

## Land Speculation and Wobbly Dynamics with Endogenous Phase Transitions

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This paper examines the global macro-dynamics of a dynamic model with capital and land with rational expectations. Through the interactions between capital accumulation and land prices, the economy experiences phase transitions, endogenously moving from back and forth from situations with unique and multiple momentary equilibria. Consequently, there can be a plethora of rational expectation equilibria trajectories, without any smooth convergence properties, neither converging to a steady state or even to a limit cycle—what we call “wobbly” macro-dynamics. The price of land and other key macro variables (wages, interest rates, output, consumption, wealth, capital stock) endogenously fluctuate within a well-identified range with repeated boom-bust cycles. The key disturbance to the economy is endogenous; even with rational expectations, there can be real estate booms, with resource allocation deteriorating as land prices increase, crowding out productive investments; but such unsustainable land price booms inevitably are followed by a crash. We analyze the set of parameter values for which wobbly fluctuations occur, show that with some parameter values, the only r.e. trajectories involve such wobbly dynamics, demonstrate how changes in parameters affect global macro-dynamics, and show how policy interventions can affect stability and social welfare.