Chapter 10

Skill and Foreign Firm Premium: The Role of Technology Gap and Labor Cost

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ABSTRACT

In this chapter, the authors construct a model that allows for joint discussion of foreign firm and skill premium in wages, and their evolution upon increased foreign firm activities. They allow for (1) dynamic interaction between the domestic and foreign firms in the labor market, via a two-sided search model, (2) technology differentials between domestic and foreign firms, and (3) varying cost of doing business between domestic and foreign firms. Analytical and numerical results point to the importance of modeling all three features. Both the level and the changes in the relative wages depend on the productivity differential (technology gap) and the job creation costs.

1. INTRODUCTION

Multinational Enterprises (MNEs) have become one of the key players in extensively integrated economies since they have gained an important ground in transmitting new technologies, managerial techniques, skills, and capital across borders. In this context, to benefit from new technology, knowledge and market opportunities, domestic policy makers (as well as firms) encourage foreign firms to establish local subsidiaries. Alongside their effect on local firm productivity through technology transfers, investments by foreign firms have important implications for local labor market conditions. According to the World Investment Report (UNCTAD, 2007) around 3% of worldwide employees work for foreign affiliates of MNEs, representing a threefold increase from 1990 to 2006 in the absolute number of these workers. The same report further emphasizes the importance of understanding the impact of increased foreign firm presence which is evident in the increasing
employment opportunities by foreign firms, where
the share of employment in foreign affiliates in
total employment ranges from around 1% in Japan
to as high as 51% in Ireland.3

The effects of increased foreign firm presence
is not limited to employment effects in the host
country labor market, in fact two stylized facts
stand out in the data regarding the wage effects
of MNE activities. First, a change in the structure
of domestic production upon the entry of foreign
firms alters the wage gap between skilled and
unskilled workers (see Gopinath & Chen, 2003;
Markusen & Venables, 1997, among others). Second, foreign firms tend to pay different wages
than domestic firms (see Aitken, et al., 1996;
Feenstra & Hanson, 1996; Lipsey & Sjöholm,
2004, among others). The literature is dominated
by theoretical studies that explore the first issue
regarding the relative wages between the skilled
and unskilled labor, i.e. the skill premium, and
by empirical studies exploring the second issue
regarding the relative wages paid by foreign and
domestic firms, i.e. the foreign firm premium.

The evidence detailed in these studies regarding
the evolution of both the skill and foreign firm
premium is quite mixed across host countries.
Regarding the skill premium’s evolution evidence
suggests an upward move for several host
countries, but with ample countries experiencing
the exact opposite trend. Looking into the wage
effects of international economic integration,
studies have shown mixed evidence regarding
the issue4. A similar mixed pattern is suggested
in studies of the relative wages paid by foreign
and domestic firms. While studies by Driffield
and Girma (2003), Conyon et al. (2002), Martins
(2004), and Aitken et al. (1996) document higher
wages being paid by foreign firms, Lipsey and Sjöholm (2004), Almeida (2007), Barry et al.
(2005), and Girma et al. (2001) note that foreign
firms do not always pay more than local firms.
None of the existing studies look into the joint
determination of the skill and foreign firm premia.
This chapter fills this gap in the literature, building
a framework that explains the two observations
synchronously and allowing for a detailed para-
metric identification of the absolute and relative
wage implications of increased MNE activities in
the host country. The below framework furthermore allows investigation of employment effects
of MNE activities alongside their wage effects,
which enriches the analysis.

Another important issue, alongside the lack of
simultaneous discussion of the two-wage premia,
is the mixed empirical and theoretical evidence
regarding the evolution of both skill and foreign
firm premia which raises the question of what
factors contribute to this nonlinearity. The com-
mon theme in the theoretical models studying the
skill premia effects of increased MNE activities
is that the effects of Foreign Direct Investment
(FDI) on relative wages in the source and the
host countries depends on the characteristics of
the investment and the conditions in the invested
environment5. Studies on the second empirical ob-
servation, regarding the differential wages across
domestic and foreign firms, resonates a similar
absorptive capacity6 story with differing foreign
firm premium across developing countries. Such
evidence can be interpreted as suggesting that
the foreign firm premia also differs across host
countries depending on the absorptive capaci-
ties, either of the local market or of the firm. The
important message to be taken from this strand of
the literature is that the local conditions as well
as the investment characteristics, which we will
lump in the term absorptive capacities matters in
the determination of the wage effects of increased
foreign presence7.

The below framework incorporates two im-
portant dimensions of these absorptive capacities.
First, taking cue from the existing studies that show
the important role played by the technology gap
in explaining wage effects of MNE activities the
model includes productivity differential between
domestic and foreign firms (see Glass & Saggi,
2002; Sayek & Sener, 2006). Inclusion of the
technology gap across firms in the model captures