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THE IMPACT OF FOREIGN DIRECT INVESTMENT ON WAGES AND WORKING CONDITIONS

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The report provides a description of the various trends in FDI during the past two decades in OECD and non-OECD countries and summarises the empirical analysis of the impact of FDI on wages and working conditions carried out for Chapter 5 of the OECD Employment Outlook 2008 by Pedro Martins, Richard Upward and the OECD Secretariat.

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The views expressed in this paper are those of the authors and do not necessarily reflect those of the OECD or its member countries.

SUMMARY

Foreign direct investment (FDI) by OECD-based multinational enterprises (MNEs) in developing and emerging economies has increased dramatically over the past two decades. While generally perceived as beneficial for local development, it has also raised concerns about unfair competition and the protection of workers' rights in host countries. This paper documents the recent increase in FDI and assesses its effects on wages and working conditions for workers of foreign affiliates of MNEs and those of their independent supplier firms. The evidence suggests that MNEs tend to provide better pay than their domestic counterparts, especially when they operate in developing and emerging economies. The positive impact on wages also appears to spread to the employees of domestic firms that serve as suppliers of MNEs or recruit managers with prior experience in foreign firms, but these spillover effects are small. MNEs also provide more training than domestic firms, but it is unclear whether this reflects a causal impact of foreign ownership.

RESUME

L'investissement direct étranger (IDE) des entreprises multinationales (EMN) originaires de pays de l'OCDE dans les économies en développement et émergentes a augmenté de façon spectaculaire au cours des deux dernières décennies. Quoique généralement perçu comme bénéfique pour le développement local, l'IDE amène aussi à s'interroger sur le caractère déloyal de la concurrence et sur la protection des droits des travailleurs dans les pays d'accueil. Ce document examine l'accroissement de l'IDE et en analyse les effets sur les salaires et les conditions de travail des salariés des filiales étrangères des entreprises multinationales et de leurs sous-traitants. Il apparaît que les EMN tendent à offrir de meilleurs salaires, surtout dans les économies en développement et émergentes. Il semble aussi que l'effet positif sur les salaires s'étende aux salariés des entreprises locales auxquelles les EMN font appel pour la sous-traitance ou qui recrutent des dirigeants ayant une expérience préalable dans des entreprises étrangères, mais ces retombées sont limitées. Les EMN font aussi un plus gros effort de formation que les entreprises locales, mais on ne saurait dire si cela tient à ce que ce sont des sociétés étrangères.

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THE IMPACT OF FOREIGN DIRECT INVESTMENT ON WAGES AND WORKING CONDITIONS

1. INTRODUCTION

1. Foreign Direct Investment (FDI) is often seen as a driver for economic development as it may bring capital, technology, management know-how, and jobs in receiving countries and access to new markets for foreign investors. Policy-makers have, therefore, tended to emphasize the benefits that FDI can bring to host economies, particularly in developing countries. Accordingly, many governments have developed policies to encourage inward FDI.

2. While FDI and multinational enterprises (MNEs) are often perceived to be beneficial for local development, they have also aroused much controversy and social concerns. For example, MNEs have often been accused of taking unfair advantage of low wages and weak labour standards in developing countries. MNEs also have been accused of violating human and labour rights in countries where governments fail to enforce such rights effectively.

3. The aim of this paper is to take stock of the current state of knowledge regarding the social impact of inward FDI in host countries, with particular emphasis on the wages and working conditions offered by OECD-based MNEs to their workforces in non-OECD countries. The paper also considers possible spillover effects of FDI on workers employed by local firms.

4. The structure of the paper is as follows. Section 2 provides a description of the various trends in FDI during the past two decades in OECD and non-OECD countries. Section 3 reviews the literature on the direct and indirect impact of FDI on wages and working conditions in host countries. Section 4 summarises the new empirical evidence carried out for Chapter 5 of the *OECD Employment Outlook 2008*, for two emerging countries (Brazil and Indonesia) and three developed countries (Germany, Portugal and the United Kingdom).¹ Section 5 offers some concluding remarks.

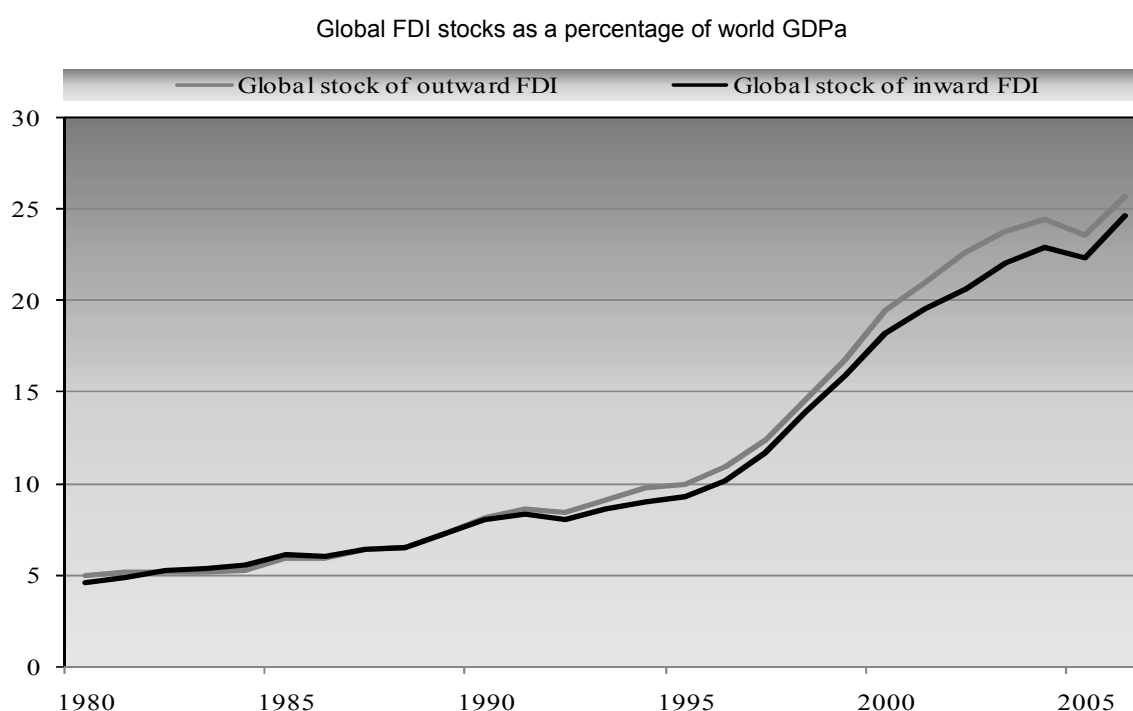
1. Chapter 5 of the *OECD Employment Outlook 2008*, will be referred hereafter to as OECD (2008a) for convenience.

2. THE GROWING IMPORTANCE OF FDI

2.1 FDI has increased rapidly

5. Foreign direct investment is defined as an investment made to acquire a lasting interest by an entity resident in one economy in an enterprise resident in another economy. The investment should allow the investing entity to exert direct control over the management of assets in the invested firm. For statistical purposes, it is typically assumed that this is the case when a foreign investor owns 10 percent or more of the ordinary shares of voting power (or the equivalent). Investments that fall short of the 10% ownership threshold are classified as portfolio investments.

Figure 2.1. **World foreign direct investment, 1980-2006**



a. FDI stocks and world GDP are expressed in current US Dollars.
Source: UNCTAD, FDI Statistics.

6. During recent decades, the importance of FDI in the world economy has increased rapidly.² The global stocks of inward and outward FDI as a percent of global GDP have increased from less than 5% in

2. UNCTAD provides the most comprehensive dataset on FDI stocks that is currently available in terms of both its coverage across countries and time. As such, it is the best data source for describing global trends in FDI. As data on FDI is not available from national sources for all countries and years, UNCTAD imputes some values in order to be able to make globally representative estimates. In other instances, UNCTAD makes certain statistical adjustments to the data provided from national sources in order to enhance their international comparability. For both these reasons, FDI estimates based on UNCTAD data may be different from those based on FDI data provided by either the OECD or the IMF (cf. OECD FDI Statistics and IMF Balance of Payment Statistics). See OECD (2008b) for a detailed discussion of international methodological standards for the measurement of foreign direct investment.

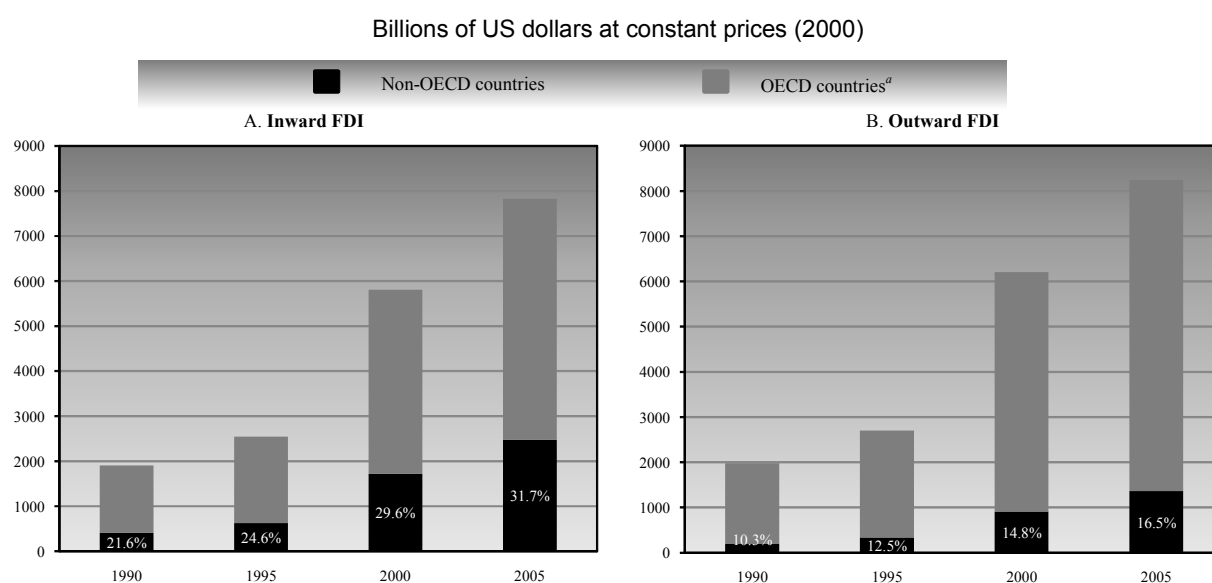
1980 to about 25% in 2006 (see Figure 2.1).³ The increase in FDI is largely driven by the ongoing liberalisation of trade and investment and technological developments in information and communication technologies.

2.2 The geographical distribution of FDI

7. Although the bulk of FDI continues to take place between OECD countries, the relative importance of non-OECD countries for inward and outward FDI has grown substantially during the past 15 years, reflecting the integration of developing countries into the world economy, and particularly, of the so-called BRICs –i.e. Brazil, China, India and Russia. Figure 2.2 shows that the share of non-OECD countries in the global stock of inward FDI has risen from 22% in 1990 to 32% in 2005 and their share in the global stock of outward FDI from 10% in 1990 to 17% in 2005.

8. The rising importance of non-OECD countries as a destination for FDI has a number of potential implications. First, since the mid-1990s, FDI has become the most important source of external finance for developing countries, thus reinforcing its potential role for the development process in those countries (see Figure A.1 in Annex)⁴. Second, the increasing number of potential destinations for FDI and the growing dependence of developing countries on FDI has intensified competition among countries to attract FDI. Finally, the rise in FDI from OECD countries into non-OECD countries has also raised serious social concerns about poor labour practices in the foreign operations of MNEs originating from OECD countries. This is particularly the case as minimum labour standards are not always effectively enforced in such countries.

