

Chapter 10 (P4, P8) : 解答

Problems

4. (a) $\$200,000 (1 + 8\%)^3 = \$251,942.4$; The real value = $\$251,942.4$.
- (b) The price level = $1.00 (1 + 3\%)^3 = 1.0927$; The real value = $\$251,942.4/1.0927 = \$230,568.68$.
- (c) The nominal interest rate = 11%; The nominal amount of the payment = $\$200,000 (1 + 11\%)^3 = \$273,526.2$; The real value = $\$273,526.2/1.0927 = \$250,321.4$.
8. (a) The natural rate of unemployment for the entire labor force is a weighted average of the natural rates of unemployment for each of the groups in the labor force. Therefore the natural rate of unemployment for the entire labor force equals $0.55(4.8) + 0.3(4.5) + 0.15(13.4) = 6\%$.
- (b) The new natural rate of unemployment for the entire labor force equals $0.5(4.8) + 0.4(4.5) + 0.1(13.4) = 5.54\%$. The natural rate of unemployment declined because the percentage of the labor force that consists of adult females, the group with the lowest natural rate of unemployment, rose and the percentages of the labor force made up of groups with higher natural rates of unemployment, adult males and teenagers, fell.
- (c) The new natural rate of unemployment for the entire labor force equals $0.5(4.3) + 0.4(4.0) + 0.1(12.5) = 5\%$.
- (d) Part (b) tells us that monetary authorities are likely to monitor demographic changes in the labor force in an effort to decompose any change in the unemployment rate into a cyclical change and a change in the natural unemployment rate. Part (c) tells us that monetary authorities are likely to look for job search innovations and other changes in labor market conditions that would have an effect on the natural rate of unemployment.

If the Fed had not been paying attention to changes in labor market condition in the 1990s, it would not have recognized that the natural unemployment rate was declining over course of the decade. In particular, it might well have taken actions to significantly slow the economy's growth as the unemployment rate fell well below 6% in the second half of the decade.