



# Early Child Development an economists view

Prof. dr. Jacques van der Gaag

International Step by Step Association  
Budapest, 2008



# Outline

- A new way for measuring development  
(The Human Development Index)
- The Millennium Development Goals (MDG's)
- From Early Child Development to Human  
Development
- The economic benefits of ECD

# Human Development Index 2005

**A long and healthy life**

Life expectancy at birth



Life expectancy index

**Knowledge**

Adult literacy rate

Adult literacy index



Gross enrolment ratio (GER)

GER index



Education index



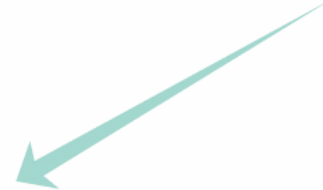
**A decent standard of living**

GDP per capita (PPP US\$)



GDP index

**Human development index (HDI)**



Change: Gross enrolment ratio introduced

# The Millennium Declaration

- September 2000, 147 heads of State and Government and 189 nations in total signed the Millennium Declaration
- Progress tracked through
  - 8 Goals
  - 16 Targets
  - 48 Indicators



# The Millennium Development Goals

1. Eradicate extreme poverty and hunger
2. Achieve universal primary education
3. Promote gender equality and empower women
4. Reduce child mortality
5. Improve maternal health
6. Combat HIV/AIDS, malaria and other diseases
7. Ensure environmental sustainability
8. Develop a global partnership for development

# From Human Development to MDG's

## Key capabilities for Human Development

- Living a long and healthy life
- Being educated
- Having a decent standard of living
- Enjoying political and civil freedoms

