Midterm Exam

EC 390 - Development Economics

Fall 2025

> Give every question your best attempt.
> Best of luck.
> You got this!

Name: __ANSWER KEY__ 95#: _____

The maximum amount of points on this exam is 75 points. You have a total of 1h 20min (80 minutes) to complete the exam, unless otherwise noted. The only items allowed on your desk at any time are a pen and/or pencil, scratch paper, a 3x5 note card, and a calculator. Everything else must be stored in your bag underneath your desk. Any form of cheating will result on a zero on the exam.

There are three sections to be completed:

- **Multiple Choice:** 5 Questions

- **Short Answer Questions:** 2 Questions

- **Multi-Part Analysis Questions:** 1 Question (6 parts)

Point totals and question specific instructions are listed for each section. Please ask for clarification if a question is not clear to you.

The exam is a total of 3 pages. There are 5 pages of questions + 2 pages for scratch paper. **Please verify you have all 3 in your exam. If you do not, let me know immediately.**

Multiple Choice - 25 Points

Circle or "X" the answer you think most correctly answers the following questions. If you mark a choice and would like to change it, **clearly indicate which one is your correct answer**.

1. Consider the following statistics: Country A has a GNI of 5,500. Income earned by residents abroad is equal to 800. Income earned by non-residents domestically is 300.

   What is the GDP of Country A?

   A. 4,700   GNI = GDP + Income from Residents Abroad − Non-resident domestic Income

   X. 5,000

   C. 5,300   5,500 = GDP + 800 − 300

   D. 5,800   GDP = 5,500 − 800 + 300 = 5,000

2. In the **Lewis two-sector model**, the turning point occurs when:

   A. The industrial/modern sector stops reinvesting profits

   B. The marginal product of labor in agriculture becomes positive

   X. Surplus labor in the subsistence/traditional sector is fully absorbed

   D. The savings rate in the industrial/modern sector falls below the population growth rate

3. In growth models that explain economic expansion primarily through capital accumulation (such as the Harrod–Domar and Solow models), which key assumption links savings behavior to the growth of output?

   X. All savings become investments

   B. All savings are held in cash

   C. Investment depends on government spending

   D. Savings and investments are determined independently

4. Suppose there are two firms in a developing economy. In order to become profitable, a **large initial investment is required**, but it requires both firms to operate simultaneously (ex. a car factory and a steel mill).

   Which concept best describes this situation?

   A. Capital deepening

   B. Comparative advantage

   C. Crowding out

   X. Coordination Failure

Short Answer - **X points**

Answer the following questions to the best of your ability. For full credit, show all of your work and clearly indicate your final solution for each party by circling the answer.

5. What is a **Big Push**? Explain intuitively and illustrate the concept by **drawing an S-curve diagram with the proper dynamics**.
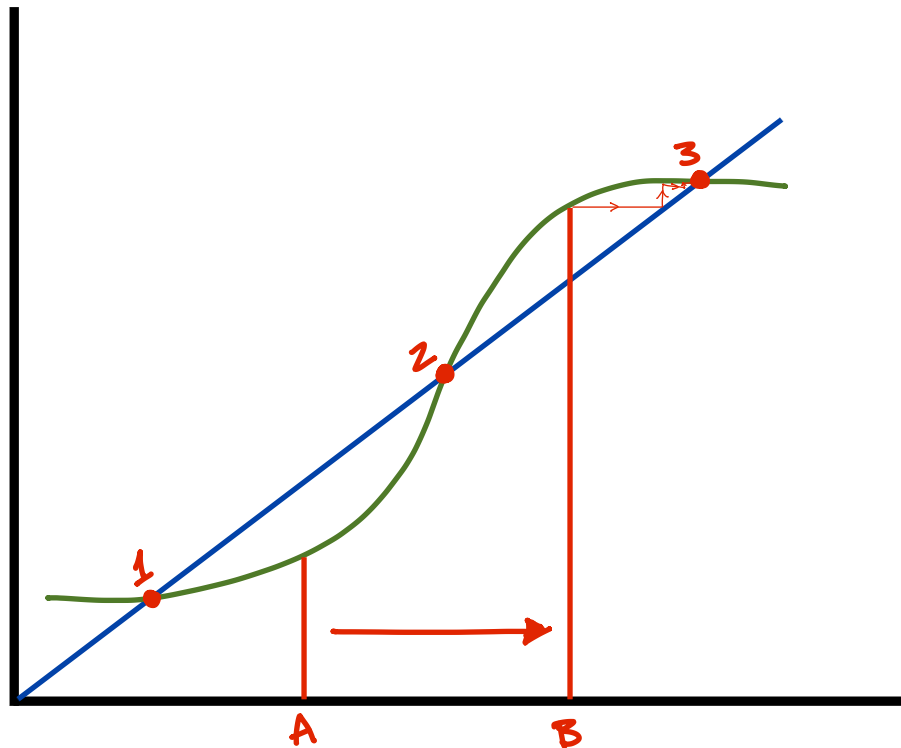

