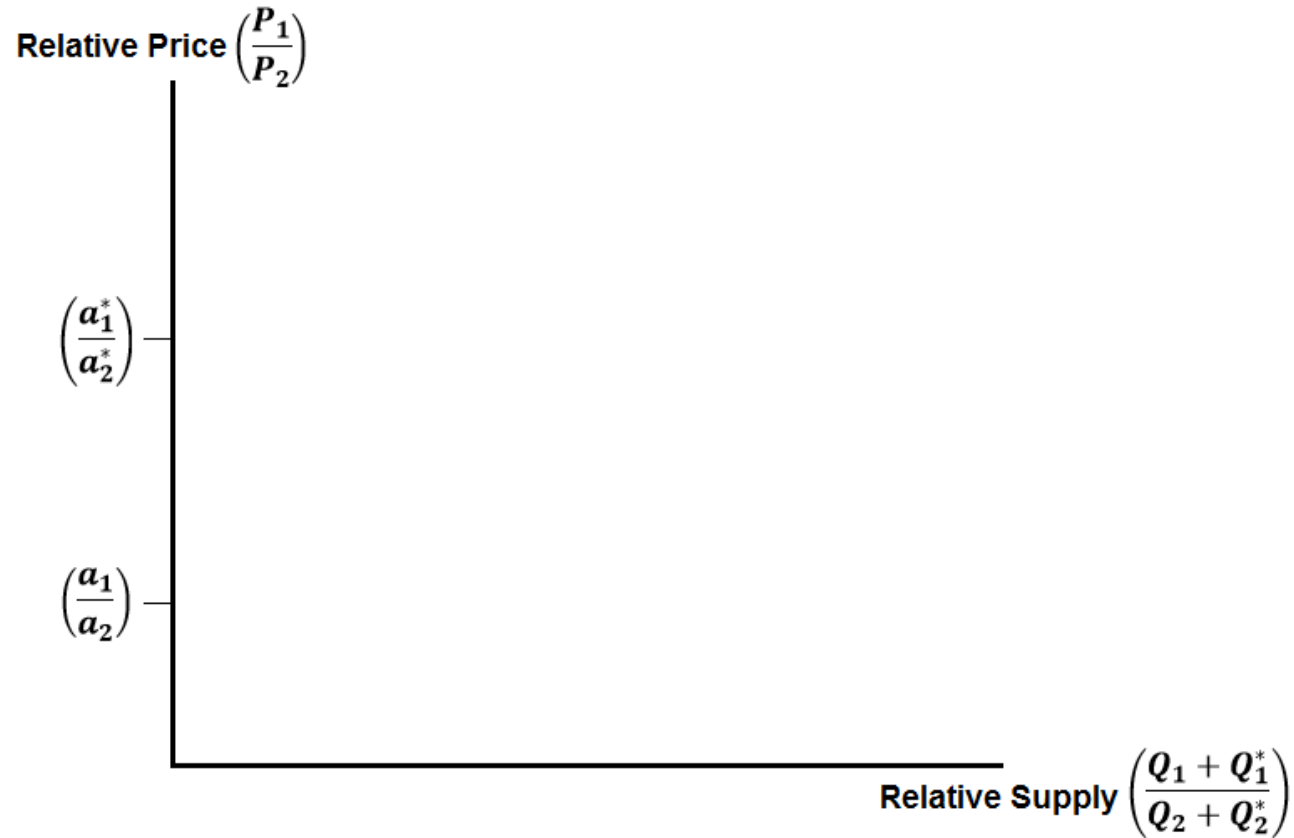


# Constructing Relative Supply Graph

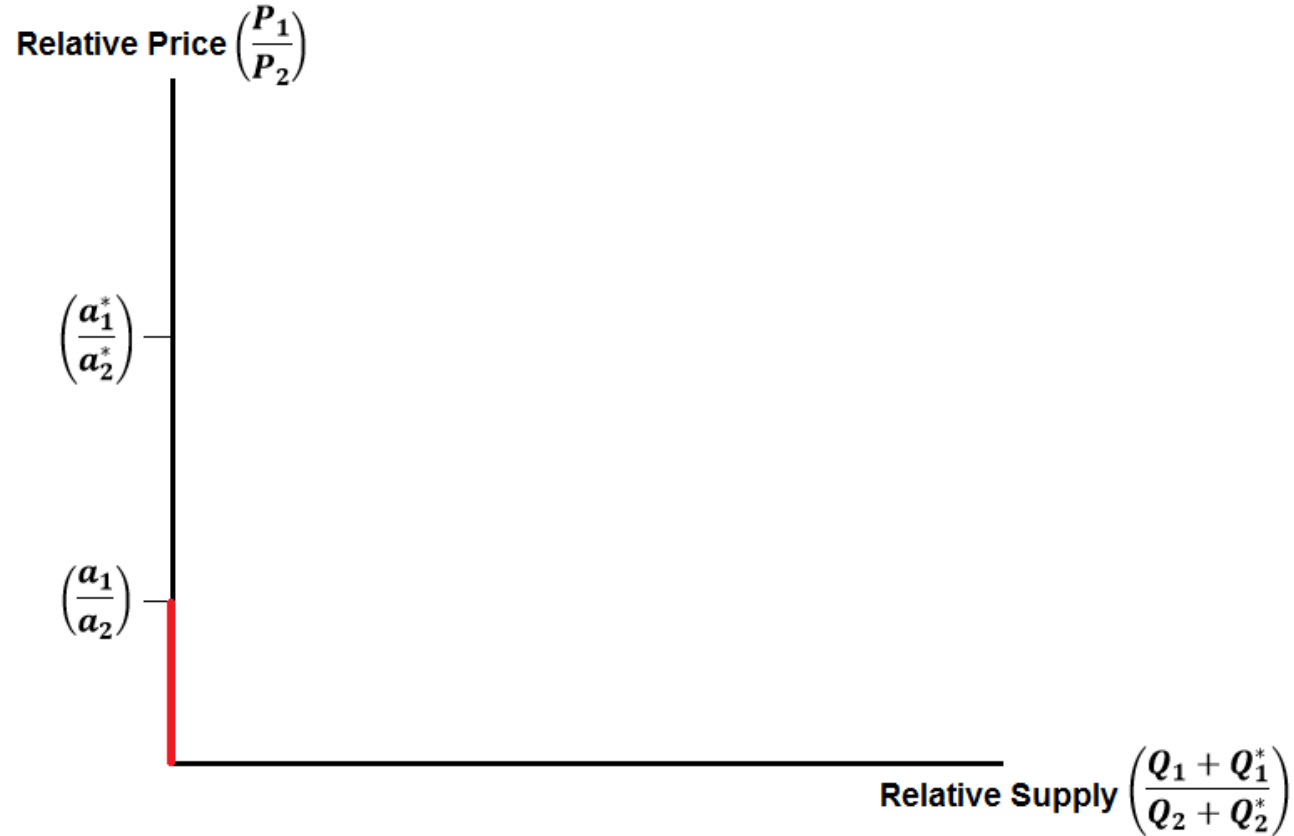
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Assume  $\left(\frac{a_1}{a_2}\right) < \left(\frac{a_1^*}{a_2^*}\right)$ . Therefore Home has comparative advantage in good 1  
(Good 1 has lower opportunity cost in terms of good 2 in Home compared to Foreign).

