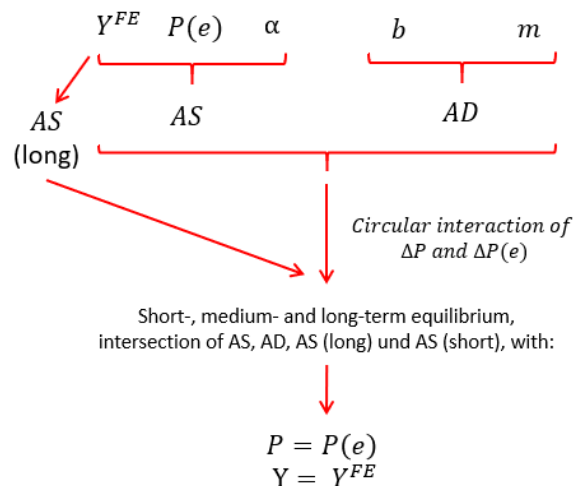


# AS/AD Model (D-Shock)

## Operating Mode

N.B.: AS (long)-curve is modelled, as usual, as a constant. The complete derivation from the labour market and the production function would increase complexity with many more inputs – deemed non-essential for understanding the main statement of the model.



N.B.: AD-curve is modelled ad-hoc as a linear function. The complete derivation from the Keynesian cross model via the IS/LM model would require a dozen new inputs, which would more obscure than lighten the main results.

N.B.: AS (short) is horizontal at P (valid at a given point in time).

## Core Functions

AS (long):

$$Y^{FE} = const.$$

AS:

$$Y = Y^{FE} + \alpha (P - P(e)) \Leftrightarrow P = P(e) + \frac{1}{\alpha} (Y - Y^{FE})$$

Price expectation (driver):

$$P(e) = P_{-1}$$

AD:

$$P = b + mY$$

AS (short):

$$P = const. (at any one time)$$

## Variables and Symbols

AS	Aggregated Supply	$\alpha$	AS slope (inverse)
AD	Aggregated Demand	b	AD ordinate intercept
$Y^{FE}$	Full employment output	m	AD slope
Y	Output	M	Money volume
P	Price level	$Y^D$	Goods demand
P(e)	Expected price level	IS	Investment=Saving (IS-curve, goods market equilibrium)

