

Classic theories of Development

A Comparative Analysis

OUTLINE

- The Quest for Growth
 - The financing gap
 - Investment in physical and human capital
 - Structural Adjustments
 - New economic theory
- Four approaches to the Classic Theories of Development

Classic Theories of Economic Development: Four Approaches

- Literature on economic development is dominated by the following four strands of thought:
 - Linear-stages-of-growth model: 1950s and 1960s
 - Theories and patterns of structural change: 1970s
 - International-dependence revolution: 1970s
 - Neo-classical, free-market counterrevolution: 1980s and 1990s

Linear-stages theory

- Viewed the process of development as a series of successive stages of economic growth
- Mixture of saving, investment, and foreign aid was necessary for economic development
- Emphasized the role of accelerated capital accumulation in economic development

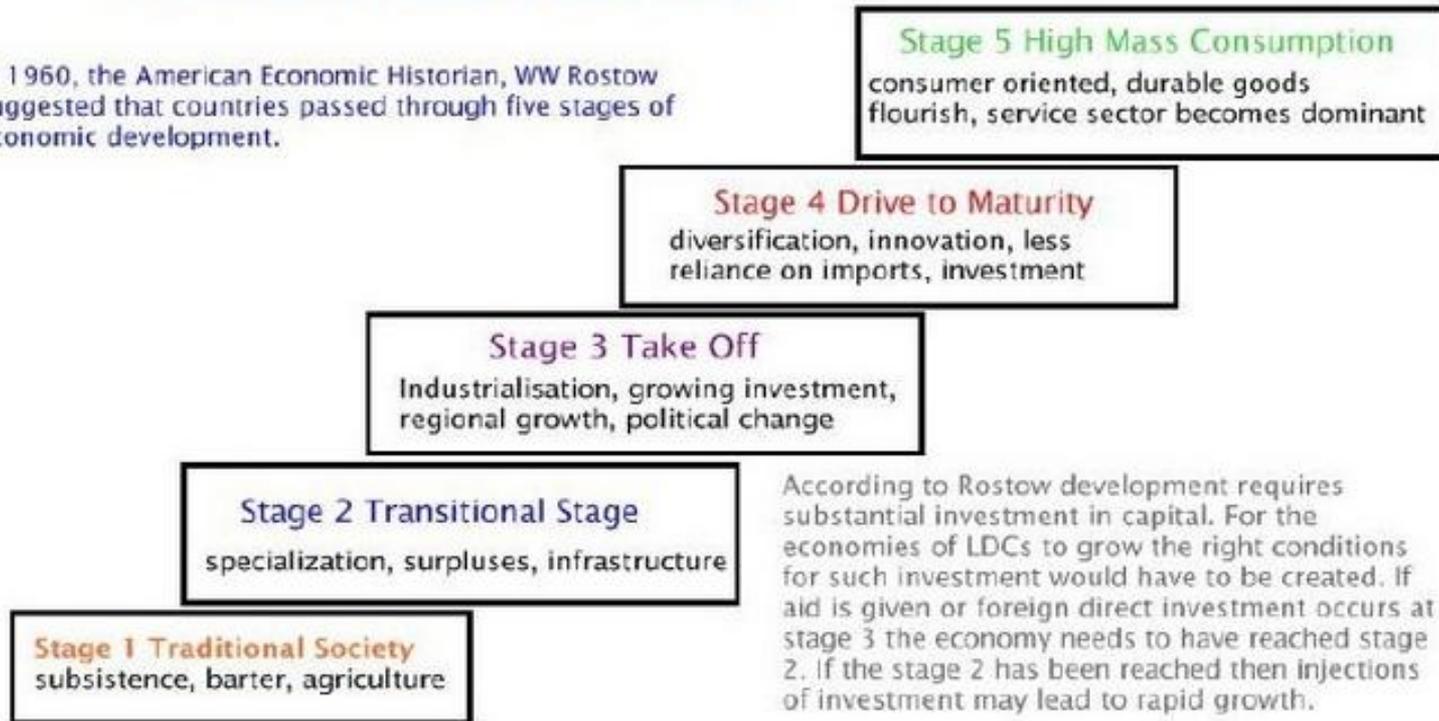
Rostow's Stages of Growth

- Rostow identified 5 stages of growth:
 1. The traditional society
 2. The pre-conditions for take-off
 3. The take-off
 4. The drive to maturity
 5. The age of high mass consumption
- All advanced economies have passed the stage of take-off into self sustaining growth
- Developing countries are still in the traditional society or the pre-conditions stage. Why?

Rostow's Model - the Stages of Economic Development

<http://www.bized.co.uk/virtual/dc/copper/theory/th9.htm>

In 1960, the American Economic Historian, WW Rostow suggested that countries passed through five stages of economic development.



Rostow's Stages of Growth

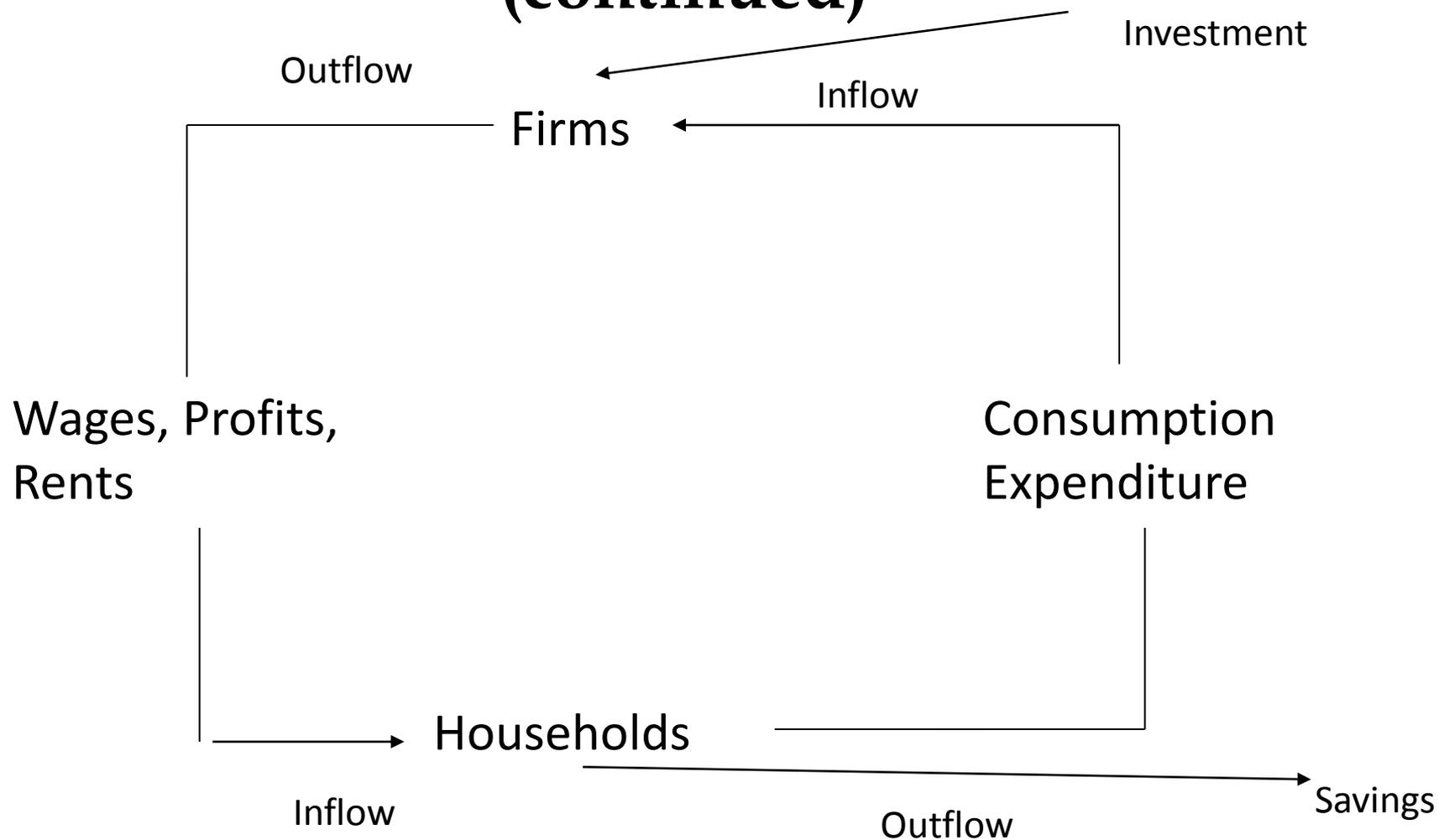
Lack of adequate investment. The financing gap exists!

