

ECON 333: PROBLEM SET # 4b Professor Lakshmi K. Raut

1. What are the main assumptions in Lewis model? Explain the main improvements that Lewis model features as compared to Harrod Domar model as a model of economic development (*economic development in the sense we have discussed in previous classes*)? Give a graphical exposition of the Lewis model, and explain the concepts of "labor surplus", and "labor absorption process" in the manufacturing sector using the Lewis model. In the Lewis model, how does an underdeveloped economy become industrialized? What is the role of agricultural sector in this development process? What are the main criticisms of this model as a model of economic development?
2. In Lewis model, explain what role does population growth play? Take two countries A and B. Country A has higher population growth rate than country B. Otherwise both countries are identical at the current moment, including the population size being the same at the current moment. According to Lewis model, what will be the differences in the rate of growth of income, and the rate of industrialization in countries A and B? Can you construct a criticism of the Lewis model based on your answers, and given the fact that the countries with higher population growth are observed to grow slowly.
3. Explain the concepts of "labor saving technology or equipment", and "capital flight" and explain what are the basic assumptions in Lewis model regarding these two, and how would they affect the development process as depicted in Lewis model if the capitalists in the manufacturing sector use labor saving technology or engage in capital flights activities. Under what circumstances, the capitalist may like to engage in labor saving technology choice (show in your diagram) or in capital flights?
4. It has been often argued by some economists that Lewis model does not describe the development process of contemporary less developed countries since we do not find unemployment in the rural sector, but what we see is rather a lot of unemployed workers in the urban sector. Modify the basic Lewis model along the line discussed in details in the class (queing for first to be employed type of mechanism) to give a model of rural-urban migration that will overcome the above criticism.
5. In Lewis model suppose the capitalist is free to import technology from abroad, or invest in the capital markets abroad. Describe under what conditions, free import of technology and unrestricted investment abroad might slow down the development process of the Lewis type. What government policies would you recommend in those situations?