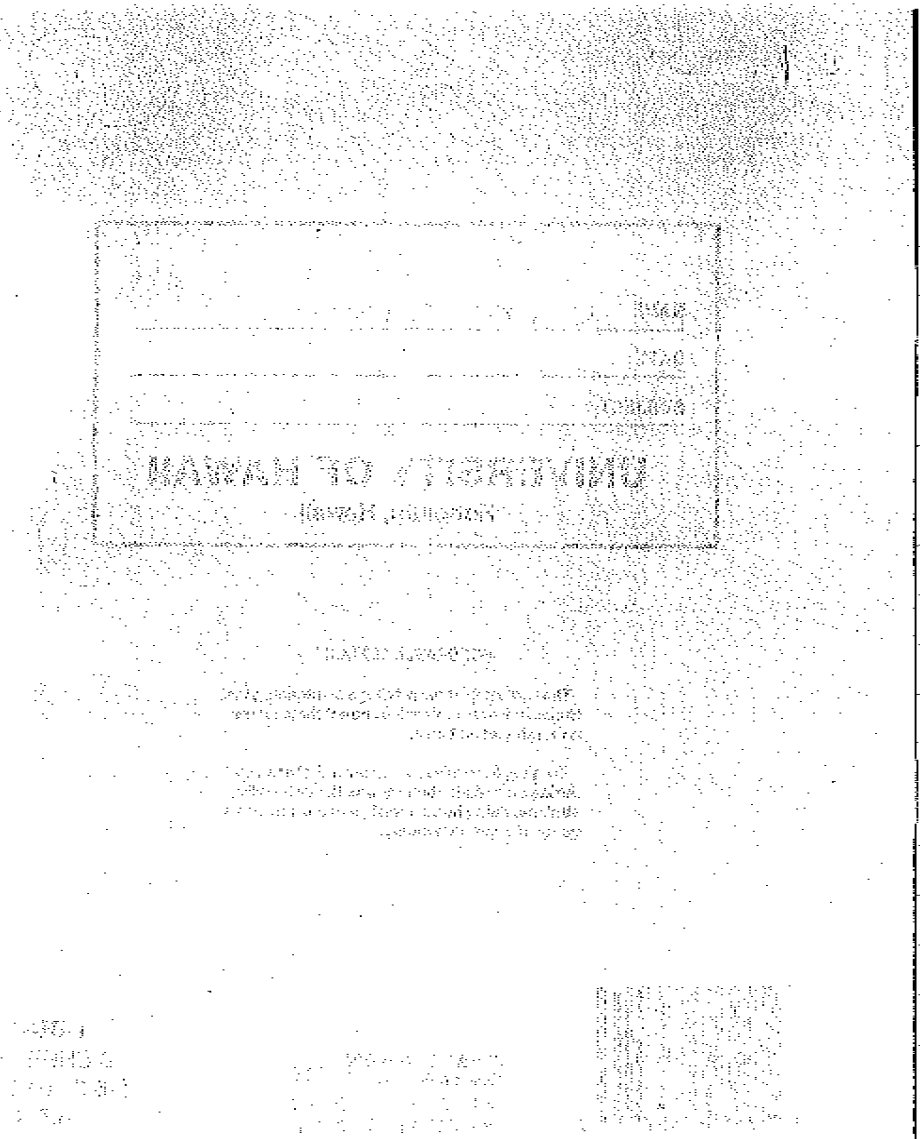


Q 1.

10

a) THE MAIN OBJECTIVES OF THE HARROD-DOMAR MODEL IS TO SHOW THE CORRELATION BETWEEN THE GROWTH IN INCOME AND THE SAVINGS RATE. THIS CORRELATION IS SHOWN UNDER THE ASSUMPTION THAT THE CAPITAL-OUTPUT RATIO (k) IS CONSTANT. THUS THE H-D MODEL SHOWS THAT TO INCREASE THE GROWTH RATE OF INCOME SAVINGS MUST BE INCREASED.

b) THE H-D MODEL HAS SEVERAL ASSUMPTIONS:

1) LABOR IS ABUNDANT (THUS IT IS NOT A BINDING CONSTRAINT OR IT IS NOT A FACTOR OF PRODUCTION)
2) CAPITAL OR TECHNOLOGY DOES NOT INCREASE IN EFFICIENCY (REMAINS CONSTANT)
3) CAPITAL-OUTPUT RATIO CONSTANT $k = Y/K$
4) KEYNESIAN SAVINGS FUNCTION

$$S = sY, \quad 0 < s < 1$$

DERIVE FORMULA:

$$S = I$$

$$\Delta K = I$$

OVER →

$K = kY$ (FROM #3)