Goals 4,5 and 6

- Reducing child mortality

~~• Improving maternal health~~

Goals 2 and 3

- Combating major diseases

~~• Universal primary education~~

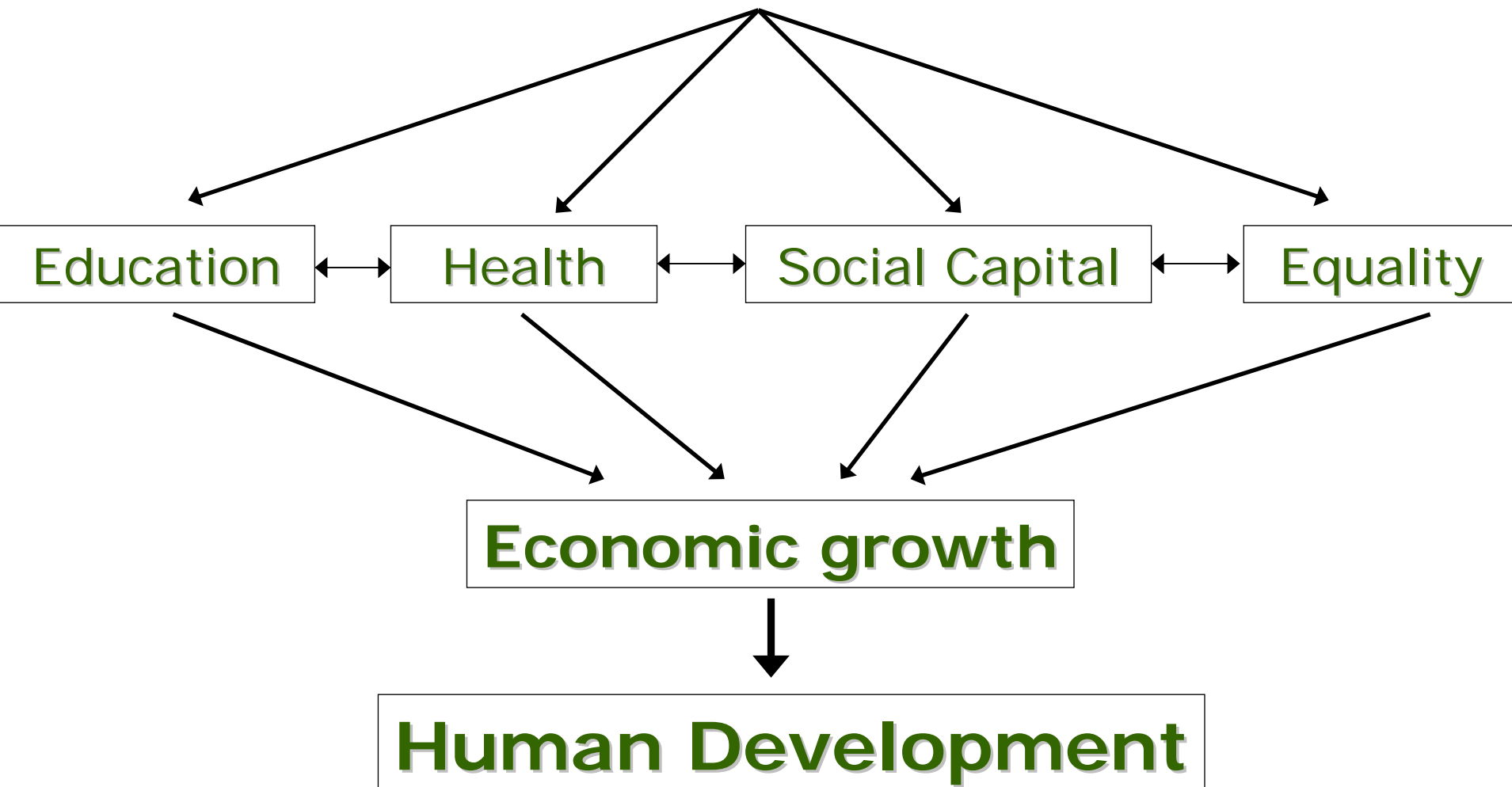
Goal 1

- Promoting gender equality

- Reducing poverty and hunger
- Empowering women

Not a Goal but an important global objective included in the Millennium Declaration

# Early Child Development



# Immediate benefits of investing in young children (0-5 yrs.)

## Cognitive development

Psychosocial stimulation

Nutritional supplementation

Health care

Parental training

- Higher IQ
- Practical reasoning
- Eye and hand coordination
- Hearing and speech
- Reading readiness

# Immediate benefits

## Health outcomes

Psychosocial stimulation

Nutritional supplementation

Health care

Parental training

- Less morbidity
- Less mortality
- Less malnutrition and stunting
- Better personal hygiene and health care
- Less child abuse

# Immediate benefits

## Social development

Psychosocial stimulation

Nutritional supplementation

Health care

Parental training

- Higher self-concept
- Less aggressive
- More spontaneous
- More interactive play
- Better parent-child relationship
- Better peer relationship
- More socially adjusted

# Long term benefits

Child experiences → Adult outcomes

## Education

Cognitive development

Nutrition

Health

Social development

- Earlier schooling
- Better schooling
- More schooling

# Long term benefits

Child experiences → Adult outcomes

## Health

Infant malnutrition

- reduced adult stature
- diabetes

Infection in early life

- chronic bronchitis
- acute appendicitis
- asthma
- Parkinson
- multiple sclerosis

Low birth weight

- raised blood pressure
- chronic pulmonary disease
- cardiovascular disease
- coronary heart disease
- stroke

