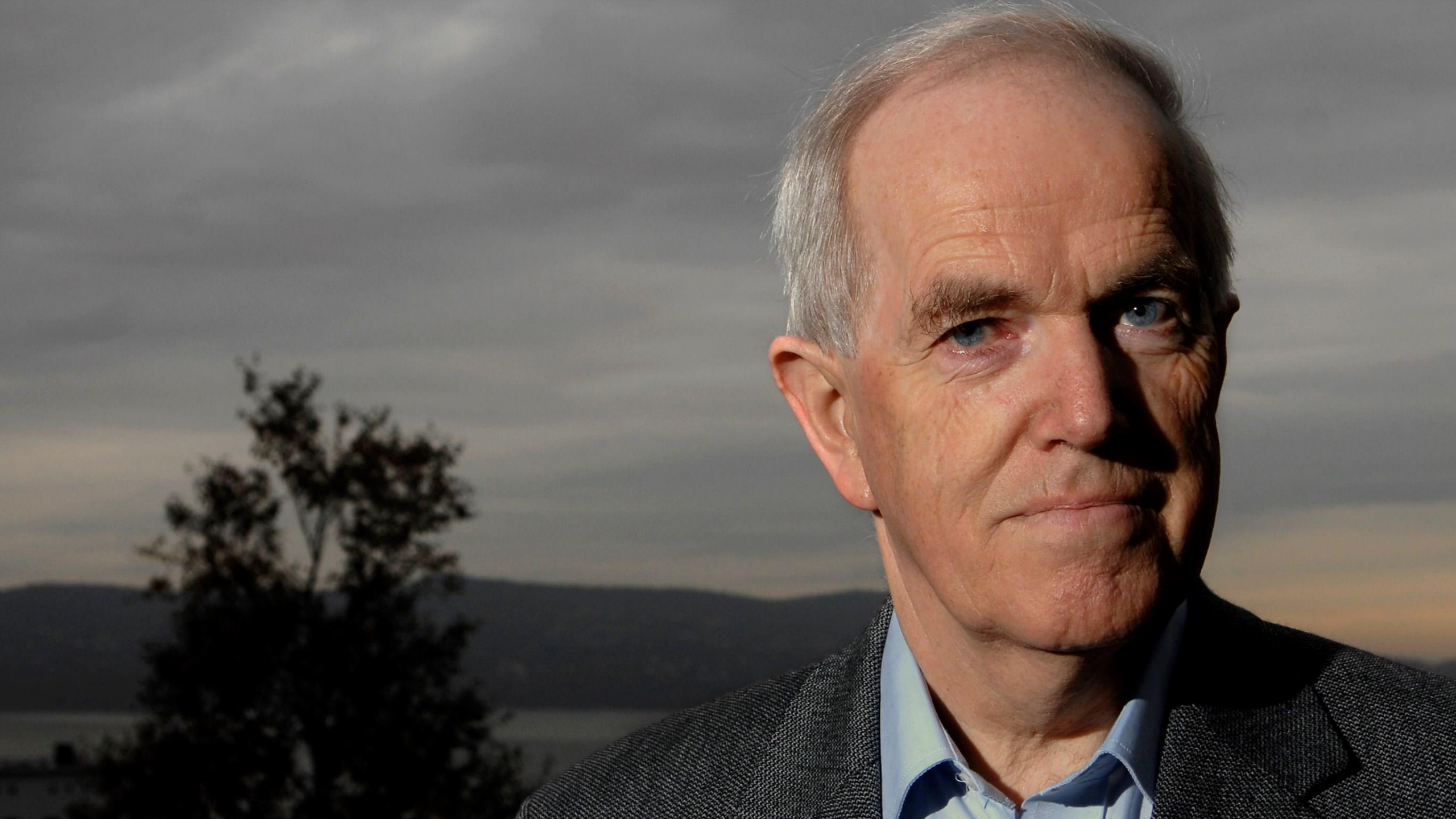
TALL SOM FORTELLER

Taxation of capital income and corporate profits in NORA

14/10 - 2019. MODELL OG METODEUTVALGET, FINANSDEPARTEMENTET

Statistisk sentralbyrå
Statistics Norway

A lowering of the corporate income tax, does it lead to lower or higher business investments?



Han evnet å gi arbeidene sine et unikt preg: elegant og tilsynelatende enkelt. Men det enkle kom av at Sandmo aldri ga seg før han hadde kjempet frem en matematisk formulering som ikke tok bort noen av de nødvendige detaljene – men alle de unødvendige.

