Discusssion of "Experience Matters"

Lutz Hendricks

UNC

July 12, 2012

Paper Outline

1. $w(t)$: experience wage profiles are "flatter" in poorer countries.
   - $w(20)/w(0)$ – US: $+130\%$, IND: $+50\%$.
2. $w(t) \rightarrow h(t)$: converting wage profiles into human capital profiles.
   - $h(t)/h(0) = w(t)/w(0)$.
   - $h(0) = 1$
3. $h(t) \rightarrow L$: development accounting.
   - Experience is as important as schooling.

$w(t) \rightarrow h(t)$

- Take a text-book Ben-Porath model.
- Calibrate it.
- Use it to measure $h(t)$ for 3 countries.
- I abstract from schooling.

A Ben-Porath Model

- LMPQ: $h_0 = 1$
- Heckman, Lochner, Taber (1998 RED):

$$h_{t+1} = (1-\delta)h_t + Ah_t^{\alpha} l_t^{\beta}$$

- Measured wage:

$$w_t = \omega h_t (1 - l_t)$$

- Aggregate labor input per worker:

$$L = \sum_{t=0}^{T} N_t h_t (1 - l_t)$$

Parameters

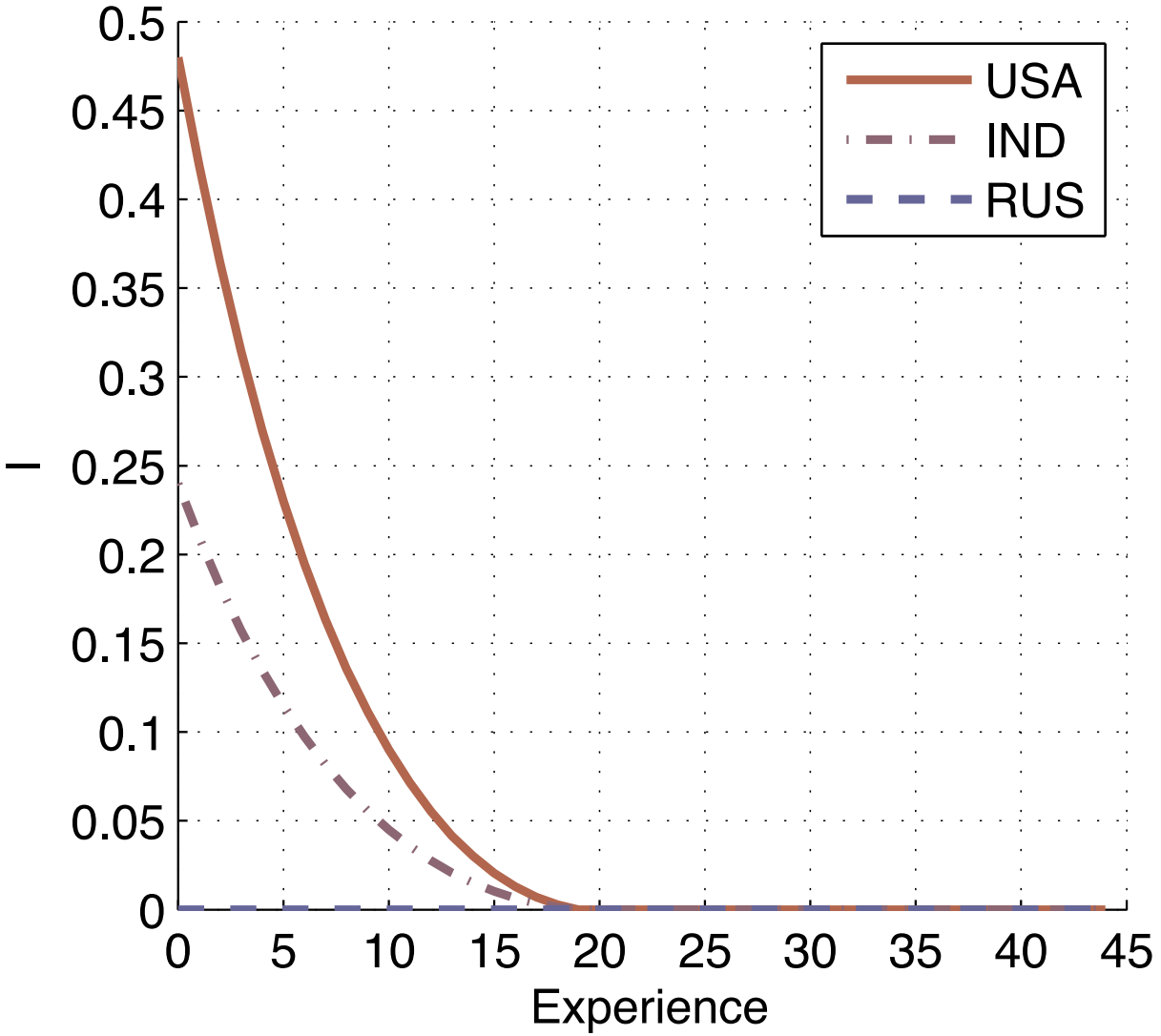
- Heckman, Lochner, Taber (1998 RED):
  - $\alpha = 0.945$. $\beta = 0.832$. $\delta = 0$
  - l_t: declines from 0.48 to 0 over first 20 years.
- $A = 0.05$:
  matches $w_{20}/w_0 = 2.3$ (LMPQ's value for USA).