# Long term benefits

Child experiences → Adult outcomes

## Social Development

More social behavior

Better peer-relationship

Better parent-child relationship

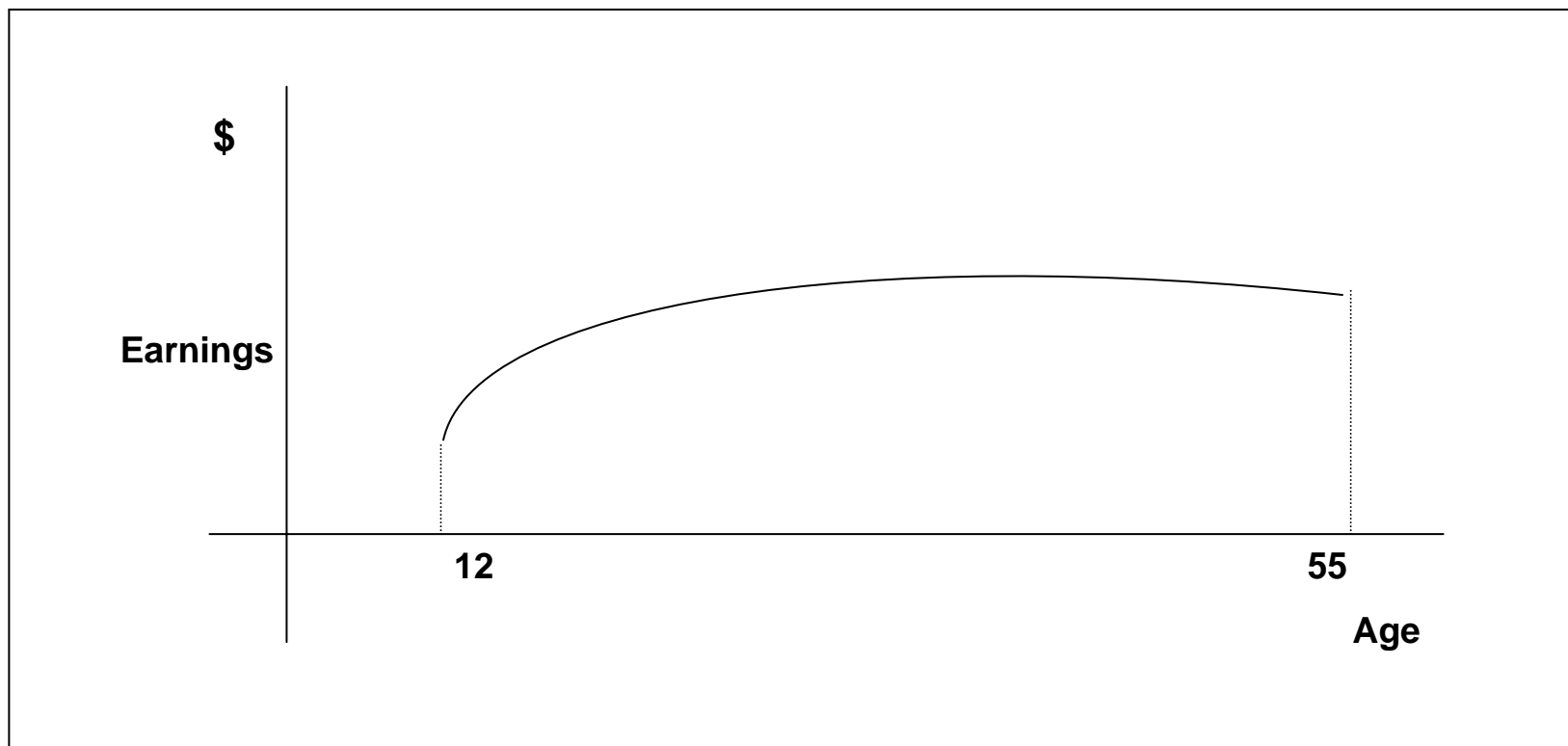
Better teacher-child relationship

More supportive environment  
(parents)

- self-esteem
- social competence
- social relationships
- motivation
- norms/values
- less delinquency

