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Comparative advantage, demand for external finance, and financial development ☆

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Abstract

This paper analyzes the effect of comparative advantage in international trade on a country's level of financial development. Countries with comparative advantage in financially intensive goods experience a higher demand for external finance, and therefore financial development. By contrast, financial development is lower in countries that primarily export goods which do not rely on external finance. We use disaggregated trade data to develop a measure of a country's external finance need of exports, and demonstrate this effect empirically. In order to overcome the simultaneity problem, we develop a novel instrumentation strategy based on the exogenous geographic determinants of trade patterns.

JEL classification: F10; G20; O16; O19

Keywords: Trade patterns; Demand for external finance; Financial development; Gravity model

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1. Introduction

A quick glance at the levels of financial development across countries reveals large differences. Fig. 1 plots the ratios of private credit to GDP and trade openness to GDP starting in 1970 for developing and advanced countries. The average share of private credit to GDP is more or less three times higher in advanced countries than in developing countries throughout the period. On the other hand, trade volume as a share of GDP grew faster in developing countries, which have now surpassed the advanced ones. What explains persistent financial underdevelopment? In particular, can we say something about the relation between financial development and trade openness?

The literature has often emphasized the idea that the financial system is an endowment. La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1998) provide empirical evidence that a country's legal origin is a strong and arguably exogenous determinant of a country's financial development. When it comes to institutions more broadly, Acemoglu, Johnson, and Robinson (2001) document that the quality of institutions is largely determined by settler mortality rates during the colonial period. Applying these insights to international trade immediately suggests a pattern of comparative advantage: countries endowed with better financial systems will specialize in goods that rely on external finance in production. Indeed, this idea has been formalized theoretically by Kletzer and Bardhan (1987), Baldwin (1989), and Ju and Wei (2005), and has found empirical support in a number of studies (e.g., Beck, 2002, 2003; Becker and Greenberg, 2005; Svaleryd and Vlachos, 2005; Manova, 2005).

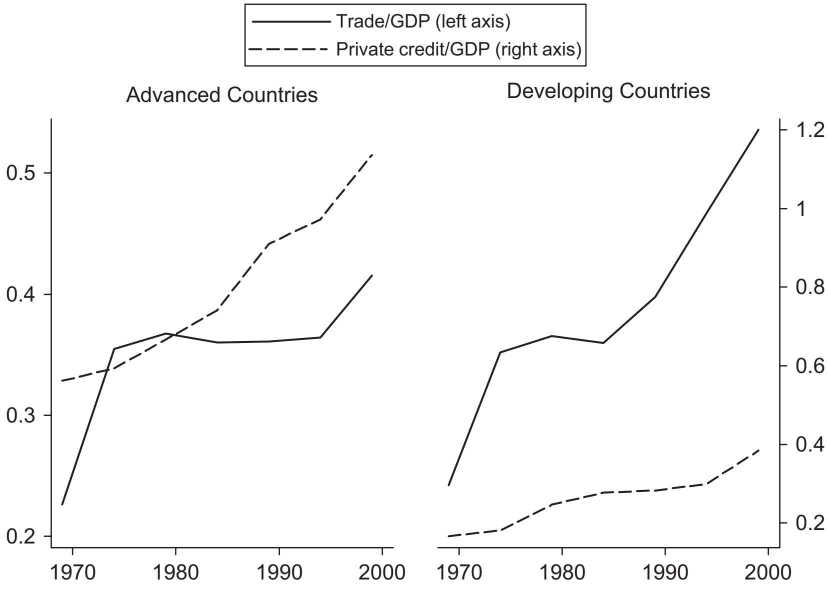

Fig. 1. Average trade volumes (trade/GDP) and financial development (private credit/GDP) are plotted over the period 1970–1999 for advanced and developing countries separately. The units for trade volumes and financial development are given on the left and right axes, respectively. While trade volumes increased steeply in developing countries (solid lines), the dashed lines suggest faster financial development for advanced countries.