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HUNGARIAN MULTINATIONALS IN 2013 - A SLOW RECOVERY AFTER THE CRISIS?

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Hungarian Multinationals in 2013 – A Slow Recovery after the Crisis?

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The ICEG European Center in Budapest, Hungary, and the Columbia Center on Sustainable Investment (CCSI), a joint center of Columbia Law School and the Earth Institute at Columbia University in New York, are releasing the results of a survey on outward investors today.[1] The survey is part of a long-term study of the rapid global expansion of multinational enterprises (MNEs) from emerging markets. The results released today focus on Hungarian MNEs. The present survey, conducted in 2014, covers the period 2009-2013.

Highlights

The report includes a ranking of Hungarian non-financial MNEs based on their foreign assets in 2013 (see Table 1). The 20 MNEs ranked held more than US$ 20 billion in foreign assets. The top-ranked firm, MOL Group (including TVK, of which MOL Group is a majority holder) accounted for almost US$ 19 billion, or almost 93% of these assets. The top 20 companies together registered foreign sales of more than US$ 25 billion in 2013 and employed more than 34,000 workers abroad (see Table 2). In 2013, Hungary was the 19th outward investor in terms of foreign direct investment (FDI) stock among emerging markets[2] and the 23rd largest in terms of outward FDI flows, well below the BRIC countries, but the second largest investor among the new member states[3] of the European Union.[4]

Outward investment by Hungarian companies went primarily into oil and gas exploration and production (mining and quarrying) and pharmaceuticals, mainly due to the activities of the top two firms in our ranking: MOL Group and Gedeon Richter. Other investment areas included electronics, construction, transportation and storage, manufacturing of medical precision instruments, building materials, plastics production, construction and other manufacturing and services industries.

The 20 companies on the list have 169 affiliates in 41 countries, with a strong concentration in Europe, mainly in Central and Western Europe (132 affiliates). These

[1] This report was prepared by Magdolna Sass (External Expert, MTA KRTK Institute of Economics) and Olivér Kovács (Research Fellow), both of whom affiliated with ICEG European Center. It is based on proactive surveys as well as official company reports.
[2] Understood as a group of countries including all developing and transition economies, as well as the 10 former economies in transition (Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia) that the United Nations has reclassified as "developed countries" after their entry in the European Union.
[3] The new member states of the European Union are those countries that joined the EU in 2004, 2007 and 2013: Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, Slovenia, Bulgaria, Romania and Croatia. Hungary is second behind Poland in terms of the stock of outward FDI in 2013.
[4] Ranking as of 2013 based on UNCTAD, *World Investment Report, 2014* (New York and Geneva: United Nations, 2014).

are primarily located in neighbouring or geographically close countries such as Romania (23 affiliates), Slovakia (14), Poland (9), Ukraine (8), Bulgaria (6) and the Czech Republic (6); Germany (8) is the leading host country in Western Europe.

The average TNI[5] of the Hungarian top 20 is relatively high at 39% compared to other European emerging economies (e.g., 29% for Poland, 36% for Russia or 31% for Turkey).[6] With 91% TNI, MOL Group, is amongst the most "transnationalized" firms in the group of emerging multinationals (see Table 2 and Figure 2 in the Annex).

Table 1. The top 20[a] non-financial Hungarian MNEs by foreign assets[b], 2013
(US$ million) [c]

Rank	Name	Industry	Status[d]	Foreign assets
1	MOL Group (including TVK)	Oil and gas exploration, production, refining and retail	Listed (23.82%, 1 golden share)	18,816
2	Gedeon Richter	Pharmaceutical products	Listed (31.35%)	743
3	Videoton	Manufacture of electrical equipment	Unlisted (Nil)	277
4	KÉSZ	Construction	Unlisted (Nil)	100
5	Waberer's Holding	Transportation and storage	Unlisted (Nil)	67
6	MPF Holding	Transportation and storage	Unlisted (Nil)	55
7	Mediso	Manufacture of medical, precision and optical instruments	Unlisted (Nil)	43
8	Masterplast	Building materials	Listed (Nil)	41
9	Jász-Plasztik	Plastics production	Unlisted (Nil)	40
10	Arcadom	Construction	Unlisted (Nil)	39
11	Vajda-Papír	Manufacture of household and sanitary goods and of toilet requisites	Unlisted (Nil)	25
12	Synergon	IT services	Listed (Nil)	10
13	Fornetti	Food products	Unlisted (Nil)	7
14	SMP	IT services	Unlisted (Nil)	4
15	Solvo Biotechnology	Research and experimental development on biotechnology	Unlisted (Nil)	3
16	Lambda-Com	Other research and experimental development on natural sciences and engineering	Unlisted (Nil)	3
17	Matusz-Vad	Food products	Unlisted (Nil)	3
18	Balabit	Computer programming activities	Unlisted (Nil)	2
19	Pureco	Other research and experimental development on natural sciences and engineering	Unlisted (Nil)	1
20	AAM	Business and other management consultancy activities	Unlisted (Nil)	1
Total				**20,280**