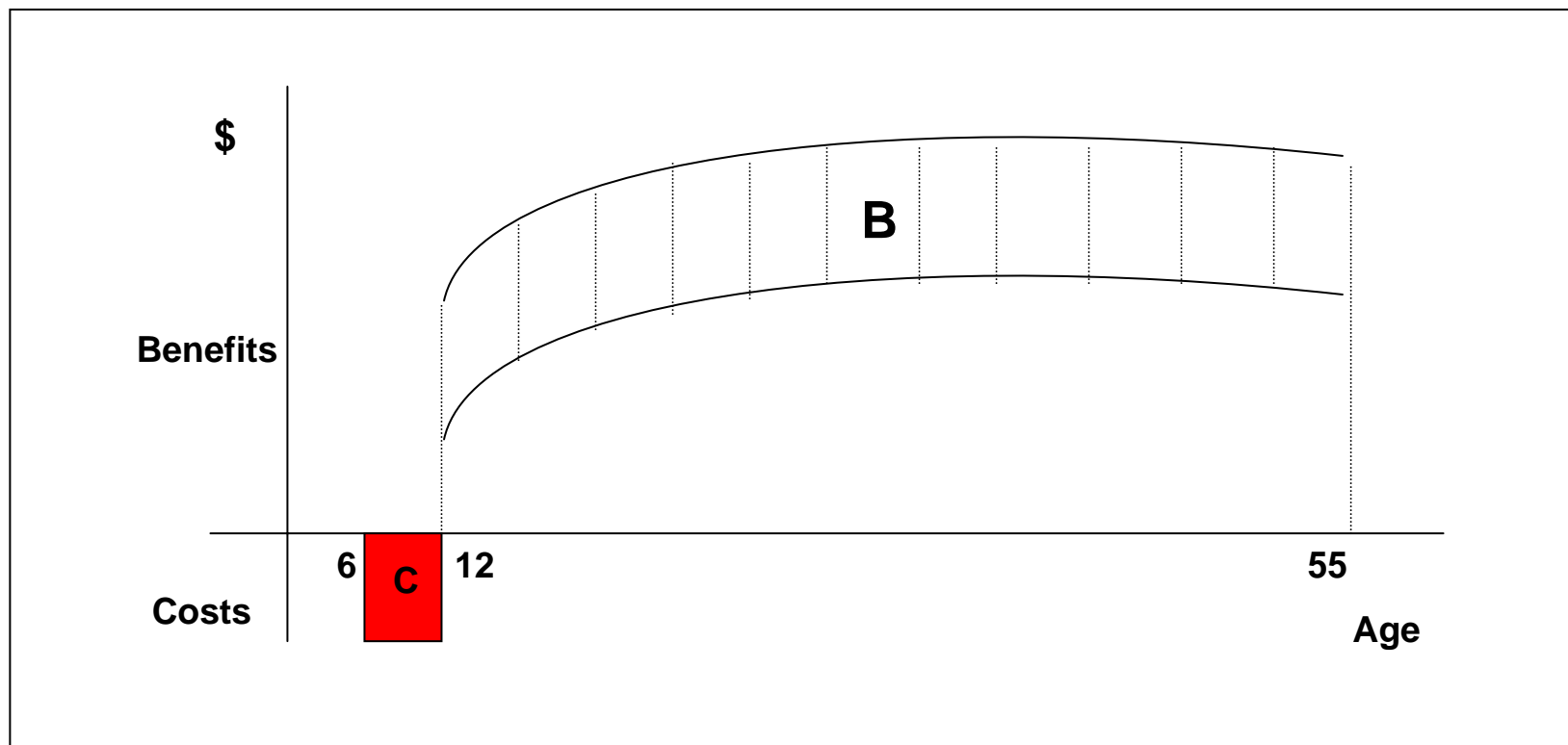
# How to evaluate economic benefits of education

