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### Outward FDI from Hungary and its policy context

by

Magdolna Sass and Kalman Kalotay\*

*Outward foreign direct investment (OFDI) from Hungary has weathered the current crisis relatively well, although its volume is still moderate for a country classified as “high income” – but not necessarily if compared with other new European Union (EU) members. The Hungarian OFDI stock is highly concentrated in five big companies. Government policy has so far focused more on a vigorous promotion of inward FDI than on helping outward investors. However, it sometimes protects strategic Hungarian OFDI firms from hostile takeovers. The main question for the future of Hungarian OFDI is how its sustainability can be assured, especially by way of broadening the company base of capital exporters.*

#### Trends and developments

In terms of the volume of its OFDI stock, Hungary is the second largest source of outbound investment among the new EU member countries, not far behind Poland, whose population is four times larger (annex table 1). Hungary was among the countries that, during the early stage of transition, based their strategy of development and reinsertion into the world economy on inward FDI.<sup>1</sup> Nevertheless, as early as 1997, a handful of Hungarian firms had overcome the difficulties of transition, had managed to keep their management in local hands (although some of them have accumulated large amounts of foreign *portfolio* investment in their shareholding) and had started expanding abroad, especially in neighboring countries.<sup>2</sup> Hungarian affiliates of foreign multinational enterprises (MNEs) also invested abroad. However, up till today, inward FDI flows and stocks have exceeded OFDI flows and stocks.

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<sup>1</sup> Magdolna Sass, “The effectiveness of host country policy measures in attracting FDI: the case of Hungary,” in Americo Beviglia Zampetti and Torbjörn Fredriksson, eds., *The Development Dimension of FDI: Policy and Rule-Making Perspectives* (New York and Geneva: United Nations, 2003), pp. 49–58.

<sup>2</sup> UNCTAD, *World Investment Report 1997: Transnational Corporations, Market Structure and Competition Policy* (New York and Geneva: United Nations, 1997), pp. 98–99.

### *Country-level developments*

The growth of Hungary's OFDI accelerated after 2000, making Hungary a relatively important outward investor among the new EU members, both in terms of volume and of relative importance of OFDI for the country's economy. Compared to GDP, Hungary is clearly ahead of the Czech Republic and Poland in its OFDI stock, although the difference has diminished since 2005. Between 2000 and 2005, Hungary's OFDI stock increased more than sixfold, and doubled again between 2005 and 2007 (annex table 1). Therefore, the ratio of outward to inward FDI, which reached a historical low as a result of massive FDI inflows in 1995 (2.5%), rose steadily, reaching 18% in 2007 and 22% in 2008 (annex table 1a). However, this ratio is higher both in certain small new EU member countries (Estonia, Slovenia) and in the Russian Federation (with the exception of the crisis year 2009). Russia follows a different development strategy based on outward FDI, while Estonia is used as a platform for OFDI by Scandinavian firms for investing in other Baltic countries and the Commonwealth of Independent States, and Slovenia is capitalizing on its inherited connections with former Yugoslav republics. Hungary's position is similar when making a regional comparison of OFDI flows: for example, in 2005–2007 and in 2009, it was in third position, behind the Russian Federation and Poland, although in 2008 both Poland and Hungary were surpassed exceptionally by the Czech Republic (annex table 2).

The sectoral composition of Hungary's OFDI changed markedly in the 2000s. In 2000, services (including financial services and trade) represented almost four-fifths of the total OFDI stock (annex table 3). Manufacturing gradually gained importance, accounting for almost 40% of the total OFDI stock in 2008. There was also a marked increase in the share of mining and quarrying, reaching almost 7% in 2008. Other industries playing an important role in Hungarian OFDI include coke and refined petroleum, financial intermediation, chemicals (including pharmaceuticals), electrical and optical equipment, and business services.

The geographical distribution of Hungary's OFDI follows – on the one hand - the same patterns as the OFDI of other emerging markets:<sup>3</sup> Hungarian MNEs target mainly neighboring countries at a similar or lower level of development (annex table 4). Eleven geographically close countries, including Slovakia (20%), Croatia (8%) and Bulgaria (6%), host almost 55% of the total Hungarian OFDI stock.<sup>4</sup> On the other hand, speculative investments, sometimes aimed at tax optimization, explain the relatively important shares of Cyprus, Luxembourg, the Netherlands, and Switzerland. One-off large transactions result in (temporary) surges of shares for certain countries. Such is the case for the Republic of Korea in 2006 or, more recently, for Central America (one deal in the Netherlands Antilles).

