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UNCERTAINTY, VOLATILITY, AND GROWTH RATE

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ABSTRACT

This paper examines two related models, which permit analytical investigation, to gain some insights into a relationship between endogenous growth and business cycle. Using two simple models which incorporate Fisher Black's idea that a significant part of business cycle fluctuations is a consequence of an economy's choice, we obtained a negative relationship between uncertainty and growth. Hence a country with large fluctuation will have a lower growth rate, and vice versa. If other factors like elasticity of substitution or average total factor productivity changes, however, a country with large fluctuation will have a higher growth rate, and vice versa. It is also shown that the relationship between volatility of output and growth rate can be either positive or negative depending on parameter values and the distribution of the shock. Thus measured relationship between volatility and growth rate might give a false relationship between uncertainty and growth.

KEYWORD: Uncertainty; volatility; economic growth
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