Aggregate Supply in the Heterogeneous-Agent Model

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Aggregate supply.

Household i sells $y_i = f(x) \times k_i$

Aggregation: all households sell

$$y = \sum_i y_i$$

$$= \sum_i f(x) \cdot k_i$$

$$= f(x) \sum_i k_i$$

$$y = \boxed{f(x) \; k \; = \; y^S(x)}$$

$y^S(x)$ aggregate supply curve

$\rightarrow$ AS curve is the <u>same as in the</u>

<u>representative</u> - agent model.

<u>Alternative derivation</u> $y = m\left(\sum_i k_i, \; \sum_i v_i \right)$

$$y = \left(\sum k_i \right) m(1, \; x)$$

$$\underset{\underset{k}{\uparrow}}{} \qquad \underset{\underset{f(x)}{\uparrow}}{}$$

$$y = f(x) \cdot k$$