# Constructing Relative Supply Graph

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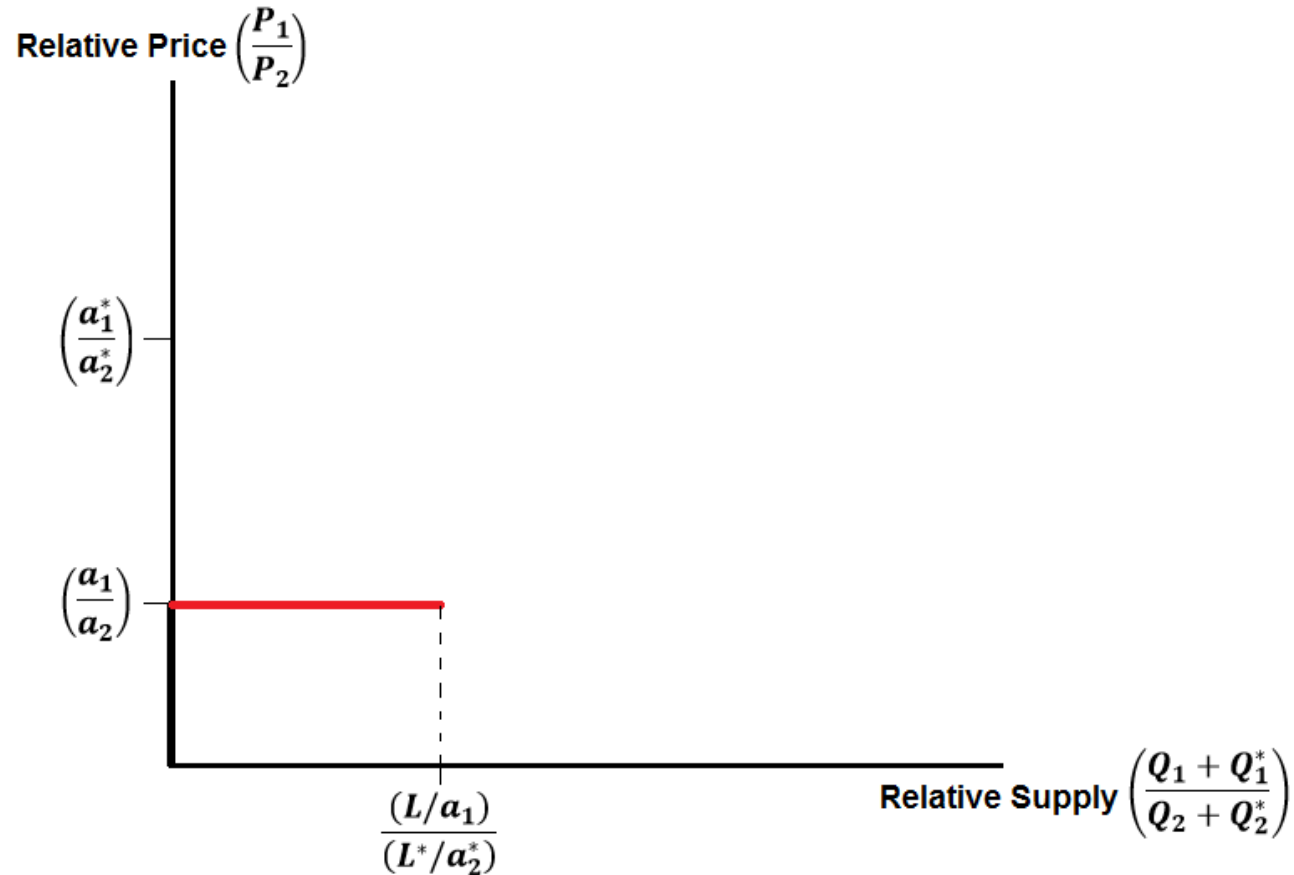


Case 1:  $\left(\frac{P_1}{P_2}\right) < \left(\frac{a_1}{a_2}\right) < \left(\frac{a_1^*}{a_2^*}\right) \Rightarrow$  Neither country will produce good 1

$$RS = \left(\frac{0+0}{Q_2+Q_2^*}\right) = 0, \text{ where } Q_2 = \frac{L}{a_2} \text{ and } Q_2^* = \frac{L^*}{a_2^*}$$

