

# Development Economics

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## Topics

- ♦ Objective
- ♦ A magic school Bus tour around the globe
- ♦ Common characteristics of developing countries
- ♦ Meaning of development
- ♦ Measures of living standards
  - Per Capita income as a measure of living standards
  - Other measures: PQLI, HDI
- ♦ Comparison of Living standards
- ♦ Graphical exposition on relationship between income per capita and quality of life. Here will glimpse of these relationships, the details of why such relationship exist and what are their significance will be covered in many lectures that follow.

## Measures of Living Standards

- ◆ Per capita income is a good measure, but ..
- ◆ What about income distribution?
- ◆ How to compare if measured in local currency.
- ◆ What about purchasing power parity?
- ◆ What about working environment?
- ◆ What about physical qualities of life such as freedom of speech, human rights, literacy, life expectancy? (talk about PQLI and HDI).
- ◆ In spite of all the above, per capita income in US dollar is a good measure of living standards. Lets examine living standards of a few selected countries (next slide)

## Comparison of living standards

Table 1.1: Basic indicators of a few selected countries

Basic indicators	India	China	Thailand	Mexico	Korea	Singapore	U.S.	Japan
P.C.income (\$1994)	320	530	2,410	4,180	8,260	22,500	25,880	34,630
PPP Estimate of PC income	1,280	2,510	6,970	7,040	10,330	21,900	25,880	21,140
pc income gr rate 1985-94	2.9	7.8	8.6	0.9	7.8	6.1	1.3	3.2
Pop. gr. rate 1980-90	2.1	1.5	1.8	2.0	1.2	1.7	0.9	0.6
gr. rate of export 1980-90	5.9	11.5	14.0	6.6	12.0	10.0	5.2	4.8
gr. rate of export 1990-94	13.6	16.0	14.6	4.0	10.6	12.3	6.7	4.0
Savings to GDP ratio 1988	21.0		26.0	23.0	38.0	41.0	13.0	33.0

Table 1.2: Average annual growth of the US economy over a long period of time

Period	1889-1983	1953-1973	1973-1983
gr. rate. of per capita income	1.8	2.1	0.9

Questions to ask are in the next slide

## Comparison of living standards

- ◆ Could some of these less developed countries grow at this high rates for ever such that they become the real threat to the U.S. economy? (Convergence hypothesis).
- ◆ Why did some countries like Japan, Korea, and Hong Kong grew so fast while other countries like India, and U.S. grew very slow? Or in other words what are the sources of growth in these countries?
- ◆ What government policies can achieve higher growth rate in per capita income?

## Contd.

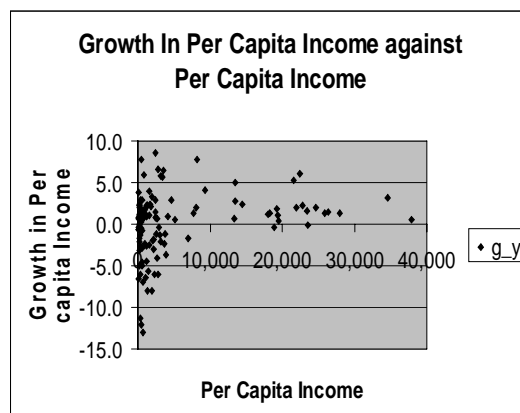
- ◆ What is the significance of a small difference in the growth rate of per capita income?
- ◆ How long would it take for less developed countries to catch up with the current US standard of living?
- ◆ After how many years these less developed countries will surpass the living standard of the U.S. economy if the current growth rates are maintained?

## Graphical summary of relationship between income per capita and quality of life.

- ◆ In the next few slides we will see graphically how growth in per capita income, income inequality, fertility, life expectancy literacy, percentage of labor force in agriculture are related to the level of per capita income.
- ◆ This is more like a graphical summary of the experiences that we had during our magic school bus tour over all the countries.
- ◆ This material is just for getting a general idea about the problems that we are interested in.

## Growth in Income against Income

- ◆ Taking per capita income as a measure of living standards, is there a relationship between per capita income and its growth?



## Issues:

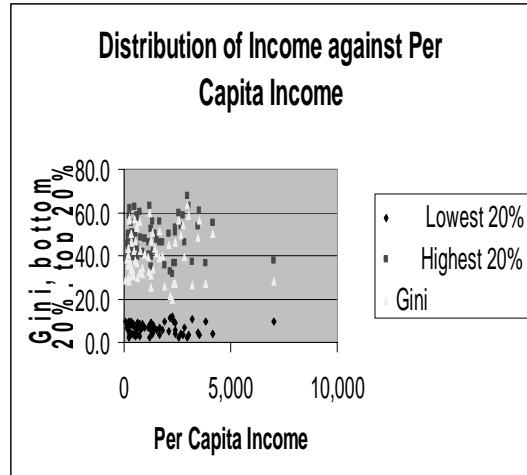
- ◆ Except for a few poorer countries, which grow at negative or low positive rates, it appears that there is a negative relationship between per capita income and growth.
- ◆ It is important to isolate those countries which are in the convergence path, and study their common characteristics. What would be those characteristics?