Kalle Moene

Statistisk sentralbyrå
Statistics Norway

https://www.dn.no/en-bauta-er-borte/2-1-664090?traffic_source=alert&alert_type=searchquery&alert_name=Nyhetsvarsel:+nhh

Investment Incentives and the Corporate Income Tax

The user cost of capital (p_j) is in Sandmo (1974) given by:

$$p_j = \left(i + \delta_j + \frac{\tau}{1-\tau}(\delta_j - \alpha_j) \right)$$

i - interest rate

δ_j - real depreciation rate

α_j - tax depreciation rate

τ - corporate income tax

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Sandmo, Agnar. 1974. "Investment Incentives and the Corporate Income Tax." *Journal of Political Economy* 82(2): 287.

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If $\delta_j < \alpha_j$ then a lowering of τ increases the user cost p_j and lowers the level of investment

Sandmo, Agnar. 1974. "Investment Incentives and the Corporate Income Tax." *Journal of Political Economy* 82(2): 287.

Economic and tax depreciation rates

	Real depreciation (δ_j)**	Tax depreciation (α_j)
Buildings	3,5	2,0
Transportation vehicles	20,0	20,0
Machinery and eq.	12,5	30,0
R&D*	15,0	100,0

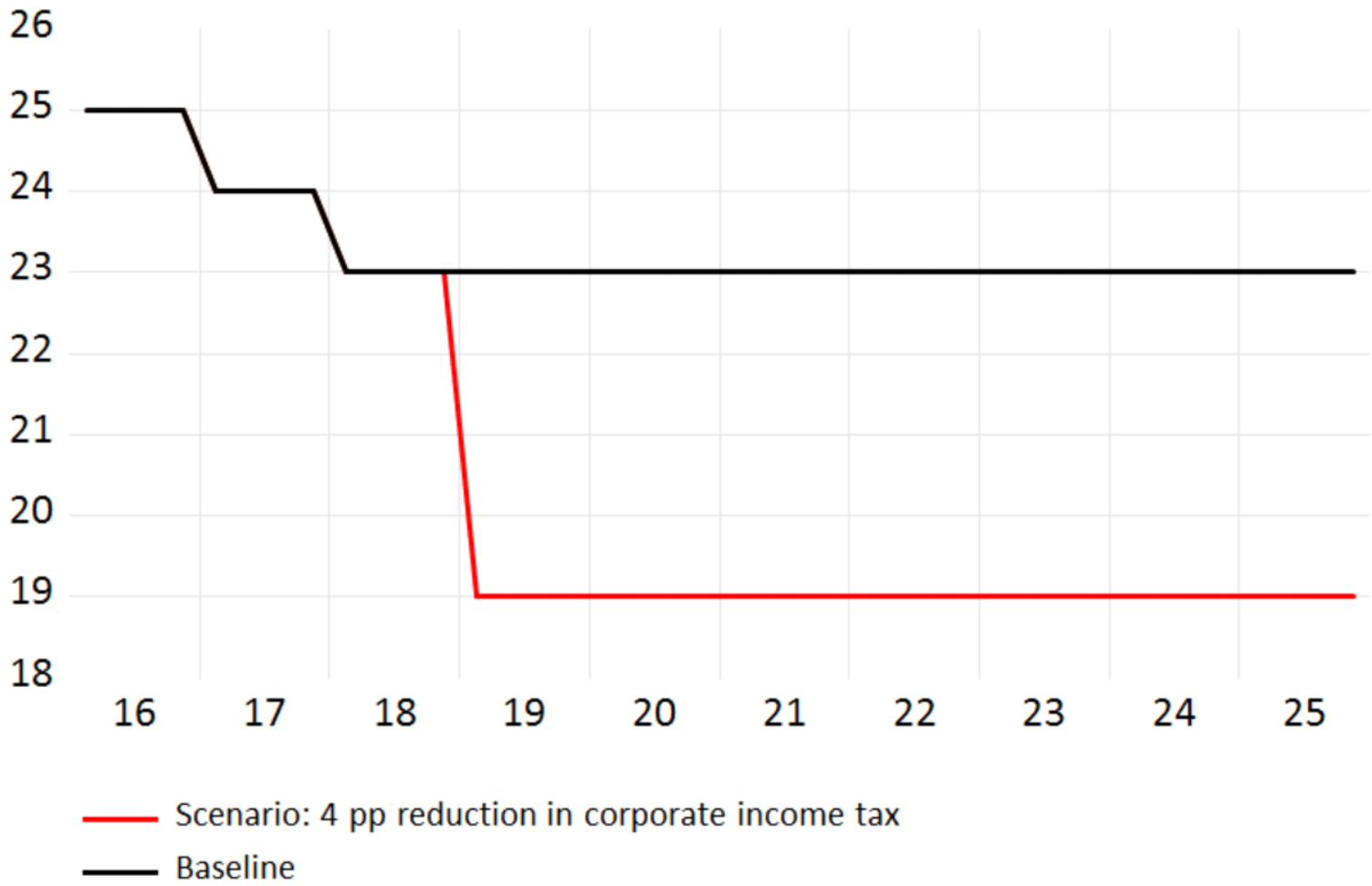
* In the macroeconomic model, R&D includes also other intangible capital with an average tax depreciation of about 30 per cent.

