EE462 Development Macroeconomics (First semester 2012)

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Topics of Discussion

- Course organization
- Overview the course content and evaluation
- Topic 1:
- Define Development Economics
- Overview and Questions about Growth and development

Course organization

- The course will be divided into two parts.
- First half: by me
- Midterm short essay (50%) and maybe some homework
- Second half:
- Final examination (50%) by Dr. Patamawadee Pochanukul

Course contents: first half

- A comprehensive analysis of the process of economic growth and sources of differences across nations.
- Understand current topics and to analyze policy debates surrounding those topics.
- See topics to be discussed in the outline

Course contents: first half

- Week 1: Overview and Questions of Economic Growth and Development
- Week 2: Solow Growth and Neoclassical Growth Model
- Week 3: Endogenous Growth Models
- Week 4: Growth empiricism
- Week 5: Growth Strategies: Industrialization Policy
- Week 6: Roles of Health and Education in development
- Week 7: Growth and Income inequality

Course contents: second half

The second-half of the course focuses on development economics issues that are important and related to the macro economy of developing countries,

- the analysis of short-run macroeconomic policies such as stabilization policy, fiscal deficit, monetary policy, exchange rates, flow of capital, financial crisis,
- the effects of international trade and foreign direct investments on economic development,
- alternative models of growth and structural reform.

Textbooks for the first half

- *Jones, Charles I. Introduction to Economic Growth, second edition, W.W. Norton & Company, 2002.
- *Ray, Debraj. *Development Economics*. Princeton University Press, 1998.
- Or other better substitutes (much more advanced texts available: Barro ; Aghion and Howitt; Acemoglu

What is Development Economics?

- About how economies and societies grow and change.
- Old framework is classical growth economics. Later involve with roles of changing behavior and institutions in the process of development.
- Always involved with issues of policy.
- Roles of markets and the state
- After WWII, confidence in the ability of government to take effective roles in directing investment.
- 1970s on saw stronger moves to liberalize and privatize

What is Development Economics?

- 1990s many countries embark on market reform
- Which needs to be supported by sound institutions and good governance.. Leading to focus on relations between markets and institutions
- Widened perspective to go beyond poverty: income distribution, health (longevity, child mortality) and education (literacy, skills) as parts of development goals and an instrumental in generating growth of income.
- Or go for comprehensive development (including other dimensions of living standards, say risk and vulnerability, human right, equal access to opportunity, the environment, powerless and lack of voice (Pussy power)
- Successful development policies need to determine not only how more rapid growth of real income can be generated but also how real income can be used to achieve the other values in development

What is Development Economics?

- From old to new generation of development economists: (Meier’s article in Meier and Stiglitz , 2001)
  - First generation (1950-75): new government in emerging countries looked for advice for the acceleration of their development. Old provides modes of development strategy that involve structural transformation and roles for government in development programs and planning.
  - Because population was increasing, the emphasis had to be on a rapid growth of GDP.
  - Capital accumulation, the necessary requirement, was the central focus of the model.

What is Development Economics?

- From old to new generation of development economists: (Meier’s article in Meier and Stiglitz , 2001)
  - growth accounting to find the contribution of capital.
  - Solow model decomposes growth into factor contribution and a residual: Y = F(K, L, t)
  - Y-growth = a.K-growth + b.L-growth + TFPG, where a is capital share, growth in TFP was called exogenous technical change.
  - Other models include Rosenstein-Rodan (big push), Lewis (dual sector and unlimited supply), Harrod-Domar (capital requirement for growth)
  - Pervasive market failures in less-developed countries require central coordination of the resource allocation

What is Development Economics?

- From old to new generation of development economists: (Meier's article in Meier and Stiglitz , 2001)
  - turn to state as the major agent of change
  - Promote capital accumulation, utilize reserves of surplus labor, undertake policies of deliberate industrialization, relax the foreign exchange constraint through import substitution, and coordinate the allocation of resources through program and planning (NESDB)
  - Using input-output table, modern analysis
  - External pessimism and internal optimism dominated the thought of the first generation

What is Development Economics?