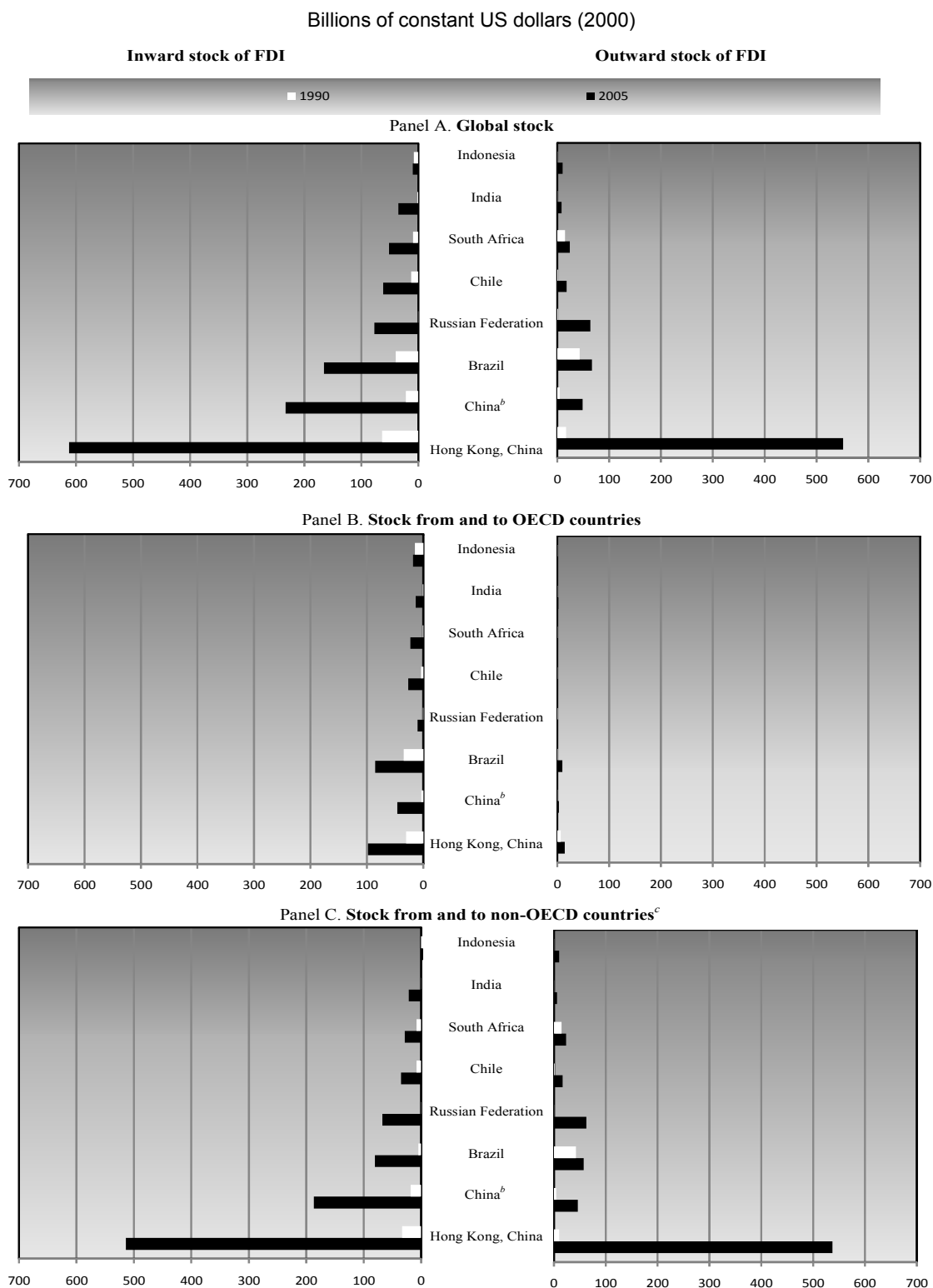
Figure 2.2. Trends in foreign direct investment by groups of countries, 1990-2005



a. Corresponds to the 30 OECD member countries.
Source: OECD (2008a).

3. While, in principle, the global stocks of inward and outward FDI should be equal at all times, in practice, sizable discrepancies tend to exist. This is largely due to gaps in coverage and the use of different reporting systems across countries (Patterson *et al.*, 2004).
4. However, the relative importance of FDI as a source of external finance differs substantially across regions. For example, in Sub-Saharan Africa, official development aid is more important than FDI (World Bank, 2006).

Figure 2.3. FDI stocks from selected emerging economies, 1990^a and 2005



a. 1993 instead of 1990 for the Russian Federation.
 b. China corresponds to mainland China.
 c. Difference between global stock of FDI and FDI stock from OECD countries.
 Source: OECD calculations based on UNCTAD, FDI Statistics; and OECD, FDI Statistics.

9. Figure 2.3 focuses on the trend in inward and outward FDI for key emerging economies (Brazil, Chile, China, India, Indonesia, Russian Federation and South Africa). Panel A documents FDI for these countries with respect to the rest of the world, while Panels B and C show their FDI stocks from and to, respectively, OECD and non-OECD countries. In all seven countries, inward and outward FDI has tended to increase significantly between 1990 and 2005. China, mainland plus Hong Kong, is by far the most important non-OECD country both as a source and as a recipient of FDI. In 2005, China represented more than a third of the total inward FDI in all non-OECD countries, and more than half of outward FDI. This trend has consolidated China as a growing source of FDI, reaching in 2006 the 4th world position in terms of stocks and the 6th in terms of flows.⁵

10. In most of the countries shown, the rise in the inward stock of FDI between 1990 and 2005 predominantly results from FDI from other non-OECD countries, although FDI from OECD countries into the key emerging countries has also increased significantly. Indonesia and Brazil are the only two countries where the OECD is more important as a foreign investor than the group of other non-OECD countries.

11. The rise in outward FDI from the selected emerging economies almost entirely reflects the rise in FDI between non-OECD countries (also referred to as South-South FDI). Outward FDI by emerging economies into the OECD remains relatively marginal, despite recurrent claims in the media that developing countries are increasingly acquiring strategic assets in developed countries. Also China's outward FDI has increased at higher rates in developing than in developed countries, particularly in Africa.⁶

2.3 FDI by sector of activity

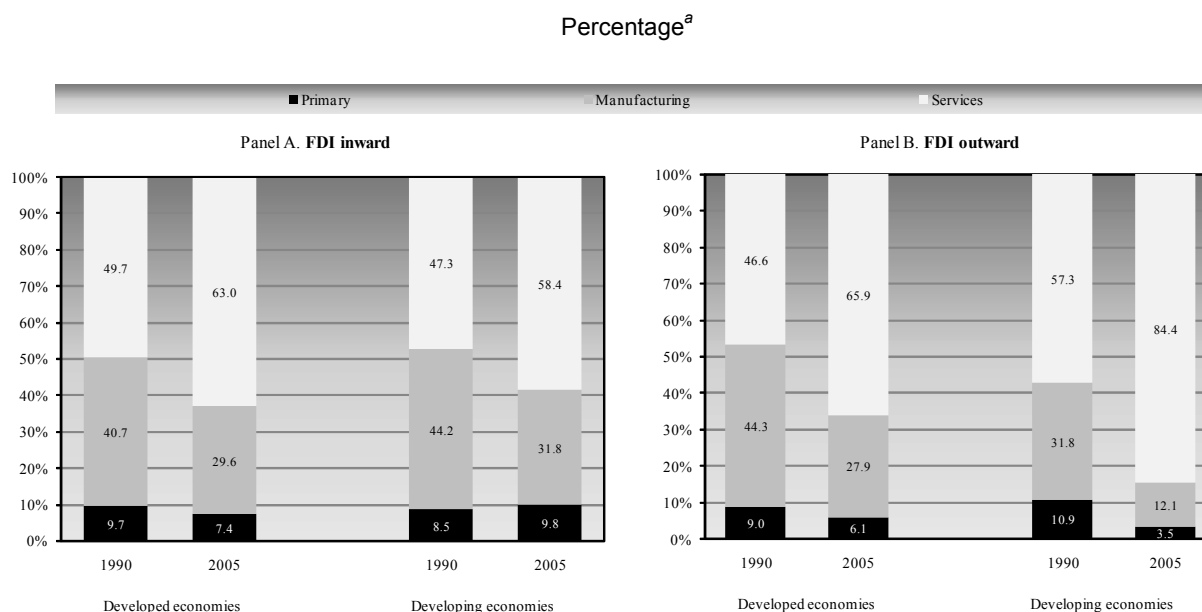
12. While FDI has increased significantly in all major economic sectors, there has been a progressive shift towards services at the expense of manufacturing (see Figure 2.4). In developed countries, inward FDI in the manufacturing sector decreased from 41% to 30%, whereas it increased from 50% to 63% in services. In developing countries, inward FDI in the manufacturing sector decreased from 44% to 32%, whereas it increased from 47% to 58% in services. While this shift is, in part, likely to reflect the growing importance of services within national economies, it may also capture the growing internationalisation of the services sector as a result of developments in ICT as well as the liberalisation of services, including the rise of services offshoring.⁷ The primary sector continues to account for about 10% of global inward FDI. However, while its share has declined somewhat in developed countries, it has increased slightly in developing countries.

5. When distinguishing between mainland China and Hong Kong, one observes that Hong Kong is much more important for both inward and outward FDI than is mainland China. To the extent that the rise in FDI in China is partly driven by increasing FDI between the mainland and Hong Kong, Figure 2.3 over-estimates the importance of FDI in this region. In fact, an important part of direct investment in Hong Kong is reinvested in other countries, including mainland China.

6. However, China accounts for less than 1% of the total stock of FDI in Africa, and remains well below other traditional investors in the region. The bulk of its outward FDI is located in resource-rich countries such as Algeria, Nigeria, South Africa, Sudan and Zambia (OECD, 2008c).

7. Data on cross-border mergers and acquisitions (M&As) confirm this trend. According to UNCTAD (2007), the share of the service sector in cross-border M&As rose from 37% in 1987-2000 to 58% in 2002-2006, whereas the share of the primary sector decreased from 11% to 5% over the same period.