The Harrod-Domar Growth Model

- The principal strategy for development is mobilization of saving and generation of investment to accelerate economic growth
- Importance of H-D growth model (AK model): It explains the mechanism by which investment leads to growth
- Investment comes from savings
- Rate of economic growth (GNP growth rate) is determined jointly by the ability of the economy to save (savings ratio) and the capital-output ratio

$$\underline{\text{change in } Y/Y = s/k}$$

The Harrod-Domar Growth Model (continued)



The Harrod-Domar Growth Model

- Target growth rate* ICOR= required investment
- ICOR= change in K/change in Y and is lower for a labour surplus economy.
- If the rate of new investment ($s=I/Y$) is multiplied by its productivity ($1/k$), one can get the rate of growth in GNP
- The AK model allows for incorporation of the effects of population growth (per capita GNP growth)
- The ghost of financing gap once again?

Obstacles and Constraints

- Problem with the argument that GDP growth is proportional to the share of investment expenditure in GDP
- Low rate of savings in developing countries gives rise to savings gap and capital constraint
- Savings and investment is a necessary condition for accelerated economic growth but not a sufficient condition

Beyond AK model

- Endogeneity of savings
 - Savings are influenced by percapita incomes and distribution of income in an economy
 - Both of these are influenced by economic growth
 - Economic growth mirrors the movement of savings with income
- Endogeneity of population growth
 - Relationship between demographic transition and percapita income
 - External policy can prevent an economy from sliding in to a “trap” (process of demographic transition)
- Endogeneity of capital-output ratio
 - Captured in Solow’s model

Structural-Change Models

- Structural-change theory focuses on the mechanism by which underdeveloped economies transform their domestic economic structures from traditional to an industrial economy
- Representative examples of this strand of thought are
 - The Lewis theory of development
 - Chenery's patterns of development