$\Delta K = k\Delta Y$

$\Delta Y = \Delta K/k = I/k = S/k$

$= sY/k$ (FROM #4)

$\Delta Y = sY/k$

$\Delta Y/Y = s/k$

SINCE $\Delta Y/Y = g_Y$

$\therefore g_Y = s/k$ ✓

c) $s = .26$

$g_Y = .086$ ↑ .10

$g_Y = s/k$

$.086 = .26/k$

$k = .26/.086$

$= 3.023$

ANS: $.10 = s/3.023$

$s =$ .302 OR 30.2 % ✓

THE H-D MODEL SHOWS THAT INCREASING THE SAVINGS RATE WILL INCREASE INCOME GROWTH. THAILAND MUST THEREFORE ADOPT POLICIES TO ENCOURAGE SAVINGS SUCH AS HIGHER INTEREST RATES, LOWER TAXES ON INCOME AND CAPITAL GAINS, INCREASE CURRENT PER CAPITA INCOME, OR IMPERFECT MARKETS. ANY OF THESE COULD HELP INCREASE THAILAND'S SAVING RATE.

Q2 a) STRUCTURAL CHANGE IN THE ECON. DEV. PROCESS OF AN UNDER DEVELOPED ECONOMY IS A CHANGE FROM A STRUCTURE DOMINANT IN LESS DEVELOPED COUNTRIES (LOW WAGES, LOW PCI, HIGH PI GROWTH, ...) TO A STRUCTURE DOMINANT IN DEVELOPED COUNTRIES (HIGHER WAGES, HIGHER PCI, LOW POP. GR, ...).

THE LEWIS MODEL DESCRIBES THE STRUCTURAL CHANGE FROM UNEMPLOYMENT OR SURPLUS LABOR TO EMPLOYMENT. IT ALSO SHOWS THE GROWTH OF THE URBAN/MANUFACTURING SECTOR, AND HOW THIS GROWTH PRODUCES JOBS FOR THE UNEMPLOYED.

b) LEWIS MODEL ASSUMPTIONS:

1) TWO SECTORS: AGRICULTURE, MANUFACTURE

2) THERE IS SURPLUS LABOR IN THE AGRICULTURE SECTOR

3) THE AGRICULTURE SECTOR HIRES LABOR UP TO THE POINT AT WHICH THE MP OF THAT UNIT OF LABOR EQUALS ZERO ($MP = 0$)

4) WAGES IN THE AGRICULTURE SECTOR ARE DETERMINED BY THE POINT ON THE AP CURVE AT WHICH THE CORRESPONDING POINT ON THE MP CURVE EQUALS ZERO

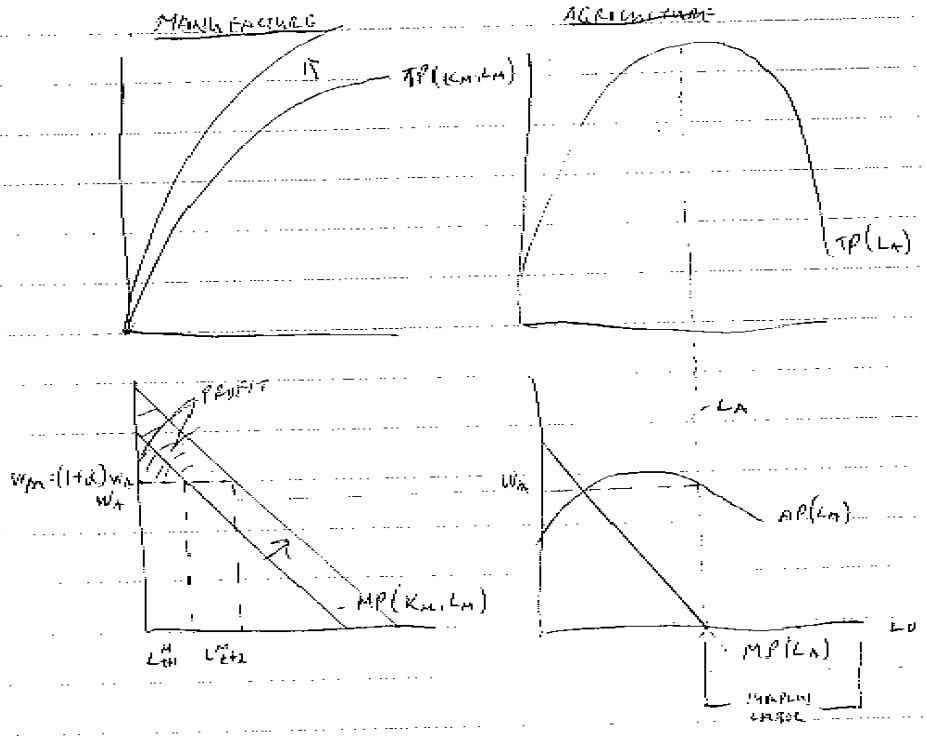
5) WAGES IN THE MANUFACTURING SECTOR ARE FIXED AT $(1+\lambda)W_A$

6) NO CAPITAL FLIGHT

7) CAPITALIST REINVEST IN THE SAME TECHNOLOGY

8) NO POPULATION GROWTH

9) NO SUBSTITUTION OF LABOR FOR CAPITAL.