Figure 2.4. Estimated world FDI stock by sector of activity, 1990-2005

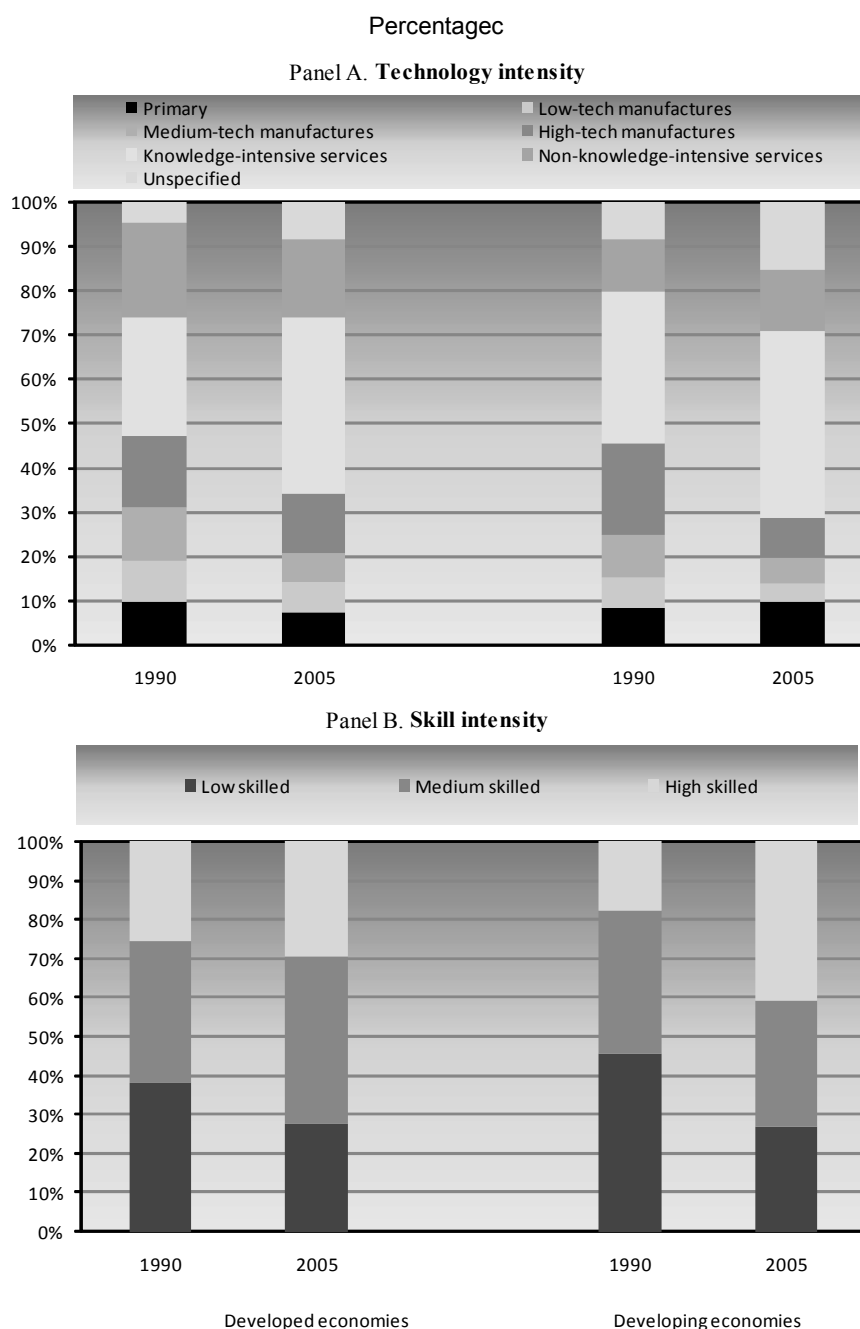


a. *Developed economies* include: Australia, Austria, Belgium, Bermuda, Canada, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Gibraltar, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, the United Kingdom, and the United States. *Developing economies* include all other countries. Source: UNCTAD (2007).

13. When assessing the social impact of FDI in host countries, it is interesting to have some idea about the knowledge- and skill-intensity of the activities in which foreign investors get involved. One way to do this is by classifying sectors according to their technology or skill-intensity. As the technology and skill requirements of sectoral activities are assumed to be the same for all countries, cross-country comparisons have to be made with caution. Figure 2.5, Panel A presents data on inward FDI by sectoral technology intensity. It suggests that the progressive shift toward services is associated with the growing importance of knowledge-intensive sectors. Between 1990 and 2005, knowledge-intensive services have increased their shares in inward FDI from 27% to 40% in developed countries and from 34% to 43% in developing countries. Moreover, the knowledge-intensive services sector is particularly important in developing countries. FDI may be a way for foreign firms in developed countries to supply markets in developing countries. Alternatively, it may reflect the increasing importance of services offshoring by OECD MNEs to developing countries.

14. Data by sectoral skill intensity, presented in Figure 2.5, Panel B, reveal a similar pattern. In both developed and developing countries, there has been a gradual shift of inward FDI towards more skill-intensive sectors, with this trend being particularly pronounced in the developing countries. While FDI is often said to have increased the relative demand for skilled labour and to have contributed to the rise in earnings inequality that is observed in many developed and developing countries, one should be careful before drawing such inferences from this Figure. The average skill-intensity of the sector need not necessarily correspond to the skill-intensity of the activities conducted in the foreign affiliates of MNEs. In order to assess the impact of FDI on the earnings distribution, not only information on the sectoral distribution of FDI is needed, but also on how FDI affects sectoral output prices and productivity. Only to the extent that FDI is concentrated in skill-intensive sectors and tends to reduce output prices or increase productivity in those sectors, is it likely to contribute to earnings inequality in the long-run.

Figure 2.5. Inward FDI by technology^a and skill^b intensity, in 1990 and 2005



a. *Special industry aggregation used in the OECD STAN bilateral trade database (see description in Annex A of the publication OECD Science, Technology and Industry Scoreboard, 2005).* Primary corresponds to Agriculture, hunting, forestry and fishing; Mining, quarrying and petroleum; and Unspecified primary. *Low-tech manufactures* corresponds to Food, beverage and tobacco; Textiles, clothing and leather; Wood and wood products; Publishing, printing and reproduction of recorded media; and other manufacturing. *Medium-tech manufactures* corresponds to Coke, petroleum products and nuclear fuel; Rubber and plastic products; Non-metallic mineral products; Metal and metal products; and Machinery and equipment. *High-tech manufactures* corresponds to Chemicals and chemical products; Electrical and electronic equipment; Precision instruments; and Motor vehicles and other transport equipment. *Knowledge-intensive services* corresponds to Transport, storage and communications; Finance; Business activities; Education; and Health and social services. And *Non-knowledge-intensive services* corresponds to Electricity, gas and water supply; Construction; Trade; Hotels and restaurants; Public administration and defence; and Community, social and personal service activities.

- b. *Low-skilled* corresponds to Agriculture, hunting, forestry and fishing; Mining, quarrying and petroleum; Food, beverage and tobacco; Textiles, clothing and leather; Wood and wood products; Non-metallic mineral products; Metal and metal products; and Construction. *Medium-skilled* corresponds to other manufacturing; Motor vehicles and other transport equipment; Trade; Hotels and restaurants; Publishing, printing and reproduction of recorded media; Transport, storage and communications; and Electricity, gas and water supply. *High-skilled* corresponds to Coke, petroleum products and nuclear fuel; Machinery and equipment; Business activities; and Community, social and personal service activities.
- c. *Developed economies* include: Australia, Austria, Belgium, Bermuda, Canada, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Gibraltar, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, the United Kingdom, and the United States. *Developing economies* include all other countries.

Source: OECD calculations based on UNCTAD (2007).

2.4 MNEs as employers

15. The increase in FDI is also reflected in the rise of the number of jobs in the foreign affiliates of MNEs. An estimated 73 million workers, representing 3% of the global workforce, were employed in foreign affiliates of MNEs in 2006, almost three times more than in 1990. A disproportionate share of these workers is employed in the foreign affiliates of MNEs in developing and transition economies, presumably reflecting the higher labour-intensity of production in foreign affiliates in those countries. The distribution of jobs in foreign-owned firms is also skewed towards the manufacturing sector, suggesting that the activities conducted in foreign-owned firms in manufacturing tend to be relatively more labour-intensive. The extent to which employment in foreign-owned firms reflects the causal impact of FDI on job creation depends largely on whether FDI is realised through greenfield investment or cross-border mergers and acquisitions (M&As). Generally, FDI realised through greenfield investment is more likely to have a positive impact on employment. However, OECD (2008a) suggests that cross-border M&As may also have substantial positive effects on employment in some countries.⁸

8. The majority of FDI is typically thought to result from cross-border M&As, with the remainder being realised through greenfield investment. While thinking of cross-border M&As as simply a component of FDI may be useful, UNCTAD (2000) emphasises that the link between cross-border M&As and FDI is much more complex.

3. THE IMPACT OF FDI ON EMPLOYMENT CONDITIONS AND INDUSTRIAL RELATIONS: A LITERATURE REVIEW

16. Policy-makers have tended to emphasize the potential benefits that FDI can bring to the host economy, including by improving pay and working conditions. These benefits may be direct or indirect. The former refer to benefits for employees in foreign-owned firms, whereas the latter refer to benefits for workers in domestic firms. MNEs are able to provide higher wages and, possibly, working conditions because of their higher productivity which, in turn, is explained by greater technological know-how and modern management practices that allows them to compete effectively in foreign markets and to offset the cost of coordinating activities across different countries. This transfer of technological and managerial know-how across affiliates of MNEs may give rise to direct benefits. But, it may also lead to indirect benefits by increasing the productivity of domestic firms when the productivity advantage spills over from foreign affiliates to domestic firms. Productivity spillovers represent positive externalities to the host country and may explain why policy-makers have sometimes treated foreign investment more favourably than investment by domestic firms. Although not automatic, increased productivity in domestic or foreign-owned firms may lead to higher incomes, better working conditions and more employment.⁹

17. Despite being more productive, there is no reason to expect, in general, that MNEs would offer better pay or working conditions for identical workers than their local counterparts. In competitive labour markets, MNEs may pay higher average wages only to the extent that they employ a more skilled workforce or must compensate workers for undesirable differences in the characteristics of jobs such as lower job security.

18. The presence of certain market failures, however, could provide MNEs with an incentive to offer better pay and working conditions than domestic firms to individuals with similar characteristics doing similar jobs. First, MNEs may be more likely to pay, so-called, efficiency wages. For example, MNEs may be willing to pay higher wages than their local competitors in an attempt to reduce worker turnover and thereby minimize the risk of their productivity advantage spilling over to competing firms. MNEs may also be willing to pay higher wages to motivate the workforce as they may face higher monitoring costs related to informational problems. Second, in the context of search frictions, the productivity advantage of MNEs may give rise to rents. To the extent that employers share these rents with their employees, better firms promote better jobs. Finally, there may be institutional factors that provide incentives for MNEs to go beyond local labour practices. For example, in developing countries where the rule of law is weak, MNEs may be more likely to comply with national labour laws, because of reputational concerns and consumer pressure in their home markets.¹⁰

9. Employment effects are likely to be particularly important in countries where formal employment opportunities are limited.

10. Halegua (2007), for example, suggests that US MNEs operating in China tended to oppose the new Labour Contract Law that entered into force 1 January 2008, as they may need to apply labour provisions more rigorously than their local counterparts due to pressure from US consumers.

3.1 The direct impact of FDI on wages

19. There is a large empirical literature on multinational wage premia (see Table A.1 in Annex). Until recently, there was a consensus that foreign firms tend to provide better pay to workers than their domestic counterparts, particularly in developing countries. In an early study for Mexico, the US and Venezuela, Aitken *et al.* (1996) compare average wages between domestic and foreign-owned firms. They show that average wages in foreign-owned plants tend to be about 30% higher than in domestic plants. Moreover, these wage differences persist once one controls for size, geographic location, skill mix and capital intensity in Mexico and Venezuela, but not in the United States. This would tend to suggest that foreign-owned firms pay higher wages than their local competitors in developing countries. However, this does not necessarily mean that foreign ownership improves employment conditions as the workforces in domestic and foreign firms may be qualitatively different.

20. In order to address the possibility that average wage differences between foreign and domestic firms merely reflect differences in the composition of the workforce, a number of studies have analyzed to what extent foreign wage premia persist after controlling for observable differences in workforce quality. For example, Lipsey and Sjöholm (2004) use a plant-level dataset for Indonesia with detailed information on the composition of workers across educational categories. They find that, while differences in average labour quality account for a significant part of the raw foreign wage premium, it remains large. Wages in foreign-owned plants are 12% higher for production workers and 20% for non-production workers. Morrissey and Te Velde (2003) present similar findings for five Sub-Saharan African countries.