### *The corporate players*

One of the most important features of Hungarian OFDI is its concentrated nature in terms of investing companies. Altogether, the estimated number of Hungarian MNEs is 7,000, including many small and medium-sized enterprises (SMEs). However, according to our estimates, the country's five largest MNEs (MOL, OTP Bank, Magyar Telekom, MKB Bank, Gedeon Richter) accounted for at least 65% of the total OFDI stock in 2008 (annex table 5).

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<sup>3</sup> Dilek Aykut and Andrea Goldstein, "Developing country multinationals: south-south investment comes of age," *OECD Development Centre Working Paper* No. 257 (Paris: OECD, 2006), mimeo.

<sup>4</sup> This is in line with the findings of gravity models on bilateral FDI in the region. See, for example, Christina Borrmann, Rolf Jungnickel and Dietmar Keller, "What gravity models can tell us about the position of German FDI in Central and Eastern Europe," *HWWA Discussion Paper* No. 328 (Hamburg: Hamburg Institute of International Economics, 2005), mimeo.

This concentration explains the volatility of annual OFDI flows, as well as the sectoral and geographical distribution of OFDI. This is the reason, for example, for the high share of mining and quarrying (MOL), coke and refined petroleum (MOL), financial intermediation (mainly OTP and MKB Bank), and pharmaceuticals and chemicals (Richter Gedeon, BorsodChem and TVK) in Hungarian OFDI. The manufacturing of electrical and optical equipment is the second most important industry within manufacturing, which may be connected to the foreign activities of Samsung<sup>5</sup> and Videoton. The largest cross-border acquisitions are also carried out by these few dominating firms, mainly in neighboring or geographically close countries, and often related to privatization deals (annex table 6), in which Hungarian MNEs benefit from first mover advantages. By the time privatization had started in neighboring countries, some Hungarian firms such as MOL and OTP had already become private firms, ready to invest abroad. The same large Hungarian MNEs, as well as the real estate firm TriGránit, are also the most active ones in key foreign greenfield projects (annex table 7). Hungarian companies invest abroad predominantly with a market-seeking motive. There are a few efficiency-seeking MNEs, such as the electronics firm Videoton, which has acquired a company in Bulgaria with the aim of transferring there its most labor intensive activities.

At the other extreme, there are also SMEs investing abroad, some of them in faraway places (they could be called “born globals”).<sup>6</sup> They establish offices on more developed markets (for example in Western Europe or in the United States) in order to be closer to their main customers – and competitors. In Hungary, such companies operate mainly in high-technology industries, such as information technology, software or medical instruments. For example, the 3DHitech company, a medical instruments producer, set up small affiliates in Germany and in the United States. Thales Nanotechnologies, a biotechnology firm, established offices in the United Kingdom and in the United States. However, this type of OFDI represents only a minor share of the total.<sup>7</sup>

Similarly to MNEs from other new EU member countries, Hungarian MNEs can be categorized into four main groups: “genuine”, “foreign-controlled”, “virtually foreign-controlled”, and “formally headquartered elsewhere”:

- “Genuine” MNEs’ ownership is mostly local and their management is Hungarian. Examples include Jászplasztik, a first tier supplier of Samsung and Electrolux, which established an affiliate in Galanta, Slovakia, following Samsung’s investment there.
- “Foreign-controlled” MNEs<sup>8</sup> are foreign affiliates located in Hungary that, for various reasons, have invested abroad from their Hungarian base. Examples include Magyar Telekom (majority-owned by Deutsche Telekom) or the Dunapack paper mill (controlled by Austria’s Mosburger). The FDI carried out by these firms can be called “indirect investment.”<sup>9</sup>

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<sup>5</sup> Samsung (Republic of Korea) realized its Slovakian investment partly through its Hungarian affiliate.

<sup>6</sup> Tage Koed Madsen and Per Servais, “The internationalization of born globals: an evolutionary process?,” *International Business Review*, vol. 6, no. 6 (1997), pp. 561–83.

<sup>7</sup> Katalin Antalóczy and Andrea Élteső, “Outward foreign direct investment from Hungary: trends, motivations and effects,” in Marjan Svetlicic and Matija Rojec, eds., *Facilitating Transition by Internalization: Outward Direct Investment from Central European Economies in Transition* (Aldershot: Ashgate, 2003), pp. 155–74.

<sup>8</sup> Eric Rugraff, “Strengths and weaknesses of the outward FDI paths of the central European countries,” *Post-Communist Economies*, vol. 22, no.1 (2010), pp. 1–17.

<sup>9</sup> Wilfried Altzinger, Christian Bellak, Andrea Jaklic, and Matija Rojec, “Direct versus indirect foreign investment from transition economies: Is there a difference in parent company/home country impact?,” in Svetlicic and Rojec, *op cit.*, pp. 91–110; Wladimir Andreff, “The new multinational corporations from transition countries,” *Economic Systems*, vol. 26, no. 4 (2002), pp. 371–79.

