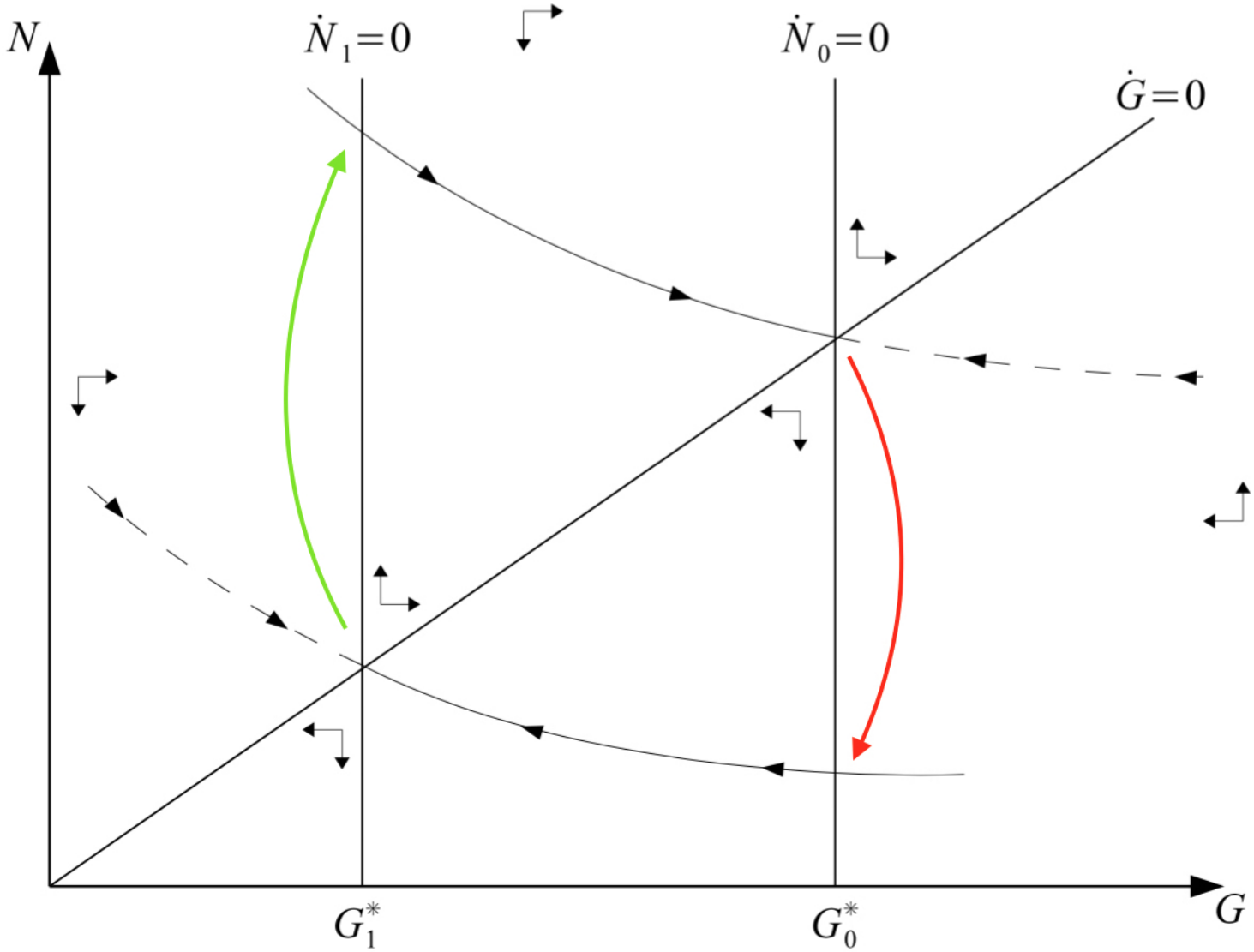
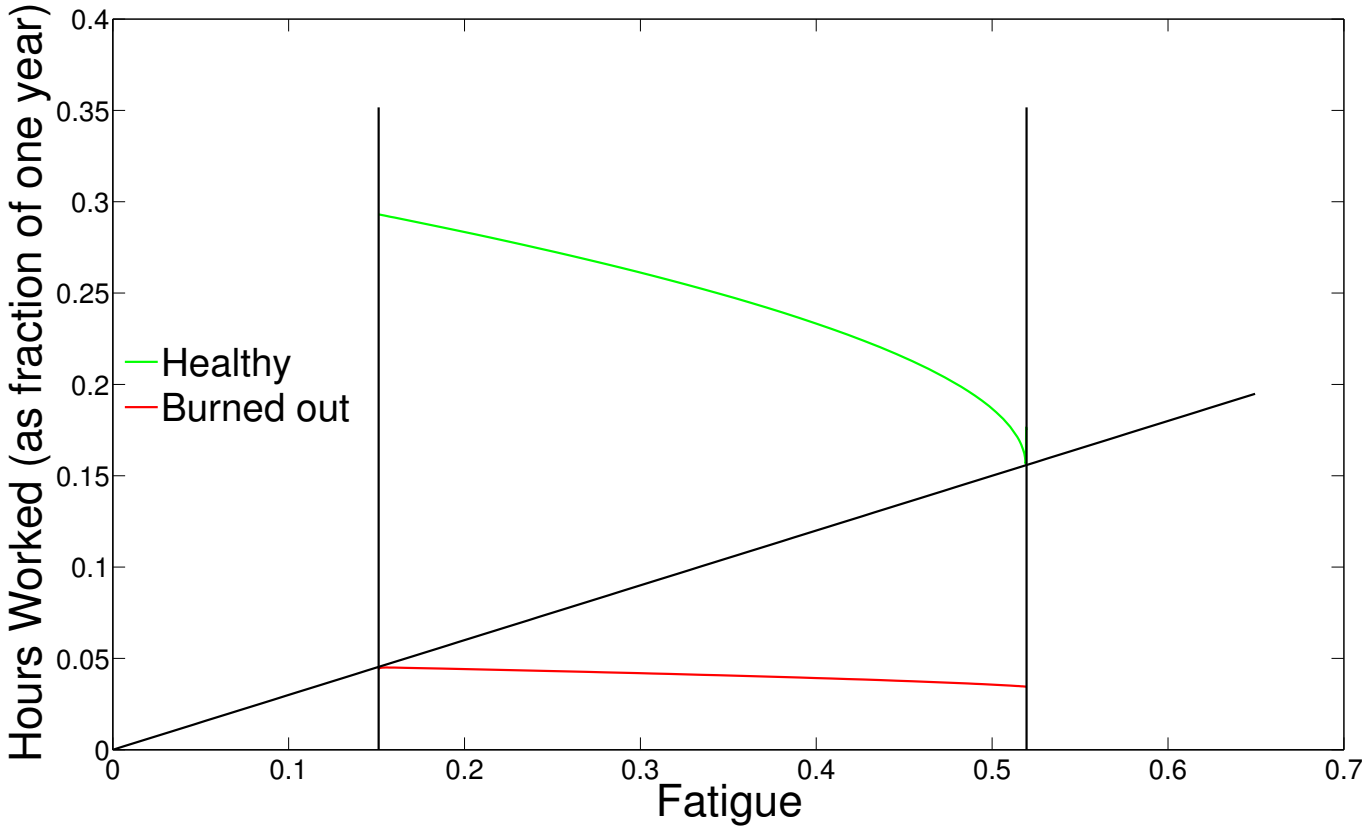


"Healthy" path versus "Burned out" path



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- "Burned out" path is flatter, indicating individuals recuperate only very slowly

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- While a higher imbalance between job demands and resources pushes the growth rate of labour supply upward, increasing labour faster leading to a slower reduction in fatigue and delaying recovery
- Healthy individuals will be more sensitive to fatigue than burned out ones $\Rightarrow$ could increase duration of recovery process

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  - Compared with this setup, would individuals be better off? i.e. Should policy seek to increase self-awareness or would individuals be better off not knowing?

☺? ☹?

Thanks!