

## SACHS & WAHNER, "FUNDAMENTAL SOURCES" (1997)

LHS variable is  $Y/pop$  - growth

Framed in terms of conventional growth models (e.g. Solow)

so hypothesize convergence (low initial  $Y/L \rightarrow$  higher growth)

but also hypothesize variation in LHS  $Y/L$ :

- Tropical climate (disease)
  - Landlocked (trade is harder)
- } exogenous

+ Instn'l quality ?

- Natural-resource exports in GDP ?

↪ "Resource curse"

1) More rentseeking, corruption (move to steal)

2) Shifts resources away from sectors (e.g. mfg)  
with high "learning by doing," or + externalities

# SACHS & WARNER (cont.)

(2)

## Demographics

Standard models assume  $L = \text{Pop}$ , so

$$Y/\text{Pop} = Y/L$$

Reality.  $\frac{L}{\text{Pop}}$  varies

When  $L/\text{Pop} \uparrow$ ,  $Y/\text{Pop} \uparrow$

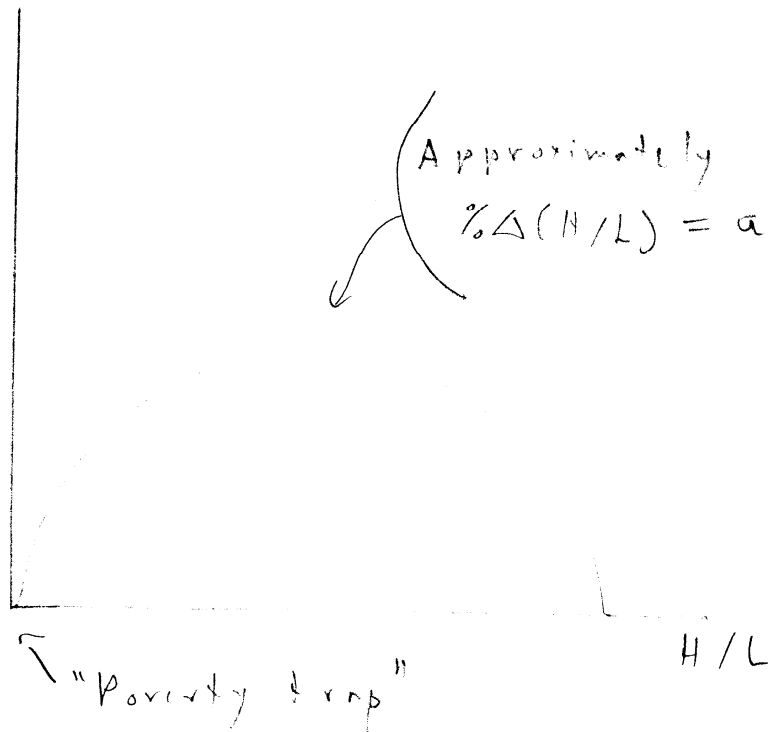
"Demographic dividend"

"Dependency ratio"

## Human-capital accumulation

Hypothesis:

Rate of  
growth  
in  $H/L$



Approximately

$$\% \Delta(H/L) = a + b(H/L) - c(H/L)^2$$

Results

TABLE 2—CROSS-COUNTRY GROWTH REGRESSION  
 (DEPENDENT VARIABLE = GROWTH PER CAPITA,  
 1965–1990; 83-COUNTRY MEAN = 0.33 PERCENT)

Independent variable	Estimated regression coefficient
lnGDP per economically active person in 1965	-1.5 (-6.5)
Share of years open, 1965–1990	10.9 (3.7)
GDP in 1965 times share of years open	-1.1 (-3.0)
Growth of economically active population – population growth	0.7 (1.9)
Central government budget balance, 1970–1990	0.11 (5.2)
Institutional quality index (1980)	0.32 (3.8)
Tropics	-0.8 (-3.0)
Landlocked	-0.6 (-2.3)
Share of natural-resource exports in GDP, 1970	-3.9 (-4.0)
Life expectancy	0.3 (2.8)
Life expectancy squared	-0.0026 (-2.3)
Adjusted $R^2$ :	0.84
Number of countries:	83
Standard error:	0.77