Lecture 10
Education and Health as Investments

I. Education: key concepts to economic analysis:

A. Gains to individual: Private Gains: earnings
      1. Age-earning profiles: why curvilinear?
      2. Rate of return analysis:
      What level and type of education; literacy, University, technical etc.

Social   Private

Region	Primary	Secondary	Higher	Primary	Secondary	Other
Africa	24	18	11	41	27	28
Asia	20	13	12	39	19	20
Latin Amer	18	13	12	26	17	20
Developed	14	10	9	22	12	12

Questions:
1. What causes difference in social versus private rate of return?
2. Why lower rates of return in developed than less developed?
3. Why does rate of return decline with level of education?
4. Why do students continue to acquire education given 3?

B. Economy-wide gains:
 1. What does a production function analysis tell us?
2. Endogenous growth theory: where does education enter in this theory?
3. Taxpayer subsidy: "Brain Loss versus Brain Gain"

C. Redistributive Effect of Education:
   1. If women or other minorities have less access to education then poverty is reproduced.

Gender Gap; Males =1000

Country	Literacy	Yrs. Of Schooling	Primary	Secondary	
Mexico	94 %	98	97	100	76
Nigeria	65%	25	92	74	37
S. Korea	95%	61	100	96	49
All LDC	71%	55	91	72	51

Share of Public Resources

Region	Farmers	Workers	White Collar
Africa			
Anglo	.7	1.19	3.8
Franco	.53	1.15	5.9
Asia	.59	1.19	2.8
L.A.	.49	1.04	2.0
OECD	.95	.87	1.2

What do the above tell us?
1. Farmers lose out everywhere except OECD or developed countries
2. White collar group gains at expense of all others
3. Workers are neutral
4. How do you redistribute income in your country if education is inequitably distributed?