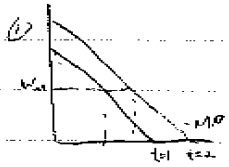


IN THE MODEL AGRICULTURE SECTOR THERE IS A "LABOR SURPLUS". A "LABOR SURPLUS" CAN BE DEFINED AS THE AMOUNT OF LABOR IN EXCESS OF THE UNIT OF LABOR AT WHICH MP = 0. LET L_S = TOTAL LABOR FORCE AND L_A = LABOR EMPLOYED BY AGRICULTURE.

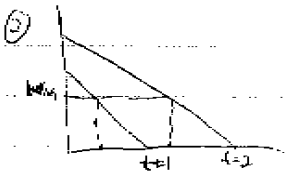
OVER →

THIS LABOR SURPLUS = $L_0 - L_A$. IN ESSENCE IT IS UNEMPLOYED LABOR. THE LEWIS MODEL SHOWS HOW AN ECONOMY WITH A DEVELOPING MANUFACTURING SECTOR EMPLOYS THESE "SURPLUS LABORERS" THROUGH A PROCESS CALLED THE "LABOR ABSORPTION PROCESS." AT $t=1$ THE MANUFACTURING SECTOR EARNS SOME OF THESE LABORER AT DETERMINED BY ITS WAGE RATE AND THE CORRESPONDING POINT ON THE MP CURVE. PROFITS ARE INVESTED INTO THE SAME CAPITAL/TECHNOLOGY CAUSING THE MP TO SHIFT UP. THIS IN TURN INCREASE THE DEMAND FOR LABOR AT $t=2$. THIS PROCESS CONTINUES UNTIL THE SURPLUS LABOR IS EXHAUSTED

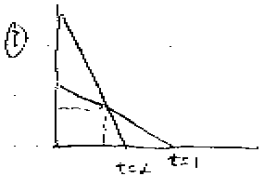
C) IF CAPITAL FLIGHT WAS ALLOWED IT WOULD SLOW THE LABOR ABSORPTION PROCESS BECAUSE PROFITS WOULD NOT BE REINVESTED IN ADDITIONAL CAPITAL. THIS WOULD NOT ALLOW THE MP CURVE TO SHIFT ~~WHICH INCREASES LABOR~~ THUS NO ADDITIONAL LABOR WOULD BE DEMANDED CURTAILING LABOR ABSORPTION AND HENCE THE DEVELOPMENT PROCESS. CAPITAL FLIGHT OCCURS IF A HIGHER RETURN ON INVESTMENT EXISTS IN MARKETS ABROAD. FREE IMPORT OF TECHN COULD HAVE THE SAME EFFECT. CAPITALISTS ARE ABLE TO CHOOSE BETWEEN 3 TYPES. THE FIRST IS THE SAME TECHNOLOGY, WHICH WOULD INCREASE



THE DEMAND FOR LABOR DEPEND ON HOW MUCH IS INVESTED. THE SECOND IS INVESTING IN LABOR INTENSIVE TECHNOLOGY WHICH WOULD



INCREASE THE DEMAND FOR LABOR EVEN MORE THAN THE FIRST OPTION. THE FINAL OPTION IS LABOR SAVING TECHNOLOGY. THIS COULD REDUCE, KEEP CONSTANT, OR MORE AT BEST SLIGHTLY INCREASE DEMAND FOR LABOR. THE CAPITALIST WOULD PICK THE OPTION THAT MAXIMIZED



HIS PROFITS. IF HE PICKED ③, IT WOULD

SLOW ADJUSTMENT BECAUSE THERE WOULD BE
LITTLE OR NO INCREASE IN LABOR DEMANDED.
TWO POLICIES GOVTS COULD USE TO PREVENT
THESE SITUATIONS IS TO TAX IMPORTS OF
DEVALUATION OF LABOR SAVING TECHNOLOGY OR
RESTRICT ACCESS TO FOREIGN EXCHANGE THUS
RESTRICTING IMPORTS OF TECHNOLOGY AND CAPITAL
FLIGHT