- In “virtually foreign-controlled” Hungarian MNEs, foreign *portfolio* investors hold the majority of shares, but do not have a controlling stake. As a result, the management is Hungarian, and all decisions are taken in Hungary. This group of MNEs deserves particular attention because, in the literature, it is assumed to be part of the foreign-controlled group, while, in substance, it is closer to genuine MNEs. We call FDI realized abroad by these firms “virtual” indirect investment, as opposed to the real indirect investment of firms such as Magyar Telekom. Out of the list of the most important investor companies, MOL, OTP and Richter (annex table 5), as well as Synergon (not in the table), belong to this category. The dispersion of ownership is a result of the fact that these firms were privatized through the Budapest Stock Exchange. As one example, the majority (more than 65%) of OTP Bank’s shares were owned by foreigners in 2009, although none of them alone controlled more than 10%, and only three of them (Artio Global Management of United States, 9%; three Russian private persons, 8%; and Groupama, France, 8%) exceeded 5%. Domestic investors owned together 22%, the Government 0.5%, and the management 11%.<sup>10</sup> Decisions of strategic importance, including those about foreign acquisitions, are taken by the Hungarian management.
- The most salient example of Hungarian MNEs whose formal headquarters are located elsewhere but whose management is mostly Hungarian, and whose decisions are taken in the Hungarian base, is the real estate firm TriGránit (registered officially in Budapest but majority-owned by a Cyprus-based parent company owned by a Hungarian private person). For analytical purposes, these companies have to be considered Hungarian MNEs, although it is nearly impossible to include them in the statistics, given methodological difficulties such as the accounting of domestic versus foreign activities.

### Effects of the current global crisis

The global crisis affected Hungarian OFDI relatively quickly, given the structural weaknesses of the Hungarian economy. In 2008, OFDI flows declined by 56%, followed by a modest recovery (5%) in 2009 (annex table 2).

The drop in 2008 was related to a halt in large cross-border M&A deals that year. In most other countries of the region (except Estonia), the decline in FDI outflows did not start before 2009. However, the decline in Hungarian OFDI was not exceptional by global standards. In 2008, the decline in outflows was larger than the world average (-13%), but its recovery in 2009 was going against a global decline of about 39%. As for OFDI stock, it grew till 2008 (annex table 1), and declined by 3% in 2009 as Hungarian assets abroad devalued. This depreciation of the OFDI stock was relatively mild in international comparison (annex table 1).

The relative resilience of OFDI is surprising given the sharp drop in Hungarian GDP (-6.3% in 2009, caused mostly by a 17.7% drop in manufacturing production)<sup>11</sup> and the contraction in the market value of Hungarian firms. In 2008, the index of the Budapest Stock Exchange (BUX), where most of the large Hungarian companies are quoted, contracted by 53%, although it recovered to 82% of the January 2008 value in 2009.<sup>12</sup> The decrease in home-country revenues reduced the scope of equity and other investments by Hungarian MNEs, while lower host-country revenues were translated into smaller reinvested earnings.

<sup>10</sup> [https://www.otpbank.hu/portal/en/IR\\_Ownership\\_structure](https://www.otpbank.hu/portal/en/IR_Ownership_structure).

<sup>11</sup> According to data from the Central Statistical Office ([www.ksh.hu](http://www.ksh.hu)).

<sup>12</sup> According to data from the Budapest Stock Exchanges ([www.bse.hu](http://www.bse.hu)).

Anecdotal evidence shows that certain Hungarian MNEs had to postpone or reduce projects due to difficulties of financing, as was the case with TriGránit in Zagreb, Croatia. The crisis and the drying-up of financial resources also revealed the vulnerability of Hungarian MNEs to takeovers or take-over attempts by MNEs from other countries. To date, the most important attempt has been undertaken by Russia's oil firm Surgutneftegaz, which acquired 26% of the shares of MOL from Austria's OMV in March 2009. So far, MOL has prevented a take-over by invoking a company rule according to which no shareholder can have more than 10% voting rights, irrespective of the amount of shares it owns, and administrative difficulties in properly registering the new Russian shareholder for the company's general assembly.<sup>13</sup> However, the case is still abeyance at the moment of writing this analysis.

### **The policy scene**

Being a EU member, Hungary's policies are framed by the Lisbon Treaty and the treaties concluded by the EU, as well as by the bilateral investment treaties (BITs) signed by the Hungarian government (57 in force in 2009).<sup>14</sup> These cover all major target economies of Hungarian OFDI. There are also government agencies and institutes offering assistance to OFDI. The institutional framework has undergone changes over time; however, the three main areas of support (subsidized information and consultancy services; investment finance and insurance; lobbying abroad) have remained the same. Information and consultancy services are provided (and business meetings are organized) by the Hungarian Investment and Trade Development Agency ITDH (an integrated agency, promoting inward and OFDI, exports and SMEs), and some chambers of commerce (national, regional, bilateral). Finance and insurance is provided by the state-owned Corvinus Group and by the Hungarian Development Bank. Both of these agencies support mostly OFDI by Hungarian SMEs. Corvinus also maintains an information system on investment opportunities in Hungary and abroad, in and outside the EU. In addition, Hungarian MNEs and government agencies carry out some lobbying abroad, especially related to privatization deals, although no formal institution exists in that area.

According to company interviews, the first two services, namely subsidized information and consultancy services and investment finance and insurance, are mainly used by SME foreign investors, while large investors are more likely to rely on lobbying. The latter consider that the lobbying activity of the Hungarian Government and its foreign representatives is weaker than that of countries with a longer history of OFDI. This is especially problematic in the case of large privatization deals, which are particularly important as a mode of entry for large Hungarian investors abroad.<sup>15</sup>

### **Conclusions and looking to the future**

So far, Hungary's strategy of international competitiveness has been based on inward rather than on outward FDI. However, over time, the latter has gained in importance, despite the financial crisis that has hit Hungary hard. The future of Hungarian OFDI is difficult to predict as the era of uncertainty is far from being over at the time of writing this *Profile* (June 2010). In addition, with a change in government (and potentially government policies) in Hungary,

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<sup>13</sup> Kalman Kalotay, "The political aspect of foreign direct investment: The case of the Hungarian oil firm MOL," *The Journal of World Investment & Trade*, vol. 11, no. 1 (2010), pp. 79–90.

<sup>14</sup> See [www1.pm.gov.hu/web/home.nsf/portalarticles/16E5406F25E730F2C1256E1A004373A4?OpenDocument](http://www1.pm.gov.hu/web/home.nsf/portalarticles/16E5406F25E730F2C1256E1A004373A4?OpenDocument).

<sup>15</sup> ICEG European Centre, "Background studies for the update of Hungarian External Economic Strategy" (2007) ([www.icegec.hu/publications](http://www.icegec.hu/publications)).

approaches toward Hungarian MNEs may change. One of the lessons drawn from Hungarian OFDI strategies is that foreign acquisitions are an imperative to prevent hostile takeovers by competitors. Thus, Hungarian MNEs will most probably continue to increase their presence in geographically close countries, reaping especially the benefits from privatization. Moreover, some indigenous firms, those that weathered the crisis well and are increasingly sensitive to wage costs, are expected to transfer in the future their most labor-intensive activities to nearby countries. These can be mainly SMEs in the labor-cost sensitive metal, plastic and machinery industries. High-technology SMEs could also be important sources for potential OFDI, though the volume of their transactions is expected to remain small.

### **Additional readings**

Antalóczy, Katalin and Andrea Éltető, “Outward foreign direct investment from Hungary: trends, motivations and effects,” in Marjan Svetlicic and Matija Rojec, eds., *Facilitating Transition by Internalization. Outward Direct Investment from Central European Economics in Transition* (Aldershot: Ashgate, 2003), pp. 155–174.

Antalóczy, Katalin and Magdolna Sass, “Emerging multinationals: the case of Hungary,” Conference on emerging multinationals: Outward Direct Investment from Emerging and Developing Economies, Copenhagen Business School, Copenhagen, Denmark, October 9–10, 2008 (available at: <http://gdex.dk/ofdi/7%20Antaloczy%20Katalin.pdf>).

Kalotay, Kalman, “The political aspect of foreign direct investment: the case of the Hungarian oil firm MOL,” *The Journal of World Investment & Trade*, vol. 11, no. 1 (2010), pp. 79–90.

Rugraff, Eric, “Strengths and weaknesses of the outward FDI paths of the Central European countries,” *Post-Communist Economies*, vol. 11, no. 1 (2010), pp. 1–17.

Sass, Magdolna, “FDI in Hungary: the first mover’s advantage and disadvantage,” *European Investment Bank Papers*, vol. 9, no. 2 (2003), pp. 62–90.

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## Statistical annex

**Annex table 1. Hungary: outward FDI stock, selected years**

| Economy                          | Outward FDI stock<br>(US\$ million) |        |         |         |         |        | Ratio of outward FDI stock to GDP<br>(Percentage) |      |      |      |      |
|----------------------------------|-------------------------------------|--------|---------|---------|---------|--------|---|------|------|------|------|
|                                  | 1995                                | 2000   | 2005    | 2007    | 2008    | 2009   | 1995  | 2000 | 2005 | 2007 | 2008 |
| Hungary                          | 278                                 | 1 280  | 7 810   | 17 596  | 19 979  | 19 451 | 0.6   | 2.7  | 7.1  | 12.7 | 13.0 |
| Memorandum: comparator economies |                                     |        |         |         |         |        |   |      |      |      |      |
| Czech Republic                   | 345                                 | 738    | 3 610   | 8 557   | 12 531  | 14 348 | 0.6   | 1.3  | 2.9  | 4.9  | 5.8  |
| Estonia                          | 68                                  | 259    | 1 940   | 6 174   | 6 657   | 6 534  | 1.8   | 4.6  | 14.1 | 29.5 | 28.7 |
| Poland                           | 539                                 | 1 018  | 6 277   | 21 201  | 22 560  | 26 211 | 0.4   | 0.6  | 2.1  | 5.0  | 4.3  |
| Russian Federation               | 3 346                               | 20 141 | 146 679 | 370 161 | 202 837 | ...    | 0.8   | 7.8  | 19.2 | 28.9 | 12.0 |
| Slovenia                         | 727                                 | 768    | 3 290   | 7 197   | 8 650   | ...    | 3.5   | 4.5  | 9.2  | 15.3 | 15.9 |

Source: Authors' calculation, based on UNCTAD's FDI/TNC database (available at: <http://stats.unctad.org/fdi/>) and national statistics.

**Annex table 1a. Hungary: inward and outward FDI stock, selected years**

| Item                                     | 1990 | 1995   | 2000   | 2005   | 2007    | 2008   | 2009   |
|--|------|--------|--------|--------|---------|--------|--------|
| Inward FDI stock (US\$ million)          | 570  | 11 304 | 22 870 | 61 970 | 100 335 | 89 717 | 92 432 |
| Outward FDI stock (US\$ million)         | 159  | 278    | 1 280  | 7 810  | 17 596  | 19 979 | 19 451 |
| Ratio of outward to inward FDI stock (%) | 27.9 | 2.5    | 5.6    | 12.6   | 17.5    | 22.3   | 21.0   |

Source: Authors' calculation, based on UNCTAD's FDI/TNC database (available at: <http://stats.unctad.org/fdi/>) and national statistics.

**Annex table 2. Hungary: outward FDI flows, 2000–2009**

(US\$ million)

| <b>Economy</b>                   | <b>2000</b> | <b>2001</b> | <b>2002</b> | <b>2003</b> | <b>2004</b> | <b>2005</b> | <b>2006</b> | <b>2007</b> | <b>2008</b> | <b>2009<sup>a</sup></b> |
|----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------------------|
| Hungary                          | 620         | 368         | 278         | 1 643       | 1 119       | 2 178       | 3 874       | 3 737       | 1 661       | 1 740                   |
| Memorandum: comparator economies |             |             |             |             |             |             |             |             |             |                         |
| Czech Republic                   | 43          | 165         | 207         | 206         | 1014        | -19         | 1 467       | 1 619       | 4 332       | 1 340                   |
| Estonia                          | 63          | 200         | 132         | 156         | 268         | 688         | 1 112       | 1 737       | 1 071       | 1 487                   |
| Poland                           | 16          | -90         | 230         | 305         | 955         | 3 358       | 9 149       | 5 664       | 3 102       | 2 924                   |
| Russian Federation               | 3 177       | 2 533       | 3 533       | 9 727       | 13 782      | 12 767      | 23 151      | 45 916      | 56 091      | 46 057                  |
| Slovenia                         | 66          | 144         | 156         | 475         | 548         | 641         | 862         | 1 805       | 1 440       | 871                     |

Source: Authors' calculation, based on the UNCTAD FDI/TNC database (available at: <http://stats.unctad.org/fdi/>) and national statistics.

<sup>a</sup> Preliminary estimates.



**Annex table 3. Hungary: sectoral distribution of outward FDI stock, 2000 and 2008**

(Percent of total)

| Sector/industry                          | 2000  | 2008  | Sector/industry  | 2000   | 2008   |
|--|-------|-------|--|--------|--------|
| <b>Agriculture, forestry and fishing</b> | 0.00  | 0.03  | <b>Electricity, gas and water</b>                        | 0.16   | 0.06   |
| <b>Mining and quarrying</b>              | 1.89  | 6.88  | <b>Construction</b>                                      | 0.28   | 0.31   |
| <b>Manufacturing</b>                     | 12.99 | 37.54 | <b>Services</b>  | 79.98  | 52.70  |
| Food, beverages and tobacco              | 1.50  | 0.15  | Wholesale, retail and repair                             | 19.57  | 6.48   |
| Textile and leather                      | 1.12  | 0.09  | Hotels and restaurants                                   | 1.55   | 0.98   |
| Wood, pulp, paper and publishing         | 1.13  | 0.53  | Transport and telecom                                    | 1.29   | 0.97   |
| Coke, refined petroleum and nuclear fuel | 0.00  | 17.42 | Financial intermediation                                 | 45.65  | 23.26  |
| Chemicals                                | 2.46  | 2.05  | Real estate  | 0.31   | 0.20   |
| Rubber and plastic                       | 1.43  | 0.28  | Computer services  | 0.04   | 0.04   |
| Other non-metallic minerals              | 2.27  | 1.39  | Business services  | 8.95   | 20.30  |
| Metals                                   | 0.01  | 0.06  | Other services   | 0.01   | 0.32   |
| Machinery and equipment n.e.c.           | 0.02  | 0.03  | <b>Acquisition of real estate and OFDI by households</b> | 3.51   | 2.44   |
| Electrical and optical equipment         | 0.18  | 14.57 | <b>Not identified</b>                                    | 1.18   | 0.05   |
| Transport equipment                      | 2.84  | 0.84  | <b>Total</b>   | 100.00 | 100.00 |
| Furniture and manufacturing n.e.c.       | 0.01  | 0.12  |  |        |        |

Source: Authors' calculation, based on data from the National Bank of Hungary.

**Annex table 4. Hungary: geographical distribution of outward FDI stock, 2000 and 2008**

(Percent of total)

| Region/economy        | 2000   | 2008   | Region/economy         | 2000 | 2008  |
|-----------------------|--------|--------|------------------------|------|-------|
| <b>Total</b>          | 100.00 | 100.00 | <b>Other Europe</b>    | 3.40 | 29.15 |
| <b>Europe</b>         | 87.61  | 74.56  | Croatia                | 1.33 | 8.31  |
| <i>European Union</i> | 83.66  | 45.16  | Montenegro             | ..   | 1.35  |
| Austria               | 6.73   | 0.38   | Russian Federation     | 0.50 | 1.76  |
| Bulgaria              | 0.31   | 6.16   | Serbia                 | ..   | 3.15  |
| Cyprus                | 6.95   | 3.78   | Switzerland            | 0.35 | 6.93  |
| Czech Republic        | 5.42   | 1.58   | TFYR of Macedonia      | 0.00 | 3.94  |
| Denmark               | 10.24  | 0.03   | Turkey                 | 0.00 | 0.81  |
| France                | 0.11   | 0.06   | Ukraine                | 1.22 | 2.90  |
| Germany               | 2.90   | 0.39   | <b>North America</b>   | 4.84 | 1.36  |
| Ireland               | 2.80   | 0.01   | Canada                 | 0.01 | 1.03  |
| Italy                 | 0.10   | 0.78   | United States          | 4.83 | 0.33  |
| Luxemburg             | 0.11   | 4.29   | <b>Central America</b> | 0.10 | 7.20  |
| Netherlands           | 32.01  | 1.53   | <b>Asia</b>            | 0.26 | 14.61 |
| Poland                | 1.08   | 1.34   | Republic of Korea      | 0.00 | 14.33 |
| Romania               | 4.96   | 4.11   | China                  | 0.10 | 0.02  |
| Slovakia              | 8.73   | 20.25  | India                  | 0.07 | 0.05  |
| Slovenia              | 0.37   | 0.26   | Japan                  | 0.03 | 0.01  |
| Spain                 | 0.04   | 0.13   | <b>Africa</b>          | 0.13 | 0.00  |
| United Kingdom        | 0.80   | 0.08   | <b>Not identified</b>  | 7.00 | 2.36  |

Source: Authors' calculation, based on data from the National Bank of Hungary.

**Annex table 5. Hungary: the top 10 MNEs, ranked by foreign assets, 2008**

(US\$ million)

| Rank | Company                                 | Industry        | Host economies of OFDI  | Foreign assets <sup>a</sup> |
|------|---|-----------------|---|-----------------------------|
| 1    | MOL                                     | Oil and gas     | Austria, Bosnia-Herzegovina, Croatia, Cyprus, Czech Republic, Germany, Italy, Jersey, Kazakhstan, Oman, Poland, Romania, Russian Federation, Serbia, Slovakia, Slovenia, Syria, The Netherlands, Ukraine, United Kingdom, Yemen | 4 800                       |
| 2    | OTP Bank                                | Banking         | Austria, Bulgaria, Croatia, Cyprus, Luxemburg, Montenegro, Romania, Russian Federation, Serbia, Slovakia, The Netherlands, Ukraine, United Kingdom  | 2 500                       |
| 3    | Magyar Telekom (Deutsche Telekom Group) | Telecom         | Bulgaria, TFYR of Macedonia, Montenegro, Romania, Ukraine   | 1 200                       |
| 4    | MKB Bank (Bayern LB Group)              | Banking         | Bulgaria, Romania   | 250                         |
| 5    | Gedeon Richter                          | Pharmaceuticals | Armenia, Germany, India, Italy, Japan, Republic of Moldova, Poland, Romania, Russian Federation, Ukraine  | 192                         |
| 6    | Danubius Hotels                         | Hotels          | Czech Republic, Romania, Slovakia   | 171                         |
| 7    | BorsodChem                              | Chemicals       | Czech Republic, Italy, Poland   | 100                         |
| 8    | Dunapack (Prinzhorn Holding)            | Paper           | Bulgaria, Croatia, Lithuania, Poland, Romania, Slovakia, Ukraine  | 75                          |
| 9    | Samsung Hungary                         | Electronics     | Slovakia  | 30                          |
| 10   | Videoton                                | Electronics     | Bulgaria  | 25                          |

*Source:* Authors' estimates based on balance sheets of the companies and values of individual M&A transactions.

<sup>a</sup> Estimated values.

*Note:* TriGránit is not included.

**Annex table 6. Hungary: main M&A deals, by outward investing firm, 1998–2009**

| Acquiring company                       | Target company                           | Target industry | Target economy     | Year | Transaction value (US\$ million) | Shares acquired (%) |
|---|--|-----------------|--------------------|------|----------------------------------|---------------------|
| MOL                                     | Italiana Energia e Servizi SpA           | Oil and gas     | Italy              | 2007 | 1 097.0                          | 100.0               |
| OTP Bank                                | Raiffeisenbank Ukraine                   | Banking         | Ukraine            | 2006 | 832.7                            | 100.0               |
| MOL                                     | INA Industrija Nafta                     | Oil and gas     | Croatia            | 2003 | 508.1                            | 25.0                |
| OTP Bank                                | Investsberbank                           | Banking         | Russian Federation | 2006 | 477.0                            | 96.4                |
| OTP Bank                                | DSK Bank                                 | Banking         | Bulgaria           | 2003 | 358.6                            | 100.0               |
| MOL                                     | Slovnaft                                 | Oil and gas     | Slovakia           | 2003 | 329.7                            | 31.6                |
| Magyar Telekom (Deutsche Telekom Group) | Macedonian Telecom (Maktel)              | Telecom         | TFYR of Macedonia  | 2001 | 323.5                            | 51.0                |
| OTP Bank                                | Nova Banka                               | Banking         | Croatia            | 2005 | 316.7                            | 95.6                |
| MOL                                     | Slovnaft                                 | Oil and gas     | Slovakia           | 2000 | 262.0                            | 36.2                |
| MOL                                     | Slovnaft                                 | Oil and gas     | Slovakia           | 2004 | 242.3                            | 28.5                |
| OTP Bank                                | Kulska Banka                             | Banking         | Serbia             | 2006 | 151.8                            | 67.0                |
| Magyar Telekom (Deutsche Telekom Group) | Telecom Montenegro                       | Telecom         | Montenegro         | 2005 | 150.7                            | 51.0                |
| Wizz Air                                | Wizzair Ukraine                          | Airlines        | Ukraine            | 2007 | 137.0                            | 100.0               |
| OTP Bank                                | Crnogorska Komercijalna Banka            | Banking         | Montenegro         | 2006 | 132.0                            | 100.0               |
| Danubius Hotels                         | Ramada Plaza Regents Park Hotel (London) | Hotels          | United Kingdom     | 2005 | 112.2                            | 100.0               |
| MKB Bank (Bayern LB Group)              | Unionbank                                | Bank            | Bulgaria           | 2006 | 85.5                             | ..                  |
| BorsodChem                              | Moravské Chemické Závody                 | Chemicals       | Czech Republic     | 2000 | 54.9                             | 97.5                |
| MOL                                     | Pearl Petroleum Company Ltd.             | Oil and gas     | Iraq               | 2009 | 54.1                             | 10.0                |
| OTP Bank                                | Banca Comerciala Robank                  | Banking         | Romania            | 2004 | 47.5                             | 100.0               |
| Gedeon Richter                          | Polfa Grodzisk                           | Pharmaceuticals | Poland             | 2008 | 43.0                             | 36.8                |
| OTP Bank                                | Zepter Banka                             | Banking         | Serbia             | 2006 | 41.3                             | 75.1                |
| OTP Bank                                | Donskoy Narodny Bank                     | Banking         | Russian Federation | 2008 | 41.0                             | 100.0               |
| Gedeon Richter                          | Polfa Grodzisk                           | Pharmaceuticals | Poland             | 2002 | 30.1                             | 51.0                |
| Magyar Telekom (Deutsche Telekom Group) | Telecom Montenegro                       | Telecom         | Montenegro         | 2005 | 29.6                             | 21.9                |
| Waberer                                 | Somitco Trans                            | Transport       | Romania            | 2008 | 29.5                             | 100.0               |
| Danubius Hotels                         | Health Spa Piestany                      | Hotels          | Slovakia           | 2002 | 27.0                             | ..                  |
| TVK (MOL Group)                         | Hamburger Unterland                      | Chemicals       | Austria            | 1998 | 27.0                             | 74.0                |
| OTP Bank                                | Niska Banka AD                           | Banking         | Serbia             | 2006 | 16.9                             | 89.4                |
| Danubius Hotels                         | Lécebné Lázně Máriaňské Lázně Spa        | Hotels          | Czech Republic     | 2000 | 15.5                             | 65.0                |
| OTP Bank                                | Investicni a Rozvojova Banka             | Banking         | Slovakia           | 2002 | 14.6                             | 92.6                |

Source: Authors' collection and estimation, based on company reports and Thomson ONE Banker, Thomson Reuters.

**Annex table 7. Hungary: the top 10 greenfield projects, by outward investing firm, in 2007–2009**

(Announced transaction values in US\$ million)

| Year | Investing company                | Target industry                | Target economy     | Investment       |
|------|----------------------------------|--------------------------------|--------------------|------------------|
| 2009 | TriGránit                        | Real estate                    | Slovakia           | 2 230            |
| 2009 | MOL                              | Oil and gas                    | Croatia            | 524 <sup>a</sup> |
| 2009 | WIZZ Air                         | Air transport                  | Czech Republic     | 128 <sup>a</sup> |
| 2009 | Omninvest                        | Biotechnology                  | Uzbekistan         | 70 <sup>a</sup>  |
| 2009 | WIZZ Air                         | Air transport                  | Switzerland        | 61 <sup>a</sup>  |
| 2009 | Genesis Energy Befektetési Nyrt. | Electronics / renewable energy | Spain              | 58 <sup>a</sup>  |
| 2009 | MOL                              | Oil and gas                    | Pakistan           | 40               |
| 2009 | CIG Central European Insurance   | Financial services             | Romania            | 23 <sup>a</sup>  |
| 2009 | DKG East                         | Machinery                      | Qatar              | 18 <sup>a</sup>  |
| 2009 | Domoinvest                       | Pharmaceuticals                | Serbia             | 14 <sup>a</sup>  |
| 2008 | TriGránit                        | Real estate                    | Romania            | 1 573            |
| 2008 | TriGránit                        | Real estate                    | Poland             | 782              |
| 2008 | MOL                              | Oil and gas                    | Slovakia           | 450 <sup>a</sup> |
| 2008 | TriGránit                        | Real estate                    | Croatia            | 311              |
| 2008 | TriGránit                        | Real estate                    | Russian Federation | 289 <sup>a</sup> |
| 2008 | TriGránit                        | Real estate                    | Russian Federation | 289 <sup>a</sup> |
| 2008 | Brixxon                          | Automotive                     | Austria            | 236 <sup>a</sup> |
| 2008 | System Consulting Zrt.           | Renewable energy               | Russian Federation | 197 <sup>a</sup> |
| 2008 | WIZZ Air                         | Air transport                  | Romania            | 150              |
| 2008 | TriGránit                        | Real estate                    | Slovenia           | 145 <sup>a</sup> |
| 2007 | TriGránit                        | Real estate                    | Russian Federation | 1 000            |
| 2007 | Libri                            | Bookshops                      | Romania            | 194              |
| 2007 | TriGránit                        | Real estate                    | Romania            | 188              |
| 2007 | TriGránit                        | Real estate                    | Poland             | 130 <sup>a</sup> |
| 2007 | TriGránit                        | Entertainment                  | Russian Federation | 40 <sup>a</sup>  |
| 2007 | MOL                              | Oil and gas                    | Serbia             | 39 <sup>a</sup>  |
| 2007 | OTP Bank                         | Banking                        | Ukraine            | 36 <sup>a</sup>  |
| 2007 | OTP Bank                         | Banking                        | Russian Federation | 36 <sup>a</sup>  |
| 2007 | OTP Bank                         | Banking                        | Netherlands        | 25 <sup>a</sup>  |
| 2007 | Cerbona                          | Food                           | Romania            | 24 <sup>a</sup>  |

Source: Authors' collection and estimation, based on information from the *fDi Intelligence*, a service from the *Financial Times Ltd.*

<sup>a</sup> Estimate made by *fDi Intelligence*.