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# Well, What Do You Expect?
# Inflationary Expectations and Macroeconomic Variables

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Economic behaviors and plans (supply and demand) depend on real variables rather than nominal values.

The real values of future values are estimated by adjusting nominal values by the expected price level, or by expected inflation.

If actual inflation departs from the inflation that was expected, then there will be good or bad surprises – unexpected costs and benefits – that produce changes in behavior (plans).
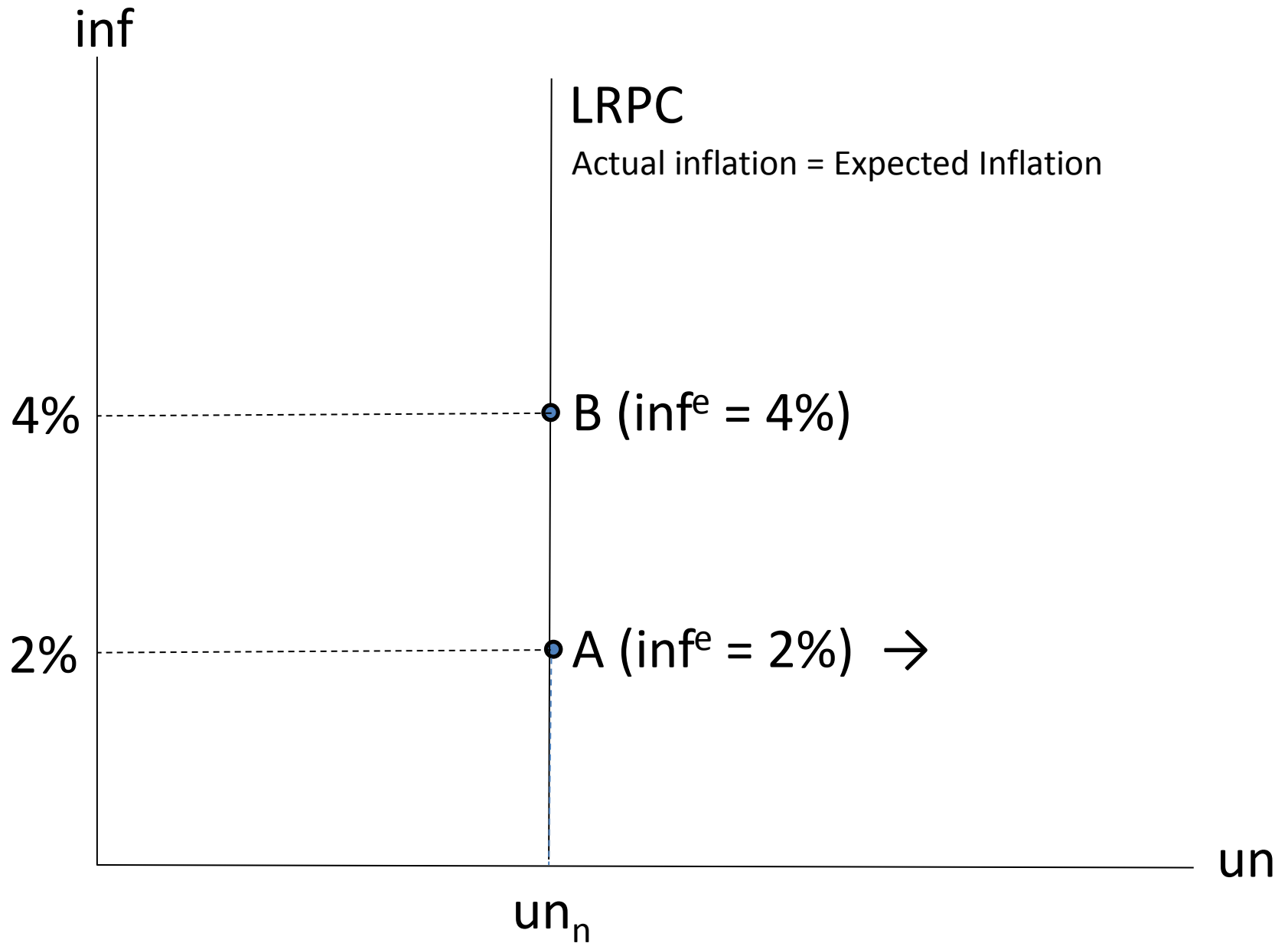
If actual inflation equals the inflation that was expected, then there will be no surprises and no changes in behavior (plans).

# Assume:

- Labor Market is in Equilibrium
  Qs= Qd of Labor, so Full Employment

- Equilibrium Real Wage Increase = 3%

- Expected Inflation = 2%

Given the acceptable real wage increase (3%) and expected inflation (2%), what is the equilibrium nominal wage?

5%

**Given the acceptable (equilibrium) real wage increase of 3% and expected inflation of 4%, what is the equilibrium nominal wage increase?**

7%

If inflationary expectations are correct and nominal wages can adjust to those expectations, then real wages (real wage changes) will remain at their equilibrium level and unemployment will not change when inflation changes.