## Issues (continued)

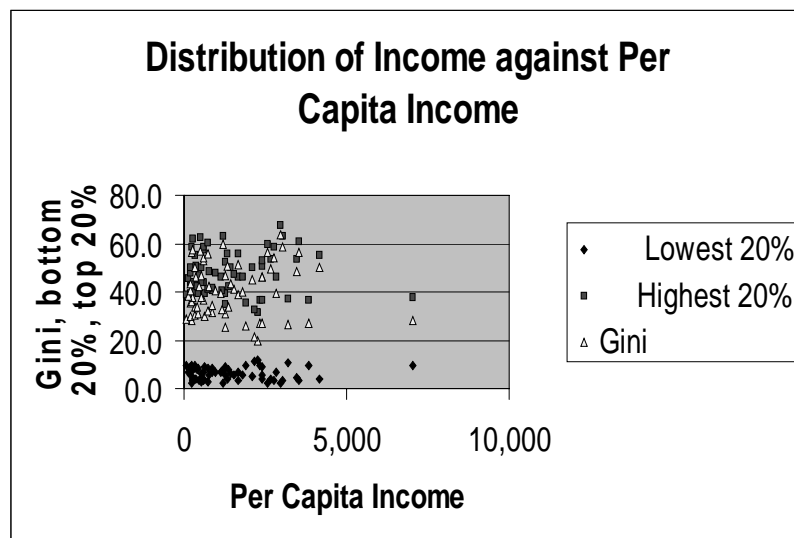
- ◆ The other countries which do not follow the pattern, probably are the ones need development policies. To that end, it would be most important to see what their common characteristics.
- ◆ What could be the factors that make those countries grow negatively?
  - War, natural disaster, disease, geographical disadvantages to trade, develop disease etc.

## Per capita income and Distribution of Income(1)

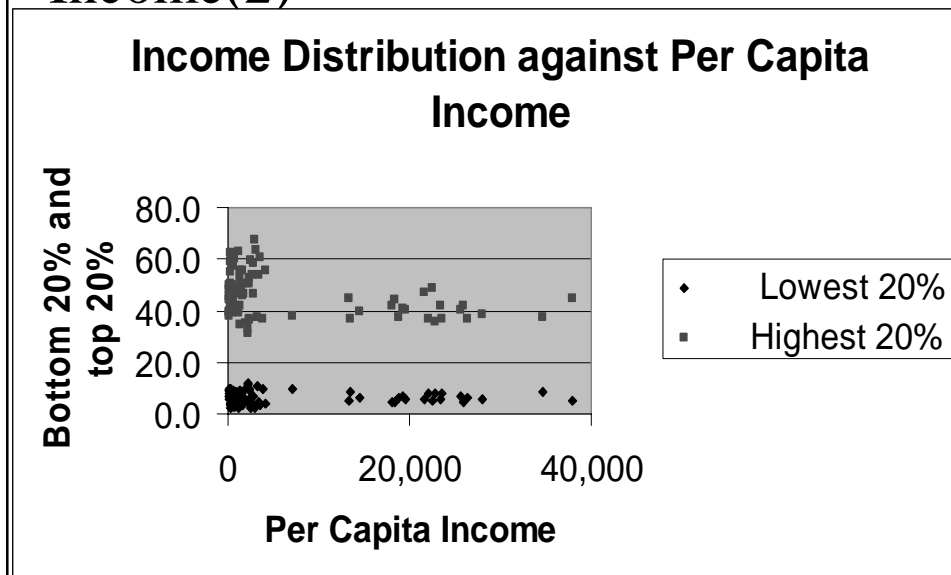
➤ When we drop a few countries in the middle income group, which are able to achieve more equal income distribution, it looks like there is an **inverted-U** relationship between per capita income and income inequality.



## Gini coefficient and per capita income (zoomed up)



## Per capita income and Distribution of Income(2)



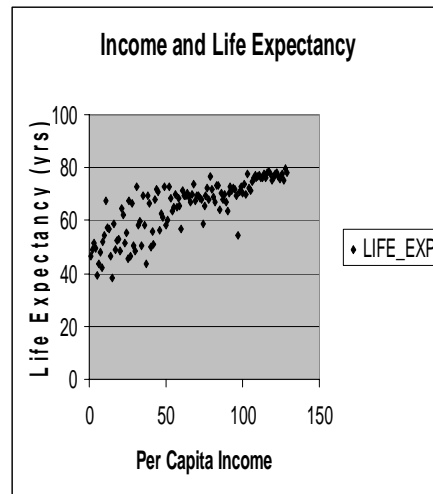
## Analysis

- ◆ Both slides show that except for a few exceptions if taken out, there is an inverted U relationship between income per capita and income inequality, especially in terms of Gini coefficient.
- ◆ Look at those few exceptional countries which are in the middle income range but they are able to have lower income inequality. What could be the explanations for it?
  - Some of these exceptional countries are: Latvia, Hungary, Poland, Slovenia, Bulgaria,