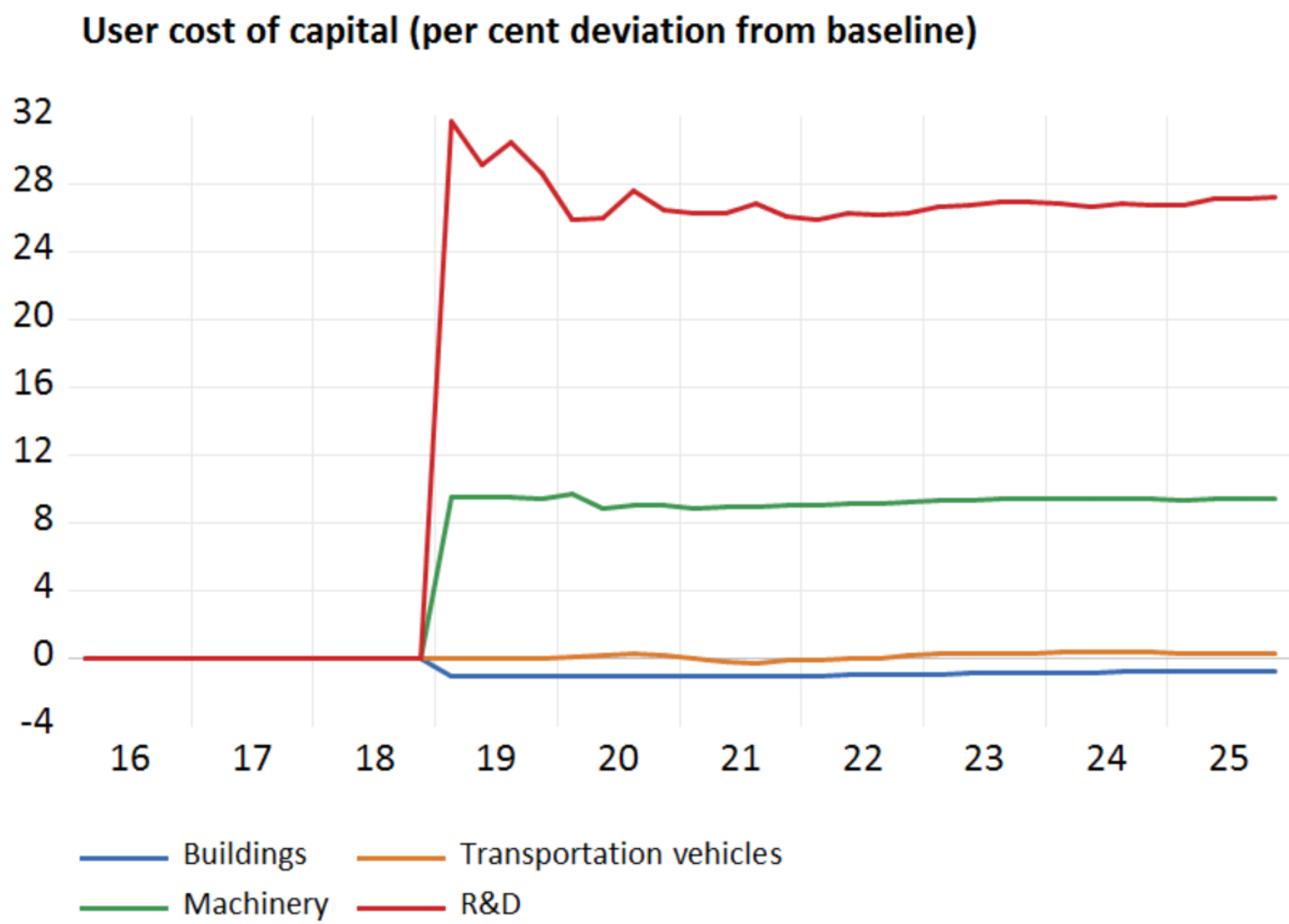
With a weight of 64 per cent in 2016 for R&D, this yields an aggregate tax depreciation for R&D and other intangibles of about 75 per cent.

