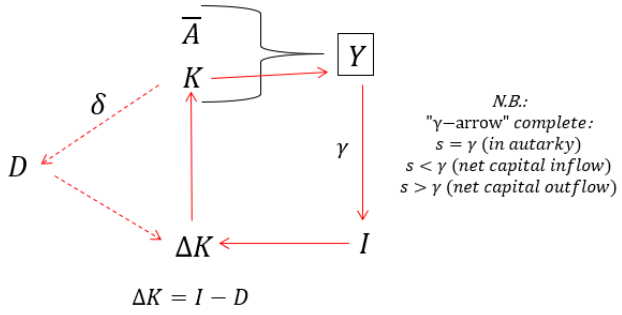
AK Model

(Harrod-Domar Model / Rebelo Model)

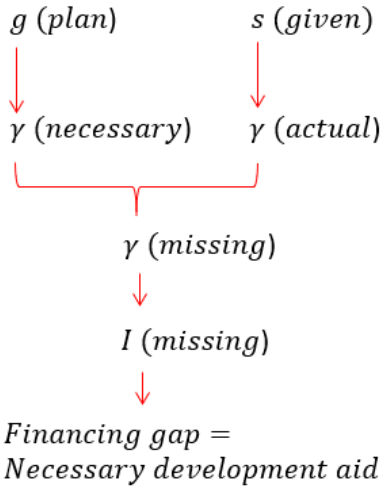
Operating Mode



$$\Delta K = I - D$$

γ, δ, A $\rightarrow$ g $\xrightarrow{n}$ g of income p.C.

Old School Development Policy



Core Functions

Production function (AK):	$Y = f(K) = AK$
Driver:	$\Delta K = I - D = \gamma Y - \delta K$
Old school development policy:	$g = \gamma A - \delta$
Alternatively replace A with 1/v :	$Y = f(K) = \frac{1}{v} K$
Production function (Harrod-Domar):	

Variables and Symbols

Y	Output or GDP	γ	Investment rate
A	Productivity	δ	Depreciation rate
K	Capital stock	g	Growth rate (of output Y)
I	Investment	v	ICOR (Incremental Capital to Output Ratio)
D	Depreciation	s	Saving rate
		n	Population growth rate

Relevance

The easiest model of endogenous growth.

For many decades, a reference model for development policies (e.g. World Bank) and development strategies based on "financing gaps" and thereby seeking to justify necessary development aid.

A corner stone of the ideology to be found until today (e.g. EU, NGOs), postulating that capital inflows "from outside" can automatically lead to development.

Limitations

Minor: The capital-output ratio (productivity) is not constant over time / or should not be.

Major: The financing gap development strategy has proven illusory over decades and should not be pursued further. In the wake of this model, important fundamental determinants of long-run development, such as productivity gains (technological progress, efficiency enhancement) and the improvement of institutions are still neglected today.