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Foreign Direct Investment, Vertical Integration, and Local Suppliers: Evidence from the Polish Dairy Sector

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Summary. — Studies argue that foreign investment has negative implications for small local suppliers, as they cannot comply with higher standards or they are laid off to reduce transaction costs. We analyze the impact of FDI in the Polish dairy sector, a sector dominated by small suppliers and of crucial importance for poor rural households. The analysis shows that FDI does not cause a rapid consolidation of the supply base. Instead, foreign companies introduce farm assistance programs to overcome market imperfections. Through vertical and horizontal spillover effects, this leads to improved access to finance, increased investments, product quality improvements, and growth of small local suppliers.

Key words — Central Eastern Europe, Poland, dairy sector, vertical coordination, FDI

1. INTRODUCTION

The public debate on globalization has renewed interest in the effects of foreign direct investment (FDI). Some see foreign investment as a beneficial factor that can be an important source of much needed capital, technology, knowledge etc. for poorer countries. Others point at the dangers of multinational companies crowding out local companies as well as introducing imperfect competition.

There is a growing empirical literature on the impact of FDI, which can be separated into two strands. A first group of studies focuses on horizontal spillover effects of foreign investment on domestic firms. The conclusions from these studies are mixed: some studies find positive effects (Hu & Jefferson, 2002; Liu, 2002), and others, no significant effect (Kokko, Tansini, & Zejan, 1996; Konings, 2001), and yet other studies conclude that the impact on local firms is negative (Aitken & Harrison, 1999). The difference in the findings comes from two opposing effects of FDI. On the one hand, FDI can introduce new products and technologies, and domestic companies can benefit from this through personnel turnover, demonstration

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effects and knowledge spillovers. These horizontal spillovers are however, only important if the technology gap between the foreign and domestic firms is not too large (Kokko, 1994). A negative FDI effect can come from FDI cutting into the local companies' market share. Hence, the different findings of the studies reflect the relative importance of these two factors in the various countries and sectors.

A second group of studies focuses on vertical spillover effects. Studies find that foreign firms facilitate the adoption of new technologies and can solve contract enforcement problems (Gow & Swinnen, 1998; Key & Runsten, 1999). Yet most studies conclude that the impact on local suppliers is mostly negative, in particular for small suppliers in developing countries (Dolan & Humphrey, 2000; Weatherspoon & Reardon, 2003). The latter often cannot comply with the higher standards and grading requirements for the supplied products (Farina & Reardon, 2000; Henson, Loader, & Brouder, 2000; Reardon, Codron, Busch, Bingen, & Harris, 1999). Moreover, foreign investors prefer to deal with a few large suppliers to minimize transaction costs, forcing consolidation of the supplier base and hence separating many small suppliers from their traditional outlets (Holloway, Nicholson, Delgado, Staal, & Ehui, 2000; Runsten & Key, 1996; Winters, 2000). Reardon and Berdegué (2002) show, in the case of retail investors in Latin America, how this process can lead to the rapid exclusion of thousands of small suppliers.

The first objective of this paper is to study the impact of foreign direct investment on suppliers, and in particular small suppliers, in transition countries. Many companies in transition countries are (or were) in severe need of restructuring and upgrading of capital, technology, and management. This holds across the transition world, but is especially pronounced in those countries which are now most open to external competition, either because trade restrictions were liberalized in the transition process, or, for several Central and Eastern European countries, because they will soon be integrated in a single EU market in which they will have to compete with other EU companies. At the same time, transition countries, and in particular those closer to the EU, have received a large inflow of FDI over the past years. For these reasons, studying the impact of FDI in transition countries can provide very useful insights.

The second objective of this paper is to analyze and understand the mechanism and process of how FDI affects the local economy, and in particular (small) suppliers. A major problem in transition countries is the breakdown of exchange systems and contract enforcement mechanisms (Blanchard, 1999; Konings & Walsh, 1999). Private institutional innovations have solved these problems in some countries (Johnson, McMillan, & Woodruff, 1999; Mcmillan & Woodruff, 1999). Case studies suggest that foreign investors have played an important role in this process through vertical integration (Foster, 1999; Gow, Streeter, & Swinnen, 2000). At least in some cases such FDI-induced vertical integration has contributed to improved access to finance and inputs, and productivity growth of suppliers (Gow & Swinnen, 2001). But, so far there is no representative statistical evidence on these effects. This paper will be the first to provide representative evidence on these effects, and to estimate econometrically the effect of these institutional innovations on the survival and growth of small suppliers.

Our empirical analysis uses data from Poland and specifically from the Polish dairy sector. To identify both the effects of FDI and the process through which these effects occur, we collected data at several levels. More specifically, we collected data through a series of in-depth interviews with domestic and foreign owned companies at the level where the foreign investment took place (dairy processing and marketing) as well as through a random survey of (potential) local suppliers (dairy farms) to these companies. We also interviewed some dairy equipment suppliers. In combination the collected information constitutes a unique dataset on the impact of FDI on (small) suppliers.

We selected the Polish dairy sector for several reasons. First, Poland is the largest of the EU accession countries, yet a small economy in the world market. Poland produced around 12 million tons of milk in 2000, which represents 2.5% of total production in the world. The accession of Poland alone would increase total milk output in the EU with 10% (FAO, 2003). Yet milk production and the dairy sector have been severely affected by the economic and institutional reforms over the past ten years. Milk production and the number of dairy cows fell by almost 30% during 1989–96. Productivity also declined initially but has turned around