

Chapter 12

Homework Assignment

1. Given the data below on real GDP and potential GDP for the fictitious country "Alpha" determine each of the following:
 - a. the year-to-year growth rates of GDP
 - d. the output gap
 - e. the output gap as a percentage of potential GDP
 - f. whether the gap is expansionary or recessionary

<i>Year</i>	<i>Real GDP</i>	<i>Potential GDP</i>
1990	17,500	17,300
1991	18,200	17,800
1992	18,500	18,300
1993	18,200	18,800
1994	18,600	19,300
1995	19,000	19,800
1996	19,400	20,800
1997	19,900	20,900
1998	20,600	21,100
1999	21,600	21,500

2. Use the data in Problem 1 to graph the economic situation in "Alpha" during the 1990s. Label the phases of the business cycle on your graph.
3. According to Okun's Law, if a country's output gap grows by 4%, its cyclical unemployment rate will grow by how much?

Key

1a. year-to-year real GDP growth

1991	4.0%
1992	1.6%
1993	-1.6%
1994	2.2%
1995	2.2%
1996	2.1%
1997	2.6%

1998 3.5%
1999 4.9%

b. output gap

1990 200
1991 400
1992 200
1993 -600
1993 -700
1995 -800
1996 -1400
1997 -1000
1998 -500
1999 100

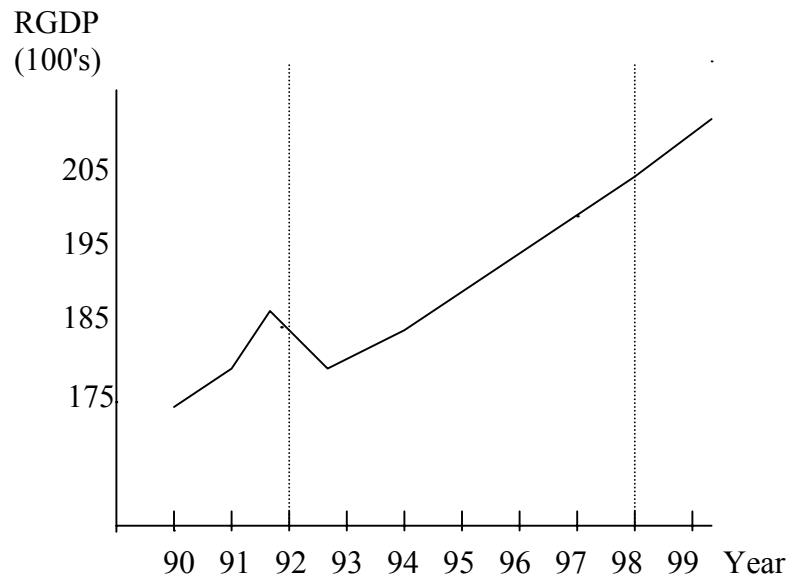
c. output gap as a percent of GDP

1990 1.14
1991 2.19
1992 1.08
1993 3.29
1994 3.76
1995 4.21
1996 7.21
1997 5.03
1998 2.43
1999 0.46

d. is the gap recessionary or expansionary?

1990 E
1991 E
1992 E
1993 R
1994 R
1995 R
1996 R
1997 R
1998 R
1999 E

2.



3. 2%