Accepted Manuscript

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PII: S1090-9443(17)30280-6
DOI: 10.1016/j.rie.2017.10.006
Reference: YREEC 750

To appear in: *Research in Economics*

Received date: 18 September 2017
Revised date: 8 October 2017
Accepted date: 8 October 2017

Please cite this article as: Igor Bykadorov, Sergey Kokovin, Can a larger market foster R&D under monopolistic competition with variable mark-ups?, *Research in Economics* (2017), doi: 10.1016/j.rie.2017.10.006

Can a larger market foster R&D under monopolistic competition with variable mark-ups?[☆]

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Abstract

We study monopolistic competition with symmetric directly additive preferences (generating variable mark-ups) and an endogenous technology choice. Each firm chooses an investment in R&D to decrease its marginal cost. We prove that the equilibrium R&D investment *increases with market size* (a larger population or trade) only if the price-elasticity of demand is an increasing function. Together with the output levels, such equilibrium investments may be *socially excessive or insufficient*, depending on whether the elasticity of the subutility is increasing or decreasing. The main implication is that opening up to free trade can foster R&D through variable mark-ups.

Keywords: R&D investments; trade and efficiency; monopolistic competition; variable mark-ups; trade gains.

[☆]We are indebted to Richard Ericson, Peter Neary, Philip Ushchev, Svetlana Demidova, Kristian Behrens, Federico Etro and Xavier Vives for valuable comments, to Jacques-Francois Thisse for guiding and advising, to Evgeny Zhelobodko (**25.09.1973-27.03.2013**) and Mathieu Parenti for participation in the early stages of this study. This study has been funded by the Russian Academic Excellence Project '5-100'. Bykadorov also gratefully acknowledges partial financing from grants 15-06-05666, 16-01-00108 and 16-06-00101 from RFBR.