

# The Lewis Theory of development

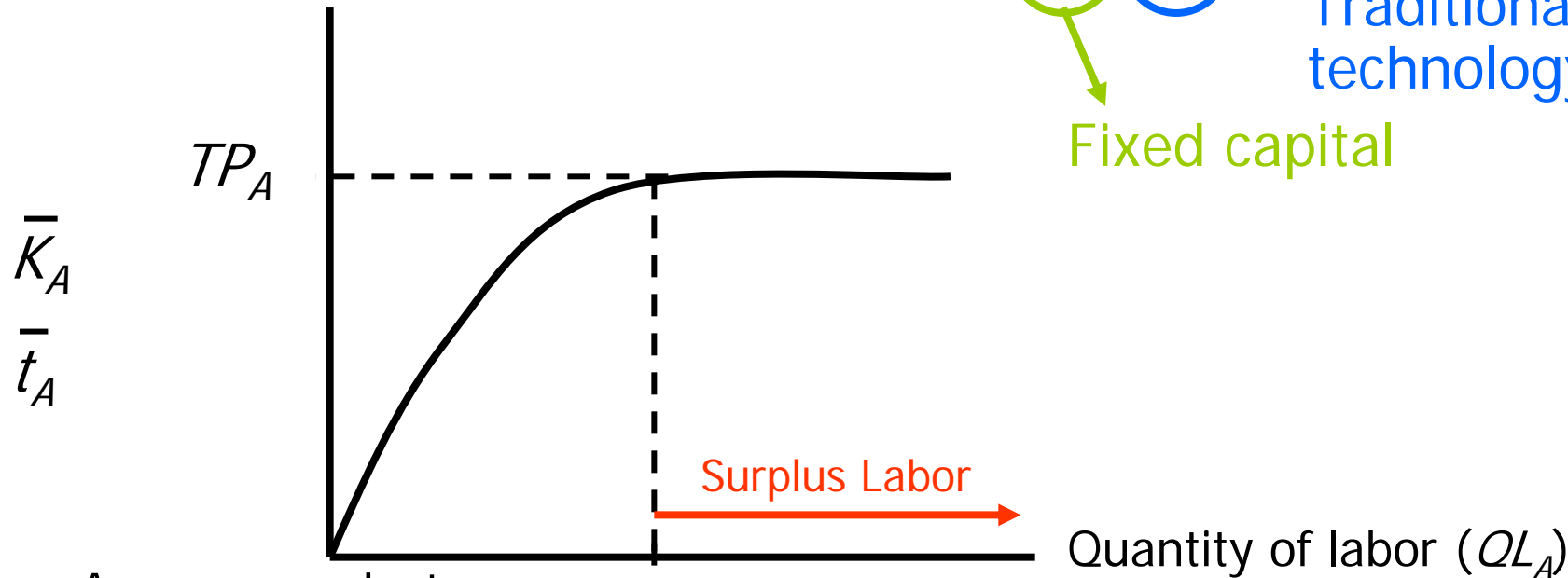
- Models on structural transformation
    - **Two-sector surplus labor model**, basic model initiated by W.Arthur Lewis (1954), a Nobel Prize Laureate
    - Modified by John Fei and Gustav Ranis (1964)
- (Based on ideas of Ragnar Nurkse (1953))

