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Two-Sided Market, R&D and Payments System Evolution

by Bin Grace Li, James McAndrews, and Zhu Wang

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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

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Fiscal Affairs Department

Two-Sided Market, R&D and Payments System Evolution*

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Abstract

It takes many years for more efficient electronic payments to be widely used, and the fees that merchants (consumers) pay for using those services are increasing (decreasing) over time. We address these puzzles by studying payments system evolution with a dynamic model in a two-sided market setting. We calibrate the model to the U.S. payment card data, and conduct welfare and policy analysis. Our analysis shows that the market power of electronic payment networks plays important roles in explaining the slow adoption and asymmetric price changes, and the welfare impact of regulations may vary significantly through the endogenous R&D channel.

JEL Classification Numbers: E4, G2, O3

Keywords: R&D, Technology Adoption, Two-Sided Market

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