## Age-Earnings profile without schooling



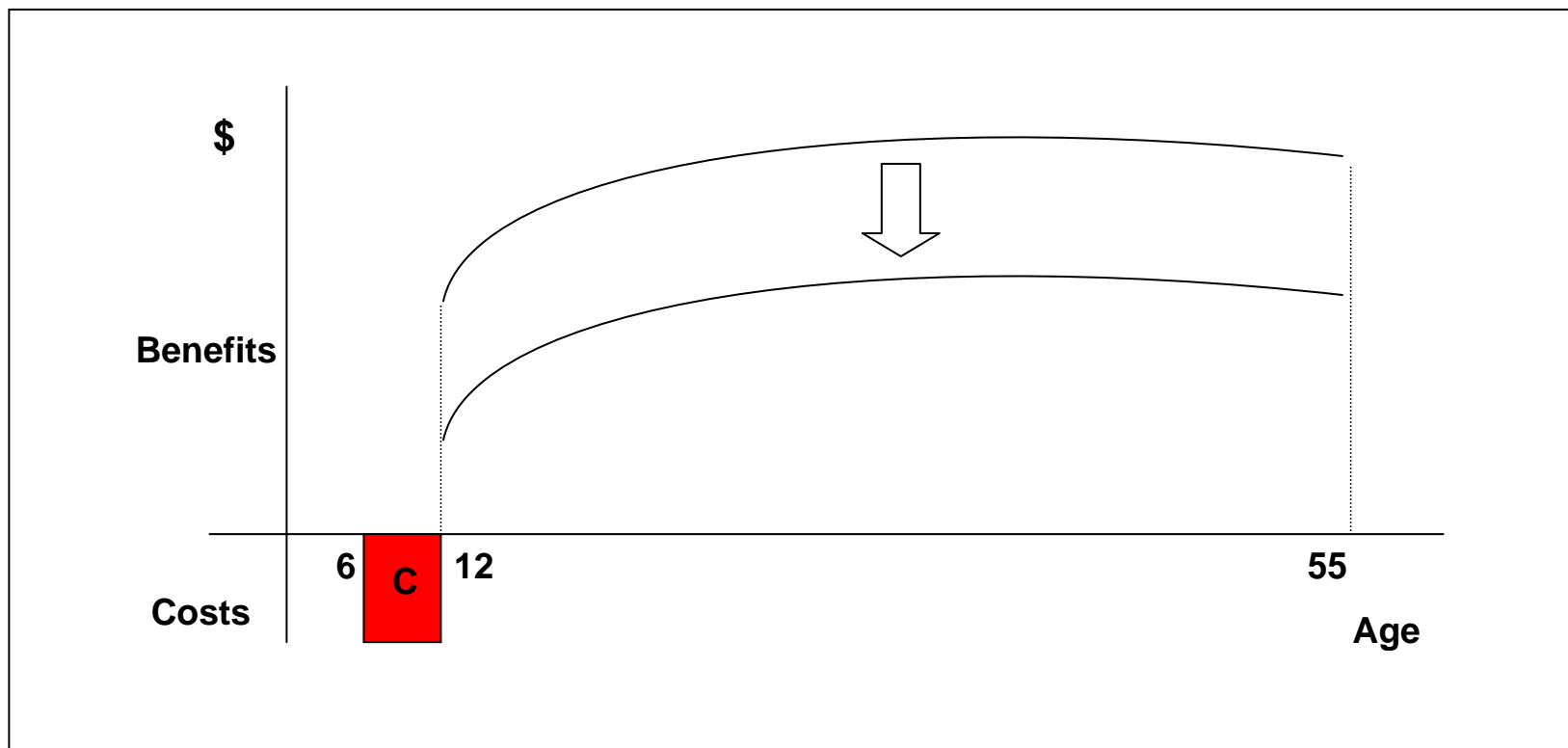
# How to evaluate economic benefits of education