21. An alternative approach to control for differences in the composition of the workforce is to focus on *changes* in firm ownership due to cross-border takeovers. Studies that have adopted this approach identify the causal effect of foreign ownership on employment conditions under the assumption that the composition of the workforce is not affected by cross-border takeovers. By focussing on cross-border M&As, this approach does not capture the role of greenfield investment, the effects of which may be different.¹¹ Studies that focus on cross-border M&As also suggest that FDI has the potential to increase significantly the number and quality of jobs in foreign-owned firms, particularly in developing countries. For example, Girma and Görg (2007) find for the UK that foreign takeovers of domestic firms tend to increase wages, but the effects are relatively small. For Indonesia, Lipsey and Sjöholm (2006) find that foreign takeovers raise production-worker wages by 17% and non-production-worker wages by 33%.¹²

22. However, the results from firm-level analysis may be misleading because they do not control for changes in the composition of the workforce that may be associated with cross-border takeovers. To the extent that foreign takeovers are associated with skill upgrading, this would bias the estimated foreign wage premium upwards. Using linked employer-employee data (worker-level data), it is possible to control for changes in the composition of the workforce due to cross-border M&As by focusing on the wage effects for individual workers who stay in the same firm. Those data also allow one to look at the role of ownership for workers who change jobs between domestic and foreign firms. This is interesting because it allows one to analyse differences in pay conditions between foreign and domestic firms for *new* workers. As productivity differences may have more important implications for workers at the moment of hiring

11. Heyman *et al.* (2007) show for Sweden that the wage difference between foreign-owned firms established through greenfield investment and comparable domestic firms tends to be larger than that between foreign-owned firms established through M&As and comparable domestic firms.

12. Other studies, e.g. Almeida (2007) for Portugal, Earle and Telegdy (2007) for Hungary and Huttunen (2007) for Finland, also find positive effects on average wages for foreign takeovers of domestic firms.

than for stayers (Beaudry and DiNardo, 1991), one may expect the role of ownership to be more important for this category of workers.¹³

23. An increasing number of recent studies have made use of worker-level data to analyse the role of foreign ownership for individual wages. The results challenge the conventional wisdom by suggesting that foreign takeovers in developed countries have, at best, a small positive effect on individual wages and that this effect could even be negative. For example, Martins (2006) shows for Portugal that the foreign wage premium disappears after controlling for worker selection and may even reduce individual wages by 3% for workers in foreign firms relative to their counterparts in domestic firms. Heyman *et al.* (2007) present similar findings for Sweden. By contrast, Andrews *et al.* (2007) for Germany, Malchow-Moller *et al.* (2007) for Denmark and Balsvik (2006) for Norway find small positive effects in the order of 1% to 3%. Relatively few studies exploit worker mobility to analyse the role of foreign ownership. Two exceptions are Andrews *et al.* (2007) and Balsvik (2006), who show that workers moving from a domestic to a foreign firm experience a 6% increase in wages in Germany and 8% in Norway. These findings may indicate that the short-term effects of foreign ownership may be more important for new hires in foreign firms than workers who stay in firms that change ownership.

24. Overall, the recent evidence based on worker-level data provides a somewhat mixed message with respect to the impact of foreign ownership on wages. While most studies indicate that foreign ownership has a positive impact on wages, a number of studies indicate small negative effects. Unfortunately, it is not clear what drives these differences in estimated wage premia across studies. They may reflect differences in country characteristics or the nature of FDI, as well as differences in methodology. Moreover, what the effect of controlling for changes in the composition of the workforce would be for the estimation of foreign wage premia in developing countries, where such premia are believed to be much larger, remains an open question. In order to better understand the implications of these new findings, it would be useful to have comparable evidence for a number of developing and developed countries. OECD (2008a) is the first study to provide such evidence and the main findings are discussed in Section 4 below.

3.2 The direct impact of FDI on other working conditions

25. Very little is known about the impact of foreign ownership on non-wage working conditions. A number of studies have attempted to characterise employment conditions in MNEs and analysed its determinants. While the definition of employment conditions differs across studies, the literature appears to suggest that MNEs have a relatively low tendency to export labour practices to their foreign affiliates, tending instead to adapt to local practices (e.g. Almond and Ferner, 2006). Bloom *et al.* (2008) use survey data on management and work-life balance practices for over 700 medium-sized firms in the US, UK, Germany and France to analyze to what extent US multinationals export certain practices to their affiliates in Europe. The evidence indicates that US MNEs export management practices but not work-life balance practices. Freeman *et al.* (2007) compare labour practices in domestic and foreign affiliates of a single US firm in different countries and also find that US firms adapt their labour practices to host-country conditions to an important extent.

26. The literature suggests a number of reasons why US MNEs might have a low propensity to export labour practices. First, labour practices tend to be embedded in national rules and social norms. For example, the extensive regulation of the labour market in many European countries and the strong role of trade unions may make it difficult or unattractive for US MNEs to export labour practices to Europe

13. In addition, the analysis of worker movements takes account of both foreign-owned firms that were previously domestic, but have been acquired by a foreign owner, and those that are established through greenfield investment.

(Bloom *et al.*, 2008). Second, the low propensity of US MNEs to export working practices may also reflect strategic considerations. For example, local affiliates with a domestic market orientation may enjoy a significantly greater degree of discretion about the way human resources are managed than firms that are more export-oriented. Finally, the low propensity of US MNEs to export labour practices may reflect the specific management style of US MNEs and not be representative for MNEs originating from other countries.

27. There appears to be no systematic evidence on the propensity of MNEs to export labour practices to developing countries. This is unfortunate, as it not obvious to what extent the results for developed countries carry over to developing countries. On the one hand, enforcement of labour provisions and trade unions tend to be weaker in developing countries, thereby reducing the role of institutional constraints for the foreign affiliates of MNEs to implement the same labour practices they use in OECD countries. On the other hand, labour practices that are socially acceptable in developing countries may not be acceptable to the consumers and investors in developed countries, creating incentives for MNEs from developed countries to export their human-resource practices abroad.

3.3 The indirect impact of FDI on wages and working conditions

28. In addition to having direct effects on wages and working conditions in the foreign affiliates of MNEs, FDI may also have indirect effects on employment conditions in domestic firms. This may happen because the productivity advantage of MNEs spills over to local firms or because the employment activities of foreign-owned firms affect the local labour market.

29. The productivity advantage of MNEs may spill over to local firms for a number of reasons.¹⁴ First, domestic plants may be able to improve productivity by imitating production or management practices in foreign firms. Second, workers who move from a foreign-owned to a domestic plant may contribute to the transfer of knowledge of modern production and management practices to their new employers. Third, spillovers may occur from foreign firms to domestic firms in the supply chain, as foreign firms may collaborate with domestic suppliers to ensure that quality standards of intermediate inputs are met and that labour practices correspond with their codes of conduct. Finally, FDI may increase productivity in domestic firms when more intense product-market competition encourages local firms to remove inefficiencies in the production process.

30. The employment activities of foreign-owned firms may affect local labour market conditions through their impact on labour demand and supply. New entry of foreign firms or the expansion of activities in foreign firms may raise local labour demand, thereby bidding up local wages. To the extent that foreign firms tend to pay higher wages, FDI may also reduce the supply of labour available to domestic firms by lowering the willingness of individuals to work for such firms. This would also have a tendency to raise wages in domestic firms.

31. The empirical evidence in support of positive wage spillovers as a result of FDI is relatively limited. For example, Aitken *et al.* (1996) find no evidence of positive wage spillovers from FDI to domestic firms in Mexico and Venezuela, even though foreign-owned plants pay substantially higher wages. The absence of positive wage spillovers may indicate that foreign-owned and domestic plants operate in different labour markets and/or that productivity spillovers may be absent or even negative. Labour markets may be segmented between foreign and domestic firms because foreign-owned firms tend to provide better working conditions in order to limit worker turnover or because of institutional differences, such as more complete compliance with labour laws or greater bargaining strength vis-à-vis

14. See Görg and Greenaway (2004) for an overview of the literature.

trade unions. Positive productivity spillovers may also fail to materialize because of the lack of absorptive capacity in domestic firms or because of the crowding-out effect of foreign entry on local competitors.¹⁵

32. Several recent studies have found evidence of positive spillovers concentrating on the wage effects of FDI through its impact on labour demand and supply. Using data for the UK electronics industry, Driffield and Girma (2003) find that FDI has a large positive effect on wages in domestic firms through its impact on labour demand and a small positive effect through its impact on labour supply. Moreover, wage spillovers appear to be more important for skilled than unskilled workers, which may reflect the relative scarcity of skilled labour. Finally, using a cross-section of worker-level data for Indonesia, Lipsey and Sjöholm (2004) find that FDI is positively associated with average wage levels in domestic firms, particularly those of non-production workers.

33. Other recent studies have attempted to analyse how productivity and wage spillovers may occur by looking at specific ways domestic firms engage with foreign firms. For example, Görg and Strobl (2005) examine empirically the contribution of worker mobility to productivity spillovers using a panel of Ghanaian manufacturing firms. They find that domestic firms with an owner who has previously been employed in a foreign firm in the same industry, are more productive than other domestic firms. Balsvik (2006) analyses productivity spillovers through worker mobility using linked employer-employee data for Norway. She finds that workers with prior experience in MNEs tend to contribute 20-25% more to productivity than workers without such experience. Moreover, the contribution to firm productivity exceeds the private return to mobility, which suggests that worker mobility entails genuine productivity externalities. Poole (2006) analyses the role of worker mobility for wage spillovers using linked employer-employee data for Brazil.¹⁶ She finds evidence in support of positive wage spillovers and that their magnitude depends on the skill levels of workers previously employed by MNEs and incumbent workers in the domestic firm.

34. Backward linkages provide an alternative channel through which spillovers may occur from FDI to local firms. Using input-output tables, a number of studies have shown that backward linkages from foreign plants to local suppliers are associated with positive productivity spillovers (see Javorcik, 2004 for Lithuania; Blalock and Gertler, 2008 for Indonesia). Intuitively, this may reflect the fact that foreign firms often have a strong interest in helping local supplier firms to improve the quality of inputs or to ensure that subcontractors respect minimum labour standards (Moran, 2007, Sabel *et al.*, 2000). There is little systematic analysis that specifically looks at the effects of backward linkages from MNEs on wages and working conditions in supplier firms. Harrison and Scorse (2006) provide indirect evidence that reputation-sensitive MNEs helped raising the wages of unskilled workers in Indonesian textiles factories without, however, inducing a reduction in unskilled employment in those factories. This may indicate that MNEs not only helped raise wages but also productivity.

35. A number of case studies have analyzed the impact of private codes of conduct adopted by MNEs on working conditions in upstream suppliers. In general, the effectiveness of such codes in the supply chain appears to be limited (ETI, 2006). The benefits of codes of conduct are likely to be greater and more enduring when they are integrated into the management structures that govern production and when the interests of workers in employment and production are represented in effective institutions. This is more likely when MNEs actively engage with supplier firms to help improve working practices and productivity. For example, Locke *et al.* (2007) find that the quality of labour practices across suppliers depends to an

15. Aitken *et al.* (1996) confirm no positive spillover for Venezuela. The usual explanation for the negative impact of FDI on the productivity of local firms is that foreign entry crowds out local competitors, which will reduce domestic firm productivity when there are increasing returns to scale (Aitken and Harrison, 1999).

