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The Role of International Trade and Foreign Direct Investment in Technology Transfer and Wage Improvement in Vietnam

by

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Abstract

This thesis is a theoretical and empirical study of the role of international trade and foreign direct investment (FDI) in technology transfer and wage improvement in Vietnam, and how the characteristics of the country influence the strength of technology transfer and wage improvement.

The starting point of this study or chapter 2 comprises a literature survey of theoretical models of international trade, FDI and technology transfer. This chapter improves our understanding of channels and determinants of technology transfer through trade and FDI, highlighting their implications for the growth performance of well-integrated economies relative to that of more autarchic economies. Theoretical models surveyed make reasonably clear prescriptions about the roles of trade and FDI in technology transfer and economic development. This paves the way for empirical work in the subsequent chapters aimed at identifying the actual mechanisms of technology spillovers through trade and FDI.

Using aggregate provincial data, chapter 3 is a first step in considering the extent to which the themes set out in chapter 2 apply to Vietnam. This chapter examines the relative importance of trade and FDI to technology transfer from both OECD countries and non-OECD countries. It is found in this chapter that international trade, particularly imports of capital goods, plays an important role in the transfer of technology to Vietnam. However, the importance of FDI as a channel for technology transfer in Vietnam is limited in that only FDI from non-OECD countries is a source of technology transfer. The chapter also finds that the skills of the labour force and

openness to trade are the most robust determinants of technology adoption at the provincial level.

With the availability of firm level data, chapter 4 takes into account specific factors of the country, industries, domestic firms as well as foreign firms, which have not been considered in chapter 3, to assess channels and determinants of technology spillovers at firm level. This chapter provides strong evidence that while domestic firms benefit from technology spillovers through vertical linkages with foreign firms, the horizontal presence of foreign firms in the same industry generates negative effects on the productivity of domestic firms. The existence and strength of technology spillovers from FDI depend on the characteristics of industries, domestic firms and foreign firms. This chapter reinforces the findings in chapter 3 that imports provide an important channel for technology spillovers; domestic firms benefit from foreign technology not only through direct imports of machinery and equipment, but also via vertical linkages with other firms in import-intensive sectors.

The role of FDI in the labour market and its impacts on wage levels of Vietnamese domestic firms are the subject of chapter 5. In a manner reflecting the concept of productivity spillovers, wage spillovers from FDI occur through horizontal presence of foreign firms in the same industry and through vertical linkages between domestic firms and foreign firms across industries. This chapter finds strong evidence that there are horizontal wage spillovers from foreign firms to domestic firms in Vietnam. Wage spillovers from the vertical linkages between foreign firms and domestic suppliers depend on the firms' specific characteristics. Training activities of both domestic and foreign firms are found to play a key role in facilitating wage spillovers.