Computing the Aggregate Supply Curve

Pascal Michaillat
https://pascalmichaillat.org/c2/

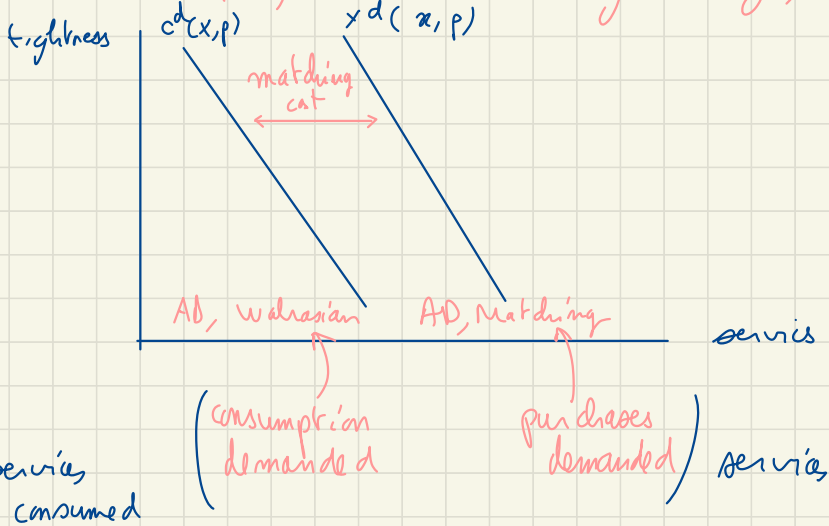
Aggregate demand:

- "notional" demand: demand for consumption
  - computed by maximizing utility, subject to budget constraint
- "effective" demand: demand for | purchases / transactions
  - purchases > consumption because some services must be allocated to matching w/ others
  - each visit costs $\rho > 0$ services
- aggregate demand: $y^d(x, p)$, based on transactions

$$y^d(x, p) > c^d(x, p)$$

$$\boxed{y^d(x, p) = [1 + \tau(x)] \cdot c^d(x, p)}$$

- $\tau(x)$ matching wedge, > 0 b/c $\rho > 0$



Aggregate supply:

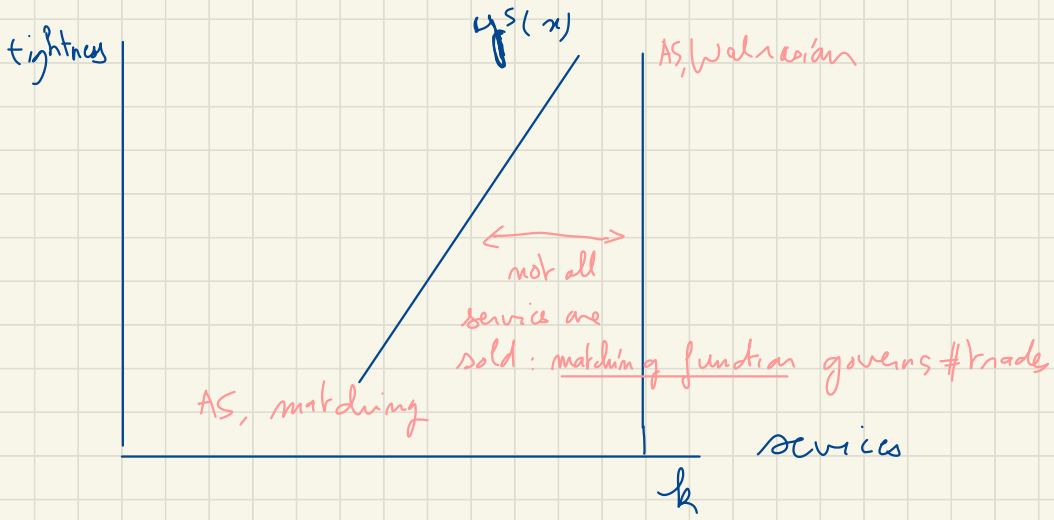
- "notional" aggregate supply: ≠
  - amount of service that households would like to sell (at given price)
- "effective" aggregate supply: amount of service sold (and paid) given tightness
  - → service transacted / traded
  - → service sold given matching structure

→ notions of AD & AS are consistent. both measure service that are traded (so will be able to use equality of AD & AS at any time)

Expression for AS curve:

$$y^s(x, p) = \underbrace{f(x) \cdot k}_{\text{selling probability}} = y^s(x)$$

AS: amount of service sold given matching structure & amount of service brought / supplied to the market by sellers (households)



Both AD & AS curves represent traded/transacted services.