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Beveridge Curve Shifts across Countries since the Great Recession

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by Hobijn and Sahin

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Beveridge Curve

$$s_t(u_t)(1 - u_t) = m_t(u_t, v_t)$$

Beveridge Curve

$$s_t(u_t)(1 - u_t) \underset{-}{=} m_t(u_t, v_t) \underset{+}{+}$$

Beveridge Curve

$$s_t \underset{-}{(u_t)} (1 - u_t) = m_t \underset{+}{(u_t, v_t)} \underset{+}{}$$

$$\Rightarrow \left. \frac{du_t}{dv_t} \right|_{s_t, m_t} < 0$$

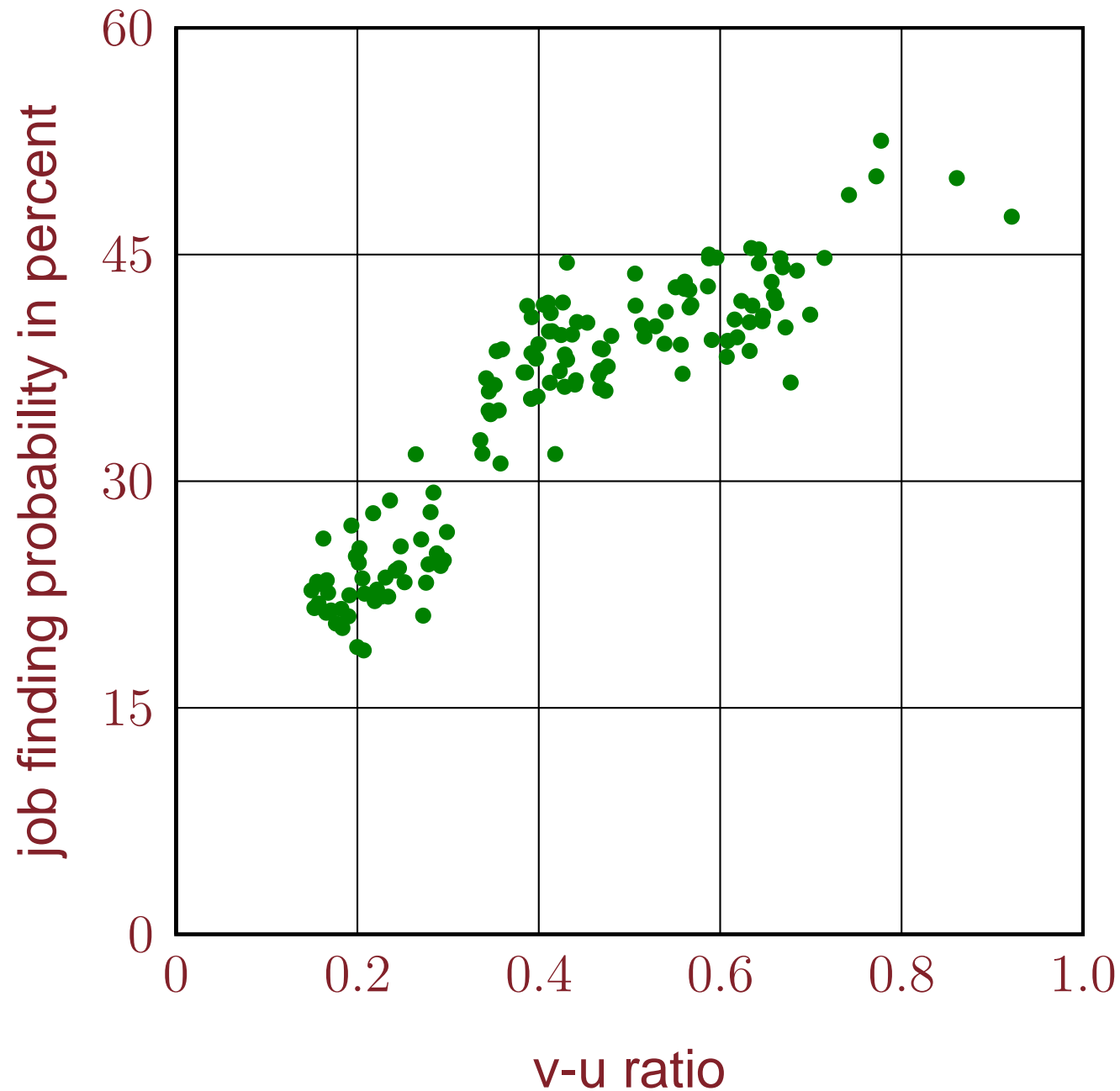
- outward shifts in the Beveridge curve attributed to two sources
 - ▷ increase in s_t
 - ▷ decrease in m_t