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Social Returns

Social Costs

Primary   Secondary   Tertiary

Years of Schooling
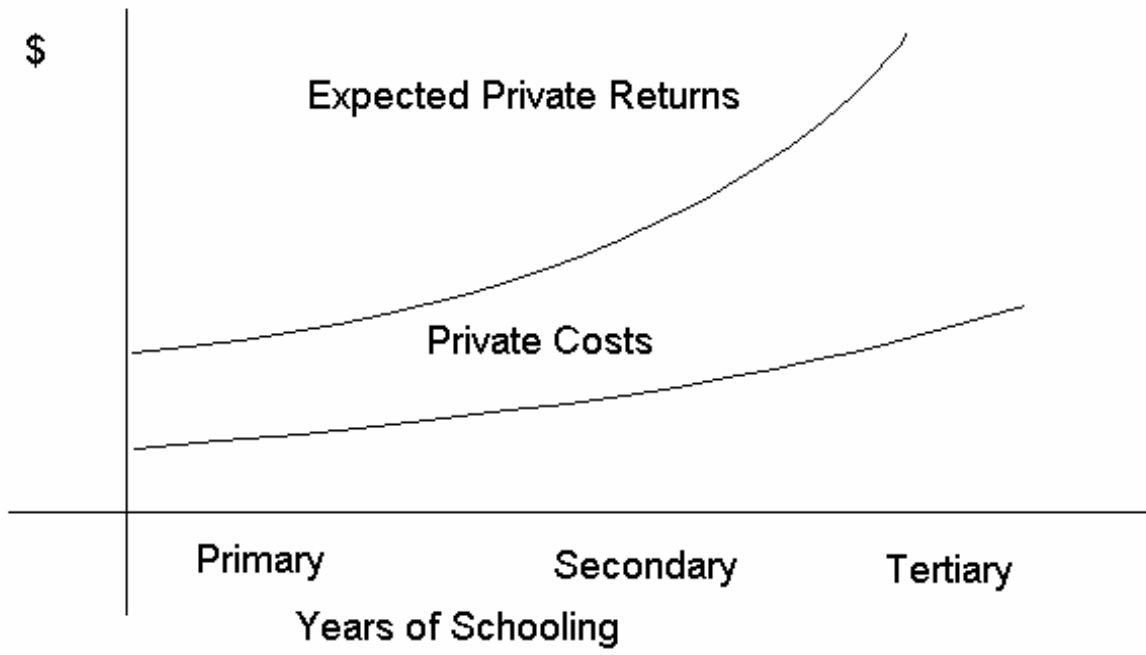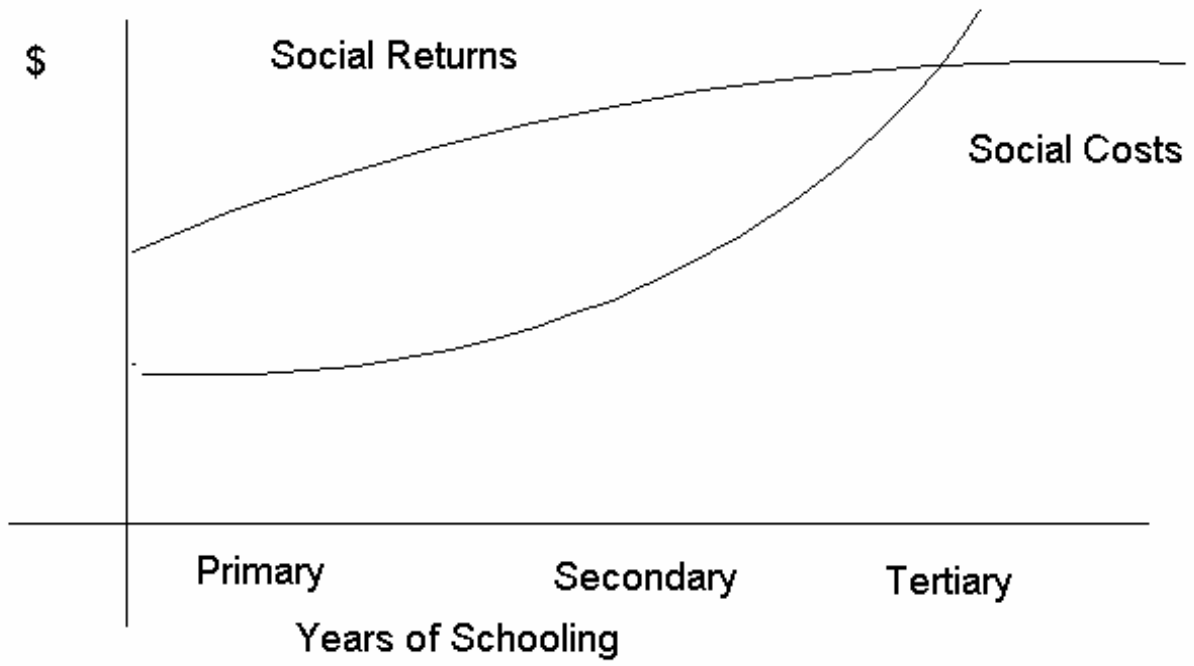
Part B Health: An Economic Analysis

II. What mechanisms increase Health and Productivity of population?

A. Early childhood health measures:
   1. Public measures: food, water and vaccination
   2. Why is health an investment?
      a. Lower IMR leads to lower age-specific fertility rate
      b. Consumption wastage
   3. Easterlin Model of desired family size, natural family size and actual family size.

B. Child labor: What is economics versus ethics of this issue?

   1. What are causes: poverty, male/female birth ratio, globalization and trade?
   2. What is trade-off for restrictions on childhood labor?
   3. What did we do in Canada between 1890 and 1920?
   4. What policies are available to developed countries to both discourage child labor and to not increase poverty in LDCs?

C. Health issues for the mature population:
   1. What is a healthy diet in terms of calories, grams of protein, etc.?
   2. Is your country providing the minimum requirements?
   3. Which countries fall short of satisfying the basic minimum requirements and why?