

Recitation 6

1. Labor market indicators

a. Complete the table below!

	Country 1	Country 2	Country 3
WAP	5M	380k	150M
LF	4M	150k	35M
EMP	3M	140K	30M
E2Pr	60%	36.8%	20%
LFPr	80%	39.5%	23.3%
UR	25%	6.7%	14.3%
Unemp	4M-3M=1M	150K-140K=10K	35M-30M=5M

The functions you need to use:

$$E2Pr = \frac{Emp}{WAP} * 100$$

$$LFPr = \frac{LF}{WAP} * 100$$

$$LF = Emp + Unemp$$

$$UR = \frac{Unemp}{LF} * 100$$

- b. By how much would Country 1 have to increase its employment level to reduce unemployment to 5%?

$$4M * 5\% = 200K$$

Country 1 has to decrease unemployment from 1M to 200K, which also means that country 1 have to increase 800K employment.

- c. By how much would the unemployment rate change in Country 2 if 80,000 workers entered the labor force?

$$LF = 150K + 80K = 230K$$

Since these people can't get a job immediately, unemployment will increase from 10K to 90K.

$$UR = \frac{Unemp}{LF} * 100 = 90/230 * 100 = 39.1$$

Thus, the unemployment rate increases by 32.4%.

- d. How will the employment-to-population ratio change in Country 3 if 15 million new children are born?

No change. New children are not a part of WAP.

2. Output gap

- a. What can you say about the unemployment rate if the output gap is \$3 billion?

UR < NUR since $3 > 0$

- b. How will an output gap of $-\$1$ billion change if the real wage rate increases while holding the unemployment rate constant?

UR > NUR since output gap is negative.

Then if real wage rate increases, more unemployment will be willing to search for a job. Generally, the natural unemployment rate will decrease. The pGDP will increase.

At the same time, the unemployment rate constant keeps constant, rGDP keeps constant.

The output gap will be larger. $OG < -\$1$ billion.

- c. What happens to the natural unemployment rate if the government increases unemployment insurance?

NUR increases since unemployment insurance is more attractive.