- maintained assumptions:
 - ▷ no movement in and out of the labor force (addressed in paper)
 - ▷ only unemployed workers search for jobs

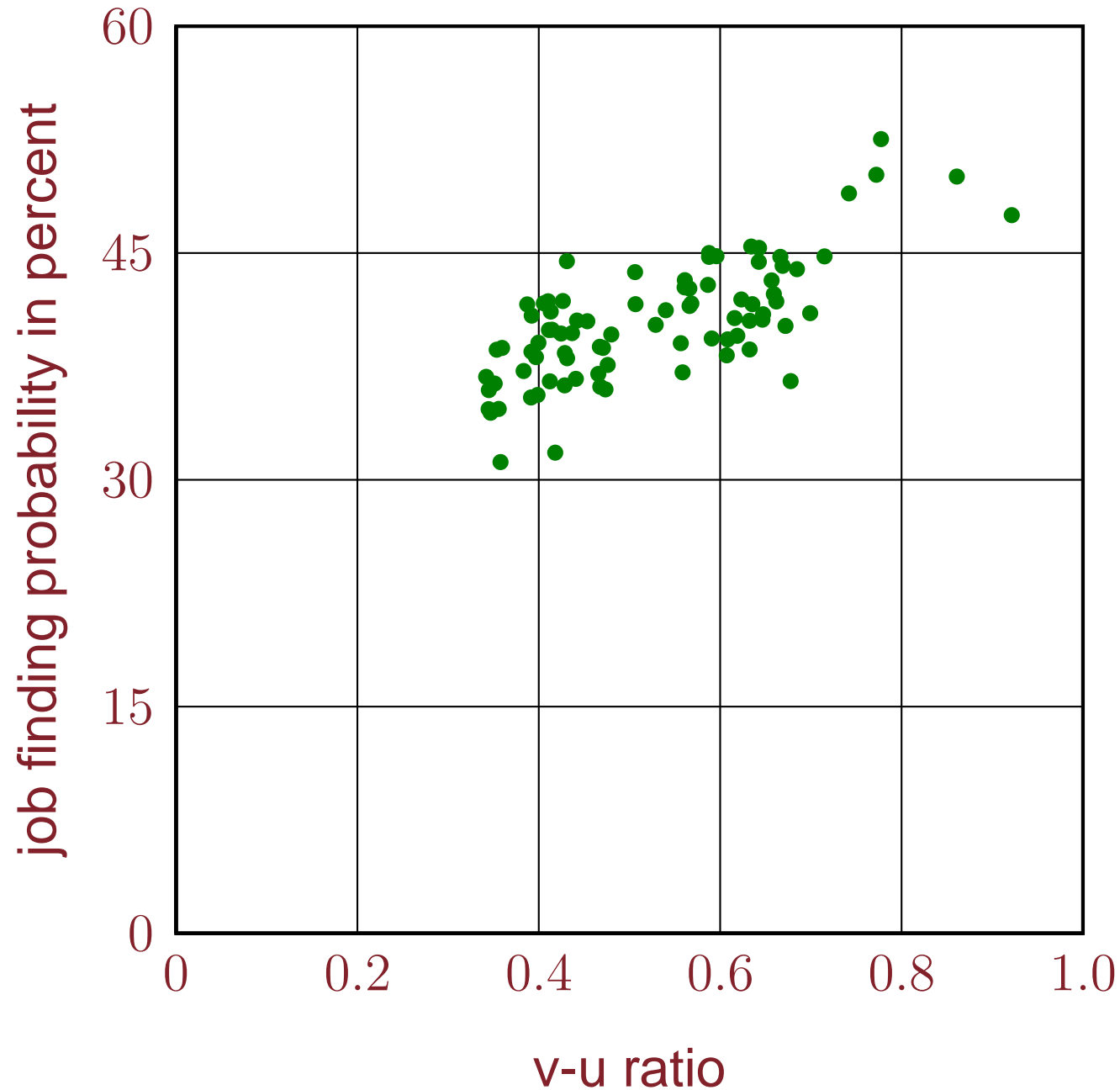
Matching Function $m_t(u_t, v_t)$

- matching function is analogous to production function
 - ▷ production function Cobb-Douglas to match Kaldor facts
 - ▷ matching function Cobb-Douglas for convenience?

