

Makroekonomia II
15 grudnia 2018 r.

Zad. 1.

- (a) $\pi_t = \pi_t^e \Rightarrow u^* = 4\%$
- (b) $u_t = u_{t+1} = u_{t+2} = u_{t+3} = u_{t+4} = 0,03$
 $\pi_t = \pi_{t+1} = \pi_{t+2} = \pi_{t+3} = \pi_{t+4} = 0,12 - 3 \times 0,03 = 3\%$
- (c) $\pi_t^e = \pi_{t-1}$
 $\pi_t = 0,12 + 0,02 - 3 \times 0,03 = 5\%$
 $\pi_{t+1} = 0,12 + 0,05 - 3 \times 0,03 = 8\%$
 $\pi_{t+2} = 0,12 + 0,08 - 3 \times 0,03 = 11\%$
 $\pi_{t+3} = 0,12 + 0,11 - 3 \times 0,03 = 14\%$
 $\pi_{t+4} = 0,12 + 0,14 - 3 \times 0,03 = 17\%$

Zad. 2.

(a)
$$\begin{array}{ccc} & s \times E & \\ E & \xrightarrow{\quad} & U \\ & f \times U & \end{array}$$

(b) $u^* = U/L = \frac{s}{s+f} = 9\%$

Zad. 3.

$\epsilon = -0,04Y_P + 0,02Y_N = \frac{EP}{P^*}$
 $E = \frac{100}{80}(0,04 \times 1070 - 0,02 \times 2130) = 0,25$

Zad. 4.

(a) $Y = 1500 - 5000r$

Zad. 5.

- (a) $T_t - TR_t - G_t - i_t B_{t-1} = 1000 + 0,1 \times 11000 - 800 + 0,05 \times 11000 - 1800 - 0,1 \times 1000 = -50$
- (b) $T_t - TR_t - G_t = 1000 + 0,1 \times 11000 - 800 + 0,05 \times 11000 - 1800 = 50$
- (c) $T_t - TR_t - G_t - i_t B_{t-1} = 1000 + 0,1Y^* - 800 + 0,05Y^* - 1800 - 0,1 \times 1000 = 1000 + 0,1 \times 10000 - 800 + 0,05 \times 10000 - 1800 - 0,1 \times 1000 = -200$
- (d) $B_t = B_{t-1} + deficyt_t = 1000 + 50 = 1050$

Zad. 6.

- (a) $u(c, l) = \sqrt{c} + \sqrt{l}; c = (1 - l)$
 $u(l, w) = \sqrt{(1 - l)} + \sqrt{l}$
 $\max u(l)$
 $u'(l) = \frac{1}{2}l^{-1/2} - \frac{1}{2}(1 - l)^{-1/2} = 0$
 $l = \frac{1}{2}$
- (b) $u(c, l) = \sqrt{c} + \sqrt{l}; c = w(1 - l)$
 $u(l, w) = \sqrt{w(1 - l)} + \sqrt{l}$
 $\max u(l, w)$
 $u'(l, w) = \frac{1}{2}l^{-1/2} - \frac{1}{2}w(w(1 - l))^{-1/2} = 0$
 $l = w^{-1}(1 - l)$
 $l(w) = \frac{1}{1+w}$
- (c) $l(w) = \frac{1}{1+w}$
 $L^s(l) = 1 - l(w)$
 $L^s(w) = \frac{w}{1+w}$