Accepted Manuscript

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PII: S0165-1889(17)30206-3
DOI: 10.1016/j.jedc.2017.10.002
Reference: DYNCON 3480

To appear in: *Journal of Economic Dynamics & Control*

Received date: 27 April 2017
Revised date: 31 July 2017
Accepted date: 7 October 2017

Macroeconomic and Stock Market Interactions with Endogenous Aggregate Sentiment Dynamics*

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October 12, 2017

Abstract

This paper studies the implications of heterogeneous capital gain expectations on output and asset prices. We consider a disequilibrium macroeconomic model where agents' expectations on future capital gains affect aggregate demand. Agents' beliefs take two forms – fundamentalist and chartist – and the relative weight of the two types of agents is endogenously determined. We show that there are two sources of instability arising from the interaction of the financial with the real part of the economy, and from the heterogeneous opinion dynamics. Two main conclusions are derived. On the one hand, perhaps surprisingly, the non-linearity embedded in the opinion dynamics far from the steady state can play a stabilizing role by preventing the economy from moving towards an explosive path. On the other hand, however, real-financial interactions and sentiment dynamics do amplify exogenous shocks and tend to generate persistent fluctuations and the associated welfare losses. We consider alternative policies to mitigate these effects.

Keywords: Real-financial interactions, heterogeneous expectations, aggregate sentiment dynamics, macro-financial instability

JEL classifications: E12, E24, E32, E44.

*Dedicated to the memory of the late Carl Chiarella, a great researcher who has had a major impact on the research of his close friend Peter Flaschel, and of all of us.

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