The long run effect of an upper bound of pollution

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Abstract

In this paper, we analyze the effect of introduction of an upper bound of pollution into utility function. By doing so, we show two things. First, if the abatement technology is relatively inefficient, there exist a stationary steady state where consumption and pollution stop growing. Second, if the abatement technology is sufficiently efficient, there exists a path where firstly pollution decreases at an accelerating rate and finally its level reaches to zero. In this case, consumption always grows at a constant rate.

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