



Unbalanced Growth and Land Overvaluation

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Historical trends suggest the decline in the importance of land as a production factor, as evidenced by the decline in the employment and GDP shares of land-intensive industries. However, land continues to be a prominent store of value, as over half of household wealth in major countries is real estate. To explain this apparent disconnection between land output and land value, in a plausible economic model with land and aggregate risk, we theoretically study the long-run behavior of land prices and identify economic conditions under which land becomes overvalued relative to the fundamentals defined by the present value of land rents. Unbalanced growth together with the elasticity of substitution between production factors plays a critical role. We establish the Land Overvaluation Theorem: when the elasticity of substitution between land and non-land factors exceeds 1 (which is natural because we can create more space by constructing taller buildings with fixed land) and technological progress is faster in non-land sectors, land overvaluation necessarily emerges. As applications of the Theorem, we present three examples. (i) Land overvaluation emerges along the long-run transition from the Malthusian agricultural economy to the modern knowledge- and service-based economy. (ii) With aggregate uncertainty, land prices exhibit recurrent stochastic fluctuations around the trend, with expansions and contractions in the size of land overvaluation. (iii) In modern economies, land use is also changing and urban land has high value. We present a model of urban land prices and show that land overvaluation emerges in the process of urban formation characterized by unbalanced growth.