[5] The transnationality index (TNI) is calculated by averaging the following three ratios: foreign assets to total assets, foreign sales to total sales and foreign employees to total employees and is expressed as a percentage.
[6] TNIs for other countries and firms are taken from country studies prepared in the framework of the EMGP project, for details see http://ccsi.columbia.edu/publications/emgp/.

Source: ICEG-CCSI survey of Hungarian multinationals, 2015

[a] Although we speak of the 'Top 20' here, information was not available on *all* likely candidates for the top places, among other things because not all companies responded to our survey. The MNEs on this ranking may thus not be *the* largest outward investors from Hungary but they are certainly *among* the largest.

[b] The foreign assets of an MNE are the current and fixed assets abroad that it controls. They are usually much larger than the multinational's total outward FDI because, for instance, of the accumulation of dividends and interest.

[c] The exchange rate used is the IMF rate on December 30, 2013: US$ 1 = HUF 216.19 and US$ 1 = EUR 0.7255

[d] The percentage in parentheses is the percentage of shares controlled by the state.

Profile of the top 20

- **Key drivers.** Over the years, various drivers motivated Hungarian non-financial companies in their outward expansion in the form of direct investments. For the majority of the companies, the primary motive for investing abroad was to find new markets, especially in geographically close countries with low psychic distance. For certain products, the size of the Hungarian market (10 million inhabitants) becomes too small after a while, so firms seek to find new markets abroad not only through exports but also through direct investments. That motive is obvious for the majority of manufacturing and for all services firms on our list (see e.g. Box 1 on Waberer's). The main motive for the overwhelming majority of the surveyed firms is thus seeking new markets. The top investor, MOL also made resource-seeking investments, investing in oil and gas exploration in Iraq, Kazakhstan, Oman and Pakistan. Thus, because of industry specifics, in the upstream segment of the operation of our top company, the resource-seeking motive is also present. Yet the majority of MOL Group's foreign investments are in refining and distribution for the local markets, thus mainly market-seeking. The efficiency-seeking motive is also present among the top investors, though its importance is much smaller as compared to the market-seeking motive: the electronics firm, Videoton acquired local companies in Bulgaria and Ukraine in order to transfer its labour-intensive activities to these countries with substantially lower wages compared to Hungary.[7] The reduction of costs contributes significantly to the competitiveness of the company. Finally, the strategic-asset or knowledge-seeking motive also drives some outward investment by Hungarian firms such as Gedeon Richter, the pharmaceutical company that ranks second on our list.[8]
- **Concentration of the total foreign assets.** The company in the first position, MOL Group, held almost 93% of total foreign assets of the top 20. This is larger than its share in 2009 (89%) or in 2010 (91%), and indicates an increase in the level of concentration among the top 20. Similarly, the leading two companies on our list, MOL Group and Gedeon Richter, held more than 96% of the total foreign assets of the top 20, also a slight increase as compared to previous years. Even the share of the top 3 (adding Videoton, 98%) showed an increase over previous years. The increase in the level of concentration is

[7] Wage costs were 2.6 times higher in Hungary than in Bulgaria, while for the Hungarian-Ukrainian comparison this ratio was almost 3. See http://www.iwkoeln.de/de/infodienste/iwd/archiv/beitrag/industrielle-arbeitskosten-gute-arbeit-kostet-91863

[8] For details see the EMGP report of Hungary for 2011, available at http://ccsi.columbia.edu/files/2013/10/Hungary_2013.pdf

mainly due to a process of "polarization": an increase in the top companies' assets and a decrease in smaller firms' assets in the top 20, which has been an ongoing process since the first report was published in 2009.

