

Why Maastricht Treaty (& German Debt Brake) Nonsense

Kuo-chun YEH

Gov's expenditure can be financed by printing money and issuing new bonds

(1) Assume Gov budget constraint

G : gov expenditure; T : tax; $D=G-T$ =budget deficit; r : bond yields; B : debts; M : printing money (=0 when the country is in the EMU)

$$G - T + rB = \frac{dB}{dt} + \frac{dM}{dt}$$

(2) The lowercase variables are the uppercases over GDP (Y)

$$b = \frac{B}{Y}$$

(3) Calculus

$$\dot{b} = \frac{\dot{B}}{Y} - B \frac{\dot{Y}}{Y^2}$$

(4) $(1)/Y$ and then substitute (3) into (1)

$$\dot{b} = (g - t) + (r - x)b$$

(5) Note that x is economic growth rate

$$x = \dot{Y}/Y$$

(6) Assume the growth of $b=0$

$$\dot{b} = 0 \text{ or } (r - x)b = t - g$$

(7) (6) can be $g - t = d = (x - r)b$

(6) Maastricht Treaty $d=3\%$, $b=60\%$, and now $r=3\%$. Do you think the value of x can sustained for the members of the EMU?