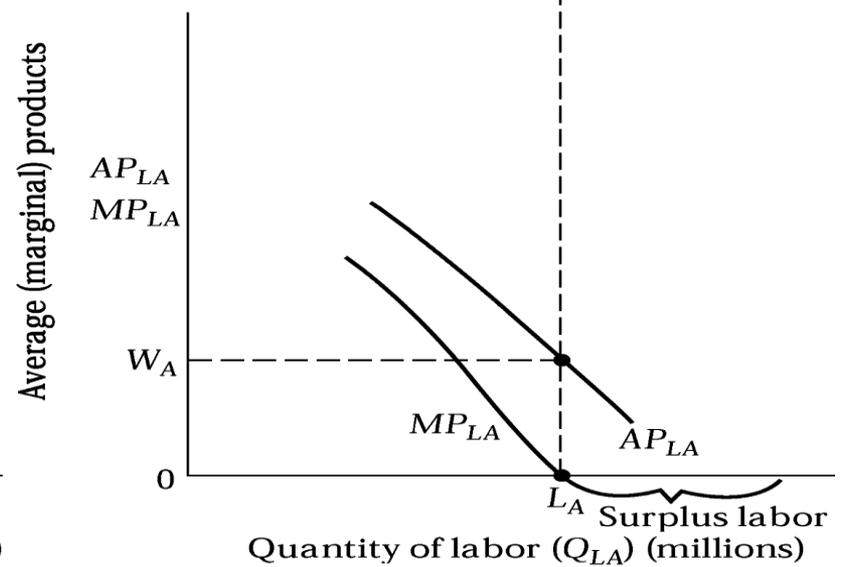
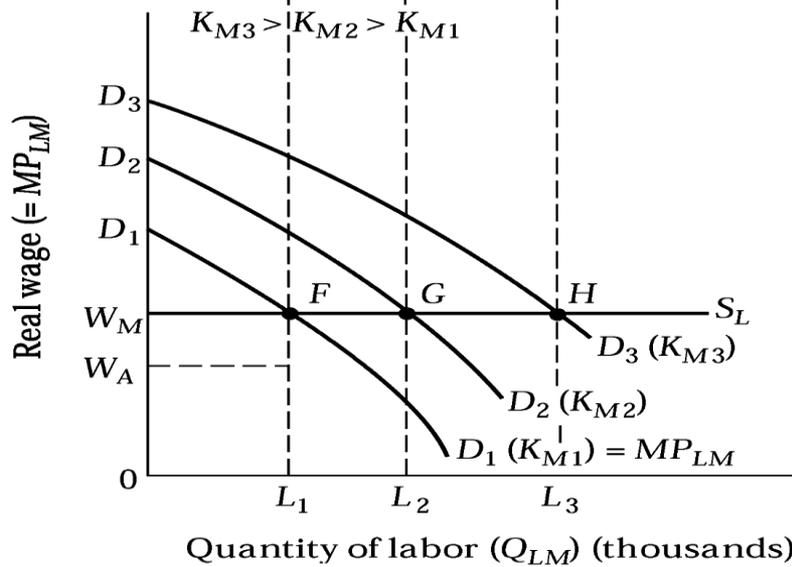
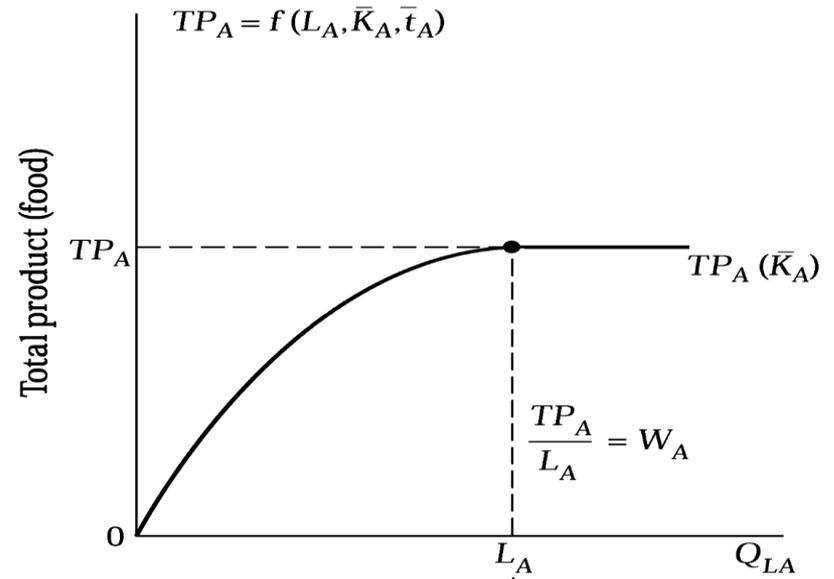
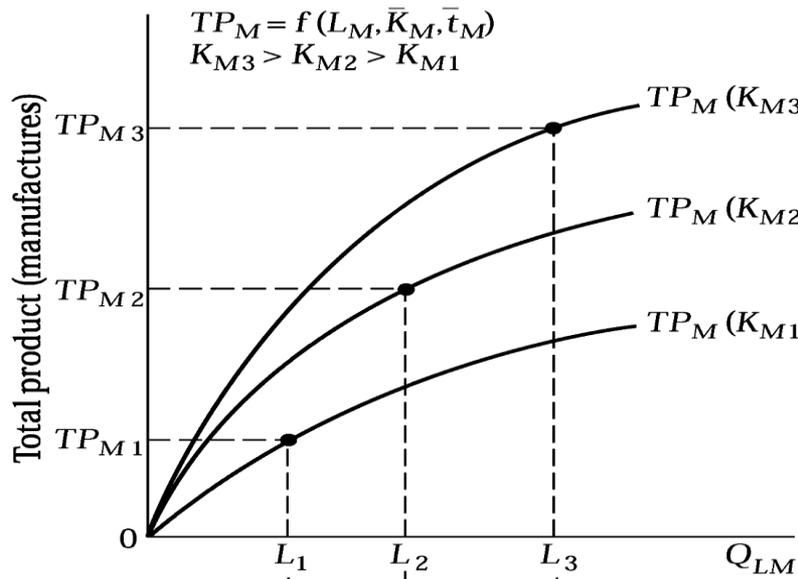
Lewis Theory of Development

