## Countercyclical Elasticity of Substitution

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## Abstract

We empirically show that the short-run elasticity of substitution between capital and labor ( $\sigma_t$ ) is countercyclical. In recessions, capital and labor are more substitutable than in expansions. We explore the effects of the countercyclicality of  $\sigma_t$  on aggregate fluctuations in the context of an otherwise standard competitive-markets business cycle model. The countercyclical  $\sigma_t$  contributes to resolve four main labor-market puzzles: Dunlop-Tarshis phenomenon, labor-productivity puzzle, hours-productivity puzzle, and labor share puzzle.

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