

# Harris - Todaro Model



*Theory of Migration, Part B*

# Functional Model

- ❖ There are two regions:
- ❖ Rural (Agricultural) and
- ❖ Urban (Industrial) in two sector economic model
- ❖ The crucial assumption of the Harris and Todaro's model is that workers base their migration decision on their expected incomes at urban (industrial) areas
- ❖ As the basic model is static, the expected income is just the weighted average of the urban wage and the unemployment benefit, the weights being the probabilities to find and not to find an urban job

# Functional Model

The model assumes that the rate of rural-urban ( $m = M/L_R$ ) is a function of:

Where

The probability that an urban labour can successfully find a modern sector job, which can be expressed as a positive function of the current urban employment rate  $E_U/L_U$ ,

or  $L_U - E_U/L_U$ , a negative function of urban unemployment rate

The urban-rural real income differential is expressed as-

$$Y_U/Y_R = W \text{ (} W \text{ greater than 1),}$$

Besides, migration will also be related to,

# Functional Model

Other factors ( $Z$ ), such as distance, personal conduct, urban amenities.

Where

$m$  = Rate of migration from rural to urban areas

$M$  = Actual volume of rural-urban migration

$L_R$  = Rural labour force

$E_U$  = Level of urban employment

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$L_U$  = Urban labour force

$Y_U$  = Urban real income

$Y_R$  = Rural real income

$W$  = Ratio between rural/urban real income

Therefore, the basic rural-migration migration model is expressed as:

(rural-urban migration)  $m$  = function of (current urban employment rate, urban-rural real income differential, and personal factors)

# Functional Model

❖ Thus, (rural-urban migration rate)  $m = f(E_u/L_u, W, Z)$   
=  $f(E_u/L_u)$  (holding  $W$  and  $Z$  constant)  
= Function of the ratio between the level of urban employment and urban labour force. Where

$f(E_u/L_u)$  is greater than Zero;  
 $f(W)$  is greater than Zero, and  
 $f(Z)$  may have +ve or -ve values;  
(here  $f$  is the time derivative of three elements)

# Functional Model

- ❖ That is, migration rate is a function of the ratio between the level of urban employment and urban labour force, or the probability to find a job in an urban industrial sector
- ❖ Besides, urban labour force growth can be expressed as:  
$$l_U/L_U = r + L_R/L_U(m) = r + L_R/L_U f(E_U/L_U)$$

$r$  = natural growth rate of rural/urban labour force

$l_U$  = time derivative of  $L_U$  (urban labour force)

# Discussion

- ❖ The fundamental contribution of Harris and Todaro's rural-urban two sector migration model was to build a model that fit the stylised facts of the labour market
- ❖ On the lines of the theory, developing countries adopted program on integrated rural development which encouraged an increase in the rural traditional sector wage

# Discussion

- ❖ The theory proves that the higher the unemployment rate, the lower is the probability of new migrants from the countryside actively seeking formal sector employment who are unable to find it

# Significant Findings

- ❖ The significant findings of the theory are:
- ❖ First, if the expected urban wage equals rural income, there is no incentive to migrate
- ❖ Second, if the expected urban wage is greater than rural income, there is a great incentive to move from rural to urban area
- ❖ Third, if the expected urban wage is less than rural incomes, there would be an incentive to move in other direction
- ❖ Fourth, the expected urban wage depends on what type of job migrant is engaged in

# Significant Findings

- ❖ Therefore, the Harris Todaro's model helps policy-makers to avoid two mistakes
- ❖ One is to assume that development efforts should necessarily be channeled to the sectors where the poor are
- ❖ The other is to assume that efforts should necessarily be focused on getting the poor out of the sectors in which they presently are

# Limitations

- ❖ Some of the assumptions of the Harris-Todaro's model were judged to be too restrictive
- ❖ The model also assumes that potential migrants are risk neutral where the poor migrants will likely be risk averse, as in they are indifferent between a certain expected rural income and an uncertain expected urban income of the same magnitude
- ❖ The assumption that there exists a perfect competition in rural agriculture sector is not realistic

Thank You