- Also known as the two-sector surplus labor model
- Features of the basic model:
 - Economy consists of two sectors- traditional and modern
 - Traditional sector has surplus of labor ($MP_L=0$)
 - Model focuses on the process of transfer of surplus labor and the growth of output in the modern sector

Lewis Theory of Development

- The process of self-sustaining growth and employment expansion continues in the modern sector until all of the surplus labor is absorbed
- Structural transformation of the economy has taken place with the growth of the modern industry

Figure 3.1 The Lewis Model of Modern-Sector Growth in a Two-Sector Surplus-Labor Economy



(a) Modern (industrial) sector

(b) Traditional (agricultural) sector

Lewis Theory of Development: Criticisms

- Four of the key assumptions do not fit the realities of contemporary developing countries
- Reality is that:
 - Capitalist profits are invested in labor saving technology
 - Existence of capital flight
 - Little surplus labor in rural areas
 - Growing prevalence of urban surplus labor
 - Tendency for industrial sector wages to rise in the face of open unemployment

Structural Changes and Patterns of Development : Chenery's Model

- Patterns of development theorists view increased savings and investment as necessary but not sufficient for economic development
- In addition to capital accumulation, transformation of production, composition of demand, and changes in socio-economic factors are all important
- Chenery and colleagues examined patterns of development for developing countries at different percapita income levels

Structural Changes and Patterns of Development : Chenery's Model

- The empirical studies identified several characteristic features of economic development:
 - Shift from agriculture to industrial production
 - Steady accumulation of physical and human capital
 - Change in consumer demands
 - Increased urbanization
 - Decline in family size
 - Demographic transition

Structural Changes and Patterns of Development : Chenery's Model

- Differences in development among the countries are ascribed to:
 - Domestic constraints
 - International constraints
- To summarize, structural-change analysts believe that the “correct mix” of economic policies will generate beneficial patterns of self-sustaining growth

The International Dependence Revolution (IDR)

- The IDR models **reject** the exclusive emphasis on GNP growth rate as the principal index of development
- Instead they place emphasis on international power balances and on fundamental reforms world-wide.
- IDR models view developing countries as beset by institutional, political, and economic rigidities in both domestic and international setup
- The IDR models argue that developing countries are up in a **dependence and dominance relationship** with rich countries

The International Dependence Revolution (IDR)

- Three streams of thought:
 - Neoclassical dependence model
 - False-paradigm model
 - Dualistic-development thesis

Neoclassical Dependence Model

- “Dependence is a conditioning situation in which the economies of one group of countries are conditioned by the development and expansion of others.”
- “Dependence, then, is based upon an international division of labor which allows industrial development to take place in some countries, while restricting it in others, whose growth is conditioned, by and subjected to the power centers of the world.”