A Big Push is an exterior force that makes it possible for an economy stuck in a low-equilibrium to grow toward a high-equilibrium.

Otherwise, the economy would remain in stable equilibrium A (in my graph).

## Multi-Part Analysis - **X points**

Answer the following questions to the best of your ability. For full credit, show all of your work and clearly indicate your final solution for each party by circling the answer.

6. An economy can evolve under different growth scenarios. As a consultant, you are tasked with helping describe possible shifts/movements/growth/pitfalls **graphically**.

    (a) Draw a **Solow diagram** showing the steady-state level of capital per worker. Label the savings curve and capital growth line. Then, show what happens to k^* and y^* if production falls.
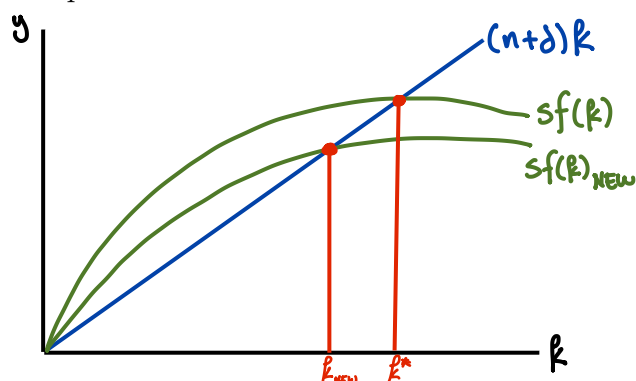
With lower production, $f(k)\downarrow$.
$sf(k)$ shifts down
$\Rightarrow$ Lower k equilibrium point.

    (b) Consider the **Lewis two-stage model diagram**. There is a traditional sector and a modern sector. Show how an increase in **agricultural productivity** affects ~~the~~ The wage in the traditional sector
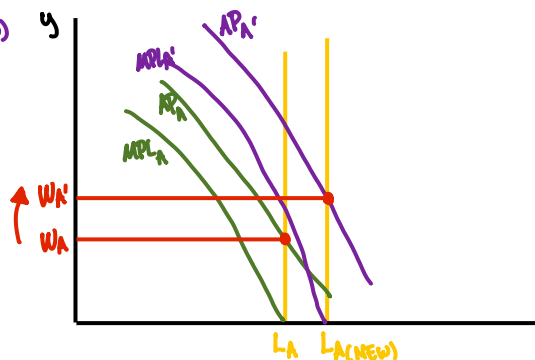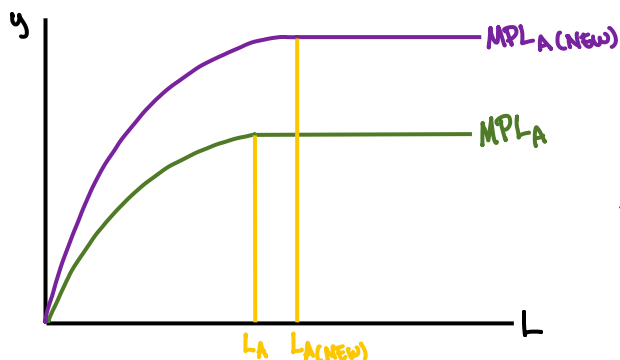
    (c) How would this increase in **agricultural productivity** affect the **pace of labor migration to the modern sector**.

Because agricultural "wages" are higher then their is a slower transition process

as the draw/incentives to move are less & there is less surplus labor