# Constructing Relative Supply Graph

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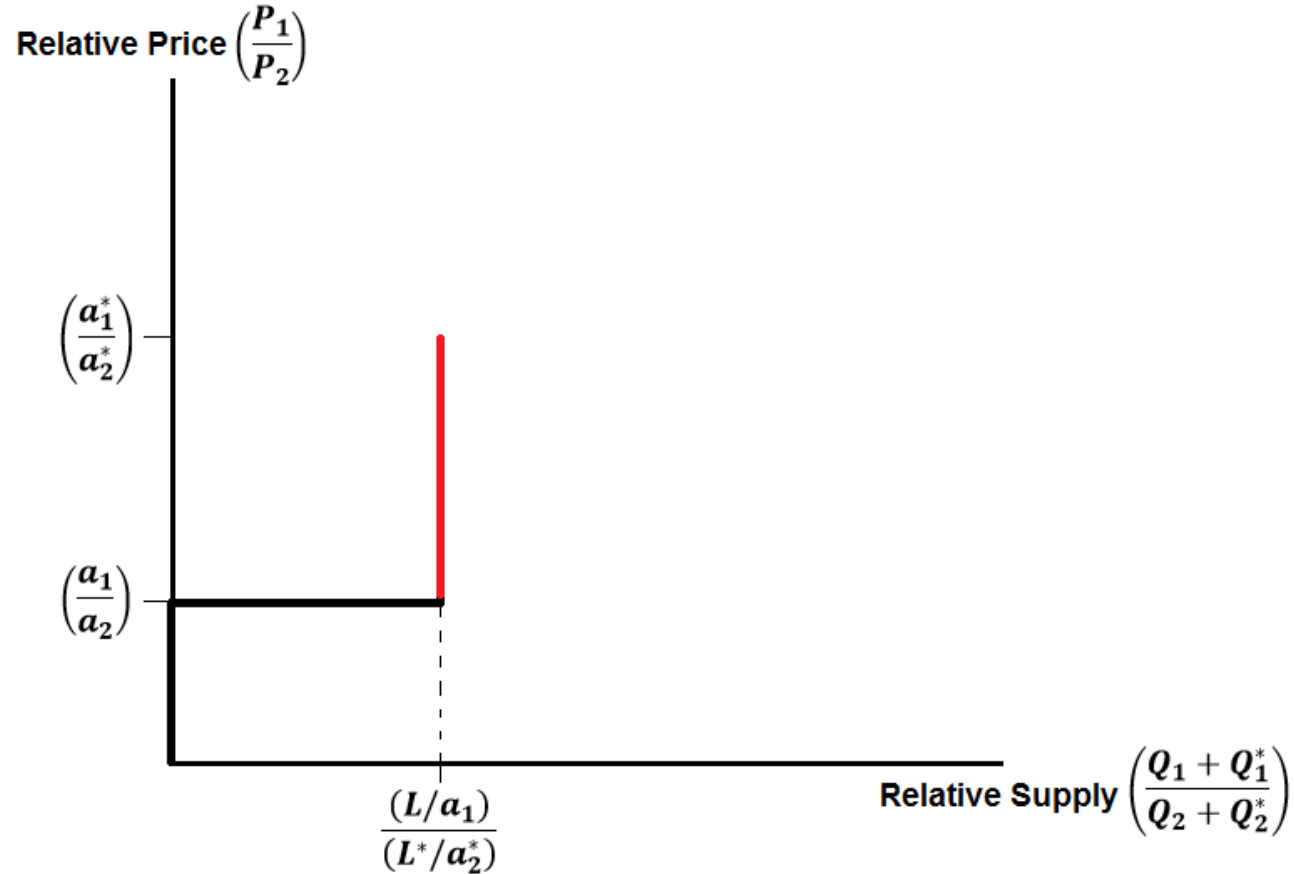


Case 2:  $\left(\frac{P_1}{P_2}\right) = \left(\frac{a_1}{a_2}\right) < \left(\frac{a_1^*}{a_2^*}\right) \Rightarrow$  Home indifferent between producing good 1 and 2

$$RS = \left(\frac{Q_1 + 0}{Q_2 + Q_2^*}\right), \text{ where } Q_1 \in \left[0, \frac{L}{a_1}\right]; Q_2 = \frac{L - a_1 Q_1}{a_2} \text{ and } Q_2^* = \frac{L^*}{a_2^*}$$