16. She focuses on the share of workers in the workforce that were displaced from a multinational firm prior to joining the current domestic firm.

important extent on the involvement of MNEs in the production process of supplier firms. Similarly, Frenkel and Scott (2002) conclude in a study for Adidas that compliance programmes based on long-term partnerships are more likely to bear fruit than those based on the policing of working conditions. Furthermore, Locke and Romis (2007) compare two supplier firms for Nike that both produce T-shirts and are located in the same region, but differ substantially in terms of their working conditions (wages, overtime, job satisfaction and employee voice). They attribute these differences to the way the plants are managed. While in one plant labour is treated as a variable input whose costs needs to be minimised, in the other plant workers are seen as an important factor to bolster productivity and output quality. Interestingly, despite paying higher wages, productivity is higher and unit labour cost lower in the plant that provides better employment conditions.

4. NEW OECD EVIDENCE ON THE EFFECTS OF FDI IN THE FOREIGN AFFILIATES OF MNES

36. OECD (2008a) presents new evidence on the impact of inward FDI on both wages and non-wage working conditions using data for three developed (Germany, Portugal and the United Kingdom) and two emerging economies (Brazil and Indonesia). This section summarises the main results from this study. After describing pay and working conditions in MNEs across host regions, the main findings of the econometric analysis are presented.

4.1 A simple comparison of employment, productivity, pay and working conditions in host countries

37. Using data from the World Bank Enterprise Survey, simple comparisons of MNEs and local firms suggest that the former tend to employ more workers and provide better jobs than local firms in the countries where they invest (Figure 4.1). The results are the following:

- On average, MNEs employ almost twice as many workers as the average local firm.
- Average wages are almost 50% higher in foreign MNEs than in domestic firms. Pay differences are larger in Asia and Latin America, as are the technological and productivity gaps between foreign MNEs and local firms in those regions.
- In all regions, the productivity gap between foreign and local firms appears to be even larger than the wage gap.¹⁷
- Foreign MNEs are more likely to provide training opportunities to their workforce and their workforces are more highly unionised than those in domestic firms. Both the emphasis on training and the higher unionisation rate could also help explain why wages tend to be higher in MNEs.

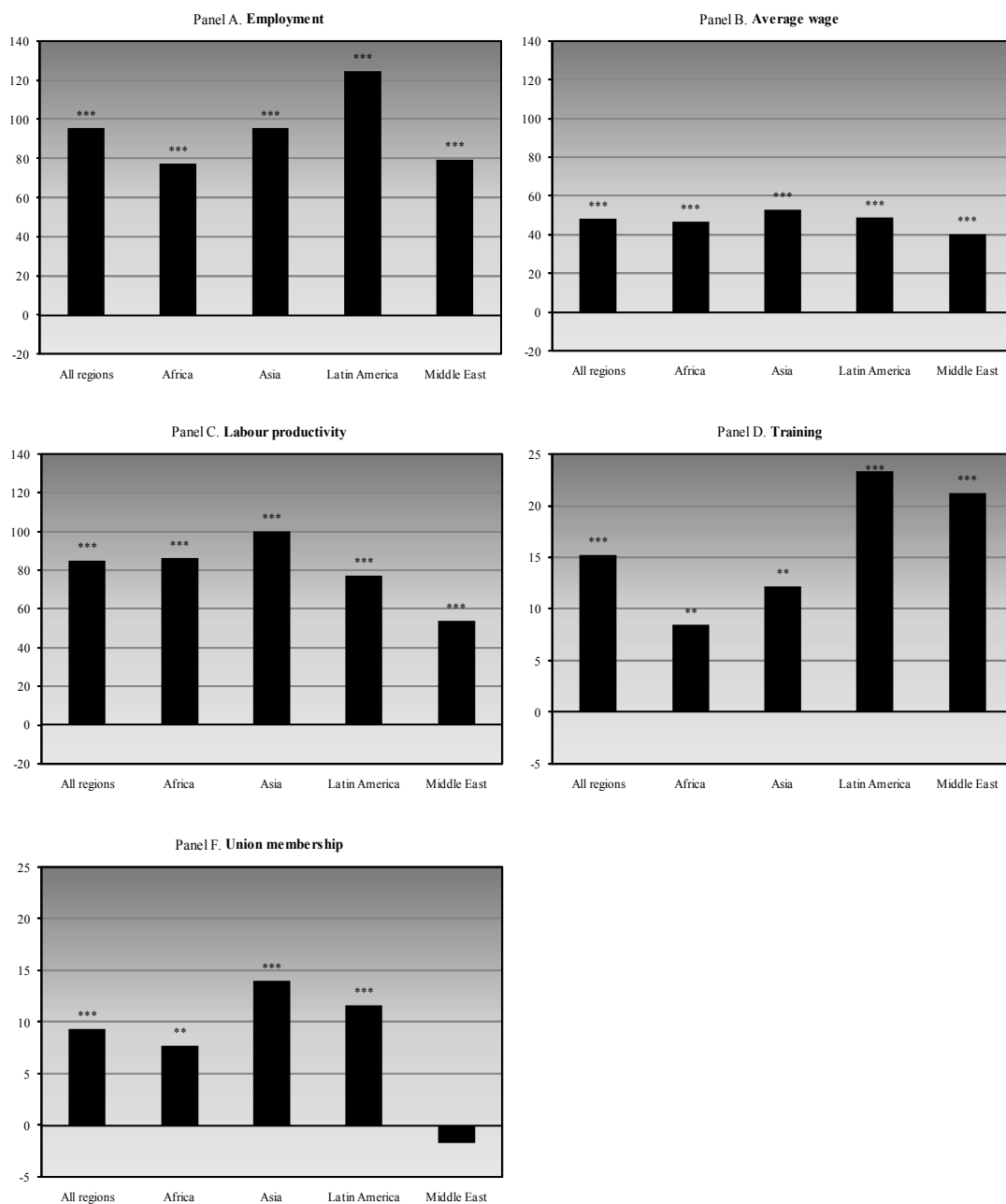
38. These results should, however, be interpreted with care as the data are subject to a number of shortcomings that give rise to potential biases that can contribute to an overestimation of the causal effect of FDI on working conditions.¹⁸ The econometric analysis of the effects of foreign ownership on wages and non-wage working conditions in the next sub-section controls for these potential biases.

17. The productivity gap between foreign and local firms is larger than the wage gap in most countries, implying that the wage share of total output is lower for MNEs. This might be an indication that worker bargaining power is weaker in foreign than in local firms, perhaps because fewer comparable outside job opportunities are available for workers in such firms. Even if this interpretation should be accurate, it does not mean that workers in foreign firms are worse off than their domestic counterparts. It would just mean that the pay premium associated with working in a foreign firm may not be as large as it would be if they had more bargaining power.

18. There are three main potential biases: aggregation, composition and selection. See OECD (2008a) for details.

Figure 4.1. Do MNEs offer better jobs?

A simple comparison of employment conditions and productivity^a between foreign MNEs and domestic firms (average percentage differences by host region^b)



*, **, ***: statistically significant at the 10%, 5%, 1% level, respectively, confidence interval based on robust standard errors.

a. *Employment*: Sum of permanent and full-time employees and temporary (or part-time) employees (adjusted by the length of contract duration); *Average wage*: Total wages and salaries of the permanent and full-time employees in constant USD divided by total employment; *Labour productivity*: Log of total sales in constant USD over employment; *Training*: Dummy equal to one when plant offers formal training to permanent employees; *Union membership*: Percentage of the workforce that is unionised.

b. All regions includes Central and Eastern European countries (CEE). Asia includes low-income Asia only.

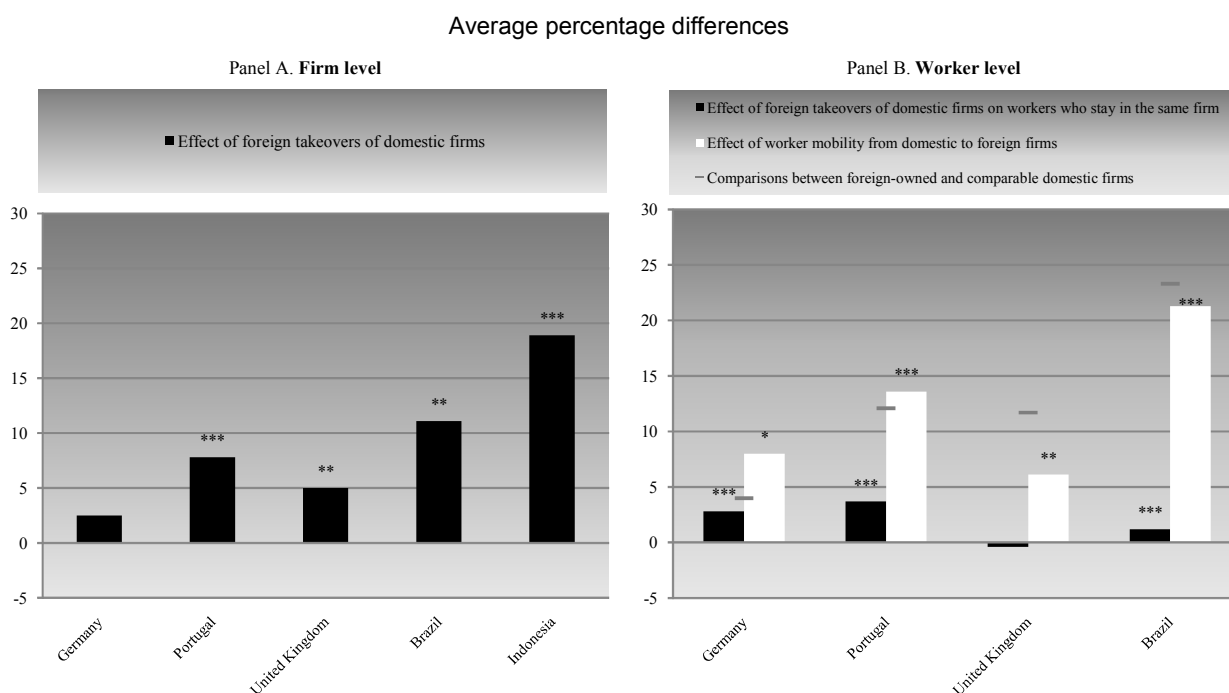
Source: OECD's calculations based on the World Bank Enterprise Survey (WBES).

4.2 The direct impact of foreign ownership: an econometric analysis¹⁹

39. The results presented below identify the impact of foreign ownership on wages and non-wage working conditions by concentrating on changes in ownership status in three developed economies (Germany, Portugal and the United Kingdom) and two emerging economies (Brazil and Indonesia) for the period 1997-2005. This allows controlling for permanent differences in unobservable characteristics between firms that are taken over and those that remain domestic, but also implies that the analysis is necessarily constrained to the short-term. In the present case, the analysis captures the average effect of changes in ownership status over the first three years after the event.

40. Using firm-level data, Figure 4.2, Panel A shows that foreign takeovers of domestic firms tend to raise average wages relative to those that would have occurred in the absence of takeovers. However, the impact varies considerably across countries. The effects range from 5% in the United Kingdom to 8% in Portugal, 11% in Brazil, and 19% in Indonesia, while the effect is positive but statistically insignificant in Germany. In general, these results are consistent with previous studies that have shown small and positive foreign wage premia in developed economies and potentially larger foreign wage premia in developing countries.²⁰

Figure 4.2. The effects of foreign ownership on wages



*, **, ***: statistically significant at the 10%, 5%, 1% level, respectively, confidence interval based on robust standard errors.