# **The Lewis model: assumptions**

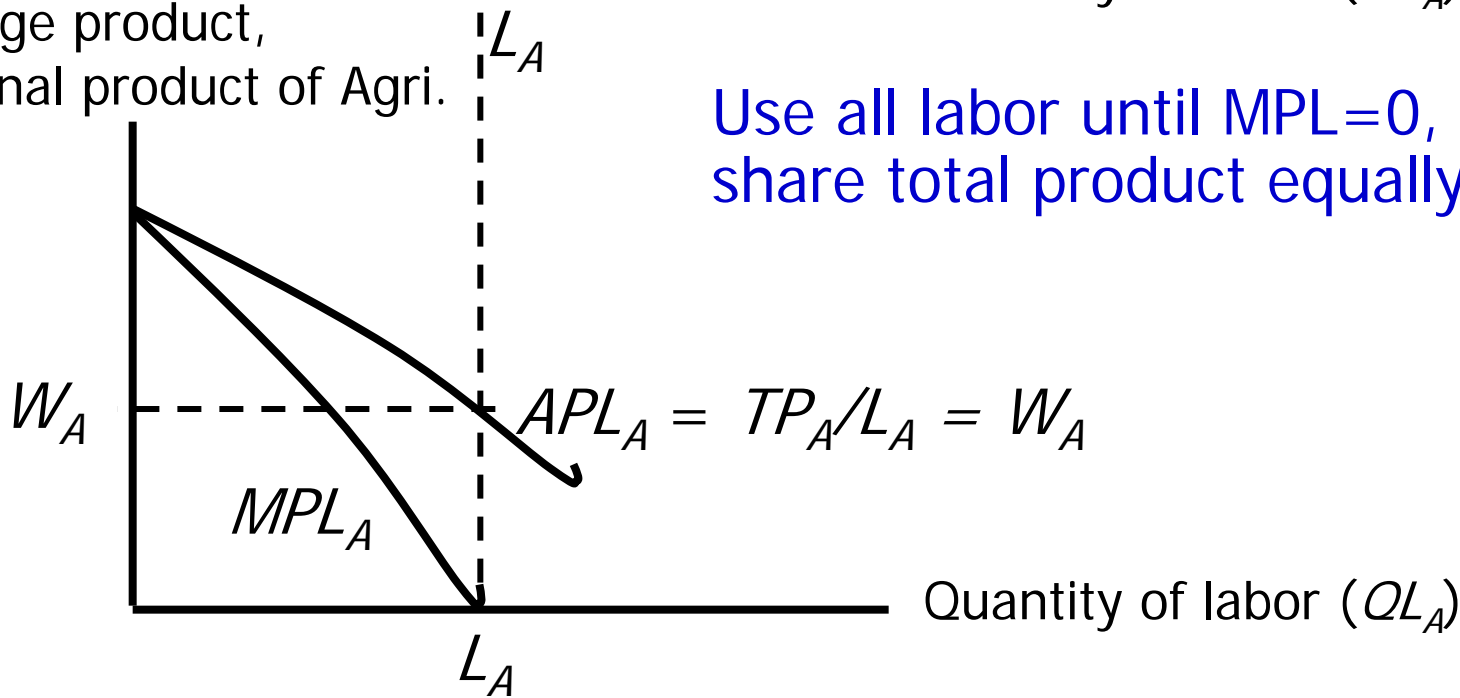
- Underdeveloped economy consisted of two sectors
  - A traditional sector
  - A modern sector

- **A traditional sector**
  - Subsistence economy
  - Overpopulated rural sector
  - Surplus labor
    - Zero marginal labor productivity
    - Labor can be withdrawn without loss of output
  - All rural workers share equally in the output so that the rural wage rate is determined by the average (not marginal product) of labor

Total product of Agri. ( $TP_A = f(L_A, \bar{K}_A, \bar{t}_A)$ ) → Unchanged Traditional technology



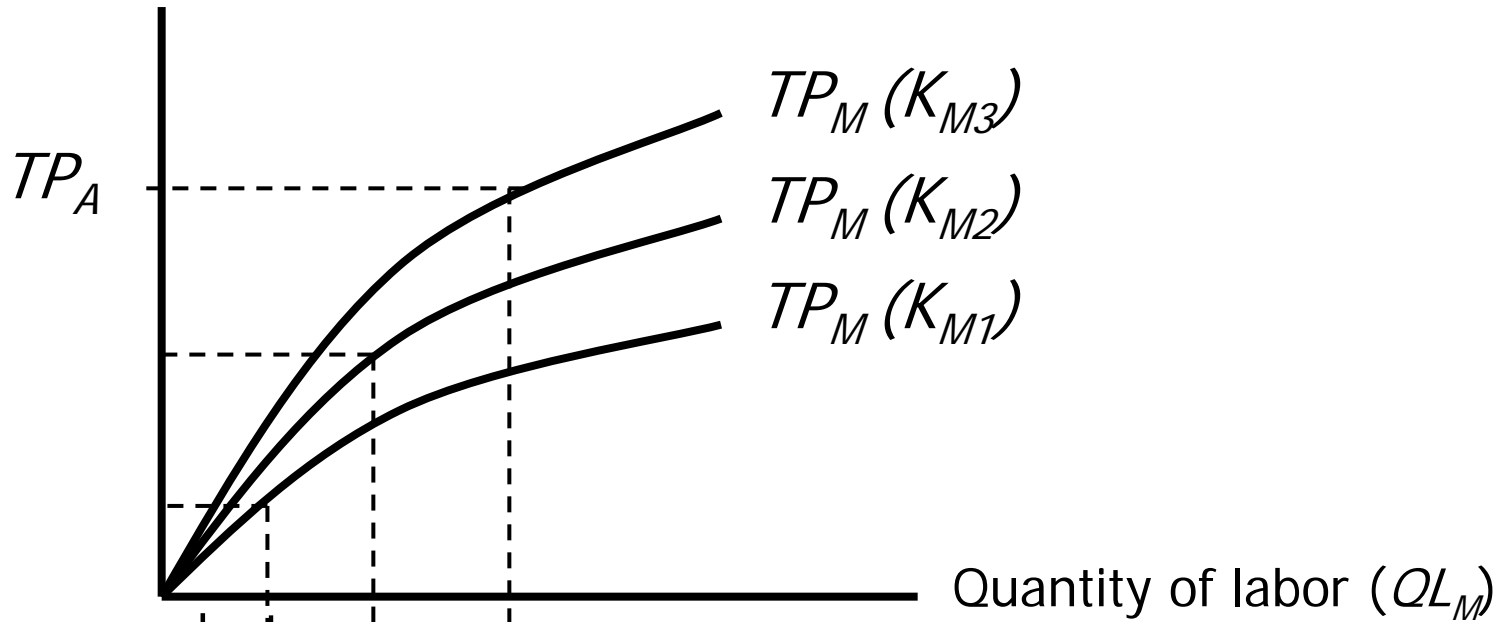
Average product, Marginal product of Agri.