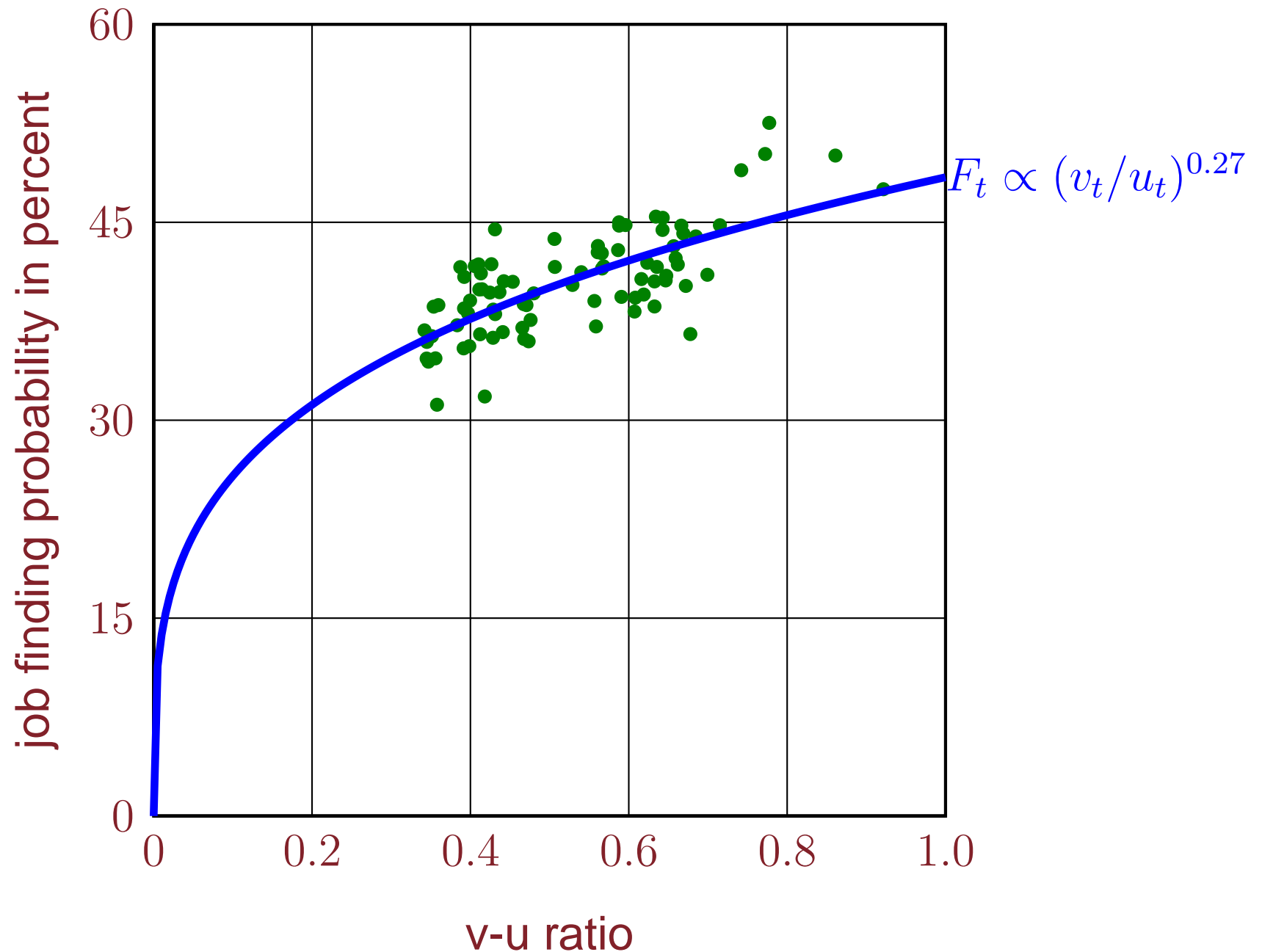
U.S. Matching Function 2000-2012



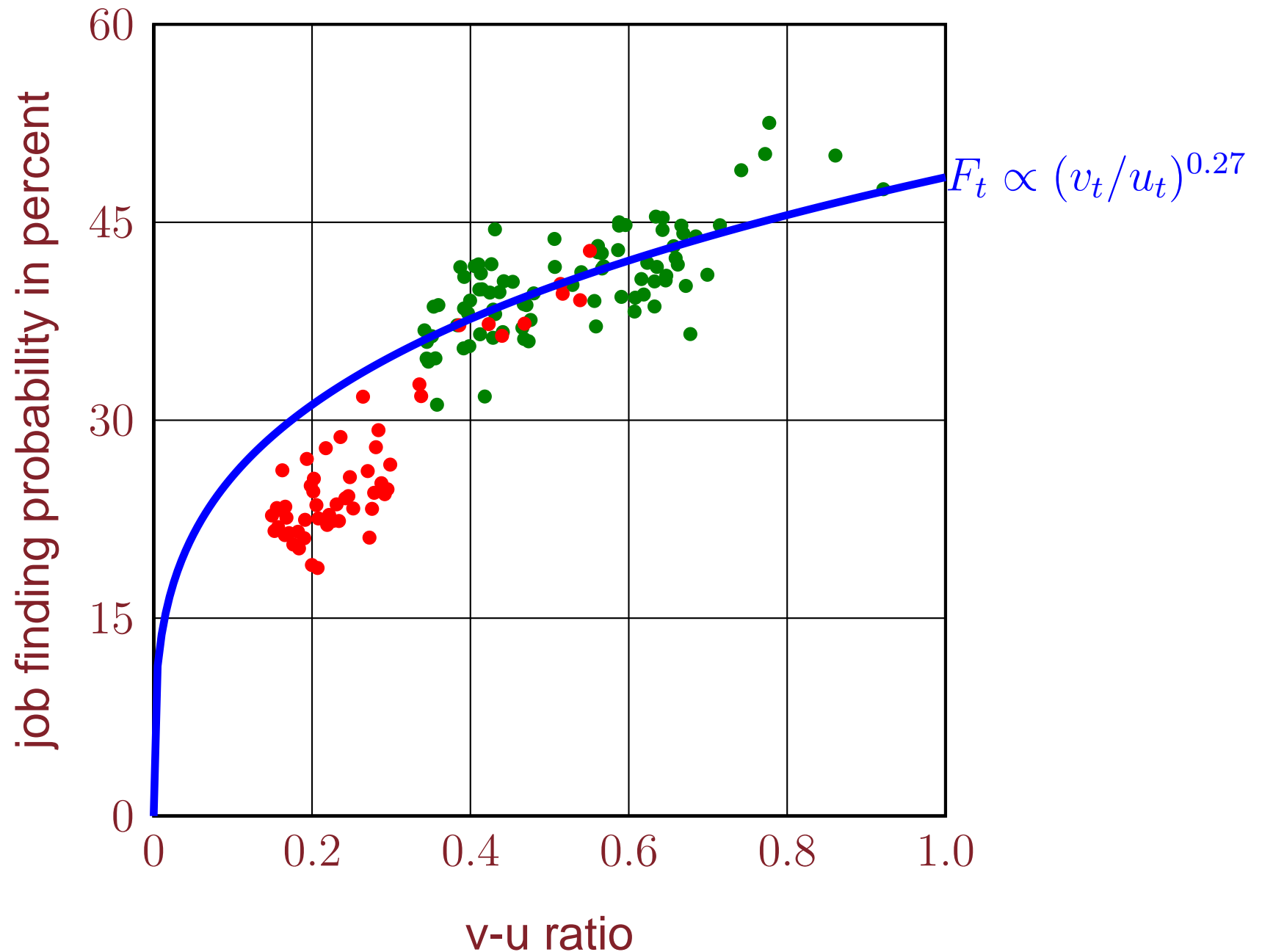
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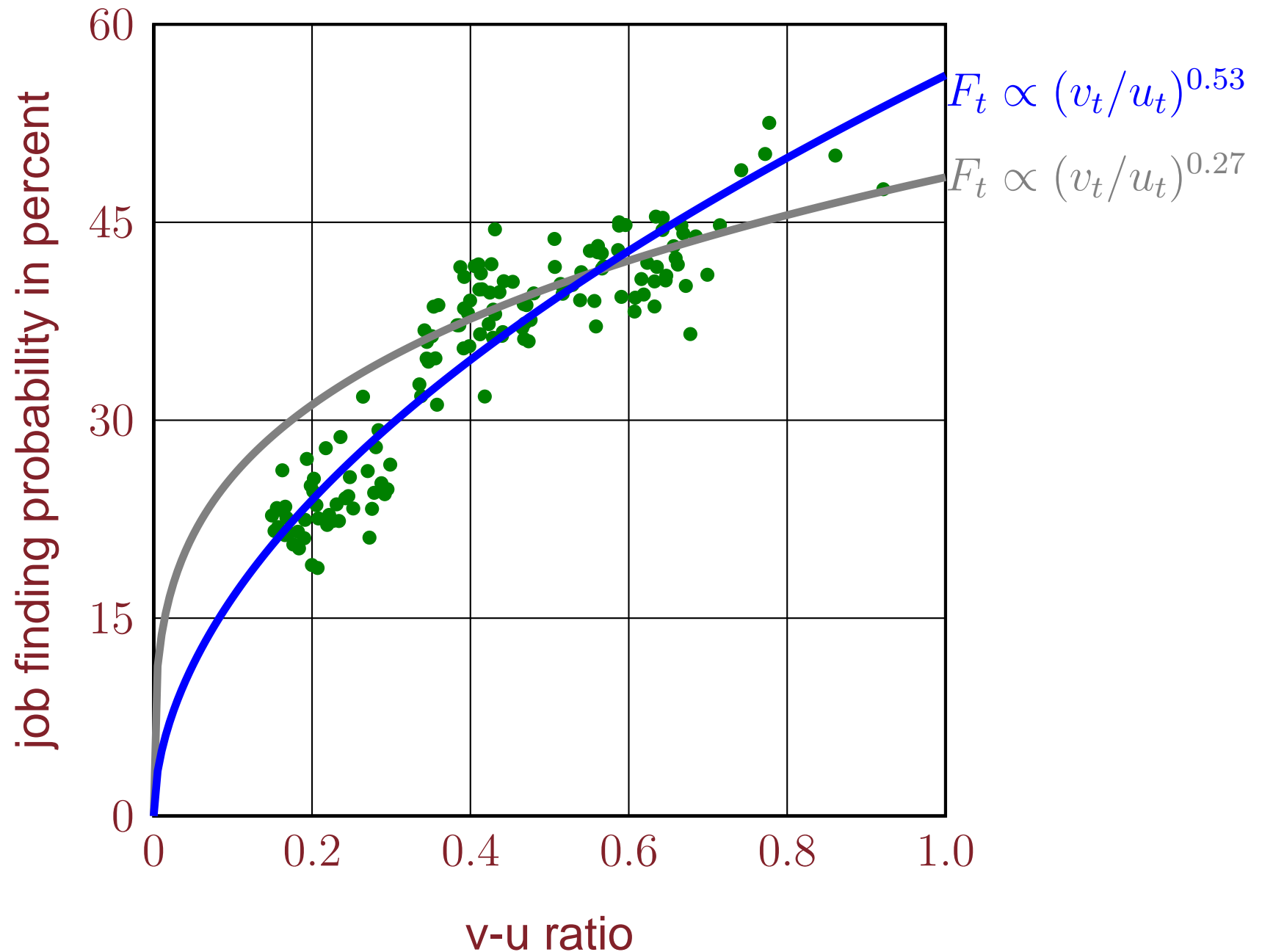