# Constructing Relative Supply Graph

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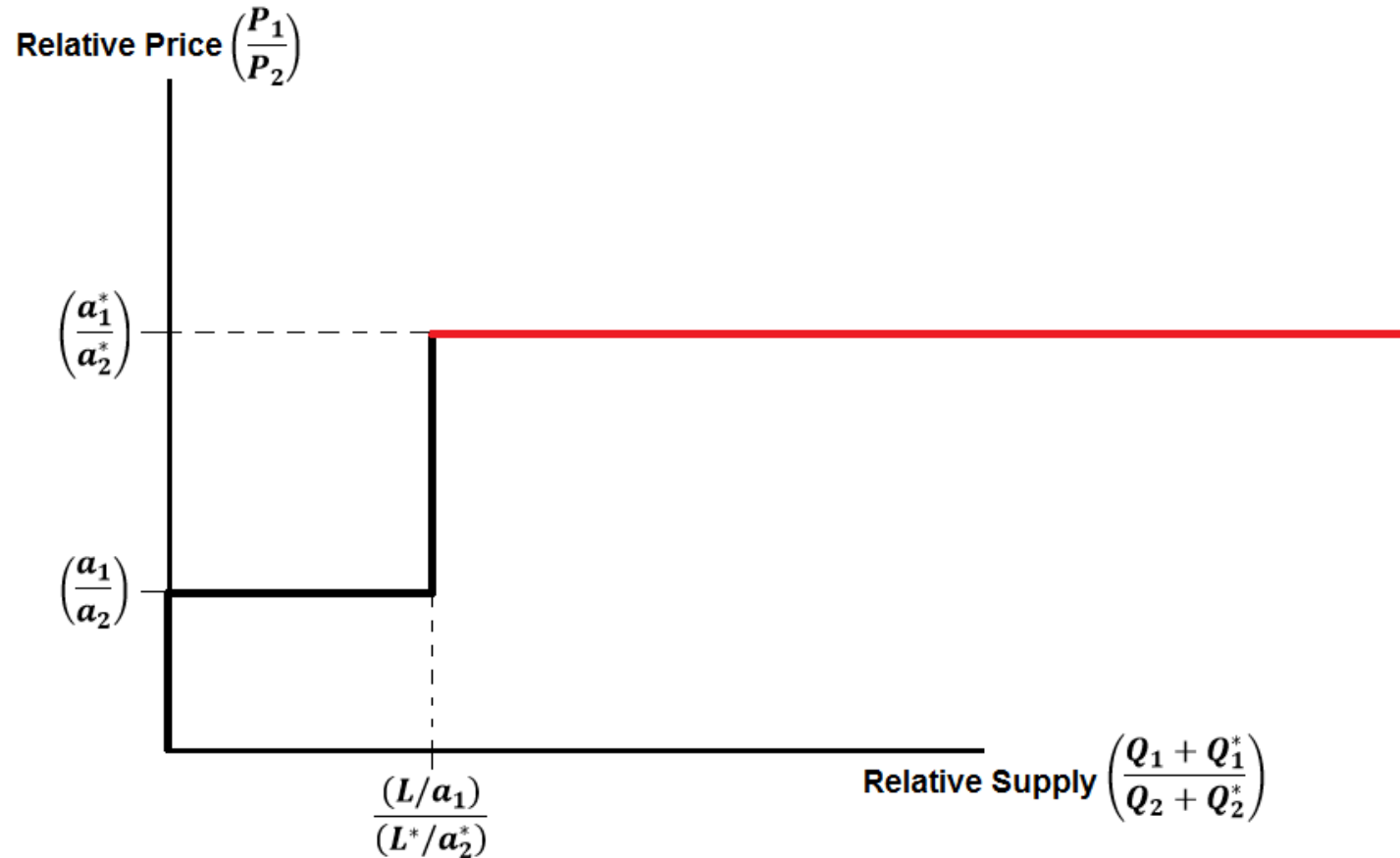


Case 3:  $\left(\frac{a_1}{a_2}\right) < \left(\frac{P_1}{P_2}\right) < \left(\frac{a_1^*}{a_2^*}\right) \Rightarrow$  Home produces only good 1. Foreign produces only good 2.

$$RS = \left(\frac{Q_1 + 0}{0 + Q_2^*}\right), \text{ where } Q_1 = \frac{L}{a_1} \text{ and } Q_2^* = \frac{L^*}{a_2^*}$$