Experiment

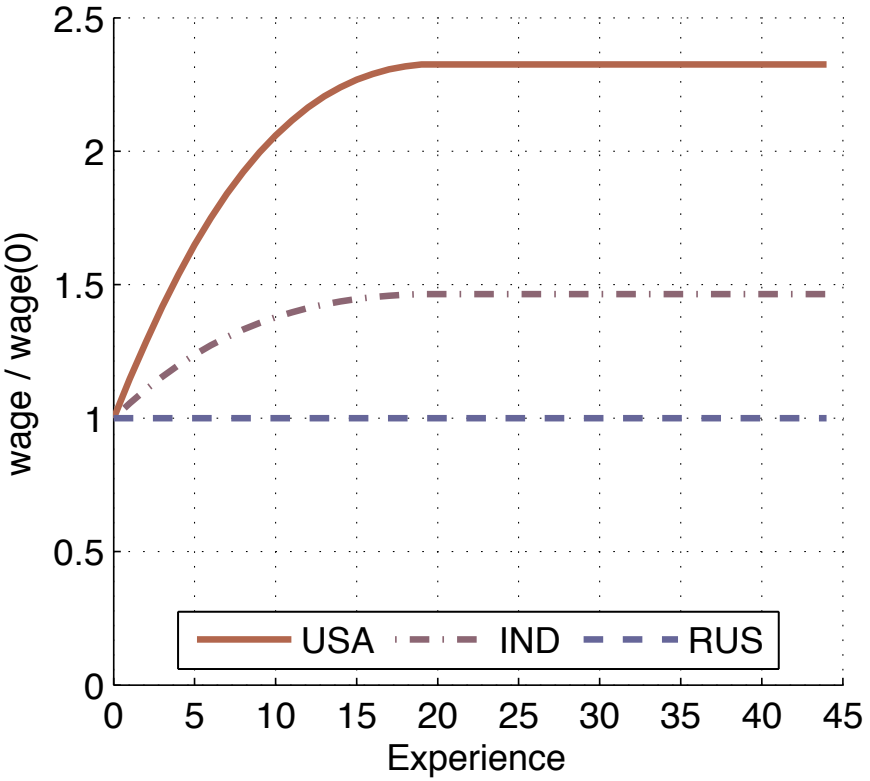
Countries differ only in job-training time.