**Real depreciation rates all capital objects except R&D are taken from Barth et al. (2017).

Barth, Nini et al. 2017. "Expected Service Lives and Depreciation Profiles for Capital Assets: Evidence Based on a Survey of Norwegian Firms." *Journal of Economic and Social Measurement* 41(4): 329–69.

Corporate income tax





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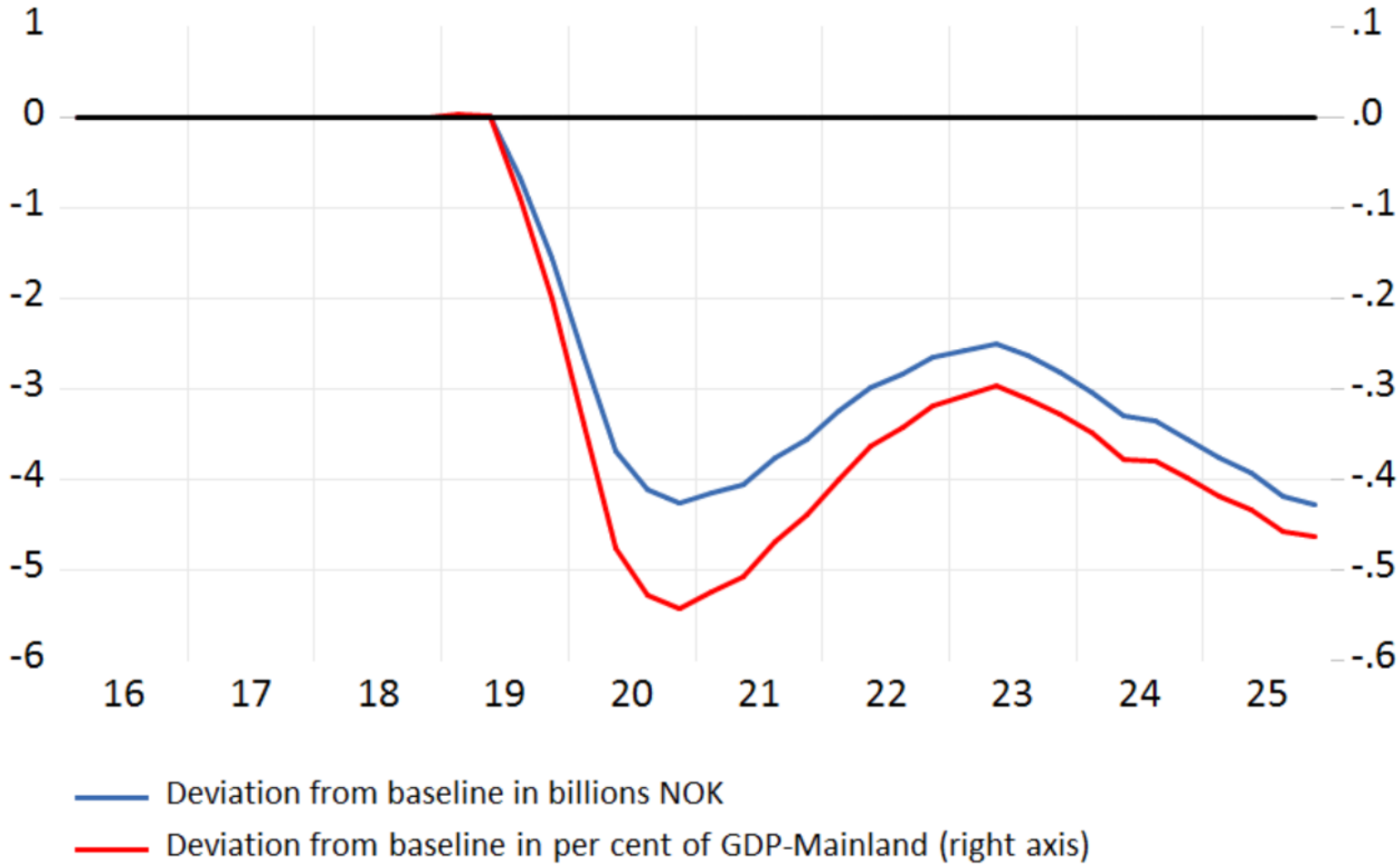
Business investments, mainland



Conclusion

A model aiming at analysing the impact on investments from changes in the corporate income tax should also take into account the user cost channel elegantly outlined in Sandmo (1974):

$$p_j = \left(i + \delta_j + \frac{\tau}{1-\tau}\left(\delta_j - \alpha_j\right) \right)$$

Sandmo, Agnar. 1974. "Investment Incentives and the Corporate Income Tax." *Journal of Political Economy* 82(2): 287.

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Takk!

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