# Constructing Relative Supply Graph

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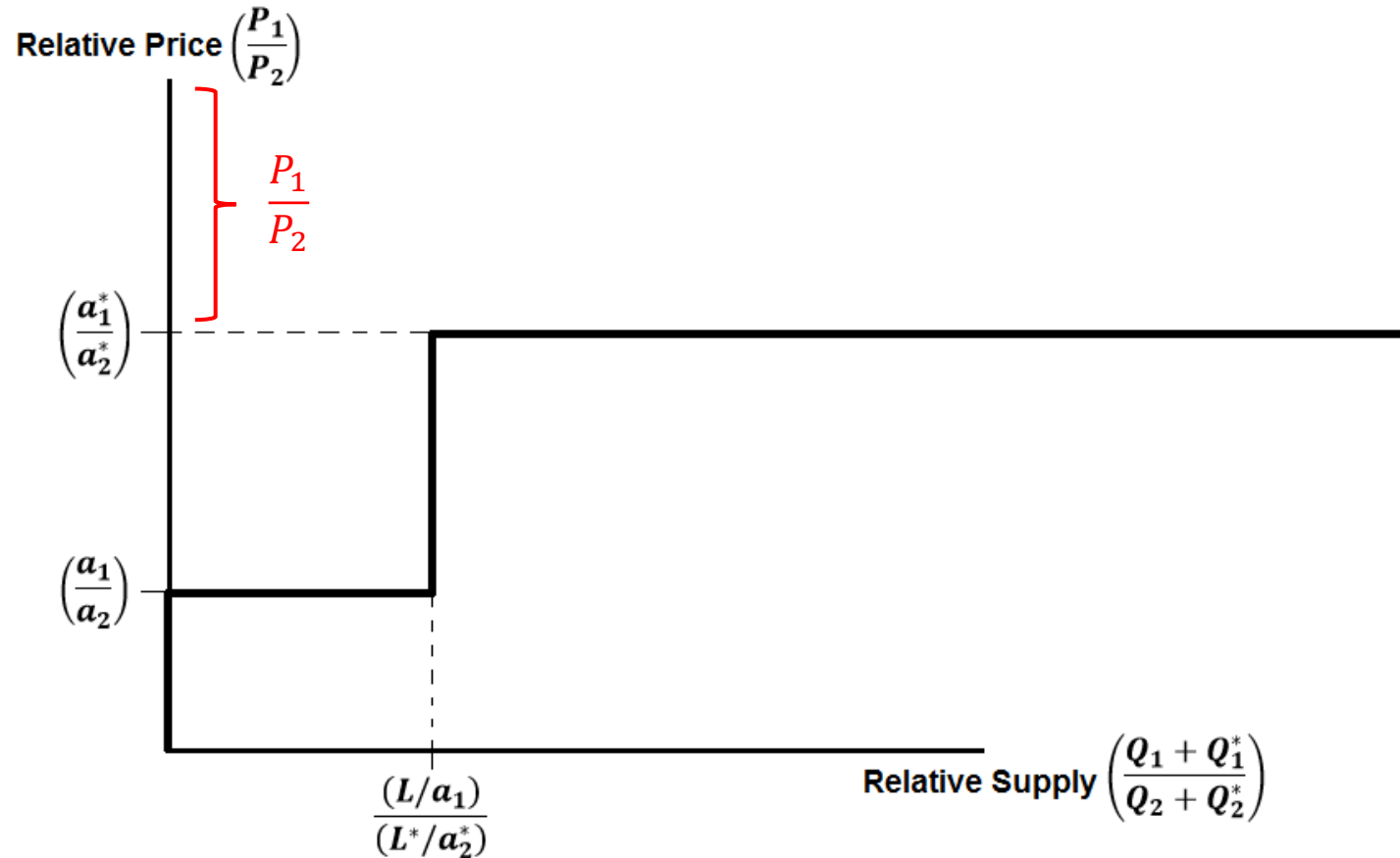


Case 4:  $\left(\frac{a_1}{a_2}\right) < \left(\frac{a_1^*}{a_2^*}\right) = \left(\frac{P_1}{P_2}\right) \Rightarrow$  Foreign indifferent between producing good 1 and good 2.

$$RS = \left(\frac{Q_1 + Q_1^*}{Q_2 + Q_2^*}\right), \text{ where } Q_1 = \frac{L}{a_1} \text{ and } Q_2^* \in \left[0, \frac{L^*}{a_2^*}\right]; Q_1^* = \frac{L^* - a_2^* Q_2^*}{a_1^*}$$