Source : OECD (2008a).

19. For the econometric methodology see OECD (2008a).

20. Domestic takeovers of foreign firms generally have no or a small negative effect on average wages and employment. This suggests that the effects of foreign takeovers of domestic firms and domestic takeovers of foreign firms are different. This asymmetry supports the hypothesis that foreign takeovers are accompanied by the transfer of modern production and management practices from the parent to the foreign affiliate.

41. Worker-level data permit to focus on the wage effects for individual workers who stay in the same firm. They also allow looking at the effects on wages for workers who change jobs between domestic and foreign firms. Panel B of Figure 4.2 presents the results of the takeover and the job mobility analysis for Brazil, Germany, Portugal and the United Kingdom. The following findings emerge:

- Foreign takeovers of domestic firms tend to have a small positive or no average effect on the individual wages of workers who stay in the same firm relative to similar workers who stay in domestic firms that are not taken over. The results suggest no effect for the United Kingdom and a small positive effect for Brazil, Germany and Portugal in the range of 1% to 4%. The absence of a positive effect in the United Kingdom may reflect the relative flexibility of the UK labour market compared to the other countries that makes it hard to sustain differences in pay for identical workers across firms.
- The job mobility results indicate large wage gains for workers who move from domestic to foreign firms.²¹ This suggests that foreign-owned firms offer higher pay than domestic firms for similar workers. Moreover, the foreign wage premia accruing to workers who move from domestic to foreign firms are considerably larger than those found in the context of takeovers. This may indicate that foreign firms share their productivity advantage more extensively with new workers than with workers who do not change firms. Moreover, the wage effects of foreign ownership differ considerably across countries. They range from 6% in the United Kingdom to 8% in Germany, 14% in Portugal and 21% in Brazil. This is consistent with the consensus in the empirical literature that foreign wage premia are larger in developing than in developed countries.
- The effect of foreign ownerships is potentially larger in the long-run. One would expect that the positive effects of FDI that initially accrue to new hires, eventually spread through the entire workforce as large pay disparities between new and old workers within firms are unlikely to be sustainable in the longer term. While it is not possible to estimate the causal effect of inward FDI in the long-run with the data analysed here, it is possible to place an upper bound on this effect by simply comparing wages across comparable workers in foreign-owned and domestic firms. The upper-bound estimates range from 4% in Germany, around 12% in Portugal and the United Kingdom, to 23% in Brazil and to 32% in Indonesia.

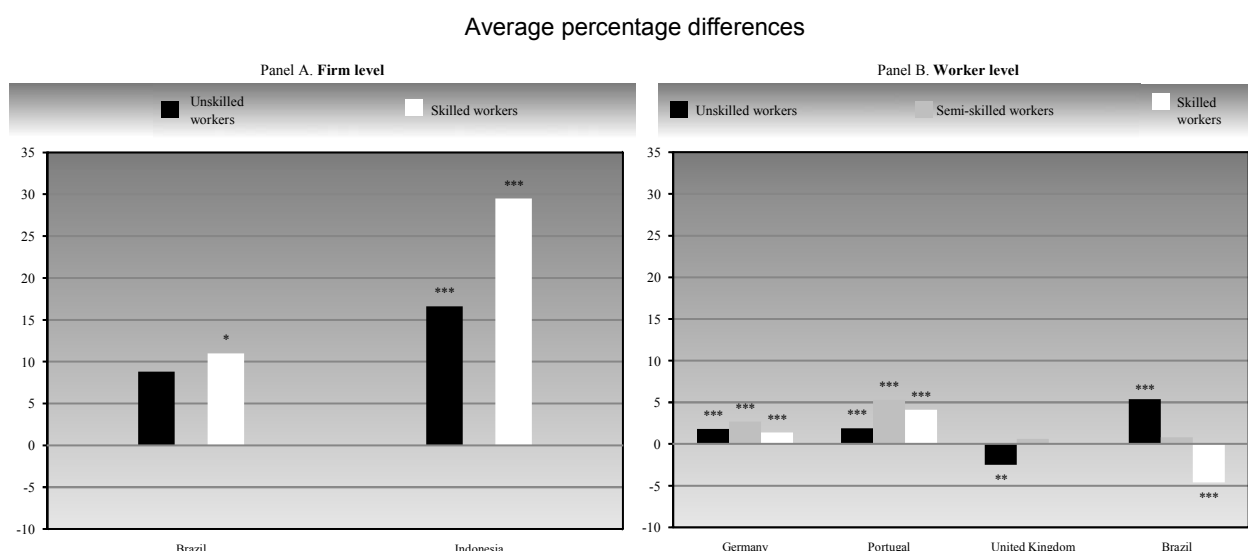
42. Thus, both the firm-level and the worker-level results suggest that FDI may have a substantial positive effect on wages in foreign-owned firms in the host country. While one should be careful about generalising results based on only a few countries, the present results are consistent with the consensus in the literature that the positive wage effects are likely to be more pronounced in developing and emerging economies. Presumably, this reflects the more important productivity advantage of foreign MNEs over local firms in less developed countries. The worker-level results based on takeovers and job movers, further suggest that the positive impact of FDI resides primarily in the provision of better job opportunities to new employees, rather than in the provision of better pay to workers who stay in firms that happen to change ownership, at least, in the short-term. This may reflect more competitive conditions in the market for new hires that allow new employees to share more widely the productivity advantages of MNEs. In the longer term, however, one would expect the positive effects to spread across the entire workforce, as large pay disparities between new and old workers within firms are unlikely to be sustainable.

43. Since the effects of foreign takeovers may not be evenly distributed across workers with different skills, OECD (2008a) also presents results by skill group (Figure 4.3).

21. By contrast, worker movements from foreign to domestic firms are associated with no effect or small wage losses.

- Firm-level results for Brazil and Indonesia provide some evidence that foreign wage premia may be more important for skilled than for unskilled workers (Panel A). In Indonesia, estimated foreign wage premia differ considerably across skilled and unskilled workers, being 30% for the former and 17% for the latter. In Brazil, a positive effect of 11% is found for skilled workers and no significant effect for unskilled workers.
- Worker-level results indicate important cross-country differences with respect to the effects of foreign takeover on workers with different skills in both qualitative and quantitative terms (Panel B). In the United Kingdom, the results suggest a small negative impact on the wages of low-skilled workers and no effect for semi- and high-skilled workers. By contrast, in Germany and Portugal, the impact of foreign takeovers on wages is positive for all three skill groups and differences across skill groups are modest. For Brazil, the results indicate large differences across skill groups with a positive effect for unskilled workers, a smaller but still positive effect for semi-skilled workers and a negative effect for skilled workers. The findings for Brazil differ from the prevailing view in the literature that the effects of foreign ownership tend to be more important for skilled workers.

Figure 4.3. The short-term effects of foreign takeovers of domestic firms on wages by skill group



*, **, ***: statistically significant at the 10%, 5%, 1% level, respectively, confidence interval based on robust standard errors.
Source: OECD (2008a).

44. OECD (2008a) also estimates the impact of foreign takeovers on a number of working conditions other than average pay: working hours (weekly working hours for full-time workers), worker turnover (the rate of job separation), low pay (the probability of receiving a wage equal or lower than the minimum wage) and union bargaining power (the wage premium associated with collective agreements). Key findings include:

- *Hours of work.* Raw comparisons between foreign and domestic firms suggest that working hours are longer in foreign firms in Brazil, Portugal and the United Kingdom.²² However, this is largely due to the specific characteristics of firms that are acquired by foreign owners. When focusing on

22. In Germany, for which actual hours of work are not available and standard hours are used instead, there is no difference between foreign and domestic firms.

changes in ownership status as a result of foreign takeovers, one observes either no effect or a slight negative impact on working hours. The results are generally not statistically significant and even in Brazil, where they are statistically significant, they are economically negligible.²³

- *Worker turnover.* There is some evidence that foreign takeovers increase worker turnover in Portugal, while no effect is found in either Brazil or Germany. Increased worker turnover may reflect the process of restructuring that accompanies such takeovers in the short-term. However, it is also possible that foreign-owned firms have higher worker turnover than domestic firms in the longer-term as MNEs tend to adjust employment levels more swiftly in response to changes in market conditions and wages. The reason for this may be that they more easily substitute workers in one country with workers in other countries by relocating production activities internationally. Level comparisons between domestic and foreign firms suggest that foreign-owned firms experience higher worker turnover also in the longer term.
- *Low pay.* Individuals in foreign-owned firms are less likely to earn the minimum wage (or less) than those in domestic firms.²⁴ Nonetheless, foreign takeovers appear to increase the probability of low pay in Brazil and Portugal relative to comparable workers in firms that are not taken over, but there is no such effect in the United Kingdom. Note that in Brazil and Portugal, this does not necessarily mean that workers are worse off in absolute terms, but that workers at the bottom-end of the wage distribution do not experience the same wage growth as they would have, had their firm not been taken over by a foreign firm.
- *Union wage premium.* The analysis for the United Kingdom and Germany assesses to what extent foreign takeovers affect the union wage premium for workers covered by a collective agreement before the takeover, relative to workers whose firms is taken over by a foreign firm but were not covered by a collective agreement. The analysis indicates a negative effect for the United Kingdom, suggesting that foreign takeovers reduce union bargaining power in that country. This may result from the fear on the part of unions that excessive wage demands are more likely to result in the relocation of production to other countries.

45. The question whether MNEs promote better working conditions other than average wages is complex and the empirical analysis in OECD (2008a) represents only a preliminary attempt to address this issue. Bearing this caveat in mind, one can draw the following tentative conclusions. First, the evidence that foreign takeovers affect working conditions other than average wages is considerably weaker than that for raising average wages. Second, and also in contrast to average wages, the impact of foreign takeovers on other working conditions is not unambiguously positive. Third, while foreign takeovers may have some impact on non-wage working conditions, it is not clear whether these effects derive from a corporate policy to export certain labour practices or reflect the responses by MNEs to local conditions. Overall, there is little evidence to suggest that MNEs export working conditions abroad.

4.3 Evidence on the effects of FDI on wages and working conditions in domestic firms

46. Further evidence presented in OECD (2008a) suggests that FDI – through both greenfield investment and cross-border M&As – may have positive spillover effects on the wages and non-wage working conditions of employees in domestic firms, but these indirect effects tend to be considerably weaker than the direct effects on employees in the foreign affiliates of MNEs. In particular, it confirms and

23. The relationship between foreign ownership and hours of work is complicated as it is necessary to take account of the relationship between ownership and both employee and employer preferences over hours of work (OECD, 2008a).

24. This indicates that foreign firms employ on average fewer low-paid workers than domestic firms.

extends the earlier findings by Lipsey and Sjöholm (2004) for Indonesia that FDI is positively associated with average wage levels in domestic firms, particularly those of non-production workers. A 10% increase in the foreign-presence index raises non-production worker wages in domestic firms by about 2%. It appears that these effects result largely from the link between the employment activities of foreign-owned firms and higher local labour demand, while the role of productivity-driven wage spillovers appears limited. Previous empirical studies on productivity-driven spillovers provide mixed results and suggest that the average effect of FDI on the productivity of domestic firms can even be negative. The lack of robust evidence in support of positive productivity-driven wage spillovers may reflect the crowding-out effect of domestic firms as a result of the competition from foreign firms in output and input markets, including the local labour market for skilled workers.