Suppose now that inflation increases from 4%, but expectations and/or wages do not completely adjust
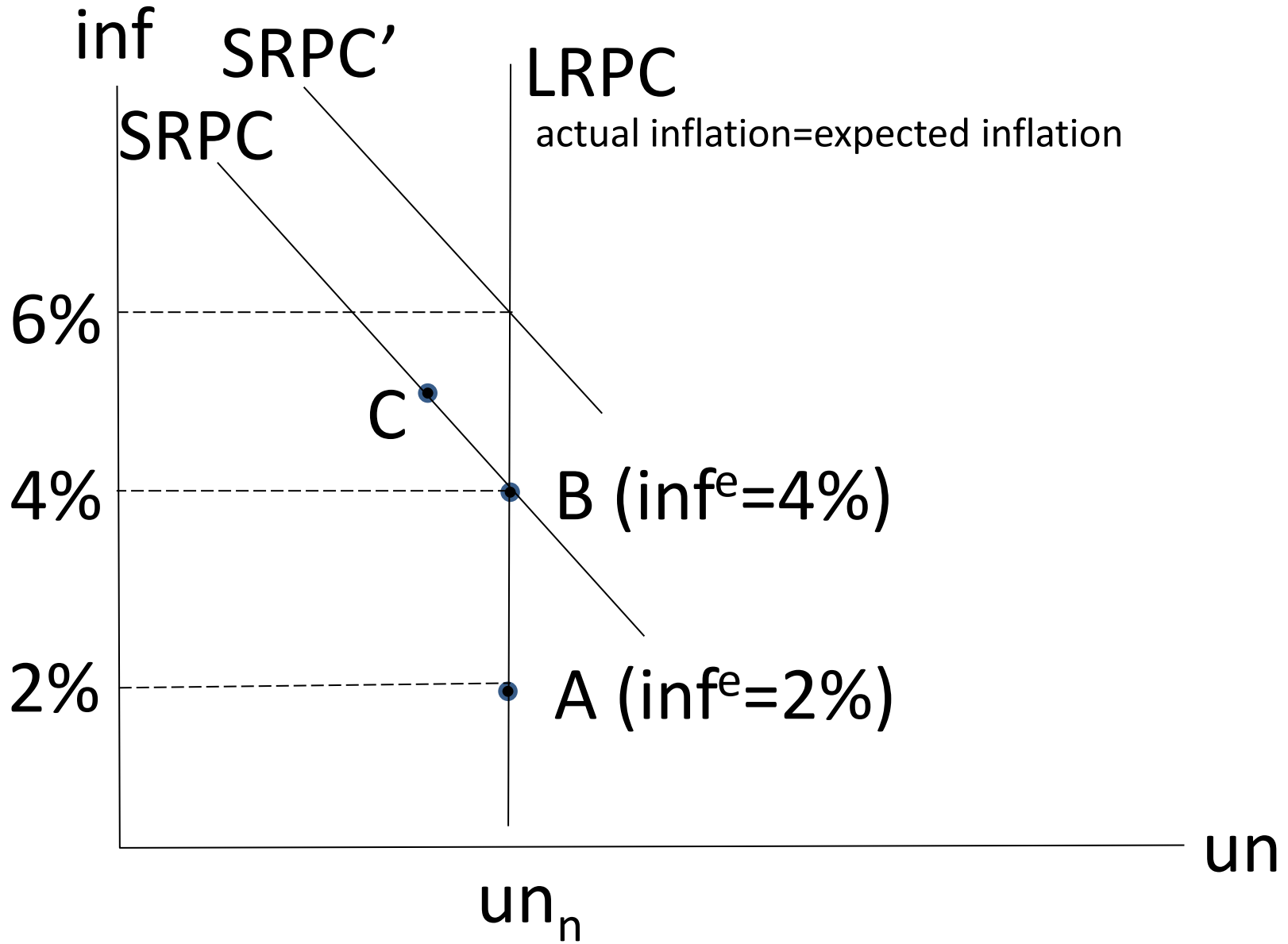
# Assume that Now:

- The market for funds is in equilibrium.

- The real interest rate in equilibrium is 10%

- Expected inflation, $\text{inf}^e = 2\%$

Given the equilibrium real rate of 10% and that expected inflation= 2%, what is the equilibrium nominal rate?

12%

At a nominal rate of 12% and expected inflation of 2%, the expected real interest rate is

$$r^e = i - inf^e = 12\%\text{-}10\% = 2\%$$

$r^e$ = *ex ante* real interest rate
i= nominal interest rate
$inf^e$ = expected inflation

If:

Actual Inflation, inf = 2%
Expected Inflation, $\text{inf}^e$ = 2%

Then for a nominal interest rate of 12%:

Expected real interest rate (*ex ante*),
$r^e = i - \text{inf}^e = 10\%$

Actual real interest rate (*ex post*),
$r = i - \text{inf} = 10\%$

If:

$$\text{inf}=4\%$$
$$\text{inf}^e=2\%$$

Then for a nominal interest rate of 12%:

$$r^e = i - \text{inf} = 12\% - 2\% = 10\% \ (\textit{ex ante})$$
$$r = i - \text{inf} = 12\% - 4\% = 8\% \ (\textit{ex post})$$

If inflation is expected to remain at 4%, what will the new nominal interest rate be?

**14%**

The nominal interest rate is the
real rate that both borrower
and lender expect to earn
plus the expected rate of inflation

$$i = r^e + inf^e$$

Fisher Relation