# Constructing Relative Supply Graph

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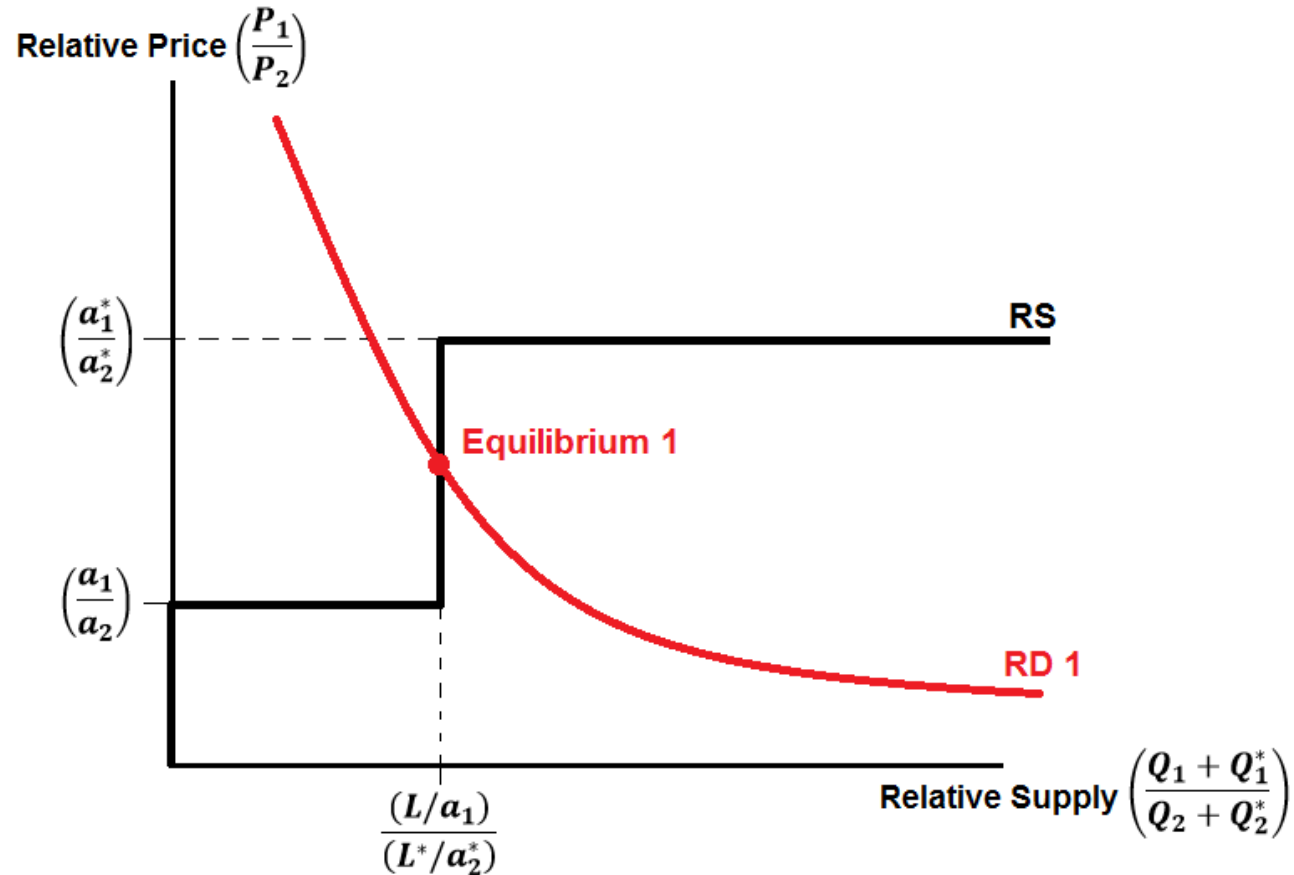


Case 5:  $\left(\frac{a_1}{a_2}\right) < \left(\frac{a_1^*}{a_2^*}\right) < \left(\frac{P_1}{P_2}\right) \Rightarrow$  Neither country will produce good 2

$$RS = \left(\frac{Q_1 + Q_1^*}{0 + 0}\right) = \infty, \text{ where } Q_1 = \frac{L}{a_1} \text{ and } Q_1^* = \frac{L^*}{a_1^*}$$