## Income and Health(1)

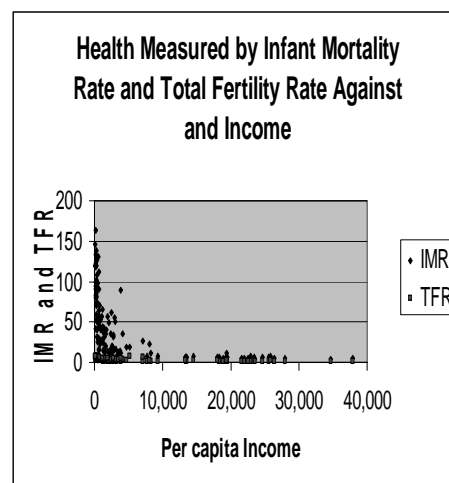
- ◆ There is a clear evidence for a strong positive relationship between per capita income and life expectancy.

What could be the reasons?



## Income and Infant mortality (2)

- What is the relationship between per capita income and Infant mortality?
- Which are those in poorer countries that have so high infant mortality rates?
- Can you find out the sources of such high mortality?



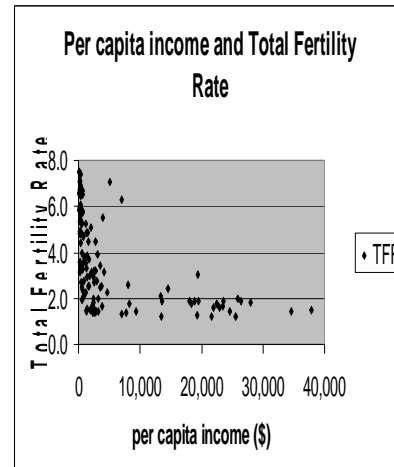
Total fertility is in next slide



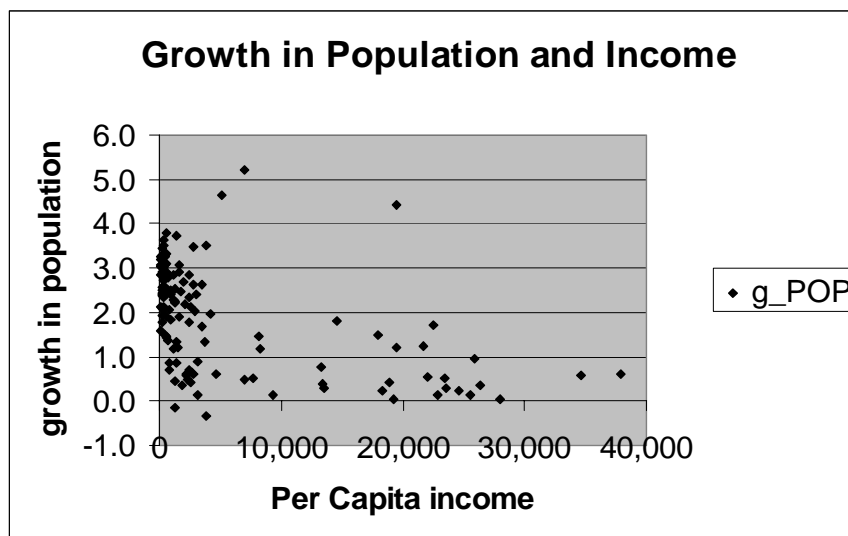
## Per capita income and Total fertility rate (3)

- ◆ Exceptions are a few low income countries, which are able to achieve low fertility.
- ◆ When we remove those exceptional countries from our data, we see negative relationship between income and total fertility rate.

Find out, which are those exceptional countries.

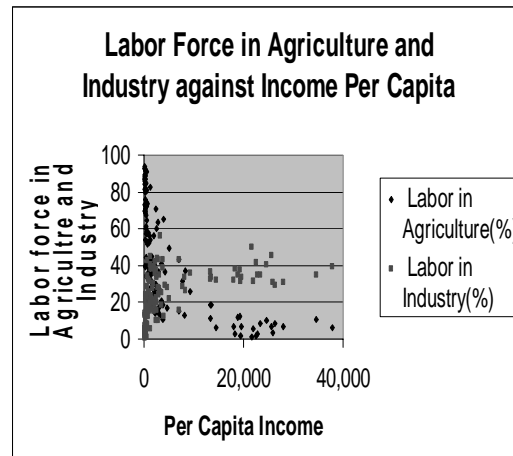


## Income and Population Growth



# Labor Force Participation and Income

High (resp. low) percentage of labor in agriculture (rep. Industry) in the poorer countries.



An important development issue is to understand, how such agriculture based economies can be transformed into industry based economy **rapidly**.