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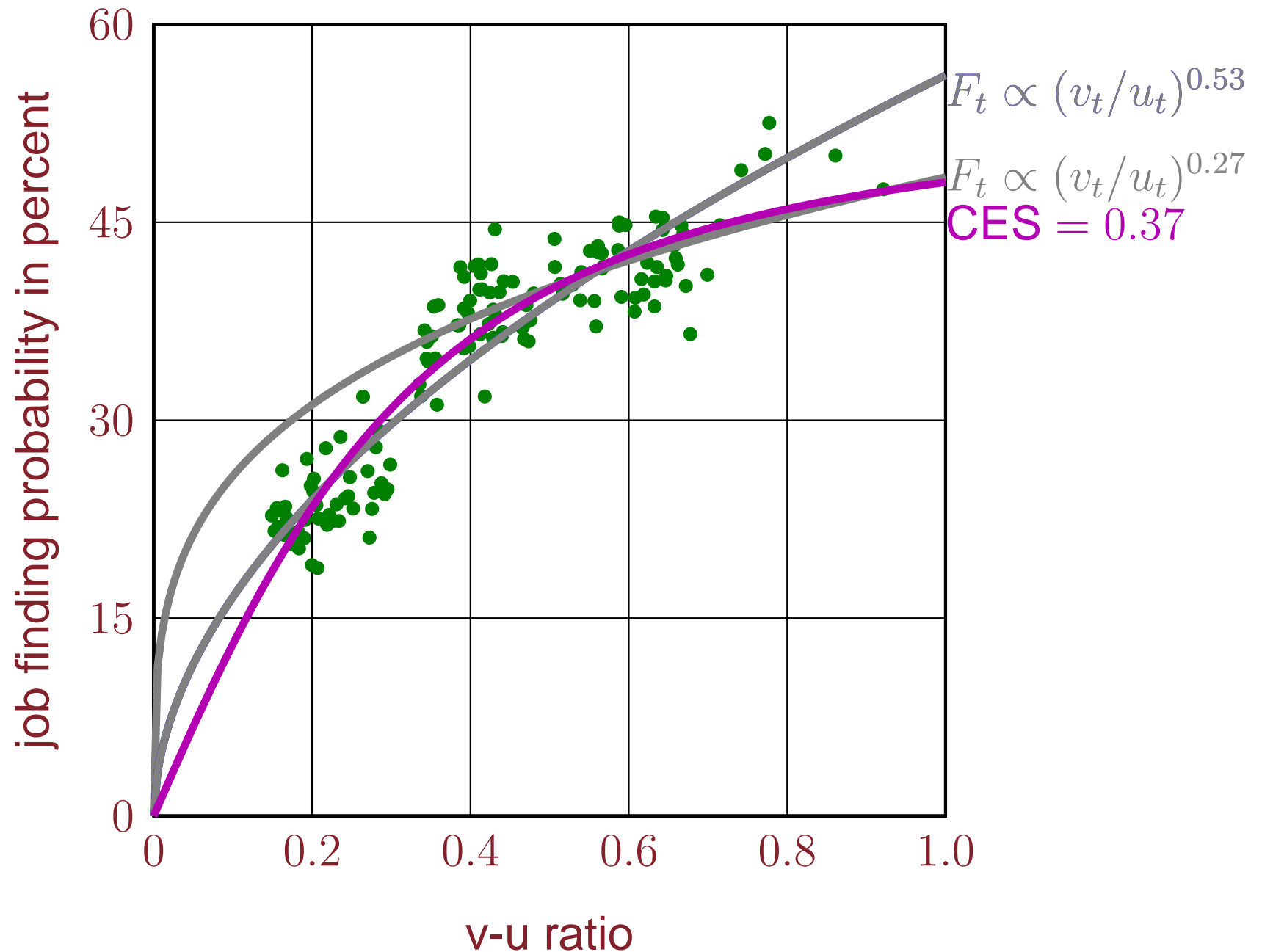
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- matching function shocks are analogous to TFP shocks
 - ▷ TFP shocks now largely viewed as model mis-specification
 - ▷ matching function shocks are reduced form for something
 - geographic or skill mismatch?
 - shifts in labor supply?