# Finding Equilibrium using Relative Demand

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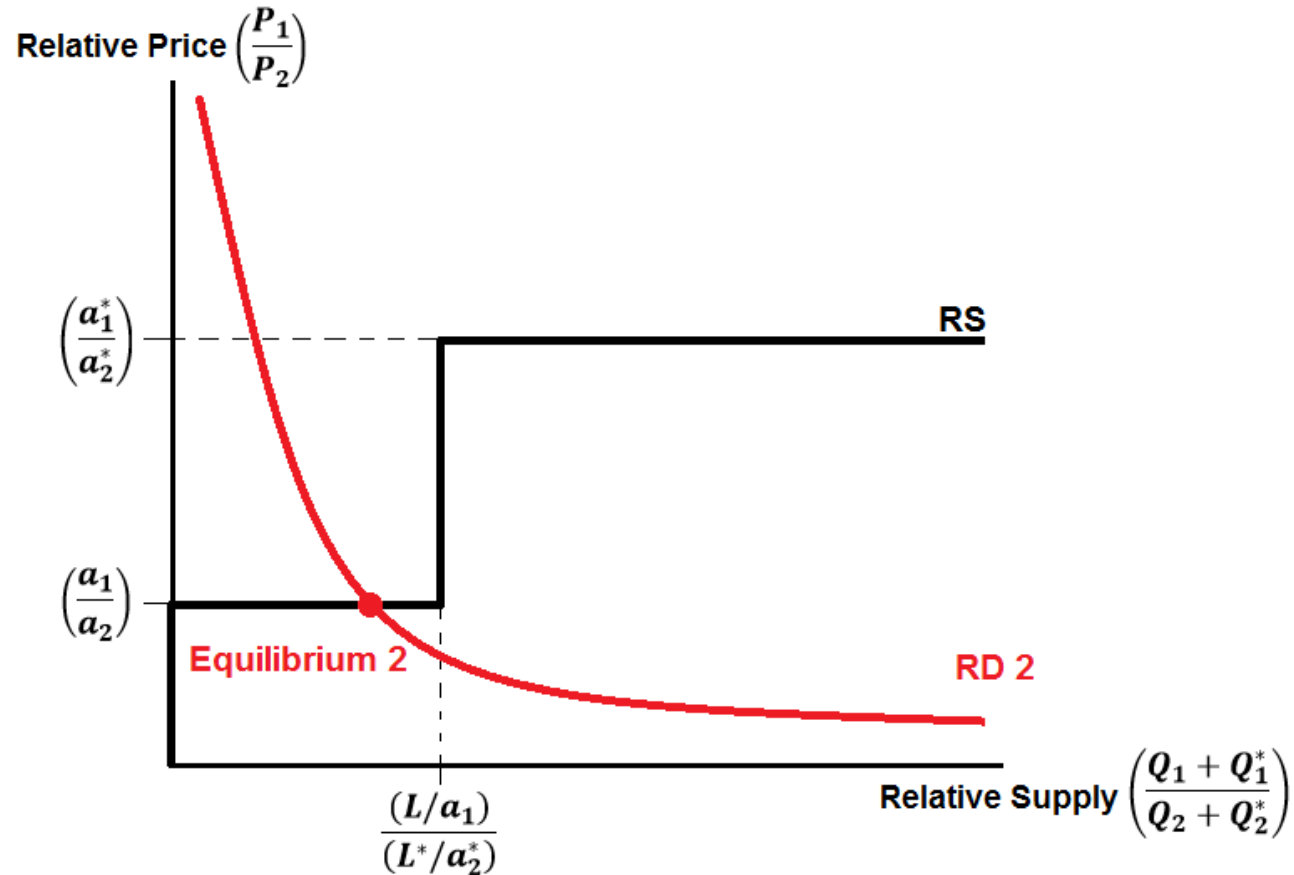


Find equilibrium prices where  $RD = RS$ . Happens at the point **Equilibrium 1**.

Therefore  $\left(\frac{a_1}{a_2}\right) < \left(\frac{P_1}{P_2}\right) < \left(\frac{a_1^*}{a_2^*}\right) \Rightarrow$  Home produces only good 1. Foreign produces only good 2.

# Finding Equilibrium using Relative Demand

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Different RD curves will give different Equilibriums. New RD curve intersects RS at **Equilibrium 2**

$\Rightarrow \left(\frac{P_1}{P_2}\right) = \left(\frac{a_1}{a_2}\right) < \left(\frac{a_1^*}{a_2^*}\right) \Rightarrow$  Home indifferent & produces both goods. Foreign produces only good 2.