1. USA: l_t from Heckman, Lochner, Taber
2. India: l_t set to 50% of HLT
3. Russia: $l_t = 0$

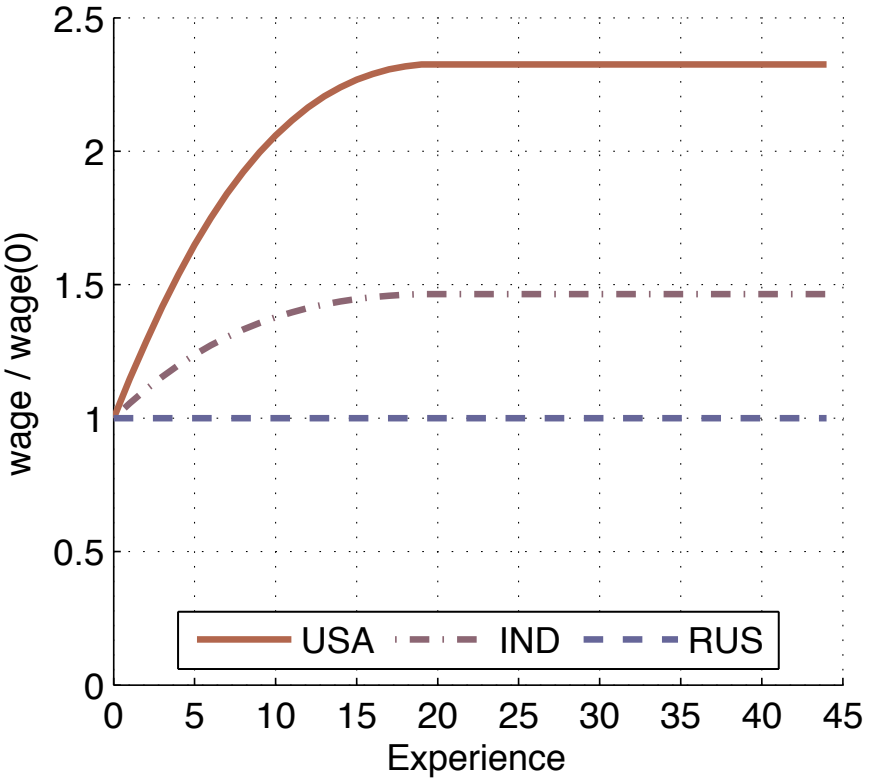
Investment

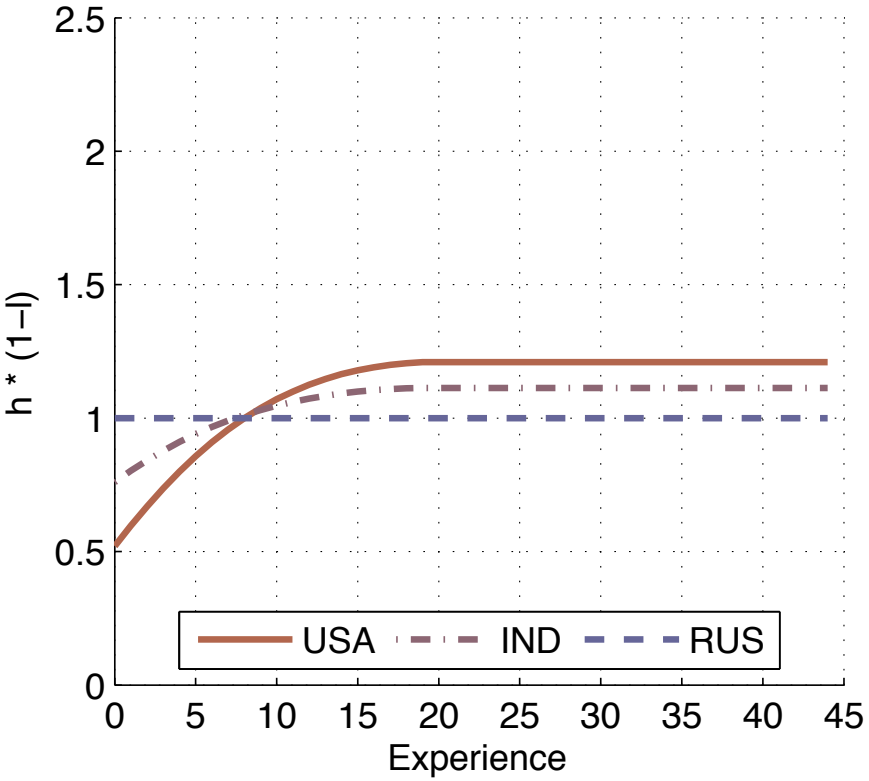

0.5
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
0
5
10
15
20
25
30
35
40
45
Experience
USA
IND
RUS

