Chapter 2
Simultaneous Decisions: Gradualist Policies

This chapter is concerned with competition between the European central bank, the American central bank, the German labour union, and the French labour union. So far we have assumed that the central banks and the labour unions follow a cold-turkey strategy. Now we assume that the central banks and the labour unions follow a gradualist strategy. We still assume that the central banks and the labour unions decide simultaneously and independently.

In the numerical example, an increase in European money supply of 100 causes an increase in German output of 150, an increase in French output of equally 150, and a decline in American output of 100. An increase in American money supply of 100 causes an increase in American output of 300, a decline in German output of 50, and a decline in French output of equally 50. An increase in German nominal wages of 100 causes a decline in German output of 120, a decline in French output of 30, and an increase in American output of 50. Correspondingly, an increase in French nominal wages of 100 causes a decline in French output of 120, a decline in German output of 30, and an increase in American output of 50. Further let full-employment output in Germany be 1000, let full-employment output in France be equally 1000, and let full-employment output in America be 2000.

At the start there is unemployment in Germany, France and America. More precisely, unemployment in Germany is high, and unemployment in France is low. The general target of the European central bank is full employment in Europe. We assume that the European central bank follows a gradualist strategy. The specific target of the European central bank is to close the output gap in Europe by 80 percent. The general target of the American central bank is full employment in America. We assume that the American central bank follows a gradualist strategy. The specific target of the American central bank is to close the output gap in America by 80 percent. The general target of the German labour union is full employment in Germany. We assume that the German labour union follows a gradualist strategy. The specific target of the German labour

union is to close the output gap in Germany by 20 percent. The general target of the French labour union is full employment in France. We assume that the French labour union follows a gradualist strategy. The specific target of the French labour union is to close the output gap in France by 20 percent.

We assume that the central banks and the labour unions decide simultaneously and independently. In step 1 the European central bank, the American central bank, the German labour union, and the French labour union decide simultaneously and independently. In step 2 there is an output lag. In step 3 the European central bank, the American central bank, the German labour union, and the French labour union decide simultaneously and independently. In step 4 there is an output lag. And so on. For a small-scale model see Carlberg (2004) p. 154.

Let initial output in Germany be 940, let initial output in France be 970, and let initial output in America be 1910. In each of the countries there is unemployment. Step 1 refers to the policy response. First consider monetary policy in Europe. The output gap in Europe is 90. The specific target of the European central bank is to close the output gap in Europe by 80 percent, that is by 72. The monetary policy multiplier in Europe is 3. So what is needed in Europe is an increase in European money supply of 24. Second consider monetary policy in America. The output gap in America is 90. The specific target of the American central bank is to close the output gap in America by 80 percent, that is by 72. The monetary policy multiplier in America is 3. So what is needed in America is an increase in American money supply of 24.

Third consider wage policy in Germany. The output gap in Germany is 60. The specific target of the German labour union is to close the output gap in Germany by 20 percent, that is by 12. The wage policy multiplier in Germany is −1.2. So what is needed in Germany is a reduction in German nominal wages of 10. Fourth consider wage policy in France. The output gap in France is 30. The specific target of the French labour union is to close the output gap in France by 20 percent, that is by 6. The wage policy multiplier in France is −1.2. So what is needed in France is a reduction in French nominal wages of 5.

Step 2 refers to the output lag. The increase in European money supply of 24 causes an increase in German output of 36 and an increase in French output of