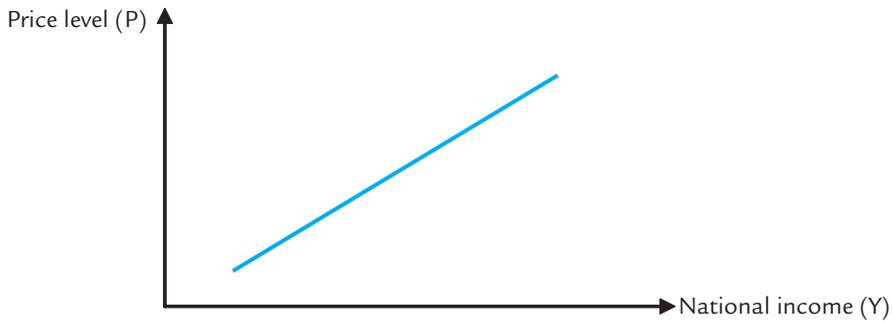


Figure 17.1 *The AS curve in the short term where there is limited capacity*



One of the key factors in the labour market is collective wage bargaining. When employees and employers enter into these negotiations, which normally set wages and salaries in Denmark for the next two to three years, expectations for prices during the period concerned are of crucial importance – particularly for employees, as companies are free to change prices if they wish.

All other things being equal, the higher the prices that employees expect in the period covered by the collective bargaining agreement, the higher the wages and salaries they will demand. From an employer perspective, this leads to rising costs that companies pass on in their prices. In simple terms, expectations of higher prices lead to higher prices. This corresponds to the AS curve being pushed upward.

The AS curve is therefore based on certain price expectations. If these expectations rise, the AS curve is pushed upwards; if they fall, the curve is pushed downwards.

In the following analysis, it is assumed that employees have what are known as adaptive expectations, i.e. prior to a round of collective bargaining they expect prices in the period covered to be the same as in the previous period.

### 17.1.2 The AS curve and potential national income

Remember that the **potential** national income depends on the capital stock, total factor productivity and structural employment, which can be calculated as the structural workforce minus structural unemployment, i.e.:

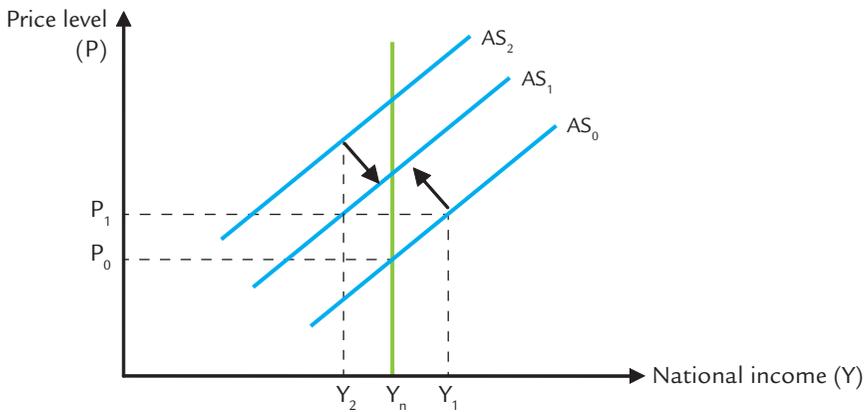
$$(17.1) Y_n = f(K, TFP, A_n - U_s)$$

where  $Y_n$  is the **potential** national income,  $K$  is the size of the capital stock,  $TFP$  is total factor productivity,  $A_n$  is the structural workforce, and  $U_s$  is the structural unemployment.

This means that for a given capital stock, given total factor productivity and given structural workforce, the **potential** national income depends on the structural unemployment. When actual unemployment is equal to structural unemployment, the actual national income corresponds to **potential** national income.

Figure 17.2 compares the AS curve with national income. Initially, the AS curve is  $AS_0$ , and the assumption is that **actual** national income  $Y$  corresponds with **potential** national income  $Y_n$ . This means that real unemployment is equal to structural unemployment. Note that the price level is  $P_0$ .

Figure 17.2 *Moving the AS curve*



If real national income rises to  $Y_1$ , which is greater than **potential** national income  $Y_n$ , then unemployment falls to a level that is lower than structural unemployment. This means that employees are in a strong position when it comes to wage negotiations, and they can force through pay rises. However, companies will pass on these costs in their prices, which will then rise to price level  $P_1$ .

This means that the prices are now higher than the prices on which the employees based their wage negotiations.<sup>147</sup> The employees will therefore factor in these higher prices in the next round of collective bargaining. In turn, companies will offset the higher wage costs in their prices, which will push the AS curve upwards from  $AS_0$  to  $AS_1$  in Figure 17.2. This process will continue as long as actual national income is higher than **potential** national income, which corresponds to unemployment being lower than structural unemployment.

All of this means that as long as actual national income remains higher than **potential** national income, the AS curve is pushed upwards, as illustrated in Figure 14.2. Correspondingly, the AS curve is pushed downwards (e.g. from  $AS_2$  to  $AS_1$ ) when actual national income is lower than **potential** national income – as is the case at  $Y_2$ .

Only when actual national income corresponds to **potential** national income, and unemployment therefore corresponds to structural unemployment, is the economy in equilibrium and the AS curve set. Only then will the prices during the period covered by the collective bargaining agreement correspond exactly with the prices that wage earners expected when their unions entered into the negotiations, and only in that situation do they have no reason to change their price expectations.

In other words, in the long term, actual national income – irrespective of the price level – corresponds with **potential** national income. In the long term, therefore, the AS curve is vertical, as seen in Chapter 3.

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## 17.2 The AD curve at flexible prices

Earlier chapters examined how the AD curve is determined when prices are constant. This section looks at how it is determined when prices are flexible.

As established previously, aggregate demand in a closed economy consists of consumer spending  $C$ , private investments  $I$ , and public spending and investments  $G$ . This means that:

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147 As a result of adaptive expectations, these were the price level  $P_0$ .