



WP/17/147

IMF Working Paper

Does the Stock Market Boost Firm Innovation? Evidence from Chinese Firms

by Hui He, Hanya Li, and Jinfan Zhang

***IMF Working Papers* describe research in progress by the author(s) and are published to elicit comments and to encourage debate.** The views expressed in IMF Working Papers are those of the author(s) and do not necessarily represent the views of the IMF, its Executive Board, or IMF management.

I N T E R N A T I O N A L M O N E T A R Y F U N D

IMF Working Paper

Institute for Capacity Development

Does the Stock Market Boost Firm Innovation? Evidence from Chinese Firms

Prepared by Hui He, Hanya Li, and Jinfan Zhang ¹

Authorized for distribution by Laura Kodres

April 2017

IMF Working Papers describe research in progress by the author(s) and are published to elicit comments and to encourage debate. The views expressed in IMF Working Papers are those of the author(s) and do not necessarily represent the views of the IMF, its Executive Board, or IMF management.

Abstract

The paper analyses the effect of the stock market on firm innovation through the lens of initial public offering (IPO) using uniquely matched Chinese firm-level data. We find that IPOs lead to an increase in both the quantity and quality of firm innovation activity. In addition, IPOs expand a firm's scope of innovation beyond its core business. The impact of IPOs on firm innovation varies across financial constraints, corporate governance, and ownership structures. Our results further illustrate that IPOs induce a firm to increase the number of inventors and enable better retention of existing inventors after the IPO. Finally, we show that the enhanced innovation activity resulting from IPOs increases a firm's Tobin's Q in the long run.

JEL Classification Numbers: G31, D22, O31, O53

Keywords: IPO, Innovation, Financial Constraint, Corporate Governance, State Ownership, China

Author's E-Mail Address: hhe@imf.org; hyli@szse.cn; JZhang2@imf.org

¹ Hui He, International Monetary Fund and School of Economics, Huazhong University of Science and Technology (HUST); Hanya Li, Research Institute, Shenzhen Stock Exchange; Jinfan Zhang, International Monetary Fund. We thank Jennifer Carpenter, Fei Han, Laura Kodres, Jun Qian, Meijun Qian, Hui Tong, Jianhuan Xu, and Colin Xu for their helpful suggestions. Hui He acknowledges the research support provided by the Shanghai Pujiang Program (No. 2013140026) and the Program for Professor of Special Appointment (Eastern Scholar) at Shanghai Institutions of Higher Learning (No. 2013140034).