

What we think we know – and do not know!

Summary lecture by lecture

Lecture 2: Classical models

Renewed relevance? Yes

- Lewis model for China
- Harrod-Domar for foreign aid

Lecture 3: Growth models

We now have a plethora of new or endogenous growth models
emphasising different:

- Driving mechanisms behind growth
- Predicting either convergence, divergence or neutrality
- Hence an empirical issue to determine what model squares best
with the data

Lecture 4: Growth empirics

- Several empirical approaches for testing growth models
- Growth accounting and cross-country panel regressions the most commonly applied methods
- Reasonably strong and robust evidence that initially poor countries tend to grow faster everything else equal (conditional convergence as in the Solow model)
- Investments in physical and human capital robust drivers of growth
- Robustness tests reveal that many other factors that have been found in some studies to boost growth are not robust
- Many methodological problems are still unresolved (such as reverse causality, multicollinearity and difficulties to come up with relevant and unambiguous measures of e.g. human capital)

Lecture 5. Economic and population growth

- Population growth has no significant and robust effect on economic growth
- Economic growth has an effect on population growth although the effect is not overwhelmingly strong (transition theory)
- Changes in the share of the population at working age have, in turn, a transitory effect on economic growth
- There is hence a complex simultaneous causal relationship that makes it difficult to disentangle the effects empirically

Lecture 6. Economic growth and the resource base

- When it comes to degradation of **renewable resources**, now relatively dated investigations, based on cross-sectional observations, provide support for the so called Kuznets environmental inverted U-curve
- We have practically no knowledge of whether this curve has shifted downwards in more recent times, or whether the “turning points” have been lowered
- Very scant evidence on changes over time in pollution in low- and middle income countries
- Many studies show most types of pollution in the now developed countries to decline over time

Lecture 6. Economic growth and the resource base (cont'd)

- When it comes to depletion of **non-renewable resources**, the evidence on growing scarcity is difficult to interpret
- For most minerals, the reserves to consumption ratios have not changed significantly over time and remain high
- For oil, annual production/consumption has since many years been larger than the addition of new reserves (as defined)
- According to most estimates of real commodity price trends show prices to fall, indicating that scarcity is not increasing
- All these studies have used a biased deflator; when this bias is corrected for, the decline in real prices is smaller (or even non-existent)
- We simply do not have enough solid evidence to say whether growing scarcity of non-renewable resources is around the bend

Lecture 6 (cont'd). Global warming

- The big question in a development perspective is whether global warming – if no drastic cuts in the emission of greenhouse gases are made – will seriously hamper growth and poverty alleviation in the developing countries
- The IPCC has not made any convincing detailed analysis of this question
- The 2006 Stern report claims that the negative consequences will be enormous, especially for the poorest countries
- Many economist have raised much criticism against this report, e.g. about the low discount rate used to value future gains from reducing emission of greenhouse gases
- Very recent (and hence yet not evaluated) studies suggest large negative impacts on these countries
- Enormously difficult problem to tackle methodologically, involving also normative stands (discount rate)

Lecture 7. Economic growth and income distribution

- Different models predict different impacts of economic growth on income distribution in countries
- Up to recently, the conventional interpretation of the evidence was that there is no systematic effect in either direction (based on cross-country observations)
- More recent evidence on the basis of time-series data show income distribution to become more uneven in countries with high growth (especially in Asia, including populous India and China)
- Several recent studies show initial even distribution of income to be beneficial for growth in subsequent years in low- and middle income countries (contrary to most previous perceptions)
- While the relative distribution of incomes across countries seems to have been more or less unaltered since the 1970s, the absolute income gap between poor and rich countries has widened considerably
- Given the still large initial income gaps between poor and rich countries, the absolute income gaps will inevitably continue to grow for several decades

Lecture 8. Poverty

- The prevalence of poverty in a country, as conventionally measured in terms of “headcounts”, is determined by per-capita income and the distribution of income
- Poverty reduction is hence determined by economic growth and changes in income distribution, but also population growth
- In countries with uneven distribution and high population growth the economic growth required to reduce poverty in absolute numbers is high (4-5%)
- Empirical estimates of the actual poverty reduction since 1990 show it to have been very small (both in relative and absolute terms) in most parts of the developing world
- The main exception is China and when this country is factored out, the MDG of halving poverty before 2015 in the other countries (as a group) will be missed if present trends prevail
- The at face value very different estimates of poverty and reduction over time are reconcilable once the data and methodological difference are taken into account
- However, all previous estimates have to be re-estimated after the recent (2007) drastic revision made in PPP per-capita incomes by the International Comparison Project and the World Bank

Lecture 9. Trade and growth

- Most theories demonstrating the gains from trade are based on static models, i.e. the gains accrue due to a more efficient allocation of existing resources
- The empirical estimates of gains from (free) trade based on static models are very small (a few percent) and once and for all (no effect on growth)
- This indicates that if there are large gains from trade, these must be “dynamic”, i.e. affect growth through boosting investments in physical and human capital and/or advance technological progress
- Very few theoretical models of gains from trade in a dynamic setting (Edwards mentioned here)
- In empirical work, a major problem is that the degree of openness to trade (or degree of protection) has proved very difficult to measure (about a dozen proxies can be found in the literature)
- No support for the hypothesis that foreign aid affects growth positively in recipient countries

Lecture 10. The political economy of development

- Different hypotheses of why governments in many countries do not pursue growth-promoting policies
 - * Countries are too fractionalised, too corrupt, climate, history, etc
 - * Governments simply do not know what policies are growth promoting
 - * The governments have other objectives
 - * Not democracies

- In recent years, much analytical emphasis has been focused on climate and institutions
- Acemoglu vs Glaeser

- The relative role of institutions and human capital not finally resolved in that debate

- Only partial explanation since many countries in especially Asia never had any large European settlements and institutions, but have still been growing rapidly (Japan since long, China and several others more recently)