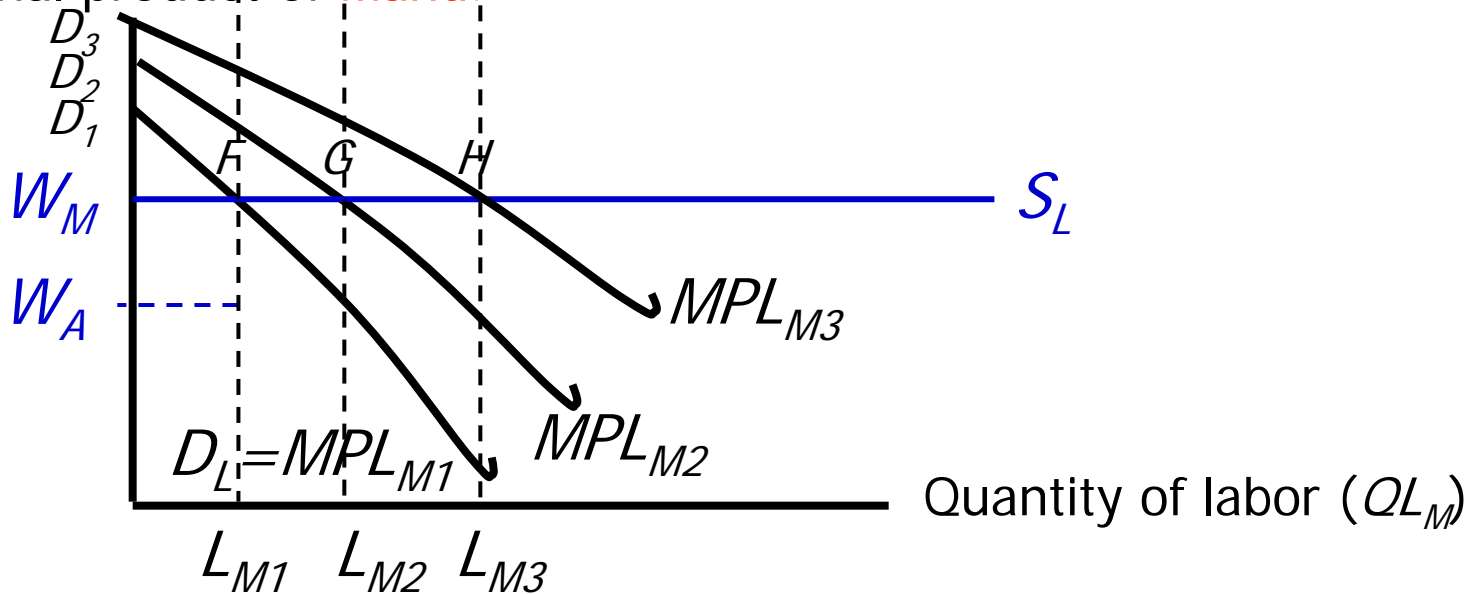
Use all labor until  $MPL=0$ , and share total product equally

- **A modern sector**
  - **Modern agriculture and urban industrial sector**
  - **High productivity**
  - **The wage rate is constant and higher than that in the traditional sector (the sector can hire as many surplus rural workers as they want without rising wages)**
  - **Total profits to capitalist will be reinvested → increase capital stock → increase MPL → hire more rural surplus labor → increase TP → increase profits → → until surplus of labor disappear**

Total product of Manu. ( $TP_M = f(L_M, \bar{K}_M, \bar{t}_M)$ )



Average product,  
Marginal product of Manu.



# **The Lewis model: prediction**

- Labor from the subsistence sector gradually transfers to the modern sector
- Modern sector has a self-sustaining growth

# **The Lewis model: criticisms**

- **Unrealistic assumptions**
  - Profits may be reinvested in labor-saving technology, changing MPL without increasing labor employment
  - Little surplus of labor in rural area
  - Urban wage rate rises overtime
  - Increasing MPL in the modern sector

# “Anti-development” growth

- GDP rises without distributed gains in income and employment

Average product,  
Marginal product of