## Age-Earnings profile with and without schooling



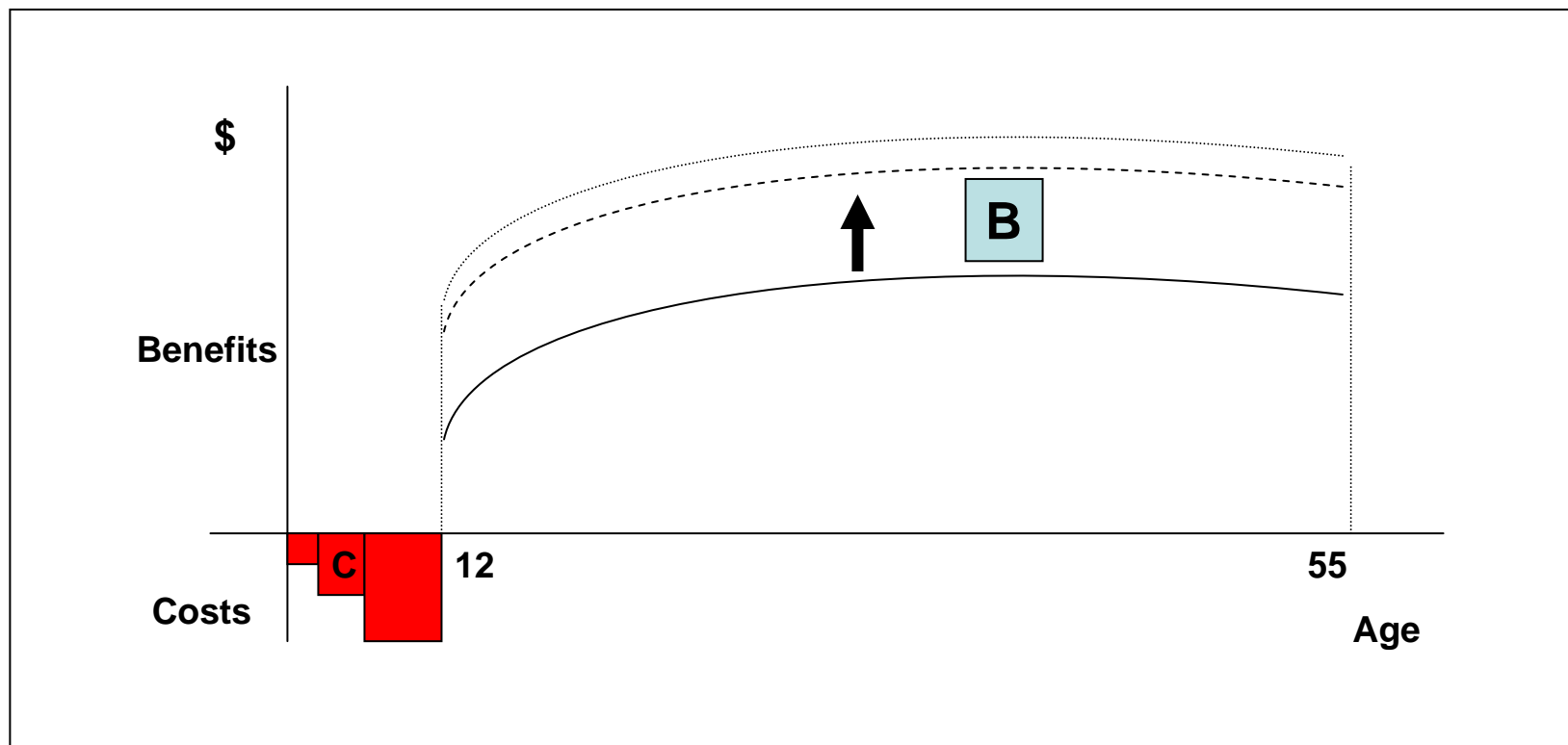
# How to evaluate economic benefits of education

