Petty-Cantillon ‘Surplus Approach’ Model

In Petty and Cantillon we find the earliest versions of the surplus approach. Both view wages as socially and historically (and not only biologically) determined by subsistence. Key then is production of subsistence and so the average productivity of labor in subsistence production, A. The average productivity of labor employed in the production of consumption goods, A, times the total number of laborers employed in that sector, Lc, will equal the total population, P. times the average necessary consumption per capita, c:

\[ A \cdot L_c = c \cdot P \]  

(1)

Total (potential) laborers can be rewritten as population, P, times the proportion of P that is employable. If \( L = P \cdot n \), then \( P = L/n \). So:

\[ A \cdot L_c = c \cdot L/n \]  

(2)

Multiply both sides by \( 1/A \) and \( 1/L \) and we get:

\[ Lc/L = c/A \cdot 1/n \]  

(3)

This tells us that the ratio of labor employed in necessary consumption to total employable labor (potential surplus labor), is in an inverse relation with labor productivity in necessary consumption goods, A, and positive relation with average per capita necessary consumption, c.

Reference:
