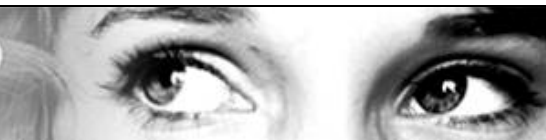


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Report on Foreign Direct Investment in Transport and Telecom in 12 EU countries and its Social Effects ■ WIBAR-2 Report No. 5

Maarten van Klaveren, University of Amsterdam/AIAS and STZ consultancy & research

Kea Tijdens, University of Amsterdam/AIAS

Nuria Ramos Martin, University of Amsterdam/AIAS

Barbora Brngálová, University of Amsterdam/AIAS

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1 Introduction

In the globalizing world economy, activities of multinational enterprises (MNEs) are growingly covering various countries. In the European Union the impact of foreign direct investment (FDI) on wages and working conditions is supposed to be substantial, but especially on working conditions evidence in this field is lacking nearly totally. The available empirical studies mainly focus on comparing wages earned in subsidiaries of MNEs respectively in domestic firms in a number of countries. Whether multinational establishments in developed home and host countries offer better or worse working conditions compared to domestic firms, is an issue that has not yet been explored in a systematic way.¹ MNEs basically show two approaches to their activities in host countries, adaptive or innovative/transferring, the latter indicating the managerial aim to transfer human resources and other management practices from home to host country.² Various and contradictory forces may be at stake here. On the one hand, with the spread of firms operating at an international level the location (establishment) level tends to increase in importance; this can give rise to considerable variation in wages, working conditions and employment practices.³ On the other hand, encouraged by EU-wide production and marketing strategies and by improved information and communication technologies major MNEs seem to have put in place management systems and structures to diffuse “best practices” across locations in different EU member states, with important spill-overs for industrial relations: such benchmarking may well diminish variation in human resource (HR) practices and working conditions.⁴ National institutions constrain the transfer of HR practices within MNEs, but they are porous, presenting partial and temporal barriers.⁵

¹ Cf. Karolina Ekholm (2004) Multinational enterprises and their effect on labour markets, in Bo Södersten (ed.) *Globalization and the Welfare State*. Basingstoke: Palgrave MacMillan, 83; OECD / ILO Conference on Corporate Social Responsibility (2008) *Report. The Impact of Foreign Direct Investment on Wages and Working Conditions*. Paris, 23-24 June, 14.

² Tony Edwards (2000) Multinationals, international integration and employment practice in domestic plants, *Industrial Relations Journal*, 31(2): 115-129; Bela Galgoczi (2003) The impact of multinational enterprises on the corporate culture and on industrial relations in Hungary, *South-East Europe Review*, 1-2: 27-44.

³ Wilfried Ruigrok, Rob van Tulder (1995) *The logic of international restructuring*. London/New York: Routledge and Kegan Paul; Marta Kahancová (2007a) *Making the Most of Diversity. Social Interaction and Variation in Employment Practices in a Multinational Company*. Diss. University of Amsterdam; Marta Kahancová (2007b) One Company, Four Factories: Coordinating Employment Flexibility Practices with Local Trade Unions, *European Journal of Industrial Relations*, 13(1): 67-88.

⁴ Graeme Martin, Phil Beaumont (1998) Diffusing “Best practice” in Multinational Firms: Prospects, Practice and Contestation, *International Journal of Human Resource Management*, 9(4): 671-695; Keith Sisson, James Arrowsmith, Paul Marginson (2003) All benchmarkers now? Benchmarking and the ‘Europeanisation’ of industrial relations, *Industrial Relations Journal*, 34(1): 15-31.

⁵ Tony Edwards, Trevor Colling, Anthony Ferner (2007) Conceptual approaches to the transfer of employment practices in multinational companies: an integrated approach, *Human Resource Management Journal*, 17(3): 201-217.

Actually cross-country comparative data gathered by the *WageIndicator* web-survey allows to clarify the impact of FDI on wages and working conditions across a number of EU member states and to discuss these issues in the European trade union movement. With these two goals in mind, UvA-AIAS developed the current *WageIndicator Support for Trade Union BARGaining – 2* (WIBAR-2) project, which was supported by the European Commission in its Industrial Relations and Social Dialogue Program (nr VS/2007/0534) and is running from December 2007 – November 2008. University of Amsterdam / Amsterdam Institute for Advanced Labour Studies (UvA-AIAS) sought and found on this behalf the partnership of ETUC, European Metalworkers' Federation (EMF), Ruskin College (Oxford, UK), and WSI im Hans-Böckler-Stiftung (Düsseldorf, Germany). WIBAR-2 builds on the experiences of the first WIBAR project, developed jointly with ETUC and ETUI-REHS, which ran from September 2006 until August 2007, was also supported by the Industrial Relations and Social Dialogue Program (nr VS/2006/0178) and resulted in a book.⁶ This book compares *WageIndicator* data on working time, low pay, training, older workers, collective bargaining coverage and work-related stress across countries and (13) industries. As we will explain in the next section, new *WageIndicator* data enable to compare wages and working conditions (in a broad sense) between subsidiaries of MNEs and domestic firms, thus allowing insight in the social effects of notably inward FDI.

As indicated above, the outcomes of the WIBAR-2 project will be of interest for the research community, various groups of policy-makers and the general public. They will also be relevant for the European trade union movement. The ETUC 2006 annual report of collective bargaining in Europe points out that the advancement of European economic integration “as well as changed practices by employers and, in particular, multinationals, have led to a situation in which bargaining processes in individual European countries become more and more linked to and influenced by collective bargaining in the rest of the continent”, and emphasizes the need for adequate information: “More and more trade unions require such information to develop their bargaining strategies and to coordinate their practices elsewhere. It allows trade unionists to cope more effectively with issues like competitive wage dumping, sectoral bargaining, collective bargaining in multinationals, etcetera.”⁷ In its document “The coordination of collective bargaining in 2007”, the ETUC states that the European economic model is turning collective bargaining into a matter of common concern for trade unions throughout Europe.⁸ Both inside and outside the euro area, the ETUC

⁶ Maarten van Klaveren, Kea Tijdens (eds) (2008) *Bargaining issues in Europe: comparing countries and industries*. Brussels: ETUI-REHS / University of Amsterdam- AIAS / WageIndicator.

⁷ Maarten Keune (2006) *The Coordination of Collective Bargaining in Europe. Annual Report 2006*. Brussels: ETUC, 2.

⁸ ETUC (2006) *The coordination of collective bargaining in 2007*, Resolution adopted by the ETUC Executive Committee in their meeting held in Brussels on 07-08 December 2006.

argues, wages and working conditions are under risk from the European economic model; in addition, the framework of reference for big companies is increasingly shifting from the national sectoral level towards the European level or even the global market on which these companies are competing, thereby putting pressure on nationally determined working conditions. The ETUC document concludes that, given the nature and extent of these challenges, the ETUC needs to reinforce the coordination of collective bargaining in Europe, and announces a number of actions to strengthen such coordination.

The current global financial and economic crisis emphasizes that internationalization cannot be separated neither from the growing dominance of shareholder value approaches of corporate governance and massive capital movements fuelled by the 'financialisation' and 'securitisation' of the economy, nor from pure managerial greed, without the corresponding development of forms of regulation at an appropriate (global, European) level.⁹ Already in the years preceding the crisis the internationalization of trade and production, including benchmarking international management practice, has given rise to escalating levels of market uncertainty and to the permanent reorientation and reorganisation of companies in accordance with short-term goals. Under such conditions, it is even more important for trade unionists throughout Europe to get actual insights in the social effects of FDI, comparing these across countries and industries, as well as to intensify the debate on this issue.

The WIBAR-2 project includes 12 countries: Belgium, Denmark, Finland, France, Germany, Hungary, Italy, the Netherlands, Poland, Spain, Sweden, and the UK. These 12 countries accounted for 91% of the total FDI inflow in the European Union in 2007, 85% in 2006 and even 96% of the EU total in 2005. In these years the shares of the 12 in the world's FDI inflow were respectively 40%, 34% and 50%. Calculated over 2005-2007, inward FDI flows were largest in the UK (29.5% of the EU total), followed by France (17.2%), the Netherlands (8.3%), Germany (7.9%), Belgium (7.5%), and Spain (5.6%). In these years, the Central and Eastern European countries (CMEs) jointly attracted 9.1% of the EU FDI inflow. In this group Poland was on top with 2.5% of the EU inflow.¹⁰

The continuous *WageIndicator* web-survey is building an ever-growing dataset with information on wages, benefits, and other labour conditions, such as working times,

⁹ Cf. Andrew Watt (2008) The economic and financial crisis in Europe: addressing the causes and the repercussions, *European Economic and Employment Policy Brief* (ETUI-REHS), No. 3 – 2008, 6-10.

¹⁰ The FDI outflow from the 12 countries was also considerable, jointly taking 89% of the total outflow from the EU countries in 2007, 92% in 2006 and 93% in 2005. Again calculated over these three years, FDI outflows were largest from France (19.3% of the EU total), the UK (18.1%), Germany (13.8%), Spain (10.9%), the Netherlands (9.0%) and Italy (7.3%). All calculations based on UNCTAD (2008) *World Investment Report 2008* (http://www.unctad.org/en/docs/wir2008_en.pdf), Table B.1.

contracts, jobs and job levels, training, and collective bargaining coverage. Currently in the 12 countries involved over 150,000 wage-earners yearly complete the *WageIndicator* questionnaire. Our reporting of the social effects of FDI primarily goes back on the question in this web-survey, posed in all countries at stake, whether the worker's firm has more than one location, and if so, if this is located in the country at stake or abroad. In our analyses we have linked the answers on this question given during the year 2007 and the first half of 2008 with those of the same individuals concerning wages and working conditions in MNEs and domestic firms. We have done so in preparatory reports for five industries: metal and electronics manufacturing; finance and call centres; retail; information technology, and the transport and telecom industry. In October and November 2008, the partners in WIBAR-2 organized three conferences, in which an audience of trade union officials and researchers discussed these reports. These conferences covered respectively metal and electronics manufacturing (in Brussels); transport and telecom (in Oxford), and retail (Duisburg). The report that you are currently reading covers transport and telecom. Its analyses of the effects of FDI are altogether based on the answers of 9,957 respondents working in this industry, 17.9% of all respondents from the five industries under scrutiny.

The use of a second database connected with the *WageIndicator* dataset gives this report added value. As part of the WIBAR-2 project, Van Klaveren and Tijdens have developed a Multinational Enterprise (further MNE)-database for the 12 EU member states and the five industries in question. This database, to be explained more elaborately in sub-section 2.1, is underlying the *WageIndicator* web-survey for its survey question "What is the name of the company where you work?". In due course, the answers on this question linked with the MNE database will enable analyses of the country-specific impact of inward but also outward FDI on wages and working conditions, as well as comparing wages and working conditions across countries within one company. Already now, the MNE database allows offering the reader a state of affairs of FDI in the respective industries in the 12 countries per March 2008. We present the results of this first exploration of the MNE database in next two sections. Afterwards, in the sections 4 to 12, we will treat the social effects of inward FDI in transport and telecom.

2 Foreign direct investment in transport and telecom: a state of affairs

2.1 Introduction

As stated, the MNE database is underlying the *WageIndicator* web-survey for its survey question “What is the name of the company where you work?”. In this survey, respondents first tick the industry where they work, and then a list of company names in this particular industry pops up. At the bottom of the list an option ‘Other’ allows respondents to key in the company name if that name is not listed. An option “Don’t want to say” facilitates respondents not to identify the name of the company where they are working.

For the database sound knowledge of industries and enterprises was combined with information gathered through the Internet. Industry knowledge partly relied on industry studies carried out since 2000 by AIAS and STZ consultancy & research. This knowledge was brought up-to-date through search efforts in company annual reports, with UN publications¹¹ as a starting point, and additionally via Google and Wikipedia. Names and ownership relations have been updated until March 25, 2008. This means that the situation concerning ownership relations as of that date will be the starting point for all analyses in the course of the WIBAR-2 project.

The WIBAR-2 MNE database contains 412 MNE names with in total 1,027 subsidiaries and with in total 4,244 establishments in the 12 countries involved. For the purpose of this research, a MNE is defined as a company with one or more subsidiaries, whereby at least one subsidiary has establishments in two or more countries. An establishment is defined at the level of the country. Within one country, establishments are not distinguished individually; even if subsidiaries own many establishments in that country, like stores in transport chains, these establishments are counted as one. For the sake of comparison in a later stage, for a number of countries the database also contains names of large domestic companies in the five industries.

2.2 Transport and telecom in the database

This paper presents brief results of a first exploration of the database. Its focus is on the transport industry, detailed in sub-sectors in Table 1. In the last two columns we have given the numbers of the respective companies and subsidiaries. For the transport sector in the 12 countries at stake our MNE database contains 71 company names with 181 subsidiaries, an average of 2.5 subsidiaries per MNE. Our further analysis will be based on these MNEs.

¹¹ Notably UNCTAD (2008) *World Investment Report 2008*.

We have to admit that, due to time constraints, for a number of sub-sectors our database is yet far from complete and is 'work in progress'. This especially remains the case for the sub-sectors freight transport by road (code 6024), cargo handling (6311), storage and warehousing (63212), national post activities (6411), and courier activities (6412). Concerning these sub-sectors, the results presented here should be dealt with cautiously.

Table 1 *MNEs in transport and telecom by sub-sector, according to NACE-coding, breakdown by numbers of companies and subsidiaries*

	No. companies	No. subsidiaries
6010 Transport via railways	3	11
6021 Scheduled passenger land transport	8	19
6024 Freight transport by road	9	9
6110 Sea and coastal water transport	11	27
6210 Scheduled air transport	14	25
6311 Cargo handling	3	8
6312 Storage and warehousing	2	7
6411 National post activities	4	15
6412 Courier activities	3	7
6420 Telecommunications	14	53
Total	71	181

The average number of subsidiaries per company can be used as a measure for the diversification of MNE interests. From this viewpoint, national post activities (code 6411, average 3.8) and telecom (code 6420, also average 3.8) are most widely diversified. It has to be taken into account that in most of the 12 countries, companies called 'MNEs' and having their main activities in these three sub-sectors are for a substantial part still owned by state bodies. These bodies carry out a lot of other activities as well i.e. are quite diversified.

3 Internationalization in transport and telecom

In the 12 countries at stake, 71 MNEs in transport and telecom own in total 181 MNE subsidiaries. These subsidiaries have 634 establishments, thus 3.5 establishments per subsidiary. This implies that each subsidiary on average is involved in between three and four countries. Compared to the other four industries under scrutiny, transport takes a middle position, further internationalized than the finance and retail industries but less than the metal and electronics as well as the IT industries. Yet, one has to be aware of the fact that the use of subcontractors (the third-party model) is very widespread in the transport sector, from a relatively early stage. This use is not included in the formal MNE structures analyzed here.

3.1 Internationalization by host country

Table 2 (next page) according to our database 151 of the 634 MNE establishments are found in the scheduled air transport sub-sector (coding 6210, 24%), followed by telecom (6420)

with 126 (20%), courier activities (6412) with 87 (14%) and sea and coastal water transport (6110) with 77 (12%). The table shows that internationalization in the cargo handling, storage and warehousing (6311) and freight transport by road (6024) sub-sectors is rather limited (but keep in mind that here our database is far from complete). Looking at the division over the 12 countries, it turns out that most establishments are found in the Netherlands (93 of 634, 15%), followed by the UK (76 or 12%), and France (71 or 11%). The lowest amount of establishments has been traced in Finland (28 or 4.5%).

Table 2 *Number of MNE establishments in 12 countries in transport by MNE host country, breakdown by sub-sector, according to NACE-coding (Table 1)*

	6010	6021	6024	6110	6210	6311	6312	6411	6412	6420	Total
BE	5	1	0	8	12	1	1	4	8	12	52
DE	5	5	2	11	14	0	0	8	8	14	67
DK	4	2	0	7	12	0	0	5	6	6	42
ES	6	1	0	3	13	0	0	3	7	11	44
FI	3	0	0	2	9	0	0	3	6	5	28
FR	10	6	0	11	17	0	0	5	7	15	71
HU	4	0	2	1	11	0	1	3	7	7	36
IT	7	2	0	4	12	0	0	3	8	11	47
NL	9	10	10	11	16	2	4	6	8	17	93
PL	4	0	2	3	11	0	1	3	7	7	38
SW	3	1	0	6	10	0	0	7	7	6	40
UK	12	5	0	10	14	1	2	9	8	15	76
Total	72	33	16	77	151	4	9	59	87	126	634

3.2 Internationalization by MNE home country

Table 3 (p. 11) shows that most transport establishments (103 or 16%) are owned by MNEs with France as their home country, followed by the United Kingdom (95 or 15%) and Germany (92, 14.5%). Logically, the largest number of establishments of the respective home companies per country is located in the own country: 31 in France, 30 in the Netherlands, 21 in the UK, etcetera.

According to our database 104 (16%) from all transport and telecom MNE establishments in the 12 countries are owned by MNEs from outside the European Union, mainly from the USA (66) and from Japan (25), but also from Hongkong (China) and Switzerland. This is a substantially lower figure than what we found for metal and electronics manufacturing (46%) and IT (32%), but it is about at par with finance and call centres (17.5%) and the retail industry (17%).

In Table 21 (Annex) we present an overview of the 50 largest and most internationalized transport and telecom MNEs active in “our” 12 European countries that are included in our database. In order to be ranked, they should have deployed substantial activities in or from at least three of 12 countries by March 2008. In this overview 20 of the 50 largest transport and

telecom groups in the world are represented that we ranked for 2007 according to sales (Table 22, also in the Annex), with sales each of over \$ 11 billion. Of the latter 50 largest MNEs, 14 were US-based, 10 were Japan-based and 15 have their headquarters in the European Union: three Germany-, France- and UK-based firms each, two Dutch firms, and one Spanish, Danish, Italian and Swedish MNE. Even within the ranks of these 50 largest MNEs, the degree of concentration is considerable: the joint share of the top 20 firms in the total 2007 sales of the top 50 is just over 70%.

Telecom companies dominate, especially in the higher ranks of this world top 50 ranking: 14 of the top 20 firms are focusing on telecom, with only three companies (Deutsche Post, UPS and FedEx) focusing on logistics and mail. The first shipping company, Danish A.P. Moller/Maersk, though a giant in the water transport sub-sector, ranks 10th, the first airline, Lufthansa, 16th. From the 13 telecom firms in Table 21, 10 can be traced back in the top 50 ranking of Table 22. On the other hand, obviously some of the largest US- and Japan-based telecom firms have hardly internationalized towards the EU, or retreated from earlier interests here.

Jointly the 50 most internationalized transport and telecom MNEs active in the 12 countries at stake, 70% of the 71 companies included in our database, owned by March 2008 according to our information 140 of 181 subsidiaries (77%) and 501 of 634 establishments (79%). These figures imply averages of 2.8 subsidiaries and 10.0 establishments – or 3.6 establishments per subsidiary (In table 21, the first row --No. establishm./1-- on the total number of establishments gives a simple footing of the 'x's and 'xx's' indicating presence as such per country; the second row --No. establishm./2-- shows the real number, as many large firms have 'parallel' subsidiaries with their own establishments in a host country). The remaining 21 transport and telecom MNEs with substantial activities in less than three countries own 41 subsidiaries and 133 establishments, meaning averages of nearly 2.0 subsidiaries and 6.3 establishments per firm, or 3.2 establishments per subsidiary -- in every respect lower than their more internationalized competitors.

It is interesting to note the share of the top 50 firms in the number of establishments per country (last row of Table 3). Though the shares do not differ widely, they are lowest in France (76%), followed by Belgium, Italy and the Netherlands (77%). The shares are highest in Finland (86%), Poland (84%), and Hungary (83%). These outcomes suggest that the largest, most internationalized firms play dominant roles in transport and telecom in notably these three countries.

Table 3 Number of MNE establishments in 12 countries in transport and telecom, breakdown vertical by MNE home country and horizontal by host country

	BE	DK	FI	FR	DE	HU	IT	NL	PL	ES	SW	UK	Total
Belgium	7	0	0	1	0	0	0	0	0	0	0	0	8
BE/DE/FR/NL	1	0	0	1	1	0	0	1	0	0	0	0	4
BE/FR/GB	1	0	0	1	0	0	0	0	0	0	0	1	3
Denmark	1	7	1	1	3	1	1	3	1	1	1	3	24
Finland	1	1	3	1	1	1	1	1	1	1	1	1	14
France	6	3	3	31	12	3	7	17	3	6	3	9	103
FR/NL	0	0	0	0	0	0	0	1	0	0	0	0	1
Germany	5	6	5	5	17	8	6	12	8	5	7	8	92
Hungary	1	1	0	1	0	2	0	0	2	0	0	1	8
Hong Kong	1	0	0	0	0	1	0	4	1	0	0	2	9
Ireland	1	1	1	1	1	1	1	1	1	1	1	1	12
Italy	1	2	1	5	4	1	10	2	1	3	1	3	34
Japan	3	0	0	3	3	2	2	3	2	2	2	3	25
Netherlands	6	3	3	4	5	3	4	30	4	3	4	11	80
Poland	0	0	0	1	1	2	0	0	3	0	0	1	8
Slovakia	0	1	0	0	0	1	0	0	1	0	0	1	4
Spain	0	0	0	0	1	0	0	0	0	6	0	1	8
Sweden	1	2	1	1	2	1	1	1	1	2	6	2	21
SE/Norway	1	2	1	0	1	0	0	1	1	0	3	1	11
Switzerland	1	0	0	1	1	0	0	1	0	0	0	0	4
UK	8	8	5	7	8	4	8	9	3	8	6	21	95
USA	6	5	4	6	6	5	6	6	5	6	5	6	66
Total	52	42	28	71	67	36	47	93	38	44	40	76	634
of which top 50	40	33	24	54	52	30	36	72	32	35	33	60	501
share top 50 firms	77%	79%	86%	76%	78%	83%	77%	77%	84%	80%	83%	79%	79%

The table indicates various patterns of internationalization of transport and telecom by MNE home country. For example, the France-based transport and telecom MNEs have expanded particularly to the Netherlands and the UK. Dutch-based MNEs mainly internationalized towards the UK, Belgium and Germany. UK-based transport and telecom MNEs particularly invested in the Netherlands, but also in Belgium, Denmark, Germany and Italy. German-based transport and telecom MNEs notably internationalized towards the Netherlands. US-based multinational transport and telecom firms seem to have spread their interests rather evenly across Europe.

4 The social effects of foreign direct investment in transport

For the analyses in this part of the report, we use the *WageIndicator* data collected in 2007 and the first and second quarters of 2008. Initially, we aimed for analyses of 12 EU member states, but the number of *WageIndicator* observations in Denmark, Italy and France were too few. For France, this is not surprising because the questionnaire started just in 2008. For Italy and Denmark, *WageIndicator* unfortunately lacks media partners with a strong position

in the national Internet market. Consequently, the analyses will be performed for nine countries only.

During the year 2007 and the first half of 2008, altogether 9,979 workers in transport and telecom in nine countries completed the questionnaire. Table 4 shows a breakdown by country. The reader should be aware that the numbers of respondents in Hungary, Sweden and to a certain extent Poland remain small.

Table 4 *Number of observations in transport and telecom by country*

Belgium	Finland	Germany	Hungary	Netherl.	Poland	Spain	Sweden	UK
855	518	2,186	34	4,485	284	605	62	950

In the next chapters (5 to 7), we first deal with the characteristics of the transport and telecom firms: their establishment size, locations, and ownership. In the chapters 8 to 12, we go into the effects of FDI on wages, working conditions, working hours, training and industrial relations, through dividing and comparing the outcomes between MNEs and non-MNEs.

5 Establishment size

How large are the company establishments in transport and telecom? Table 5 shows that establishments where the respondents are employed, according to them are on average quite large (headcount) in Germany, Hungary, Sweden and to a lesser extent in the UK. The share of those working in companies with 500 or more employees is largest in Hungary (55%), Sweden (44%), and Germany (37%). On the other hand, small and medium-sized companies remain quite important in transport and telecom. In Finland (55%), in the Netherlands (51%) and especially in Spain (70%) majorities of the respondents are working in establishments with less than 100 employees, in Belgium exactly half of them does so.

Table 5 *Distribution over five establishment size categories and average establishment size in transport and telecom by country*

Establishment size	BE	FI	DE	HU	NL	PL	ES	SW	UK
Less than 20	19	28	18	15	21	24	40	13	19
20 - 100	31	27	23	15	30	30	30	19	27
100 - 500	27	26	22	15	25	24	17	24	27
500 - 1000	13	8	12	26	11	13	8	13	11
1000 and more	11	10	25	29	13	9	5	31	17
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%
Average head count	790	711	1537	2087	864	586	399	1822	1049

Note: Establishment size is measured on a 10-point scale, ranging from a 1-person firm to a firm with more than 5,000 employees at the locality of the respondent. In order to approach reality, for this table the midpoints of the values have been taken.

6 Locations of the firm

The *WageIndicator* web-survey includes a question whether the worker's firm has more than one location, and if so, if this is located in the country at stake or abroad. For the purpose of this report, we define a Multinational Enterprise (MNE) as a company that has one or more locations abroad. Unfortunately, in Hungary this question was not operational in the web-survey until week 21 in 2008. Therefore, table 6 covers eight countries only.

Table 6 *Distribution over location categories in transport and telecom by country*

	BE	FI	DE	NL	PL	ES	SW	UK
No	18	18	25	25	22	19	11	14
Yes, in 1 city / municipality	3	4	5	5	10	8	2	9
Yes, in 1 region	5	3	5	4	4	7	2	12
Yes, in 2 or more regions	10	20	6	10	8	13	11	7
Yes, throughout the country	15	17	14	15	26	20	18	14
Yes, throughout the country and abroad	40	35	43	37	25	30	56	38
Yes, but only abroad	9	3	2	5	5	3		5
Total	100	100	100	100	100	100	100	100
MNE median establishment size	450	1283	2674	1260	644	713	2716	1520
No MNE median establishment size	880	389	681	579	580	262	662	709
Med. MNE size: med. No MNE size	0.5	3.3	3.9	2.2	1.1	2.7	4.1	2.1

The share of workers employed in MNEs is particularly high in Swedish transport and telecom (74%: the answers on *Yes, throughout the country and abroad* combined with those on *Yes, but only abroad*); the scores for all other countries remain in the 50-57% range. In most countries the transport and telecom MNE establishments are much larger than those of the non-MNE firms, with Sweden (4.1 times as large) and Germany (3.9) as most extreme cases. The size difference is small in Poland, while in Belgium it is the other way around, with on average nearly twice as large non-MNE firms.

7 Firm ownership

Besides location of the firm, we are also interested in firm ownership. Unfortunately, only four countries in the *WageIndicator* web-survey have put a question on ownership of the firm of the worker. Three categories are distinguished: firms that are fully domestic-owned, firms that are partly domestic and partly foreign-owned, and firms that are fully foreign-owned. In order to create an indicator for ownership, we grouped the latter two categories into one category 'foreign owned', and compared their employment share with that of the fully domestic-owned.

Table 7 Percentage of workers in foreign-owned firms and in MNEs in transport and telecom by country

	BE	NL	ES	SW
Total workers in foreign-owned company	59%	34%	29%	46%
Working in MNE, in foreign-owned company	89%	59%	59%	63%

Table 7 presents the results. The first row concentrates on those indicating to work in a foreign-owned company. It shows that particularly in Belgium and Sweden, rather high shares of the respondents –59% and 46% respectively-- are employed in such companies. The second row concentrates on those working in MNEs. It indicates that in all four countries majorities of MNE staff are working in foreign-owned MNEs: in Belgium even 89% (implying that only 11% works in Belgium-based MNEs), in the other countries about three of five. For Belgium these outcomes correspond with the very high ‘transnationality index’ (made up of FDI inward stocks, value added and employment in foreign affiliates) that UNCTAD attaches to this country, for 2005 the highest in the EU.¹² Belgium has also the no. 1 ranking in the KOF Index of Globalisation for 2007 and 2008, composed from indices of economic, social and political globalisation, with in 2008 Sweden in 3rd position, the UK in 4th, the Netherlands in 6th and Spain ranking 12th.¹³

8 Wages

8.1. Comparison of wage levels

A major issue in much research and debate on foreign direct investment and MNEs, and in our research as well, is that concerning the levels of wages paid in establishments of MNE versus those in domestic-owned firms. Table 8a presents the outcomes of the *WageIndicator* web-survey in this respect, for the MNEs as defined earlier here (a company that has one or more locations abroad) versus domestic firms, for seven countries and for all workers. The outcomes give a picture of the variations between national hourly wage levels, though they strictly spoken do not allow for purchasing power comparisons (We did not use Purchasing Power Parities as these were not yet available, but current exchange rates instead). We based ourselves on the *median* wages, but also calculated *average* wages (not shown).

Table 8a (next page) reveals that except for Belgium the median gross hourly wage level in MNEs is substantially higher than that in non-MNE firms, varying from 7.8% of the average MNE-wage in Finland till 28.6% in Poland and even 33.3% in Germany. Yet, especially the

¹² UNCTAD (2008) *World Investment Report 2008*, 9.

¹³ Axel Dreher, Noel Gaston, Pim Martens (2008) *Measuring Globalisation. Gauging its Consequences*. New York: Springer, 52. For 2008: KOF Swiss Economic Institute (2008) *press release January 8, 2008* (<http://globalisation.kof.ethz.ch>).

German figures may be somewhat biased: a first analysis of the occupations of the respondents learns that they include relatively many white-collar workers, among them many women, presumably often working at the headquarters of large companies. The effects of this representation can also be assumed in large Polish and UK firms. The Belgian outcomes are interesting too, as particularly they suggest that scale may well play a role here: we remind the reader that in Belgium the non-MNE establishments on average were much larger than the MNE establishments.

Table 8a *Median gross hourly wages of workers in MNE and non-MNE firms, in transport and telecom by country (in Euros, current exchange rates av. 2007-1st half 2008), all*

	BE	FI	DE	NL	PL	ES	UK
MNE	14.78	14.28	17.32	14.20	6.06	8.68	14.97
No MNE	14.95	13.17	11.55	12.60	4.33	7.25	13.99
Total	14.83	13.48	13.85	13.28	4.51	7.70	14.62
Difference ((MNE-non-MNE):MNE)	-1.2%	7.8%	33.3%	11.3%	28.6%	16.5%	6.6%

In Table 8b we present the same information but only for those working 20 hours or less per week. The median wage levels of these part-timers are lower than the median overall wages in transport and telecom in the Netherlands, but remarkably enough much higher in the other countries: from 7% in Germany to 20% in Spain. Most likely this working hours' category includes quite some relatively well-paid trainees. Except for the UK the general picture that MNEs pay higher wages than domestic firms does not change for the category working 20 hours or less.

Table 8b *Median gross hourly wages of workers in MNE and non-MNE firms, in transport and telecom by country (in Euros, current exchange rates av. 2007-1st half 2008), working week 20 hours or less*

	BE	FI	DE	NL	PL	ES	UK
MNE	-	22.82	16.30	14.59	-	12.10	15.24
No MNE	-	14.68	14.15	11.03	-	8.00	17.18
Total	-	15.84	14.97	12.35	-	9.58	16.83
Difference ((MNE-non-MNE):MNE)	-	35.7%	13.1%	24.4%	-	33.8%	-12.7%

Table 8c (next page) gives this wage information for those usually working more than 20 to 40 hours per week, representing 39% (Germany) or more of the respective transport and telecom workforces (cf. Table 17). These median hourly wages are 2 – 3% lower than the overall median wages in Belgian, Finnish and Dutch transport and telecom but also from 4% (Germany, Poland and the UK) to 10% (Spain) higher than the overall medians. Except for the UK, MNEs pay higher wages for this category as well, though for Belgium the difference is negligible.

Table 8c Median gross hourly wages of workers in MNE and non-MNE firms, in IT by country (in Euros, current exchange rates av. 2007-1st half 2008), working week >20-40 hours

	BE	FI	DE	NL	PL	ES	UK
MNE	14.43	13.68	17.18	13.36	5.77	8.54	15.20
No MNE	14.41	12.82	13.03	12.50	4.46	7.53	15.43
Total	14.43	13.21	14.56	12.83	4.79	8.04	15.29
Difference ((MNE-non-MNE):MNE)	0.1%	6.1%	24.2%	6.4%	22.0%	11.8%	-1.5%

Our calculations (not shown) of median hourly wages for those usually working over 40 hours / week reveal varying outcomes per country: in Finland wages for this category in domestic firms are 2% higher than in MNEs, but in the Netherlands, Spain and the UK they are about 25% lower and in Germany and Poland even over 50% lower. It has to be added that in two countries, Finland and Spain, the hourly wages for those working extremely long i.e. usually over 48 hours per week are considerably lower than those working less than 48 hours, especially in MNEs. In Germany, the Netherlands, Poland and the UK this is only the case for non-MNEs (For Belgium we do not have adequate data). In Germany, the Netherlands and Poland median hourly wages increase with more hours worked in MNEs, in Finnish and Spanish MNEs they decrease; the UK shows an irregular pattern, with comparatively low wages in the 40-48 hours' category. In German, Dutch, Spanish and UK domestic firms median hourly wages clearly fall with more hours, to rather low median levels (about Euro 4.10 in Poland, Euro 6.90 in Spain, Euro 9.00 in Germany, and Euro 12.20 in both the Netherlands and the UK).

Yet, it can be questioned to what extent size of operations matters, and whether other factors may be relevant as well. In order to find some clues, we control for size and compare median wages between MNEs and non-MNEs within three size categories: Table 8d (next page). From this table the picture emerges that in all countries the wage premium in transport and telecom MNEs is omnipotent in firms with less than 100 employees, though this hardly is the case in Belgium. In the other countries the premium varies between 5 and 29%. Yet in larger firms the picture is much less clear. In the category with 100-500 employees MNEs have a rather modest wage advantage in five countries, Belgium, Germany, the Netherlands, Poland and Spain, while in Finland and the UK the domestic firms have an advantage, up to 14% in the UK. The results in the largest category, the firms with over 500 employees, are even less in favour of MNE wages. They are only above those of domestic firms in Poland and Germany, quite clearly indeed (35 and 22% respectively), but in the five other countries median wages in domestic firms are higher than in MNEs, from very little in the Netherlands to substantial amounts in the UK, Finland and especially Spain (25%). Like in some other industries, notably metal and electronics manufacturing, larger Finnish domestic firms seem

to have a strong position in the labour market, but this also seems to be true for larger domestic UK firms. Another interpretation, at least equally viable, may be that transport and telecom MNEs with large establishments more than MNEs in other industries resort to wage pressure, following our evidence notably in Finland, Spain, Poland and the UK.

Table 8d Median gross hourly wages of workers in MNE and non-MNE firms, in transport and telecom by country and firm size (in Euros, current exchange rates av. 2007-1st half 2008)

		BE	FI	DE	NL	PL	ES	UK
MNE	< 100 empl	13.83	13.32	13.36	12.61	5.71	9.37	14.76
MNE	100-500 empl	15.19	12.56	14.43	14.58	4.60	8.22	13.72
MNE	> 500 empl	15.64	17.81	19.92	16.41	6.90	9.86	16.46
MNE	Total	14.78	14.28	17.32	14.20	6.06	8.68	14.97
No MNE	< 100 empl	13.82	12.22	10.01	11.55	4.04	6.93	12.49
No MNE	100-500 empl	14.72	13.48	12.93	13.42	4.50	7.77	15.58
No MNE	> 500 empl	16.18	20.42	15.59	16.45	4.48	12.34	18.60
No MNE	Total	14.95	13.17	11.55	12.60	4.33	7.25	13.99
Total	< 100 empl	13.83	12.40	10.71	11.93	4.33	7.22	12.99
Total	100-500 empl	15.01	12.82	13.57	13.98	4.52	8.08	14.63
Total	> 500 empl	15.33	19.40	18.76	16.42	6.19	10.39	17.86
Total	Total	14.83	13.48	13.85	13.28	4.51	7.70	14.62
Difference ((MNE-non-MNE):MNE)	< 100 empl	0.1%	8.3%	25.1%	4.8%	29.2%	26.0%	15.4%
Difference ((MNE-non-MNE):MNE)	100-500 empl	3.1%	-7.3%	10.4%	8.0%	2.2%	5.5%	-13.6%
Difference ((MNE-non-MNE):MNE)	> 500 empl	-3.5%	-14.7%	21.7%	-0.2%	35.1%	-25.2%	-13.0%
Difference ((MNE-non-MNE):MNE)	Total	-1.2%	7.8%	33.3%	11.3%	28.6%	16.5%	6.6%

Only cells with more than 8 observations are included

In our last comparison of wage levels we go into the gender pay gap, the difference between median male and female gross hourly wages (divided by the male wage) at the cost of women, in MNEs respectively non-MNE firms: Table 8e.

Table 8e Median gross hourly wages of workers in MNE and non-MNE firms, in transport and telecom by country and gender (in Euros, current exchange rates av. 2007-1st half 2008)

		BE	FI	DE	NL	PL	ES	UK
MNE	male	15.30	14.49	17.47	14.93	5.92	10.02	15.31
MNE	female	13.42	13.98	17.00	12.65	6.13	7.65	14.03
MNE	difference ((m-f):m)	12.3%	3.5%	2.7%	15.2%	-3.5%	23.7%	8.3%
No MNE	male	15.63	13.36	11.55	12.71	4.33	7.70	14.51
No MNE	female	12.23	12.38	11.43	12.04	4.33	6.35	13.80
No MNE	difference ((m-f):m)	21.7%	7.4%	1.0%	5.3%	0.0%	17.5%	4.9%
Total	male	15.36	13.84	13.57	13.63	4.41	8.52	14.78
Total	female	13.01	12.92	14.72	12.32	4.81	6.77	13.92
Total	difference ((m-f):m)	15.4%	6.7%	-8.5%	9.6%	-8.3%	20.5%	5.8%

Only cells with more than 8 observations are included

Five of seven countries show a gender pay gap, from 6-7% in Finland and the UK to even 36% in Poland. Germany and also Poland show a negative overall gap i.e. a wage disadvantage for men; as we already indicated. As already indicated, most presumably a major cause is that women office workers, often working at firm headquarters, are well represented among the respondents. In four countries, Germany, the Netherlands, Spain and the UK, the gap is larger in MNEs than in domestic, though with 10%-points the difference is only considerable in the Netherlands. Belgium, Finland and Poland show the reverse pattern. A breakdown of male and female wages by firm size (not shown) reveals that only in Belgium the gap is largest in the transport and telecom firms with less than 100 employees. Germany, Poland and the UK show the largest gaps in the medium-sized firms, and Finland, the Netherlands and Spain do so in the firm category over 500 employees. Yet, large domestic Finnish firms show a considerable negative gap, just like German and Polish domestic firms as well as, to a smaller extent, large German and UK MNE establishments.

So far our results seem to be in line with the majority of empirical studies on the subject, that have established that MNEs pay higher wages than domestic firms for comparable jobs, also in developed countries, though with some reservations: investments of these MNEs or cross-border take-overs mostly also contribute to wage inequality; positive effects on average wages may be short-term, and for EU member states recent studies anyway find rather small individual wage premia.¹⁴ The mainstream reasoning is that MNEs have ample opportunities to create 'high quality' jobs, given their size, their level of production technology, their better management techniques, their HRM abilities, and their more intensive use of intermediate products. Indeed there seems to be a tendency that the so-called wage premium that they tend to pay is higher for high-skilled staff.¹⁵

¹⁴ It has to be noted that most evidence on the effects of FDI on host countries relates to manufacturing and to a lesser extent to mining, and much less to services like transport and telecom; this also applies to wage effects. Cf. in general: Robert E. Lipsey (2002) *Host and home country effects of FDI*. Cambridge, MA: National Bureau of Economic Research, NBER Working Paper 9669; OECD (2008) Policy Brief. The Social Impact of Foreign Direct Investment, *OECD Observer*, July; Paolo Figini, Holger Görg (2006) *Does Foreign Investment Affect Wage Inequality? An Empirical Investigation*. Bonn: IZA. Discussion Paper No. 2336; for the UK: Karl Taylor, Nigel Driffield (2005) Wage inequality and the role of multinationals: evidence from UK panel data, *Labour Economics*, 12(2): 223-249; Alexander Hijzen (2007) International Outsourcing, Technological Change, and Wage Inequality, *Review of International Economics*, 15(1): 188-205; for Germany: Ingo Geishecker, Holger Görg (2004) *International outsourcing and wages: Winners and losers*. DIW Berlin: paper; for Denmark: Nikolaj Malchow-Møller, James R. Markusen, Bertel Schjerning (2007) *Foreign Firms, Domestic Workers*. Cambridge, MA: National Bureau of Economic Research, NBER Working Paper 13001 (small positive effect); for Finland: Kristiina Huttunen (2007) The Effect of Foreign Acquisition on Employment and Wages: Evidence from Finnish Establishments, *The Review of Economics and Statistics*, 89(3): 497-509 (small positive effect); for Hungary: John S. Earle, Almos Telegdy (2007) *Ownership and Wages: Estimating Public-Private and Foreign-Domestic Differentials with LEED from Hungary, 1986-2003*. Cambridge, MA: National Bureau of Economic Research, NBER Working Paper 12997. By exception, for Sweden recent research found lower individual wages in foreign firms relative to their counterparts in domestic firms: Fredrik Heyman, Fredrik Sjöholm, Patrik Gustavsson Tingvall (2007) Is there really a foreign ownership wage premium? Evidence from matched employer – employee data, *Journal of International Economics*, 73: 355-376.

¹⁵ Taylor & Driffield, *op. cit.*; Hijzen, *op. cit.*; not confirmed by Sourafel Girma, Holger Görg (2007) Evaluating the foreign ownership wage premium using a differences-in-differences matching approach, *Journal of International Economics*, 72(1): 97-112. While in the 1990s related to FDI the position of unskilled labour in highly developed countries like the UK and Sweden was already deteriorating, in the last decade this trend became visible in Central and East European Countries (CEECs) too, notably in Hungary, Poland and the Czech Republic. Cf. Peter Egger, Robert Stehrer (2003) International Outsourcing and the Skill-specific Wage Bill in Eastern Europe, *The World Economy*, 26(1): 61-72; Rosario

We already compared wages in MNEs and non-MNEs taking into account working hours, firm size and gender. Moreover, to make a more “honest” comparison one needs to take into account the educational levels and tenure (years of work experience) of the workforce in MNEs respectively non-MNEs, as these two factors mostly exert the largest influence on wage levels. In order to undertake a comparison that includes the relevant factors, we carried out a regression analysis to control for the influence of five factors: work experience, gender, working hours, education, and firm size. We did so per country: Table 8f.

Table 8f Results of regression analysis in transport and telecom by country

	BE	FI	DE	NL	PL	ES	UK
Constant	2.944 ***	2.136 ***	1.717 ***	1.541 ***	1.286 ***	1.611 ***	2.354 ***
Work experience	0.025 *	0.015 *	0.026 ***	0.041 ***	0.057 ***	0.018	0.003
Work experience SQ	0.000 *	0.000	0.000 ***	-0.001 ***	-0.001 **	0.000	0.000
Female	-0.216	-0.109 *	-0.085 *	-0.128 ***	-0.171	-0.244 ***	-0.006
Working hours p.w. > 40	0.116	-0.015	-0.065 *	-0.019	-0.022	-0.111 *	-0.191 **
Educ (1=low,...,5=high)	0.089 **	0.082 ***	0.163 ***	0.157 ***	0.295 ***	0.099 ***	0.034
MNE	-0.142	0.024	0.161 ***	0.067 ***	0.243 *	0.165 **	-0.011
Company > 100 empl.	0.005	0.116 **	0.220 ***	0.134 ***	0.051	0.151 *	0.190 **
N	416	464	1994	3651	193	507	625
R square	0.077	0.107	0.223	0.215	0.224	0.150	0.032

The results of our analysis show that in four of seven countries there is a wage premium for working in MNEs if controlled for the five factors, though for Spain the influence is significant but not strong and for Poland rather weak (see row ‘MNE’). There are no significant differences in transport and telecom for Belgium, Finland and the UK. The influence of working in a MNE is highest for Poland, followed by Spain and Germany.

If controlled this way, Belgium and Finland do not show wage premia for the other four industries as well, while the UK in three industries does not show wage premia and in two shows rather weak influences. Germany is the only country clearly showing a wage premium for all five industries, followed by the Netherlands with three of five, Poland (two industries) and Spain with one industry.

8.2. Overtime compensation

The *WageIndicator* web-survey includes questions about overtime compensation in pay, in time, or no overtime compensation at all. Here we compare workers in MNE and non-MNE firms with regard to the percentages receiving overtime compensation in pay. At this point the picture deviates clearly from that concerning wage levels. As Table 9 (next page) shows, in transport and telecom in all countries receiving overtime in pay is more common in non-MNE firms than in MNEs. As Table 18 will show, in five countries –Belgium, Finland,

Crino (2007) *Offshoring, Multinationals and the Labour Market: A Review of the Empirical Literature*. Milano: CESPRI, Working Paper 196.

Germany, the Netherlands and the UK— the incidence of usually working more hours than agreed (or overtime) is higher in MNEs, but in Poland, Spain and Sweden it is not. This means that in the first five countries working for a MNE is paired with less compensation for overtime, a result in accordance with detailed findings for the Netherlands also based on *WageIndicator* outcomes.¹⁶ Thus, in these five the differences in wages between MNEs and non-MNEs calculated on a weekly or monthly basis will be somewhat smaller (be it less than 1%-point in all cases) than those presented in Tables 8 based on an hourly basis.

Table 9 *Percentage of workers receiving overtime compensation in pay in MNE and non-MNE firms in transport and telecom by country*

	BE	FI	DE	NL	PL	ES	UK
MNE	19%	55%	15%	35%	27%	39%	45%
No MNE	24%	68%	25%	44%	37%	43%	58%
Total	21%	63%	20%	40%	34%	41%	52%

8.3. Performance-based pay

The *WageIndicator* includes a number of questions on the incidence of performance-based pay. Here, we define performance-based pay as any bonus based on individual, group, team or departmental performance in addition to monthly payments. It also includes any annual performance allowance or commission, but it does not include skill bonuses or labour market shortage bonuses.

Table 10 reveals that workers in transport and telecom MNEs more often receive performance-based pay than workers in non-MNEs, except in Sweden. Particularly in Spain a substantial difference between MNEs and non-MNEs shows up in this respect.

Table 10 *Percentage of workers receiving performance-based pay in MNE and non-MNE firms in transport and telecom by country*

	BE	FI	DE	NL	ES	SW	UK
MNE	11%	23%	15%	7%	25%	17%	8%
No MNE	10%	21%	12%	4%	17%	19%	5%
Total	10%	22%	13%	5%	20%	18%	7%

9. Job quality and working conditions

The *WageIndicator* web-survey includes several questions about job quality and working conditions. We will treat six issues here: working in dangerous conditions; the incidence of work-related stress; whether the job level matches the educational level of the worker;

¹⁶ Fabienne Fortanier (2008) *Multinational Enterprises, Institutions and Sustainable Development*. Diss. Erasmus University Rotterdam, 178.

internal promotion (opportunities for careering); the incidence of reorganizations, and finally job satisfaction and job security.

We will first treat the incidence of working in dangerous conditions. As the related question was only asked in the *WageIndicator* survey in four countries, we have to limit ourselves to these four: Belgium, the Netherlands, Poland, and Spain. Table 11 shows the average scores, based on answers ranging from never (=1) to daily working in dangerous conditions (=5). The outcomes indicate that working conditions are perceived as more dangerous in non-MNE firms in all four countries. Except for the Netherlands and Spain, the differences are quite large. It has to be noted in addition that, compared to the other four industries under scrutiny, transport and telecom on average has the highest (perceived) incidence of dangerous work.

Table 11 Average score on working in dangerous conditions, ranked on a scale from 1 = Never to 5=Daily, in MNE and non-MNE firms in transport and telecom by country

	BE	NL	PL	ES
MNE	1.8	2.1	1.7	1.9
No MNE	2.3	2.2	2.3	2.5
Total	2.0	2.1	2.1	2.3

Second, we go into the incidence of four indicators of work-related stress. Here we have got information for six countries: Belgium, Germany, Hungary, the Netherlands, Poland, and Spain. On all four indicators, the respondents are asked to give their opinions on a five-point scale, ranging from never (=1) to daily (1=5), or from fully disagree (=1) to fully agree (=5).

Table 12 Average score on four work-stress related issues, all ranked on a scale from 1 = Never to 5=Daily in MNE and non-MNE firms in transport and telecom by country

		BE	DE	HU	NL	PL	ES
MNE	Finds job stressful	3.5	3.6	5.0	4.0	3.6	3.5
No MNE	Finds job stressful	3.5	3.8	3.0	3.8	3.6	3.8
Total	Finds job stressful	3.5	3.7	4.0	3.9	3.6	3.7
MNE	Work physically exhausting	2.5	2.5	4.0	2.6	2.9	3.2
No MNE	Work physically exhausting	2.8	3.3	3.0	2.7	3.2	3.4
Total	Work physically exhausting	2.6	3.1	3.5	2.6	3.1	3.3
MNE	Work mentally exhausting	3.3	3.5	4.0	2.9	3.5	3.9
No MNE	Work mentally exhausting	3.2	3.1	4.0	2.9	3.5	3.9
Total	Work mentally exhausting	3.2	3.2	4.0	2.9	3.5	3.9
MNE	Finds job boring	2.2	2.2	4.0	2.2	2.3	2.7
No MNE	Finds job boring	2.3	2.3	4.0	2.3	2.2	2.8
Total	Finds job boring	2.2	2.2	4.0	2.2	2.3	2.8

Table 12 shows that for the first indicator, 'finds job stressful', the outcomes are mixed: in Hungary and the Netherlands the average scores are higher in MNEs in Hungary and the Netherlands, lower in those in Germany and Spain, and equal in Belgium and Poland. 'Work mentally exhausting' scores clearly higher in non-MNE firms: in all five countries for which we

have larger numbers of data. The differences are clearly marked in Germany. For ‘work mentally exhausting’ the outcomes are a bit the other way around, but not very convincing: higher scores in MNEs in Belgium and Germany, but no differences in the other four countries. Finally, the scores for ‘finds job boring’ are mostly (except for Poland) to the disadvantage of non-MNEs, but the differences remain small. Thus, concerning the question whether inward FDI i.e. working for a MNE generates more stress, our results are inconclusive.¹⁷

The third job quality issue is that concerning the possible gap between the level of the job performed and the educational level of a worker. Such a gap can indicate whether workers are over-skilled or overeducated (which is most likely) or under-skilled or undereducated (which in most countries may be the case for smaller groups). If continued, both situations of mismatch are detrimental for workers’ mental health, and over-skilling is generally also rather disadvantageous for one’s earnings.¹⁸ Here we have data for six countries, be it that for Hungary a division between MNEs and non-MNEs was not possible.

Table 13 *Percentage of workers reporting that job level matches educational level, in MNE and non-MNE firms in transport and telecom by country*

		BE	HU	NL	PL	ES	SW
MNE	Job level matches education level	64%		63%	100%	66%	79%
No MNE	Job level matches education level	57%		61%	94%	62%	78%
Total	Job level matches education level	61%	83%	63%	96%	63%	79%

Table 13 reveals for four countries an over-all ‘match’-level between 61% (Belgium) and 79% (Sweden), with Poland as an outlier with the very high score of 96%. The matching scores in MNEs are consistently higher, yet with rather small differences compared to non-MNEs.

The fourth job quality issue concerns internal promotion. Table 14 (next page) shows that in six out of the seven countries for which we have adequate information, the share of those reporting to have been promoted in the current firm is higher in MNEs than in non-MNE firms. In most countries the differences are quite clear, varying from 3%-points in Poland and 7%-pts in the UK till 18%-points in Spain, suggesting that transport and telecom MNEs in these countries are offering better career opportunities. Finland is the exception here, with 5%-pts in favour of the non-MNE firms. The larger scale of MNE establishments may well favour promotion opportunities (though in Finland the scale of MNEs was also substantially larger than of non-MNEs).

¹⁷ Fortanier, *op.cit.*, 173 and 178, concluded for the Netherlands to higher (perceived) stress levels in MNEs compared with domestic firms, especially among lower educated employees.

¹⁸ Cf. Joop Hartog (2000) Over-education and earnings: where are we, where should we go?, *Economics of Education Review*, 19: 131-147.

A minor but striking observation is that the share of workers stating to have been promoted in the current firm is much smaller in Germany than in all other countries; that applies for both types of firms. The same phenomenon could be traced for other German industries.

Table 14 *Percentage of workers reporting to have been promoted in the current firm, in MNE and non-MNE firms in transport and telecom by country*

		BE	FI	DE	HU	NL	PL	ES	UK
MNE	Has been promoted in current firm	51%	40%	29%		49%	52%	47%	45%
No MNE	Has been promoted in current firm	36%	45%	16%		37%	49%	29%	38%
Total	Has been promoted in current firm	44%	43%	22%	48%	42%	50%	34%	41%

Our fifth job quality issue concerns experiences with the incidence of reorganisations and expectations on this subject. The two relevant questions in the *WageIndicator* survey were whether the organization where the respondent works faced a reorganisation in the last 12 months, and whether he/she expects a reorganisation to happen in the next 12 months.

The upper half of table 15 clearly shows the experiences and indicates that the MNE organisations faced reorganizations in the past year much more often in four out of five countries for which have solid information; Belgium, where no differences show up, forms the exception. The outcomes presented in the lower half of the table reveal that the expectations concerning coming reorganizations are also at a higher level in MNEs; this is the case in all five countries. In the four countries for which experiences can be compared with expectations, the percentages for MNEs respectively non-MNEs are for both in the same magnitude in Germany and the UK, while for Poland the difference is smaller. Belgium shows a slightly higher expectation level in MNEs, surprisingly higher than seems to be justified by recent experiences of the respondents.

Table 15 *Percentage reporting that organisation faced reorganization, and percentage reporting to expect a reorganization in the next 12 months, in MNE and non-MNE firms in transport and telecom by country*

		BE	DE	HU	NL	PL	SW	UK
MNE	Organisation faced reorganisation	35%	61%		42%	62%		56%
No MNE	Organisation faced reorganisation	35%	40%		31%	54%		46%
Total	Organisation faced reorganisation	35%	49%	80%	36%	57%		50%
MNE	Reorganisation exp. in 12 months	59%	76%			68%	88%	75%
No MNE	Reorganisation exp. in 12 months	56%	50%			66%	77%	62%
Total	Reorganisation exp. in 12 months	58%	62%	71%		67%	84%	68%

Our last issue related to job quality is job satisfaction and job insecurity (although of course job satisfaction is wider than job quality and is also related to wages and other aspects of working life). The respondents were asked to give their opinions on a five-point scale, ranging from 1=Not satisfied to 5= Satisfied. The same holds for the question whether one worries about his/her job security. Here the opinions range from 1=Wholly disagree to 5=Wholly agree.

Table 16a reveals that in six out of the eight countries for which the data enables comparisons between categories of firms, the job satisfaction scores are higher in MNEs, mostly slightly but in Sweden considerably. The results are reverse for Poland, where the scores of non-MNE workers are slightly higher. The Finnish figures show no difference. Looking at the total scores, it remains remarkable that the outcomes for Spain and the UK (on average 2.9-3.0) are that much lower than those for the other seven countries (on average 3.2 and up).

Table 16a *Average score on job satisfaction, ranging from 1=Not satisfied to 5= Satisfied, in MNE and non-MNE firms in transport and telecom by country*

		BE	FI	DE	HU	NL	PL	ES	SW	UK
MNE	Satisfaction with job	3.6	3.3	3.3		3.6	3.3	3.2	3.9	3.1
No MNE	Satisfaction with job	3.5	3.3	3.1		3.5	3.4	2.8	3.3	3.0
Total	Satisfaction with job	3.5	3.3	3.2	3.2	3.6	3.4	2.9	3.7	3.0

We can present data for job security only for three countries, Germany, the Netherlands and Poland. Table 16b indicates that in Germany feelings of job insecurity are higher in MNEs than in non-MNEs, while the Netherlands and Poland show the opposite pattern. Yet, in Germany job satisfaction was higher in MNEs too!

Table 16b *Average score on job security, ranging from 1= Wholly disagree with worries to 5= Wholly agree with worries, in MNE and non-MNE firms in transport and telecom by country*

		DE	NL	PL
MNE	Security in job	2.8	2.4	2.5
No MNE	Security in job	2.7	2.5	3.0
Total	Security in job	2.8	2.5	2.8

It is interesting to observe, based on the results presented above, possible relations between three aspects: the incidence of reorganisations, job insecurity and job satisfaction in MNEs. Also if job insecurity in MNEs is enlarged through more reorganisations, that insecurity obviously does not automatically translate into lower levels of job satisfaction. Other aspects of working in a MNE, like the comparatively high wage levels and/or better career prospects, may form compensating elements.¹⁹

10. Working hours

Under this heading we will discuss three working hours' issues: the length of the working week; the incidence of overtime, and the incidence of irregular hours (including shift work).

¹⁹ Not often discussed as it concerns the relationship between insecurity and job satisfaction. Cf. Kenneth Scheve, Matthew J. Slaughter (2004) Economic Insecurity and the Globalization of Production, *American Journal of Political Science*, 48(4): 662-674.

Overtime is defined as usually working more hours than agreed. It has to be noted that the survey question about shift work was not asked during the full one-and-a-half year of the survey period.

Table 17 *Distribution over three categories of usual working hours and average usual working hours in MNE and non-MNE firms in transport and telecom by country*

		BE	FI	DE	HU	NL	PL	ES	SW	UK
MNE	0-20 hrs (col %)	7	9	7		11		9		13
MNE	>20-40 hrs (col %)	58	73	39		48	42	61	90	46
MNE	>40-48 hrs (col %)	19	9	35		19	42	15	7	21
MNE	>48-80 hrs (col %)	16	10	18		22	16	15	3	20
MNE	Total (col %)	100	100	100		100	100	100	100	100
No MNE	0-20 hrs (col %)	9	10	10		16	5	13	4	13
No MNE	>20-40 hrs (col %)	59	67	34		47	47	47	89	47
No MNE	>40-48 hrs (col %)	12	13	25		15	22	16	4	18
No MNE	>48-80 hrs (col %)	21	10	31		22	26	24	4	22
No MNE	Total (col %)	100	100	100		100	100	100	100	100
Total	0-20 hrs (col %)	8	10	9	18	14	5	11	2	13
Total	>20-40 hrs (col %)	57	69	36	47	47	44	52	89	46
Total	>40-48 hrs (col %)	17	11	29	12	16	28	16	5	19
Total	>48-80 hrs (col %)	18	10	26	24	22	23	21	4	22
Total	Total (col %)	100	100	100	100	100	100	100	100	100
MNE	Usual working hours	39.1	37.6	40.9		39.9	44.4	39.2	39.7	39.2
No MNE	Usual working hours	39.5	37.8	43.0		38.3	44.5	39.2	39.9	38.6
Total	Usual working hours	39.6	37.8	42.1	38.7	39.1	44.5	39.2	39.8	39.2

Table 17 confirms that the length of the working week in transport and telecom is often extremely long: with the exception of Sweden (4%), in all nine countries one-tenth or more of all workers usually have working weeks of over 48 hours, starting from 10% (Finland), via 18% (Belgium) and 21% in Spain to 22% (the Netherlands and the UK), 23% (Poland), 24% (Hungary) and 26% (Germany) of the respondents tick that they usually work over 48 hours per week. These figures are even much higher than those we gathered earlier based on the *WageIndicator* survey for September 2004 – March 2007 for transport and telecom at large in mostly the same countries. By then we found figures ranging from 6% in Belgium to 13% in the UK.²⁰ This comparison suggests that recently the practice of working long hours in transport and telecom has even expanded in all or nearly all countries at stake.

Deviating from the other industries under study, in the majority of these countries the non-MNEs show the worst picture concerning working hours. This clearly is the case in Belgium and Germany, and to a lesser extent in Finland, Poland, Spain, and Sweden too. In the Netherlands, both the share of working hours over 48 hours and the average working week are higher for MNEs, and in the UK the length of the working week is (but not the share of very long hours).

²⁰ Van Klaveren & Tijdens, *op. cit.*, 31-39.

The outcomes concerning overtime are not fully consistent with those concerning the length of the working week. As the upper third of Table 18 shows, large majorities of transport and telecom workers have agreed working hours; the lowest score, for Sweden, is still on average 85%. Maybe surprisingly, except for the UK these scores are somewhat higher in the MNEs. Yet, the percentages usually working overtime (=more hours than agreed) are very high, especially in the North-West European welfare states. Germany scores a disquieting average of 60%, but the averages for Belgium, the Netherlands and Sweden are at a high level too. The picture concerning MNEs and non-MNEs is mixed, but not to the advantage of the MNEs: in five countries the incidence of overtime proves to be higher in MNEs, in three (Poland, Spain and Sweden) it was higher in non-MNE firms.

Table 18 *Percentage having agreed working hours with employer, of these the percentage working usually more hours than agreed, and percentage working shifts or irregular hours, in MNE and non-MNE firms in transport and telecom by country*

		BE	FI	DE	HU	NL	PL	ES	SW	UK
MNE	Working hours agreed	83%	95%	94%		93%	93%	91%	88%	92%
No MNE	Working hours agreed	70%	92%	89%		92%	91%	84%	81%	93%
Total	Working hours agreed	77%	92%	91%	94%	93%	93%	87%	85%	93%
MNE	Usual more working hours	52%	21%	62%		53%	36%	28%	48%	48%
No MNE	Usual more working hours	46%	19%	59%		47%	37%	44%	55%	40%
Total	Usual more working hours	50%	20%	60%	39%	50%	38%	39%	50%	44%
MNE	Shifts or irregular hours	27%	-	-		33%	-	22%	16%	-
No MNE	Shifts or irregular hours	40%	-	-		32%	-	24%	29%	-
Total	Shifts or irregular hours	37%	-	-	55%	33%	-	23%	21%	-

In only four countries we gathered information on shift or irregular work, to be compared between transport and telecom MNEs and non-MNEs: see the lowest third of Table 18. In three countries (Belgium, Spain and Sweden) the incidence of shift work is higher in non-MNE firms, in Belgium and Sweden even considerably, while in the Netherlands this incidence is slightly higher in MNEs. The outcomes, though to be cautiously treated, on the incidence of shift or irregular work for Hungary emphasize the difficult position of the Hungarian workers in this respect: the 55% score is at par with what we found earlier for Hungarian transport.²¹

11. Training

Training, or the acquisition of human capital, can be related to the MNE wage premium issue. One explanation for the fact that MNEs pay higher wages than domestic firms may be

²¹ Van Klaveren & Tijdens, *op. cit.*, 55-59.

that, though starting wages in MNEs may not be higher than in domestic firms, workers in MNEs receive more and/or more efficient on-the-job training and experience higher wage growth. There is some empirical support for such an explanation of firm-specific human capital acquisition, be it that the wage effect of training is most likely stronger in developing than in developed countries.²²

We will discuss three training-related issues here. The first relates to the incidence of employer-paid or provided training, and is based on the question: “Over the past 12 months, how much training have you received, paid for or provided by your *employer*, in order to improve your skills?”. The second issue relates to the incidence of self-paid training, based on the question: “Over the past 12 months, how much training have you paid for *yourself* in order to improve your skills?”. The third issue is the assessment of the importance that the respondents attach to training, which goes back to the question: “How often do you find training for your job would be worthwhile?”. The latter is measured on a five-point scale, ranging from 1=Never to 5=Daily. Table 19 (next page) shows the results.

Like in other industries, in all seven countries for which we gathered data, the incidence of employer-received/paid training is considerably (from 8%-points in Belgium and the UK till 22%-pts in Germany) higher in MNEs than in non-MNEs. The same holds true for duration (number of days received in last year); the ratios MNEs : non-MNEs are more or less similar for both yardsticks, except for Poland, where especially duration in MNEs seems rather generous. These results seem to confirm the evidence concerning on-the-job training we just cited.

Obviously the incidence and duration of self-paid training is not closely related to those of employer-provided training, neither in MNEs nor in non-MNEs. In five countries the incidence of self-paid training is higher in MNEs, mostly slightly, but in the UK it is slightly lower. In all countries the propensity (or pressure?) to follow training courses shows up as higher in MNEs than in domestic firms. Against this backdrop, it comes as no surprise that the respondents' assessment of the importance of training turns out to be higher in MNEs too. As the lower part of the table shows, this is the case in all four countries for which we have data available, Belgium, the Netherlands, Poland, and Spain.

²² Holger Görg, Eric Strobl, Frank Walsh (2007) Why Do Foreign-Owned Firms Pay More? The Role of On-the-Job Training, *Review of World Economics*, 143(3): 464-482; OECD/ILO, 2008, *op. cit.*

Table 19 *Incidence and duration of employer-received and self-paid training and opinion over training, ranging from 1=Never to 5=Daily in M&E, in MNE and non-MNE firms in transport and telecom by country*

		BE	DE	HU	NL	PL	ES	SW	UK
MNE	Received training from employer (Y/N)	63%	60%		59%	76%	59%	85%	69%
No MNE	Received training from employer (Y/N)	55%	38%		48%	56%	39%	69%	57%
Total	Received training from employer (Y/N)	58%	48%	58%	52%	61%	47%	78%	62%
MNE	No of days training received from employer in last year	4.9	4.6		5.8	9.0	8.9	7.1	12.3
No MNE	No of days training received from employer in last year	5.0	2.7		4.7	3.7	3.9	6.5	6.9
Total	No of days training received from employer in last year	4.9	3.5	6.4	5.2	5.0	5.6	6.8	9.1
MNE	Self-paid training (Y/N)	16%	21%		15%	46%	35%	15%	21%
No MNE	Self-paid training (Y/N)	15%	18%		15%	43%	26%	4%	23%
Total	Self-paid training (Y/N)	15%	19%	29%	16%	43%	29%	10%	23%
MNE	No of days self-paid training in last year	3.9	3.0		2.8	7.5	11.9	5.1	4.8
No MNE	No of days self-paid training in last year	2.7	2.2		3.3	5.0	7.3	2.2	3.6
Total	No of days self-paid training in last year	3.1	2.6	4.3	3.3	5.6	8.5	3.8	4.2
MNE	Finds training would be worthwhile	3.2			2.6	3.4	3.3		
No MNE	Finds training would be worthwhile	3.0			2.4	3.3	3.1		
Total	Finds training would be worthwhile	3.1			2.5	3.3	3.2		

12. Industrial relations

Our research covers three core issues in industrial relations. The first is the incidence of trade union membership (union density). The second relates to whether the respondent is covered by a collective bargaining agreement (collective bargaining coverage). The third concerns the incidence of workplace employee representation (works council, staff council, trade union representatives, shop stewards, or alike).

The results, presented in the upper third of Table 20 (next page), concerning trade union membership do not allow a clear conclusion. In the transport and telecom industry union density rates mostly do not differ that much between MNEs and non-MNE firms. In German and Spanish transport and telecom MNEs the rates are slightly higher than in their non-MNE competitors, while in the other five countries the situation is more favourable in non-MNE firms: in Belgium with a substantial difference (13%-points).

Table 20 Percentage covered by a collective agreement, with employee representation and member of a trade union, in MNE and non-MNE firms in transport and telecom by country

		BE	FI	DE	HU	NL	PL	ES	UK
MNE	Member of trade union	45%	56%	31%		19%	13%	30%	27%
No MNE	Member of trade union	58%	59%	26%		23%	19%	29%	31%
Total	Member of trade union	53%	58%	28%	31%	21%	17%	29%	29%
MNE	Covered by collective agreement	84%		74%		66%		82%	38%
No MNE	Covered by collective agreement	82%		48%		72%		70%	37%
Total	Covered by collective agreement	83%		60%	59%	70%		75%	37%
MNE	In workplace empl representation	63%		80%		75%	53%	73%	49%
No MNE	In workplace empl representation	52%		45%		53%	62%	54%	42%
Total	In workplace empl representation	58%		60%	61%	62%	59%	60%	45%

The outcomes concerning collective bargaining coverage and workplace employee representation, covered by Table 20 too, are remarkable. In four out of five countries for which we were able to compare collective bargaining coverage, MNEs show a higher coverage than non-MNEs, slightly in Belgium and the UK but quite substantial in Germany (26%-points) and Spain (12%-pts). The exception, though not totally unexpected,²³ is the Netherlands, with a 6%-points lower coverage in MNEs.

For workplace employee representation the results are in line with those on collective bargaining, though not exactly per country. In five out of six countries for which we can compare data, the incidence of such representation is higher in MNEs than in non-MNE firms, in Germany (35%-points difference), the Netherlands (22%-pts) and Spain (19%-pts) even quite much. Poland forms the exception, with employee representation 9%-pts lagging behind, on an anyway rather high level. Most likely the larger average scale of MNE establishments works out in favour of both collective bargaining coverage and workplace employee representation in MNEs.

13. Conclusions

Concerning FDI and internationalization in transport and telecom, the following picture emerges:

- The transport and telecom MNEs included in our database are modestly diversified, owning on average 2.5 subsidiaries.
- Compared to the other four industries, transport and telecom takes a middle position concerning the level of internationalization, with subsidiaries having on

²³ For the Netherlands Fortanier, *op.cit.*, 185, found a lower collective bargaining coverage in establishments of US and Japanese firms.

average 3.5 establishments, implying that an average subsidiary is involved in between three to four countries out of 12.

- France, the UK and Germany prevail as home countries of transport and telecom MNEs; 16% of transport and telecom MNE establishments in the 12 countries are owned by MNEs from outside the EU.

Concerning the social effects of FDI in transport and telecom, our main conclusions are:

- In six of seven countries, median hourly wages in MNEs are higher than in domestic transport and telecom firms, though these premiums vary widely across countries (8 - 33%). Yet, in Belgium non-MNE pay slightly more. Except for the UK, this picture remains intact for the various working hours' categories.
- Hourly female wages lag considerably behind males in transport and telecom, and in five of seven countries this gender pay gap is even larger in MNEs than in domestic firms.
- Relying on their pay levels, larger Finnish and UK domestic firms seem to have a strong position in the labour market, though it may (also) be that transport and telecom MNEs in notably Finland, Spain, Poland and the UK resort to wage pressure.
- Based on a regression analysis in which we controlled for experience, gender, working hours, education, and firm size, we show that in four of seven countries there is a wage premium, though for Spain the influence is significant but not strong and for Poland rather weak. There are no significant differences for Belgium, Finland and the UK. The influence of working in a MNE is highest for Poland, followed by Spain and Germany.
- Except for Finland and Poland, MNE pay less overtime compensation while workers in MNEs in Belgium, Finland, Germany, the Netherlands and the UK more often perform more working hours than agreed; this means that in these five countries the weekly and monthly wage premiums in MNEs are smaller than the hourly ones.
- The scores on work-stress related issues in MNEs respectively domestic firms are mixed, implying that our results are inconclusive concerning the question whether working for an MNE generates more stress.
- In six of seven countries workers in MNEs report to have been promoted more often than in domestic firms; the exception here is Finland.
- In four of five countries workers report that they faced reorganizations in the past year more often in MNEs, while in Belgium figures for MNEs and domestic firms

are at par. In all five countries the shares of workers expecting reorganizations in the year to come are higher in MNEs.

- Except for Poland, job satisfaction in transport and telecom MNEs is at par or higher than in domestic retailers.
- In six of eight countries, the average usual working week is longer in MNEs. Notably the share of small part-time jobs is mostly higher in domestic firms.
- Generally the length of the working week is extremely long in transport and telecom; in eight countries at least one-tenth of workers usually have working weeks over 48 hours. Non-MNEs show the worst picture concerning working hours. In three countries the average working week is longer in MNEs, in four in non-MNEs, in one it is equal.
- In all seven countries the incidence of employer-received/paid training is higher in MNEs than in non-MNEs; except for Belgium the number of training days is also in favour of MNEs.
- In German and Spanish transport and telecom MNEs union density is slightly higher than in their non-MNE competitors, while in the other five countries the situation is more favourable in non-MNE firms.
- In four of five countries for which we have adequate data collective bargaining coverage is higher in MNEs, the Netherlands being the exception.
- In five of six countries with adequate data the incidence of workplace representation is higher in MNEs; Poland is the exception here.

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ANNEX. TABLES

Table 21 50 largest (sales 2007) and most internationalized MNEs in 12 countries (threshold: in 3 of 12 countries) in transport and telecom, March 2008

MNE	no.subs	NACE	BE	DK	FI	FR	DE	HU	IT	NL	PL	ES	SW	UK	Total
Deutsche Bahn	5	6010	x				x			x					3
SNCF	4	6010	x			x				x				x	5
Arriva Int'l	2	6021		x			x		x	x		x	x	x	7
Transdev	5	6021				x	x		x	x				x	5
Veolia Int'l	4	6021				x	x			x				x	4
N.Dessantriangle	1	6024	x			x	x		x			x			5
Rico	1	6024					x	x		x	x				4
Willy Betz	1	6024					x	x		x	x				4
Brittany Ferries	1	6110	x			x	x					x		x	5
CMA-CMG	4	6110	x			x	x		x	x		x		x	7
CMB	2	6110	x							x	x		x	x	5
DFDS Seaways	1	6110		x			x			x			x	x	5
MSC (CH)	3	6110	x			x	x			x					4
APM Maersk	4	6110	x	x	x	x	x	x	x	x	x	x	x	x	12
Stena Line	1	6110		x	x		x						x	x	5
Wallenius(SE/NO)	3	6110	x	x	x		x			x	x		x	x	8
Air France/KLM	8	6210	x	x	x	x	x	x	x	x	x	x	x	x	12
Air One	1	6210		x		x	x		x			x		x	6
Alitalia	1	6210	x	x	x	x	x	x	x	x	x	x	x	x	12
BMI	1	6210	x	x		x	x		x	x		x		x	8
British Airways	2	6210	x	x	x	x	x	x	x	x	x	x	x	x	12
Easyjet	1	6210	x	x		x	x			x	x	x		x	8
Finnair Group	2	6210	x	x	x	x	x	x	x	x	x	x	x	x	12
Iberia	1	6210	x	x	x	x	x		x	x		x	x	x	10
LOT	1	6210				x	x	x			x			x	5
Lufthansa	2	6210	x	x	x	x	x	x	x	x	x	x	x	x	12
Ryanair (IE)	1	6210	x	x	x	x	x	x	x	x	x	x	x	x	12
SAS	2	6210	x	x	x	x	x	x	x	x	x	x	x	x	12
SkyEurope	1	6210		x				x			x			x	4
Hutchison W (CN)	4	6311	x							x	x	x		x	5
Kuehne & N (CH)	3	6311	x	x	x	x	x	x		x	x	x	x	x	11
Vopak	1	6311	x				x			x				x	4
Deutsche Post	7	6411	x	x	x	x	x	x	x	x	x	x	x	x	12
La Poste	2	6411				x	x			x				x	4
FedEx (US)	2	6412	x	x	x	x	x	x	x	x	x	x	x	x	12
TNT	3	6412	x	x	x	x	x	x	x	x	x	x	x	x	12
UPS (US)	2	6412	x	x	x	x	x	x	x	x	x	x	x	x	12
Alcatel-Lucent	5	6420	x	x	x	x	x	x	x	x	x	x	x	x	12
Avaya Corp (US)	2	6420	x	x		x									3
Bouygues Telec.	2	6420				x	x		x		x	x			5
BT Group	3	6420	x	x	x	x	x	x	x	x	x	x	x	x	12
COLT	2	6420	x			x	x		x	x		x		x	7
DeutscheTelekom	4	6420					x	x		x	x			x	5
France Telecom	5	6420				x	x		x			x		x	5
Royal KPN	6	6420	x	x		x	x		x	x		x		x	8
Telecom Italia	4	6420				x	x		x			x			4
Telefonica	5	6420	x	x	x	x	x		x	x		x		x	8
Telenor (NO)	3	6420		x	x								x	x	4
TeliaSonera	4	6420		x	x		x						x		4
Vodafone	5	6420	x	x	x	x	x	x	x	x	x	x	x	x	12
	140		BE	DK	FI	FR	DE	HU	IT	NL	PL	ES	SW	UK	
No. comp/home c.			1	1	1	10	6	0	3	4	1	2	4	9	42
Tot. companies		misc. 8													50
No. subsidiaries															140
No. establishm./1			33	30	22	36	44	21	28	38	26	31	24	41	283
No. establishm./2			40	33	24	54	52	30	36	72	32	35	33	60	501

bold = home country

Table 22 50 largest firms by sales in transport and telecom, worldwide, 2007

		Country	Sales (bil. USD)	Ranking employ ment x)	Employment (no. employ ment x)
1	AT & T	US	118.93	3	310,000
2	Verizon Com	US	93.47	6	235,000
3	Nippon T & T	JP	91.57	8	193,800
4	Deutsche Telekom	DE	91.26	5	241,460
5	Deutsche Post	DE	86.90	1	463,350
6	Telefonica	ES	82.40	4	248,487
7	France Telecom	FR	77.31	9	187,331
8	Vodafone	UK	61.23	19	85,000
9	UPS	US	49.69	2	425,300
10	A.P. Moller/Maersk	DK	46.83	13	108,350
11	Telecom Italia	IT	42.81	20	79,628
12	Sprint Nextel	US	40.15	24	60,000
13	BT Group	UK	39.81	12	111,900
14	China Mobile	CN	37.06	10	127,959
15	FedEx	US	36.39	17	94,700
16	Lufthansa	DE	32.70	14	105,000
17	Air France-KLM Gr.	FR/NL	30.85	15	102,000
18	America Movil	MX	28.53	40	34,650
19	KDDI	JP	28.38	49	14,021
20	Alcatel-Lucent	FR	24.39	21	76,400
21	Hutchison Whamp	HK	23.50	7	230,000
22	AMR	US	22.94	18	85,500
23	East Japan Railw.	JP	22.61	22	71,000
24	United Airlines	US	20.14	27	55,000
25	Telstra	AU	20.11	34	41,784
26	Japan Airlines	JP	19.59	25	57,400
27	KT	KR	19.18	37	37,500
28	Delta Air Lines	US	19.15	26	55,044
29	Nippon Yusen K.	JP	18.42	40	35,000
30	Royal KPN	NL	18.19	46	31,116
31	BCE	CA	18.01	28	54,000
32	Telenor	NO	17.01	39	35,800
33	British Airways	UK	16.72	32	43,500
34	Union Pacific	US	16.28	29	50,089
35	TNT	NL	15.89	11	127,000
36	Nippon Express	JP	15.88	23	67,773
37	Burlington Sta Fe	US	15.80	35	40,000
38	TeliaSonera	SE	14.90	45	31,292
39	Continental Airlines	US	14.23	33	42,370
40	Qwest Commun.	US	13.78	38	36,519
41	Mitsui OSK Lines	JP	13.35	50	9,626
42	Qantas Airways	AU	12.75	39	36,500
43	Central Japan Rail	JP	12.69	37	37,400
44	All Nippon Airways	JP	12.68	47	22,170
45	Northwest Airlines	US	12.53	41	32,000
46	Kuehne & Nagel	CH	12.20	48	18,000
47	China Unicom	CN	11.83	31	48,162
48	Tokyu Group	JP	11.76	30	48,515
49	US Airways Group	US	11.70	36	39,600
50	Sistema JSFC	RU	11.16	16	100,000
	TOTAL		1,828.64		4,923,996

x) = only in this table

Sources: *Forbes Global 2000*, 2008; Wikipedia; company websites; company Annual Reports 2007; various news reports