

Section Exercise for April 6/7: Introduction to Business Cycles with Answers

1) The country of Wallachia has a potential GDP of \$10 billion. Its chief economist has just reported that its actual unemployment rate has just reached 10%, while its natural unemployment rate is only 5%. According to Okun's law, how much below its potential GDP, would you expect its actual GDP to be?

$$\mathbf{-2*(10-5)=-10}$$

**-10% of 10 billion= -1 billion
One billion below.**

2) In 2016, Wallachia had a potential output of \$10 billion. However, its actual GDP is \$10.5 billion. What kind of gap does Wallachia have? How big is in percentage terms?

Expansionary Gap of 5%.

3) What are some reasons the natural rate of unemployment can change over time? Can the government do anything to reduce the natural rate of unemployment?

People might put more or less effort into looking for a job. Geographic mobility might increase, making it easier for people to move and find work. The age distribution of the country might change and people of different ages might make people more or less likely to be employed.

The government could make being unemployed more unpleasant by abolishing unemployment benefits. If more educated people are less likely to be unemployed, the government could invest in education.

4) A local restaurant sells stress-busting smoothies with acacia berries. During exam time, their sales skyrocket and they have lines out the door. During spring break, their restaurant is nearly empty. How does this example relate to the concepts discussed in chapter 21?

Possible answers: During spring break, the restaurant is producing below potential output and during exam time the restaurant might produce above potential output (through over-time work and running their blenders non-stop.) Eventually, the restaurant might be able to bring potential and actual output closer together through timing worker vacations and maintenance during spring break, or through raising prices and hiring seasonal workers at the end of semesters.