

# An R&D-based Growth Model with Nominal Wage Stickiness

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## Abstract

In this study, we introduce nominal wage stickiness into an endogenous growth model based on R&D. This study examines how money growth affects long-run economic growth. We find that there exists a unique balanced growth path for sufficiently high rates of money growth and the economy exhibits sustained growth based on sustained R&D. Faster money growth results in larger employment and faster economic growth along such a balanced growth path. Furthermore, under some parameter restrictions, no balanced growth path exists for low rates of money growth, and the economy is trapped in the steady state without long-run growth. These results suggest that money growth may be an important factor for long-run economic growth.

*JEL classification:* O11, O42, E12, E31

*keyword:* endogenous growth, R&D-based growth model, new Keynesian Phillips curve, nominal wage rigidities, money growth