均衡概念の拡張 — 付録

付録　1.　『一般理論』の雇用理論

『一般理論』の均衡方程式

消費関数　$D_1 = \chi(N)$,　　総需要　$D = D_1 + D_2$,　　均衡条件　$D = \phi(N)$

$\chi(N)$：消費関数,　　$\phi(N)$：供給関数,　　D_2：投資支出

Keynes, *General Theory*, p. 29.

不完全雇用均衡の説明

When employment increases, D_1 will increase, but not by as much as D (sic); since when our income increases our consumption increases also, but not by so much. The key to our practical problem is to be found in this psychological law. For it follows from this that the greater the volume of employment the greater will be the gap between the aggregate supply price (Z) of the corresponding output and the sum (D_1) which the entrepreneurs can expect to get back out of the expenditure of consumers. Hence, if there is no change in the propensity to consume, employment cannot increase, unless at the same time D_2 is increasing so as to fill the increasing gap between Z and D_1. Thus — except on the special assumptions of the classical theory according to which there is some force in operation which, when employment increases, always causes D_2 to increase sufficiently to fill the widening gap between Z and D_1 — the economic system may find itself in stable equilibrium with N at a level below full employment, namely at the level given by the intersection of the aggregate demand function with the aggregate supply function.

Keynes, *General Theory*, pp. 29–30.

付録　2.　ワルラス均衡とケインズ均衡 — 2期間の場合

以下は，ヒックスの一時的均衡の概念によるワルラス均衡とケインズ均衡の比較である．

i: 名目利子率，　$\bar{w}$: 硬直的貨幣賃金率，　添字 e は予想値を示す．

ワルラス均衡

$$u(c_1^*, n_1^*, c_2^*, n_2^*) \geq u(c_1, n_1, c_2, n_2) \tag{1}$$

$$(\pi_1^* + w_1^* n_1) + (\pi_2^e + w_2^e n_2) = p_1^* c_1 + p_2^e c_2 \tag{2}$$

$$\pi_1^* = p_1^* y_1^* - w_1^* l_1^*, \quad \pi_2^e = p_2^e y_2^e - w_2^e l_2^e$$

$$w_1^* l_1^* + p_1^* z^* + w_2^e l_2^* \leq w_1^* l_1 + p_1^* z + w_2^e l_2 \tag{3}$$

$$y_1^* = f(k_0, l_1), \qquad y_2^e = f(k_0 + z, l_2) \tag{4}$$

$$y_1 = c_1\left(\frac{w_1}{p_1}, i\right) + z\,(i, y_1) \tag{5}$$

$$n_1\left(\frac{w_1}{p_1}, i\right) = l_1\,(y_1) \tag{6}$$

$$f_l(k_0, l_1) = \frac{w_1}{p_1} \tag{7}$$

ケインズ均衡

$$u(c_1^*, n_1^*, c_2^*, n_2^*) \geq u(c_1, n_1, c_2, n_2) \tag{1}$$

$$(\pi_1^* + \bar{w}_1 n_1) + (\pi_2^e + w_2^e n_2) = p_1^* c_1 + p_2^e c_2 \tag{2}$$

$$\pi_1^* = p_1^* y_1^* - \bar{w}_1 l_1^*, \quad \pi_2^e = p_2^e y_2^e - w_2^e l_2^e$$

$$l_1^* \geq n_1, \qquad l_2^e \geq n_2 \tag{3}$$

$$\bar{w}_1 l_1^* + p_1^* z^* + w_2^e l_2^* \leq \bar{w}_1 l_1 + p_1^* z + w_2^e l_2 \tag{4}$$

$$y_1^* = f(k_0, l_1), \qquad y_2^e = f(k_0 + z, l_2) \tag{5}$$

$$y_1 = c_1(i, y_1) + z\,(i, y_1) \tag{6}$$

$$n_1 = l_1\,(y_1) \tag{7}$$

$$\frac{M}{p_1} = L(i, y_1) \tag{8}$$