47. While the evidence suggests that positive productivity-driven wage spillovers are limited on average, their importance is likely to differ across local firms according to their engagement with foreign MNEs. In particular, productivity-driven wage spillovers are likely to be more important for local firms that engage with foreign MNEs in the supply chain or through worker mobility. In order to get an idea of the role of foreign-domestic linkages for wages and working conditions in domestic firms, Figure 4.4 compares employment conditions and productivity in domestic firms without any apparent relationship with foreign firms with conditions in domestic firms that supply intermediate inputs to foreign firms or have managers with prior experience in foreign firms by host region. These data indicate that:

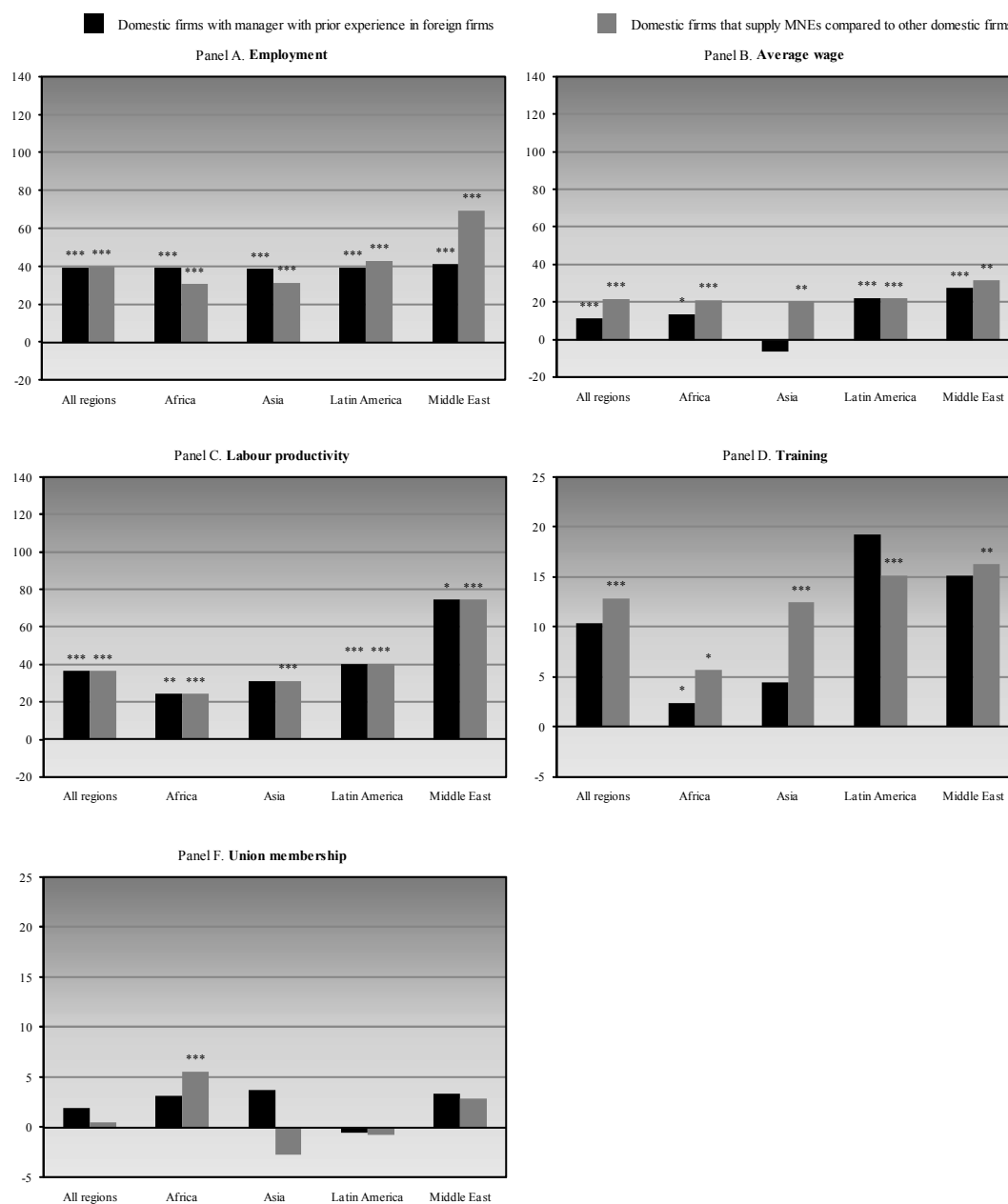
- Domestic firms that engage with foreign firms in the supply chain or that hire managers with prior experience in foreign firms tend to be larger, more productive and pay higher wages than local firms that have no apparent relationship with foreign firms.
- Domestic firms that engage with foreign firms are also more likely to provide training courses to their employees.
- There is no apparent difference in terms of union membership between such firms and other domestic firms.

48. The comparisons in Figure 4.4 suggest that backward linkages and worker mobility could be an important channel of wage spillovers between foreign and domestic firms. However, the simple comparisons do not provide conclusive evidence about the causal effect of engaging with foreign firms on working conditions in domestic firms. Indeed, it seems plausible that foreign firms select more productive firms as their suppliers and that managers, with prior experience in foreign firms, find it more attractive to work in more productive firms. Unfortunately, it is not possible to analyse these issues with the data available.

49. OECD (2008a) also analyses the wages of workers moving from foreign to domestic firms. The results indicate that the human capital accumulated in foreign firms can be effectively transferred through worker mobility, which is a pre-condition for observing productivity-driven wage spillovers. However, this analysis is limited to private returns (i.e. the wage premia of workers who change jobs) and it does not provide any information about whether there is also an impact on the wages of incumbent workers in domestic firms. Further work will be necessary to establish whether worker mobility provides a channel through which human capital accumulated in foreign firms creates spillover effects for incumbent workers in domestic firms.

Figure 4.4. **Are domestic firms that engage with MNEs different?**

A simple comparison of employment conditions and productivity^a (average percentage differences by host region^b)



*, **, ***: statistically significant at the 10%, 5%, 1% level, respectively, confidence interval based on robust standard errors.

a. *Employment*: Sum of permanent and full-time employees and temporary (or part-time) employees (adjusted by the length of contract duration); *Average wage*: Total wages and salaries of the permanent and full-time employees in constant USD divided by total employment; *Labour productivity*: Log of total sales in constant USD over employment; *Training*: Dummy equal to one when plant offers formal training to permanent employees; *Union membership*: Percentage of the workforce that is unionised.

b. All regions includes Central and Eastern European countries (CEE). Asia includes low-income Asia only.

Source: OECD (2008a).

5. CONCLUDING REMARKS

50. Foreign direct investment has been one of the most dynamic components of the world economy in recent decades. Global FDI stocks rose from 8% of world GDP in 1990 to 24% in 2006. This rapid quantitative growth was accompanied by important qualitative changes. Although the bulk of FDI continues to take place between OECD countries, the relative importance of non-OECD countries for inward and outward FDI has grown substantially, both enabling and reflecting the increasing integration of developing countries into the world economy. Indeed, inward FDI has become the main source of external finance for developing countries. Many non-OECD countries have also become increasingly active as foreign direct investors, as is shown by the near doubling of their share in the global stock of outward FDI between 1990 and 2005.

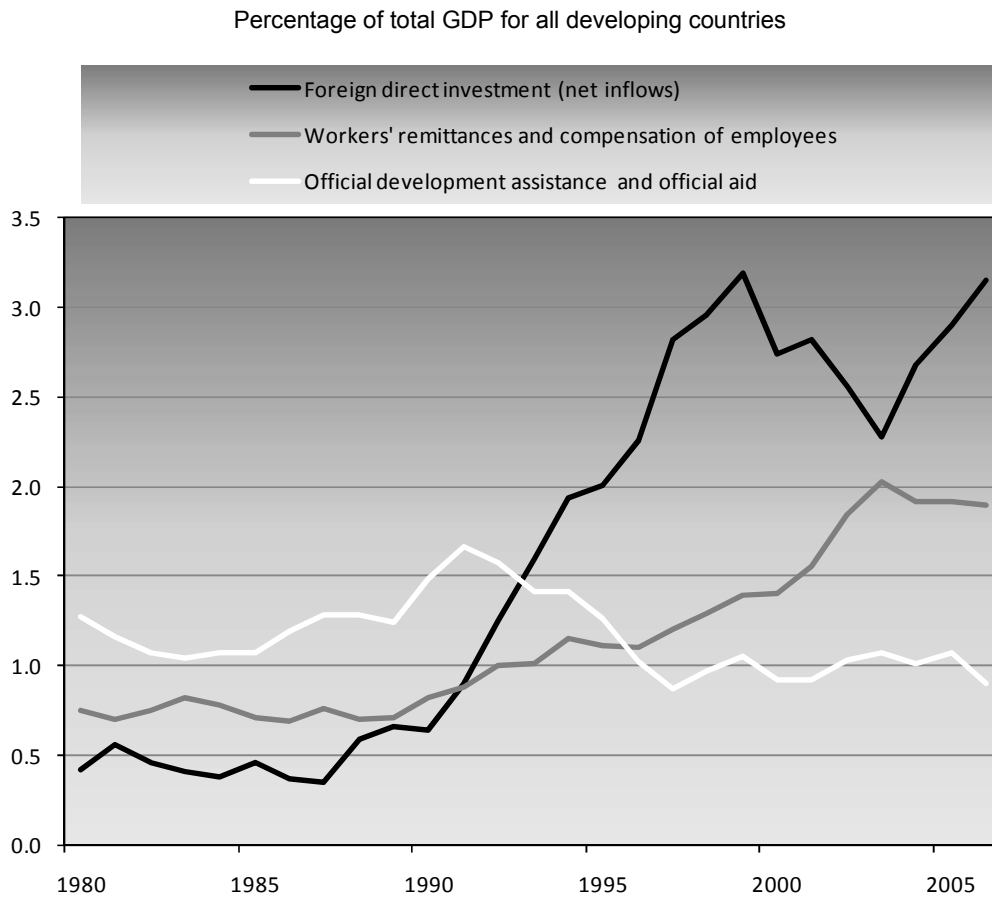
51. The increased role of FDI in developing countries has raised expectations about its potential to contribute to the development process in these countries, for example, by serving as a channel for the international diffusion of know-how. One concrete way local economies may benefit from FDI is through the creation of high-quality jobs, such as when MNEs offer better pay and working conditions than domestic firms in the host country. MNEs may also increase the supply of good jobs indirectly by stimulating domestic firms to improve employment conditions. However, there has been considerable uncertainty (and controversy) about whether MNEs are, in practice, an important driver of improvements in pay and working conditions.

52. This paper summarises what is known about this issue, surveying prior research on the labour market impacts of FDI and presenting the main results from a new OECD study. Overall, the evidence indicates that MNEs tend to promote higher pay in the countries in which they operate. The positive wage effect tends to be concentrated among workers that are directly employed by MNEs, but there also appears to be a small positive impact on wages in domestic firms participating in the supply chains established by MNEs. These effects are larger in developing than in developed countries, probably because the technology gap between foreign and domestic firms is larger in the former. The evidence about whether MNEs provide non-pay working conditions that are superior to those in domestic firms is more mixed. While working conditions in foreign firms tend to differ from those in comparable domestic firms, they do not necessarily improve following a foreign takeover.

53. While more research on the labour market effects of MNEs is clearly required, enough is already known to draw some practical lessons. First, the evidence confirms that FDI is a potentially important driver of improving living standards for workers. This suggests that governments should strive to create a framework for international investment which facilitates economically and socially beneficial forms of FDI. The fact that the impact of MNEs on wages and working conditions varies in complex ways across different types of investments, workforce groups and national environments also suggests that governments and other stakeholders may be able to take measures to enhance the contribution of FDI to economic and social development. Among the types of initiatives that may prove to be helpful are government measures to enforce labour standards and public and private initiatives to promote responsible business conduct.

