

# Computing Market Tightness from the AD and AS Curves

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Goal: determine tightness  $x \rightarrow$  from  $x$  we can infer all other variables in the model.

Household's spending/purchasing decision: (by maximizing utility)

$$\underline{y = y^d(x, p^n(x))}$$

Household's visit/shopping decision: (by matching process)

$$v = y / q(x)$$

$$y = v * q(x)$$

by definition:  $x = v / k \Rightarrow v = x * k$

$$\Rightarrow y = x * q(x) * k$$

link b/w trading probab.  $f(x) = x * q(x)$   
by definition of probabilities (accounting) ordering  $\uparrow$  buying  $\uparrow$

$$\Rightarrow y = f(x) * \underline{k} = \underline{y^s(x) = y}$$

So in the model we always have:

$$y^d(x, p^n(x)) = y^s(x)$$

households  
choose consumption  
to max. utility

trades are governed  
by matching function,  
& capacity supplied

Tightness  $\alpha$  is computed by solving  
the  $AD(\alpha) = AS(\alpha)$  equation

But need to specify a price norm  $p^n(\alpha)$   
first  $\rightarrow$  we obtain  $\neq \alpha$ , and  $\neq$   
properties, for different price norms.