ECON1910 Exam Spring 2024

Consider a dual economy with a manufacturing sector hiring labour in the city and an agricultural sector hiring labour in the countryside and where workers are free to migrate.

This leads up to the standard Haris Todaro model. It was discussed extensively in class. It was also covered in the handout.

a) Explain how wages are determined.

Here it was expected that candidate draw a diagram with MPL of labour MPLa in agriculture from left to right and in manufacturing, MPLm from right to left and with total labour supply as the width. Where the two curves cross all labour is employed and the wage is equal in both sectors. Some might already here anticipate the unemployment complication introduced in the next Q. That is OK, because that is the main insight.

b) Assume, from now on, that the wage in manufacturing is fixed at a high level. Show how this could result in unemployment (or informal self-employment) in the city.

With a fixed high wage in manufacturing the equil above is not feasible. There will be unemployment. In particular there will be unemployment in the city so that expected wage in city is equal to MLPa.

c) The government wants to alleviate poverty. What is the consequence for the employed workers in agriculture and for the unemployed of a cash transfer to the unemployed?

A cash transfer to unemployment is like an unemployment insurance. Expected wage in the city increases as more workers come into the city. Employed workers in agriculture are better off. The number of unemployed increases but their welfare increases.

d) Consider the case where manufacturing in the city expands and labour demand expands with it. What happens to unemployment in the city, and employment in the countryside?

MPLm shifts out, (i.e. to the left). Manufacturing employment increases expected wage in the city increases. Employment in the countryside goes down. Unemployment may go up or down. The best students are able to show how the slope of MPLa determines this.

e) How would your answer to c and d change if workers are not free to migrate?

Without migration: Cash to the unemployed has no effect on the number. Expansion of manufacturing lowers unemployment.

f) Try at the end to compare the unemployment outcome when there is sharecropping in the countryside rather than hired labour.

This is tricky and distinguish the best from the others. With sharecropping the farmer households demand for farm labour is $g*MPLa$ where g is share to farmer. This lowers demand in agriculture. Going to share cropping will increase unemployment. The change in slope could also be of relevance for the discussion done in c, d and f.