 - ▷ not clear how much we can tell just from aggregate data

Separation Rate $s_t(u_t)$

- separation rate is normally decreasing
 - ▶ separations to unemployment plus separations to a new job
 - U.S.: measure directly from JOLTS data
 - OECD: infer from job tenure data
 - ▶ this is not the object that we want to measure
- separation rate has fallen unusually much in the U.S.
 - ▶ partially offsets the decline in matching efficiency

Other OECD Countries

- decrease in match efficiency

- ▷ ~~Norway (not much increase in unemployment rate)~~
- ▷ Portugal ⇒ housing
- ▷ Spain ⇒ housing
- ▷ UK ⇒ housing

Other OECD Countries

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□ increase in separation rate

- ▶ Portugal (layoffs due to austerity measures)
- ▶ Sweden (extension of UI benefits in 2007)

□ decrease in separation rate

- ▶ Spain (deterioration of the workings of the labor market)

Comments

- ❑ is reduced-form matching function the best way to model mismatch?
 - ▶ shameless plug: Shimer (2007) “Mismatch” AER
- ❑ focus on Beveridge curve is misleading
 - ▶ substantive analysis looks at s_t and m_t separately
- ❑ insurmountable data limitations?
 - ▶ poor measure of vacancies
 - ▶ no direct measure of separations to unemployment
 - ▶ no data for Iceland, Ireland, Greece, Denmark, NZ, Mex, Lux
- ❑ conclusions are based on story-telling

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