Implications

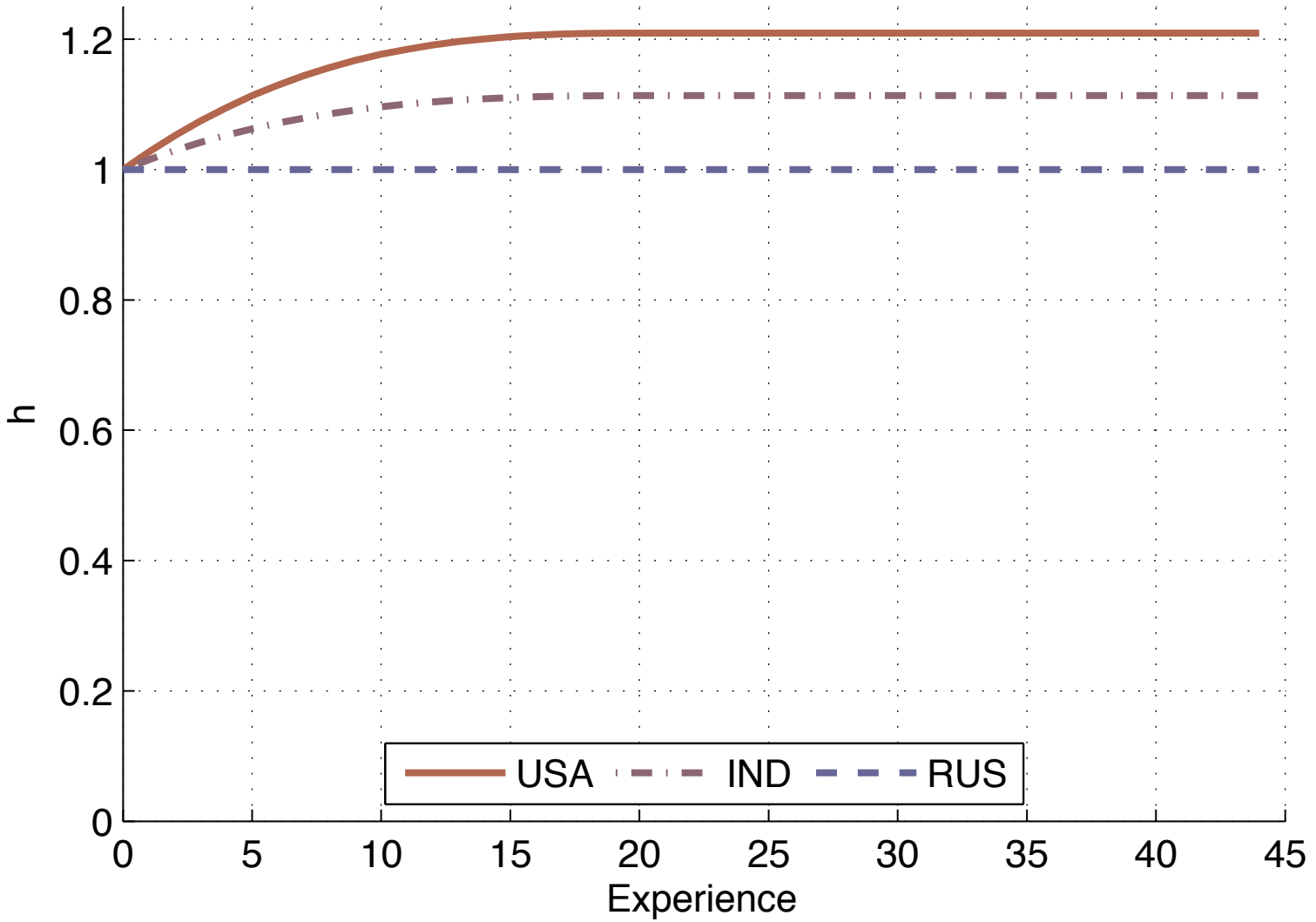


Implications

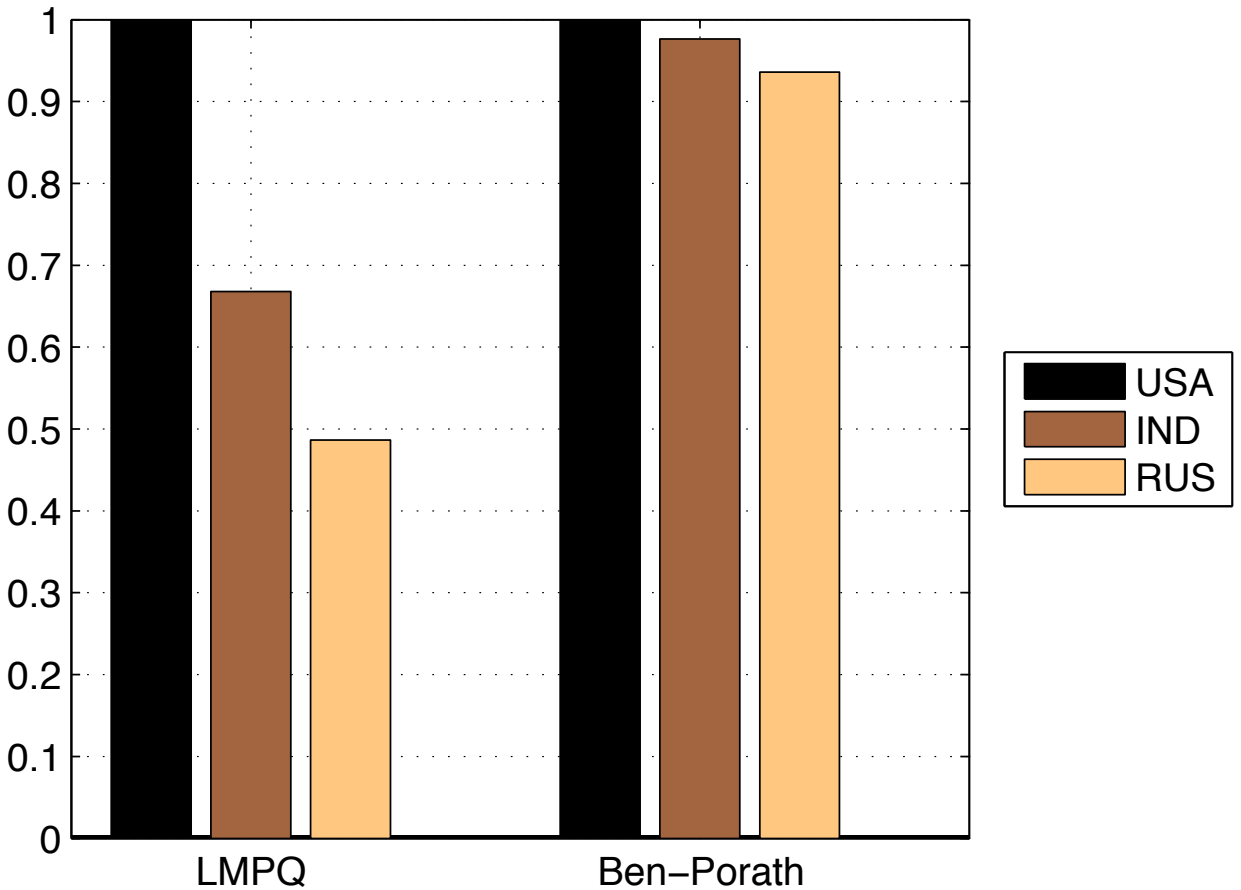




Implications



Average Labor Input



LMPQ: $L = \sum_{t=0}^{T} N_t \frac{h_t(1-l_t)}{h_0(1-l_0)}$. Ben-Porath: $L = \sum_{t=0}^{T} N_t h_t (1 - l_t)$

Why so small?

- Why does the Ben-Porath model imply small differences in H across countries?
- Kuruscu (2006 AER): training has small effects on lifetime income.

Where does the difference come from?

- LMPQ: $w_t = \omega h_t$
  - Workers do not pay for learning
- Ben-Porath: $w_t = \omega h_t(1 - l_t)$
  - Workers pay for learning

A Suggestion

- Needed: a theory that converts wage profiles into human capital profiles.
- One idea: Calibrate a Ben-Porath model for each country.
  - Countries differ in training costs or TFP.
- Additional benefits:
  - Avoid calibration that relies on $w(0)$.
    For a country with 8 years of schooling: $t = 0$ is age 14!
  - Model helps to identify cohort and time effects.