Theotonio Dos Santos

The False-Paradigm Model

- Attributes under development to the faulty and inappropriate advice provided by well-meaning but biased and ethnocentric international “expert advisers”
- The policy prescriptions serve the vested interests of existing power groups, both domestic and international

The Dualistic- Development Thesis

- Dualism represents the existence and persistence of increasing divergences between rich and poor nations and rich and poor peoples at all levels.
- The concept embraces four key arguments:
 1. Superior and inferior conditions can coexist in a given space at given time
 2. The coexistence is chronic and not transitional
 3. The degrees of the conditions have an inherent tendency to increase
 4. Superior conditions serve to “develop under development”



Weaknesses of IDR Models

- Do not offer any policy prescription for how poor countries can initiate and sustain economic development
- Actual experience of developing countries that have pursued policy of autarky/closed economy has been negative

The Neoclassical Counterrevolution: Market Fundamentalism

- Neoclassical counterrevolution in the 1980s called for freer markets, and the dismantling of public ownership, and government regulations
- **Four component approaches :**
 - **Free-market analysis-** markets alone are efficient
 - **Public-choice theory-** governments can do nothing right
 - **Market- friendly approach-** governments have a key role to play in facilitating operations of markets through nonselective interventions
 - **New institutionalism-** success or failure of developmental efforts depend upon the nature, existence, and functioning of a country's fundamental institutions

Traditional Neoclassical Growth Theory

- According to the traditional neoclassical growth theory:
 - Output growth results from one or more of three factors- increases in Labor, increases in capital, and technological changes
 - Closed economies with low savings rates grow slowly in the SR and converge to lower per capita income levels
 - Open economies converge at higher levels of per capita income levels

Traditional Neoclassical Growth Theory

- Traditional neoclassical theory argues that capital flows from rich to poor countries as K-L ratios are lower and investment returns are higher in the latter
- By impeding the flow of foreign investment, poor countries choose a low growth path.

Solow's Neoclassical Model or Exogenous Growth Model

- Solow's model of economic growth implies that economies will conditionally converge to the same level of income, given that they have the same rates of savings, depreciation, labor force growth, and productivity growth
- Solow's model differs from Harrod-Domar model in the following respects:
 - Allows for substitution between labor and capital
 - Assumes that there exist diminishing returns to these inputs
 - Introduces technology in the growth equation

Solow's Neoclassical Model or Exogenous Growth Model

Aggregate production function:

$$Y = A K^{\alpha} L^{(1-\alpha)}$$

Growth accounting formula:

$$\frac{\Delta Y}{Y} = \frac{\Delta A}{A} + \alpha \frac{\Delta K}{K} + (1 - \alpha) \frac{\Delta L}{L}$$

Solow's Neoclassical Model or Exogenous Growth Model

- Impact of increase in savings rate:
 - Temporary increase in per capital K/L and per capita output. However, both would return to a steady- state of growth at higher level of per capita output
 - Savings has no impact on long-run per capita output growth rate but has an impact on long-run level of per capita output
 - Total output and total capital stock grow at the same rate as the population growth rate

Solow's Neoclassical Model or Exogenous Growth Model

- Impact of increase in population growth rate:
 - Population growth rate has a positive effect on the growth of total output
 - Results in a lower steady -state growth rate with lower levels of per capita capital, output, and consumption

Solow's Neoclassical Model or Exogenous Growth Model

- Impact of increase in productivity:
 - Shifts the per-worker production function to the right
 - Raises steady state per capita output through increase in per capita capital.
 - In the long-run increase in per capita income takes place at the same rate as productivity/ technical progress

Application: Do Economies Converge?

- **Unconditional convergence** occurs when poor countries will eventually catch up with the rich countries (LR) resulting in similar living standards
- **Conditional convergence** occurs when countries with similar characteristics will converge (savings rate, investment rate, population growth)
- **No convergence** occurs when poor countries do not catch up over time and living standards may diverge