- From old to new generation of development economists: (Meier's article in Meier and Stiglitz , 2001)
  - along comes the concept of human capital in 1960s
  - Failures of government intervention, more poverty and widening income gap
  - To explain these disappointments, many blamed the policy-induced distortions, nonmarket failure, neglect of agriculture, inefficiency of state-owned enterprises, ill effects of import-substitution industrialization policy, and balance of payment deficits.

What is Development Economics?

- From old to new generation of development economists: (Meier's article in Meier and Stiglitz , 2001)
  - early 1970s, crisis in planning become acute, too often government failures (because of plan deficiency, inadequate information, institutional weakness..)
  - Adverse effects of price distortions (wage, interest rate and foreign exchange rates)
  - Getting price right (Timmer 1973): does not guarantee economic development, but getting prices wrong is the end of development.

What is Development Economics?

- From old to new generation of development economists: (Meier's article in Meier and Stiglitz , 2001)
  - Second generation of development economists was to give support to a resurgence of neoclassical economics.
  - A country was not poor because of the vicious circle of poverty, but because of poor policies.
  - Get all policies right, removing price distortions, focus on incentives and market mechanisms
  - Economic rationality characterizes agents in developing countries as well as in the more developed countries
  - Universality of neoclassical economics

What is Development Economics?

- From old to new generation of development economists: (Meier's article in Meier and Stiglitz , 2001)
  - Once it is recognized that individuals respond to incentives, and that market failures is the result of inappropriate incentives rather than of non-responsiveness, development economics becomes an applied field. Questions and Policy issues that arise in the context of development can be addressed by tools from different fields.
  - See move from aggregate models to micro studies: production units (farms) and households
  - Less grand and visionary to direct and specific policies (change in tariff or agricultural subsidies

What is Development Economics?

- From old to new generation of development economists: (Meier's article in Meier and Stiglitz , 2001)
  - Looking at growth process from micro views
  - Residual was recognized as
    - Quality of labor improvement by edu, experience, training
    - Reallocation resources from low to high uses by market or removing barriers or distortions
    - Exploitation of economics of scale
    - Changes in production process at the firm /farm level
  - The East Asian Newly Industrializing countries (NICs) were viewed as the success stories of development via export-led growth, stabilization program, privatize state-owned enterprise, follows market price system.

What is Development Economics?

- From old to new generation of development economists: (Meier's article in Meier and Stiglitz , 2001)
  - Shifting more roles from physical capital to human capital via acquisition of knowledge, better health and nutrition, and increased skills.
  - Knowledge and ideas as source of increasing returns came the new endogenous growth theory in 1980s and 1990s. (Paul Romer, Robert Lucas)
  - Technological progress and human capital formation are endogenized within general equilibrium models of growth.
  - New innovation is generated by investment in the research sector, guided by monopoly profit
  - The new production processes, once obtained, can be used repeatedly, and have spillover benefits to other firms. (make increasing returns to scale possible, thereby to sustain long-run growth in per-capita income.)

What is Development Economics?

- From old to new generation of development economists: (Meier's article in Meier and Stiglitz , 2001)
  - Recognizing heterogeneity of developing countries and gave more attention to an explanation of differential rates of country performance.
  - Cross-country econometrics studies and their determinants are booming. Why certain policies were effective, why not.
  - A major modification of neoclassical analysis occurred in the 1980s and 1990s.
  - Market failures extends from public goods and externalities to imperfect and costly information, risk, incomplete markets, absence of future markets, and their transaction cost (Stiglitz). This recognition was not given much attention in the beginning.

What is Development Economics?

- From old to new generation of development economists: (Meier’s article in Meier and Stiglitz , 2001)
  - Understanding risk and information imperfection helps to promote and think abut policies for rural development.
  - Incentive-based model; contract theory (adverse selection to explain imperfect capital market and credit rationing; sharecropping as optimal contract for risk sharing)
  - Microeconomics of the rural sector examined the organization and linkages of labor, credit, and land markets (Stiglitz 1986; Binswanger and Rosenzweiz 1981)
  - Explain how rural institutions are a response to missing markets.
  - Decision-making by members of rural households was studies from the maximization framework (Singh, Squire and Strauss 1986)

What is Development Economics?