ANNEX

Figure A.1. Components of external finance in developing countries, 1980-2006



Source: OECD calculations based on World Bank, World Development Indicators database.

Table A.1. An overview of the literature on foreign wage premia

Study	Country	Sample	Treatment ^a	Main findings
I. Cross-sectional studies				
Aitken, Harrison and Lipsey (1996)	Mexico, United States, Venezuela	1984-1990; 1987; 1977-1989, manufacturing	Foreign-owned	Positive and significant wage differences for Mexico and Venezuela after controlling for plant size, geographic location, skill mix and capital intensity, but not in the United States.
Morrisey and Te Velde (2003)	Cameroon, Ghana, Kenya, Zambia, Zimbabwe	Pooled cross-sections for various years during 1990-1993, manufacturing	Foreign-owned	Foreign wage premia ranging from 8% to 23% after controlling for observable worker and firm characteristics.
Lipsey and Sjöholm (2004)	Indonesia	1996, manufacturing	Foreign-owned	Wages in foreign-owned plants are 12% higher for production workers and 20% for non-production workers than in domestic plants.
II. Longitudinal studies - Firm-fixed effects				
Almeida (2007)	Portugal	1991-1998, manufacturing	Foreign takeovers	Foreign takeovers have a small positive effect of 2-4% on average wages.
Canyon, Girma, Thompson, and Wright (2002)	United Kingdom	1989-1994, manufacturing	Takeovers, asymmetric	Cross-border takeovers have small positive effect of 3.3% on average wages.
Earle and Telegdy (2007)	Hungary	1986-2003	Takeovers, symmetric	Cross-border takeovers have a positive effect of 7% on average wages.
Girma and Görg (2007)	United Kingdom	1980-1994, manufacturing	Foreign takeovers	Takeovers of UK firms by US firms increases the wage of both skilled and unskilled workers (4-13%), but takeovers by non-UK EU firms do not.
Huttunen (2007)	Finland	1988-2001, manufacturing	Foreign takeovers	Foreign takeovers have a positive effect on wages. The wage increase occurs within one to three years from the acquisition.
Lipsey and Sjöholm (2006)	Indonesia	1975-1999, manufacturing	Takeovers, asymmetric	Foreign takeovers have a positive effect of 10% on the average wage of blue-collar workers and 21% on the average wage of white-collar workers.
III. Longitudinal studies – Worker and firm fixed effects				
Andrews, Bellman, Schank and Upward (2007)	West and East Germany	2000 and 2004	Takeovers and movers, asymmetric	For West-Germany foreign takeovers are associated with 3% increase in individual wage. The effects for East Germany tend to be insignificant. Movers from domestic to foreign firms experience an increase in wages of 6%.
Balsvik (2006)	Norway	1990-2000, manufacturing	Takeovers and movers, asymmetric	Foreign takeovers have a small positive effect of 3% on individual wages. Movers from domestic to foreign firms experience an increase in wages of 8%.
Heyman, Sjöholm and Gustavsson Tinvall (2007)	Sweden	1996-2000	Takeovers, symmetric	Foreign takeovers have a small negative effect of -2% on individual wages.
			Takeovers, asymmetric	Foreign takeovers increase wages of high-skilled workers by 2% and reduce wages of medium and low-skilled workers by 4% and 6%.
Malchow-Moller, Markusen and Schjening (2007)	Denmark	2000-2002	Takeovers, symmetric	Foreign takeovers have small positive effect of 1% on individual wages.
Martins (2006)	Portugal	1991-1999, manufacturing	Takeovers, symmetric	Foreign takeovers have small negative effect -3% on individual wages.

- a. Some studies impose the assumption of symmetry on the treatment. In the present case, this means that the effects of changes in ownership from domestic to foreign and domestic to foreign are assumed to be of the same magnitude but of opposite sign. If this assumption is not imposed but both changes are allowed, the treatment is said to be asymmetric.

BIBLIOGRAPHY

- Aitken, B., A.E. Harrison and R. Lipsey (1996), “Wages and Foreign Ownership: A Comparative Study of Mexico, Venezuela, and the United States”, *Journal of International Economics*, Vol. 40, No. 3/4, pp. 345-371.
- Aitken, B. and A.E. Harrison (1999), “Do Domestic Firms Benefit from Direct Foreign Investment? Evidence from Venezuela”, *American Economic Review*, Vol. 89, No. 3, pp. 605-618.
- Almeida, R. (2007), “The Effects of Foreign Owned Firms on the Labor Market”, *Journal of International Economics*, Vol. 72, Iss. 1, pp. 75-96.
- Almond, P. and A. Ferner (2006), *American Multinationals in Europe*, Oxford: Oxford University Press.
- Andrews, M., L. Bellmann, T. Schank and R. Upward (2007), “The Takeover and Selection Effects of Foreign Ownership in Germany: An Analysis Using Linked Worker-Firm Data”, *GEP Research Paper*, 2007/08.
- Balsvik, R. (2006), “Is Mobility of labour a channel for spillovers from multinationals to local domestic firms?”, Norwegian School of Economics, mimeo.
- Beaudry, P., and J. DiNardo (1991), “The effect of implicit contracts on the movement of wages over the business cycle: Evidence from micro data”, *Journal of Political Economy*, Vol. 99, No. 4, pp. 665–688.
- Blalock, G., and P. J. Gertler (2008), “Welfare Gains from Foreign Direct Investment through Technology Transfer to Local Suppliers”, *Journal of International Economics*, forthcoming.
- Bloom, N., T. Kretschmer and J. Van Reenen (2008), “Work Life Balance, Management Practices and Productivity”, in R. Freedman and K. Shaw (eds.), *International Differences in Business Practices and the Productivity of Firms*, NBER: University of Chicago, forthcoming.
- Canyon, M., S. Girma, S. Thompson and P. Wright (2002), “The productivity and wage effects of foreign acquisition in the United Kingdom”, *Journal of Industrial Economics*, Vol. 50, Iss. 1, pp. 85-102.
- Driffield, N. and S. Girma (2003), “Regional Foreign Direct Investment and Wage Spillovers: Plant Level Evidence from the Electronics Industry”, *Oxford Bulletin of Economics and Statistics*, Vol. 65, Iss. 4, pp. 453-474.
- Earle, J.S. and A. Telegdy (2007), “Ownership and Wages: Estimating Public-Private and Foreign-Domestic Differentials with LEED from Hungary, 1986–2003”, *NBER Working Paper*, No. 12997.
- ETI – Ethical Trading Initiative (2006), *The ETI Code of Labour Practice: Do Workers Really Benefit?*, London, available at www.ethicaltrade.org/Z/lib/2006/09/impact-report/index.shtml.

- Freeman, R., D. Kruse and J. Blasi (2007), “The Same Yet Different: Worker Reports on Labour Practices and Outcomes in a Single Firm across Countries”, *NBER Working Paper*, No. 13233.
- Frenkel, S.J. and D. Scott (2002), “Compliance, Collaboration and Codes of Labor Practice: The Adidas Connection”, *California Management Review*, Vol. 45, No. 1, pp. 29-49.
- Girma, S. and H. Görg (2007), “Evaluating the foreign ownership wage premium using a difference-in-differences matching approach”, *Journal of International Economics*, Vol. 72, No. 1, pp. 97-112.
- Görg, H. and D. Greenaway (2004), “Much ado about nothing? Do domestic firms really benefit from foreign direct investment?”, *World Bank Research Observer*, Vol. 19, No. 2, pp. 171-197.
- Görg, H. and E. Strobl (2005), “Spillovers from Foreign Firms through Worker Mobility: An Empirical Investigation”, *Scandinavian Journal of Economics*, Vol. 107, No. 4, pp. 693-709.
- Halegua, A. (2007), “The Debate Over Raising Chinese Labor Standards Goes International”, *Harvard Law Policy Review*, 5 April 2007.
- Harrison, A.E. and J. Scorse (2006), “Multinationals and Anti-sweatshop Activism”, *NBER Working Paper*, No. 10492.
- Heyman, F., F. Sjöholm and P. Gustavsson Tingvall (2007), “Is there Really a Foreign Ownership Wage Premium? Evidence from Matched Employer-Employee Data”, *Journal of International Economics*, forthcoming.
- Huttunen, K. (2007), “The Effect of Foreign Acquisition on Employment and Wages: Evidence from Finnish Establishments”, *Review of Economics and Statistics*, Vol. 89, No. 3, pp. 497-509.
- Javorcik, B. (2004), “Does Foreign Direct Investment Increase the Productivity of Domestic Firms? In Search of Spillovers through Backward Linkages”, *American Economic Review*, Vol. 94, Iss. 3.
- Lipsey, R.E and F. Sjöholm (2004), “FDI and Wage Spillovers in Indonesian Manufacturing”, *Review of World Economics*, Vol. 140 (2), pp. 321-332.
- Lipsey, R.E and F. Sjöholm (2006), “Foreign Firms and Indonesian Manufacturing Wages: An Analysis with Panel Data”, *Economic Development and Cultural Change*, Vol. 55, No.1, pp. 201-221.
- Locke, R., F. Qin and A. Brause (2007), “Does Monitoring Improve Labor Standards?: Lessons from Nike”, *Industrial and Labor Relations Review*, No. 4612-06.
- Locke, R. and M. Romis (2007), “Improving Work Conditions in a Global Supply Chain”, *MIT Sloan Management Review*, forthcoming.
- Malchow Møller, N., J. Markusen and B. Schjerning (2007), “Foreign Firms, Domestic Workers”, *NBER Working Paper*, No. 13001.
- Martins, P. (2006), “Do Foreign Firms Really Pay Higher Wages? Evidence from Different Estimators”, *mimeo*.
- Moran, T.H. (2007), *A Perspective from the MNE Declaration to the Present: Mistakes, Surprises and Newly Important Policy Implications*, Geneva: ILO.

Morrisey, O. and D.W. Te Velde (2003) ,“Do Workers in Africa Get a Wage Premium if Employed in Firms Owned by Foreigners?”, *Journal of African Economies*, 12:1, 41-73.

OECD (2008a), “Do Multinationals promote better pay and working conditions?”, *OECD Employment Outlook*, Paris: OECD.

OECD (2008b), *OECD Benchmark Definition of Foreign Direct Investment*, 4th Edition, Paris: OECD.

OECD (2008c), *OECD Investment Policy Review of China*, forthcoming, Paris: OECD.

Patterson, N., M. Montanjees, J. Motala, C. Cardillo (2004), *Foreign Direct Investment: Trends, Data Availability, Concepts, and Recording Practices*, Washington D.C.: IMF.

Poole, J.P. (2006), “Multinational Spillovers through Worker Turnover”, University of California, San Diego, mimeo.

Sabel, C., D. O’Rourke and A. Fung (2000), “Ratcheting Labor Standards: Regulation for Continuous Improvement in the Global Workplace”, *KSG Working Paper*, 00-010.

UNCTAD (2000), “Cross-border Mergers and Acquisitions and Development”, *World Investment Report*, UNCTAD, United Nations: Geneva.

UNCTAD (2007), “Transnational Corporations, Extractive Industries and Development”, *World Investment Report*, UNCTAD, United Nations: Geneva.

World Bank (2006), *World Development Indicators 2006*, Washington D.C.: World Bank.

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