Reduction in the cohort's full productive potential



# How to evaluate economic benefits of education

Regaining the lost productive potential

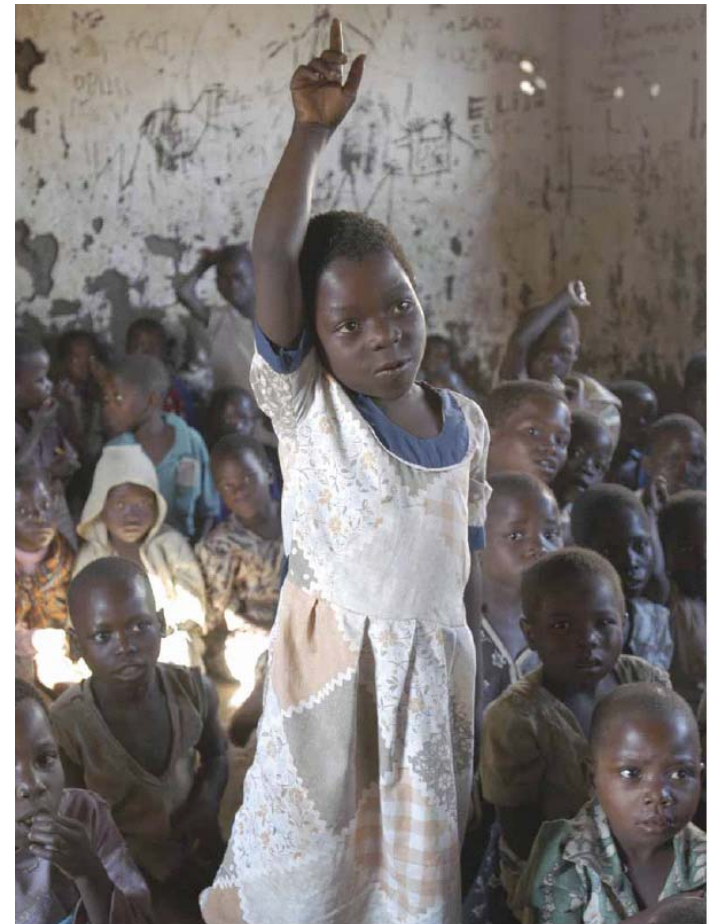


# Adult outcomes → Individual Prosperity

## Education

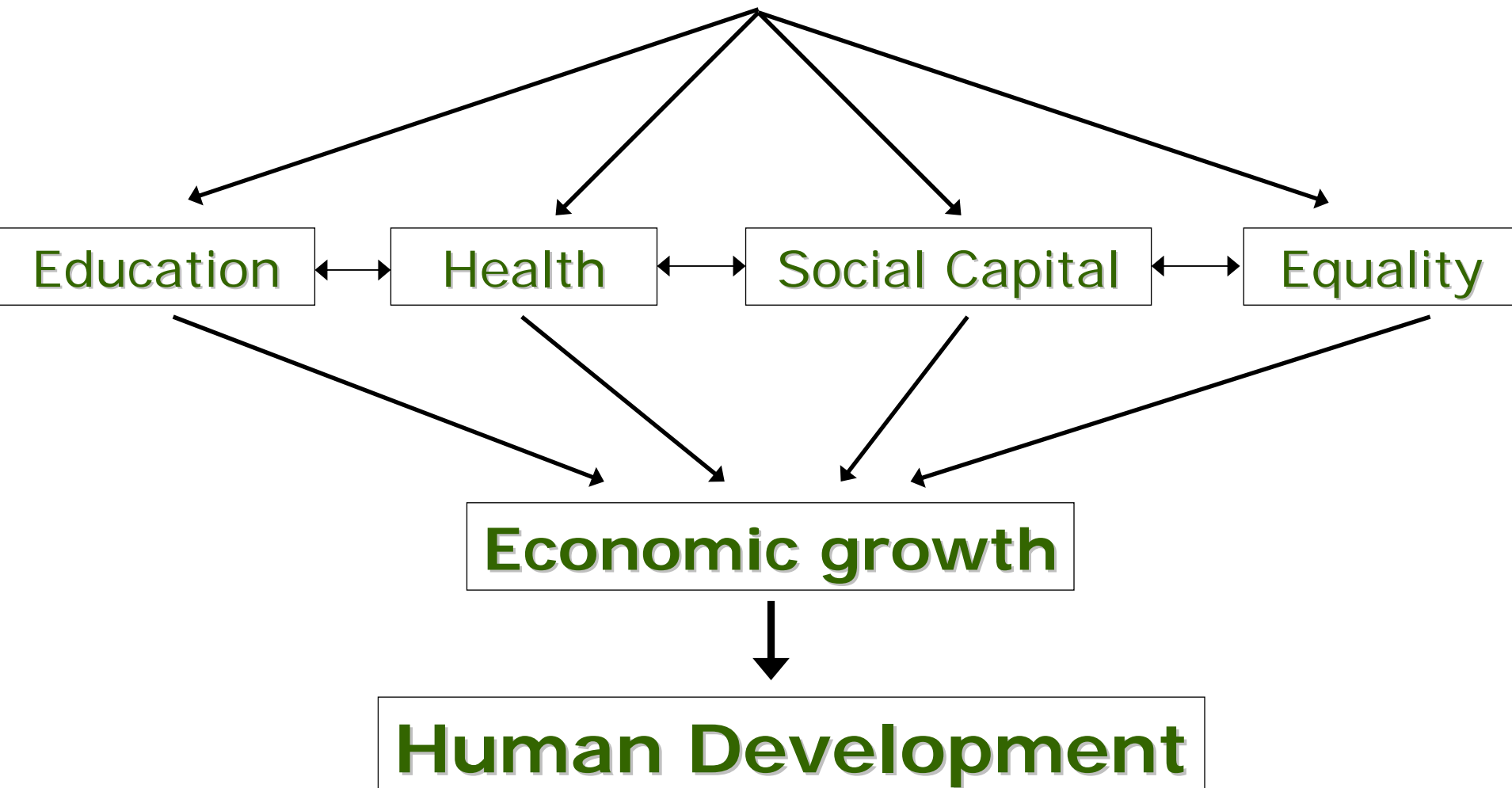
### Returns to education

- Income
- Child care quality
- Own family health
- Social cohesion
- Poverty reduction
- Reduced fertility
- Crime reduction
- ...





# Early Child Development



# ***Policies to Foster Quality Human Capital***

We cannot afford to postpone investing in children until they become adults nor can we wait until they reach school - a time when it may be too late to intervene."

Heckman, J., 2001  
(Nobel Prize Economics, 2000)