- "One solved problem fans out into many new open questions that beg in turn for solutions" (Samuelson)
- Settled issues:
  - what are the source of growth?
  - Does macroeconomics stability matter, how can it be sustained?
  - Should developing countries liberalize trade?
  - How crucial are property rights?

What is Development Economics?

- New unsettled issues:
  - Globalization implications
  - Environmental degradation
  - Demographical change
  - Food and water security
  - Urbanization
  - Coordination failures, low development trap
  - Patterns of growth and income distribution (winners and losers, avoid urban bias, displacement of unskilled labor, changing prices to the disadvantage of the poor, gender gaps, deterioration of traditional social safety nets)

What is Development Economics?

- New unsettled issues:
  - Still more for new growth theory: interaction among determinants and to capital accumulation, how to apply to developing countries, can it be related to institutional design?)
  - Influence of institution: mixture of rules, norms, and enforcement characteristics determine economic performance (Doughlas North). But how to get institutions right?

Economic Development : Overview

- Economic development is the primary objective of the majority of the world's nations
- How do we measure development?
- Development is not just about income, beyond simply increasing the rate of economic growth or GDP per capita, it is multidimensional of human development
- However, level and distribution of income per capita correlates well with the multidimensional process of development

Income and Growth

- Low per capita incomes are an important feature of economic underdevelopment
- Across nations, distribution of income is skewed. There is enormous variation in per capita income.
- Simple comparison is to convert each country's income into a common currency, say US dollars, by exchange rates
- Problem: this underestimates the real incomes of poorer countries
- How: underreporting of income, exchange rate does not well reflect domestic prices for non-tradables
- Solution: using Purchasing Power Parity (PPP): national income is valued at the international price (average of baskets from all countries) By PPP, developing countries do better
- Another remaining problem is the price itself maybe distorted, not reflect true marginal social value or cost

Historical experience

- Rates of economic growth vary substantially across countries: growth miracle, disasters
- A country growing at g percent a year will double its per capita income in every 70 / g years.
- If USA has averaged only 1.4 % during 60-97, its GDP per worker will double in every 50 years.
- About the formula: yt= y0e^xt
- If yt = 2y0, then 2 = e^xt.
- Take ln both side, ln(2) = 0.7 = xt
- Or t = 0.7 / x or 70 / g

Historical experience

- Growth rates are not constant over time.
- For the whole world, growth rates were close to 0.
- But grew at a 2.2 percent a year between 1950-90.
- We are ten times higher than in year 1500.
- Countries can move from being poor to being rich and vice versa: no ultimate traps to development

Income distribution in developing countries

- Inequality might rise and then fall as we move from lower to higher incomes : the inverted U hypothesis by Kuznets.
- Growth and equity may not go hand in hand
- Middle income countries have significant higher income inequality.

Development index

- Index of human development : life expectancy at birth (child and infant mortality rate), adult literacy rate, per capita income
- HDI is calculated by defining some notion of a country's achievements in each of defined components, and taking a simple average
- We can rank country's development
- Life expectancy, literacy, infant mortality : each has strong correlation with per capita income
- We concentrate on economic growth and then move on other issues, such as income distribution, and operations of markets and institutions.

Structural features

- Demographic characteristics: poor countries are characterized by both high birth and death rates.
  - High population growth has two effects: more income from greater supply of labor, but then must be enough to divide among the larger population
  - Population growth declines with increased per capita income
- Agriculture accounts for a large fraction of production in developing countries, large share of labor forces
  - Agriculutral share decline as per capita income rises
- Rural-urban migration : push and pull factors, large informal sector and service sectors

Structural features

- International trade: developing countries are often exporters of primary products, textiles and light manufactures
    - Subject to price fluctuations, instability of export revenues
    - May be subject to declined terms of trade : ratio of price of its exports to that of its imports