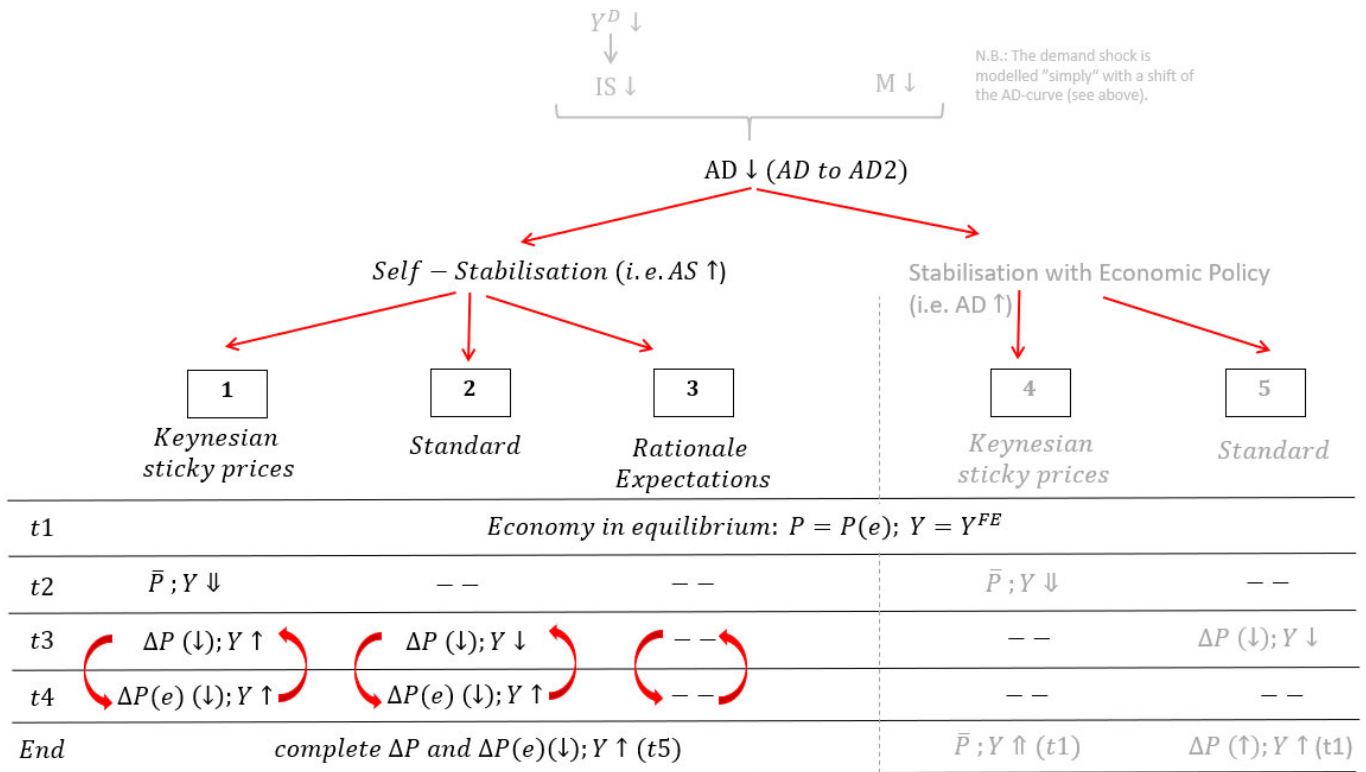
## Relevance

Three major advantages: 1) Price expectations are of central importance and the interactions between price changes and changes in price expectations can be analysed (due to the modelling of the AS curve as a price level-based Phillips curve). 2) Different schools of economic thought can be conveniently compared in the same analytical framework (see below cases 1-3). 3) In particular, the discourse "neutrality vs. non-neutrality of money" can be mapped well (e.g., in the context of a positive demand shock).

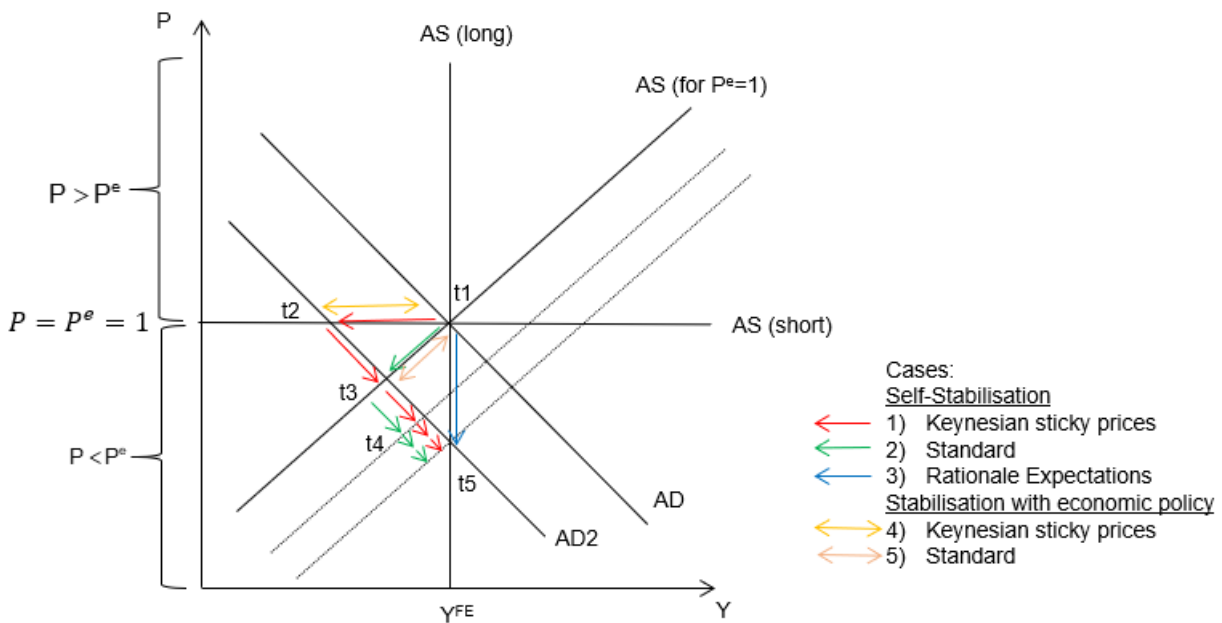
## Limitations

Three major disadvantages: 1) The AD curve is derived "actually" from the IS/LM model, with all associated problems (in particular the steering of the money supply, exogeneity of money). 2) The key role of the price level is problematic (especially if  $P \downarrow$ ), a dynamized version including the inflation rate would be closer to reality. 3) The automatic self-stabilization of the market towards full employment equilibrium is somehow optimistic for many practical cases.

**Table: Demand Shock (negative)**



**Figure: Demand Shock (negative)**



**Demand Shock (positive)**

Simply turn around all relevant arrows in the table and rotate all arrows in the figure by 180° at t1.