Comment on the textbook Macroeconomics, 3rd US Ed., Olivier Blanchard by Louis Hotte and Gabriel Rodriguez University of Ottawa

In chapter 6 (p. 123, 3d US edition), the wage-setting relation is justified by arguing that nominal wages are negotiated in advance, and fixed for a period of up to three years. It is also argued that during negotiations, the unemployment rate has a negative impact on the wage level. The discussion implies the following relation:

(1)
$$W_{t+1} = E_t[P_{t+1}]F(u_t, z),$$

where $E_t[P_{t+1}]$ denotes present expectations over future prices. Hence, future nominal wages depend the present unemployment rate and expectations about the price level that will prevail once those wages are paid. Note that the above relation is equivalent to

(2)
$$W_t = E_{t-1}[P_t]F(u_{t-1}, z).$$

Today's nominal wage level depends on yesterday's expectations about today's prices and yesterday's unemployment rate.

As for the price-setting relation, it is defined as

(3)
$$P_t = (1+\mu)W_t.$$

Putting the two together, we get

(4)
$$P_t = E_{t-1}[P_t](1+\mu)F(u_{t-1},z).$$

This relation turns out to be different from the one implied by the AS-AD model of chapter 7. The AS-AD model rather assumes the following relation:

(5)
$$P_t = E_{t-1}[P_t](1+\mu)F(u_t, z),$$

that is, the current price level depends on the current unemployment rate, not the one that was effective during wage negotiations. The distinction is important since along the AS curve, output has a positive effect on prices because when the current unemployment rate decreases, wage setters increase the current wage rate, thus leading price setters to increase prices. If current nominal wages were based on past unemployment rates, then the AS curve would be flat. Whether it is the past or the current unemployment rates that is important in determining nominal wages is an empirical issue that will not be considered further here. One should also keep in mind that the expected price that is used to derive the natural output level on the AS curve denotes yesterday's expectations about the current price level or, put differently, it tells us how wrong people were about the current price level.