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The trade and FDI effects of EMU enlargement

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Abstract

This paper considers the nature and the distribution of trade and FDI effects of a potential enlargement of the European Monetary Union (EMU) to the 10 countries that obtained EU membership in 2004. One-way and two-way error component gravity models are estimated using a data set of unbalanced panel data that combine bilateral trade flows among 29 countries and the distribution of outward FDI stocks among these countries. The results reveal a complementarity between trade and investment and a relationship between trade and exchange rate volatility that depend on the sign of bilateral trade balances. Using a simulation-based technique, we find that estimates of FDI effects of EMU range between 18.5% for Poland and 30% for Hungary.

JEL classification: C33; F21; F31; F33; F36

Keywords: EMU; Exchange rate volatility; Foreign investment; Trade diversion; Vertical integration

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1. Introduction

The Accession Treaty of the European Union (EU) that entered into force on May 1, 2004 accredited the accession of 10 new countries into the EU. This represented the biggest enlargement in European integration with more than 100 million citizens joining the EU.[1] Economic and political changes came dramatically fast in these countries as they, excepting Cyprus and Malta, adjusted from planned to market economies in 15 years. The next step in the integration process is to join the European Monetary Union (EMU).[2] On the one hand, the prospect of euro membership helps stabilize these economies and the effective adoption of the euro as a common currency would generate the microeconomic benefits of a currency union. On the other hand, membership would imply the loss of macroeconomic flexibility of running an independent monetary policy. Hence, the question of what constitutes the benefits of EMU accession for new member countries assumes considerable importance.

An important factor affecting firms' foreign trade and investment decisions is the volatility in the major currencies of the world as illustrated by the behavior of the US dollar in the last two decades. Central to the issue is the popular conjecture that the floating exchange rate regime has led to a decrease in the volume of trade and in the investment flows by multinational firms. This view has been put forward repeatedly by governments and international organizations (see for example, UNCTAD, 1993, p. 224, Table XI.2). This paper examines the empirical premises of such conjecture.

Foreign direct investments (FDIs) have grown dramatically as a major form of international capital transfer over the last few decades. Between 1990 and 2005 world stocks of FDI have approximately quintupled. The emerging global economy is one increasingly dominated by multinational firms that contribute to the internationalization of production chains. Currently they account for about one-third of world trade, intra-firm trade constituting the major component of such trade flows. One of the important features of FDI is that it is prominent in industries where the classical competitive paradigm fits least well. Regarding the 10 new EU members a characteristic of the data is that Slovenia lags behind in attracting FDI as evidenced by UNCTAD's FDI performance index. The latter computes the ratio of a country's share in global FDI inflows to its share in global GDP. An index value of 1 implies the equality of both shares. Using this index a ranking of 141 economies in 2005 shows Estonia in 4th place but Slovenia in 92nd position only (UNCTAD, 2006, Annex Table A.I.9). Therefore, the question of what can be the role of EMU in the trans-boundary investment behavior of enterprises becomes important for these countries.

The analysis of this paper considers variables such as trade and foreign direct investment, which are closely linked to the exchange rate. To that end, we estimate gravity models based on a data set of unbalanced panel data that consist of bilateral trade flows among 29 countries and of the distribution of outward FDI stocks among these countries (including the 10 new EU members). The data generally cover the period from 1990 to 2004, thus including the 2004 EU membership of the new countries. Whereas the existing literature aims at measuring the general effects of a common currency on trade (see e.g. Rose, 2004) or FDI (see e.g. De Sousa and

[1] The 10 countries that became EU member in 2004 are Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia.

[2] The European Monetary Union (EMU) exists since January 1, 1999 and comprises 12 countries. It substituted the euro for the national currencies of Austria, Belgium, France, Finland, Germany, Ireland, Italy, Luxembourg, The Netherlands, Portugal and Spain. Greece joined the EMU on January 1, 2001.