Box 1 Waberer's

The company has been amongst the leading foreign investors since the inception of the Hungarian EMGP project in 2011. It is a transportation and logistics service provider, and is the sixth largest company in its sector in Europe. Its sales amounted to 431 million EUR with 1659 employees and with 848 trucks in 2013. In 2014, at least a further 600 trucks and 700 employees were added due to two new investments in Hungary with the combined value of more than 100 million EUR. For 2014, more than 500 million EUR in sales are expected.

The company's state-owned predecessor was established in 1948, and was privatised and restructured by the present owner, György Waberer and his business associates, in 1994. Its domestic and international expansion has been based mainly on acquisitions. The peak years for domestic acquisitions were in 1999 and in 2007, and in 2005 for international ones. In 2013, it had 21 franchise partners and its main foreign markets were Germany (21.6% of exports), UK (18.7%) and France (18.6%). Amongst its key buyers were multinational companies, such as Electrolux, Samsung, IKEA, Audi, Unilever and Bosch.

In 2011, the Mid Europa Partners, an investment fund, acquired 49.05% of the shares, which resulted in a 12 million EUR increase in the base capital of the firm. The financial investor "gives" five years to the firm, after which its shares may be introduced on the stock exchange.

Waberer's foreign affiliates can be found in Slovakia (two subsidiaries), Romania (three subsidiaries), Poland, Germany (two subsidiaries) and Spain. In 2014, subsidiaries were established in France, the UK, the Netherlands and Italy. There will be a substantial increase in the number of employees in the German and Polish subsidiaries. The fleets operate mainly in the destination market, but Europe as a whole is considered to be the main market. At the same time, the fleet of the Romanian subsidiaries will be gradually transferred to Hungary, though the subsidiaries will not be closed down. In spite of these developments, the company's main aim is to grow quickly in the East-Central European region through acquisitions.
Sources: balance sheets of the company, www.waberers.com,
http://www.autoszektor.hu/hu/content/waberer-500-uj-kamion-600-uj-dolgozo#sthash.XpRm6mEt.dpuf ;
http://hvg.hu/kkv/20140127_Megszunteti_roman_kamionflottajat_a_Waber ;
http://www.mfor.hu/cikkek/Uj_tulajdonos_a_Wabererben.html
and ICEG-CCSI survey of Hungarian multinationals, 2015.

- **Size.** In size, i.e. in terms of foreign assets, Hungarian multinationals clearly lag behind some of their emerging-market counterparts.[9] Only the largest foreign investor, MOL Group, had more than US$ 18 billion in foreign assets in 2013, according to which it would rank 26th on the aforementioned UNCTAD list. MOL's foreign employment of more than 26,000 workers would put it in 35th place on the same list. There was an 8.8% increase in foreign assets and a more than 4% decrease in foreign employment. These numbers are the result of various developments. On the one hand, there was a slight decrease in foreign assets due to various factors: revaluations of the Slovakian and other European Union affiliates (for example, the Italian subsidiary in Mantova was transformed from an oil refinery into a logistics centre); the sale of small affiliates in management and research in Cyprus and

[9] See e.g. the UNCTAD list of the top 100 non-financial TNCs from developing countries in UNCTAD, World Investment Report, 2014 (New York and Geneva: United Nations, 2014), Annex Table 29, available at http://unctad.org/en/Pages/DIAE/World%20Investment%20Report/Annex-Tables.aspx

Russia; impairment due to unsuccessful exploratory research in Kurdistan, Oman, Syria and Croatia; and negative impacts on assets in Croatia due to unfavourable changes in the business environment. On the other hand, there was an increase in the ownership share in a number of affiliates inside (for example in Croatia and Slovakia) and outside Europe and significant acquisitions, as can be seen in Annex Table 4. Furthermore, INA, MOL's Croatian affiliate acquired 50% of the Croatian company Croplin. Besides MOL Group, Gedeon Richter, the pharmaceutical company, also had substantial foreign employment of close to 4,000; Videoton in electronics employed more than 1,200 abroad and Waberer Group in transport employed almost 700. (See Box 1 on Waberer's.)

- **Changes in corporate players compared to 2011.** There are five newcomers on the list: Vajda-Papír, Solvo Biotechnology, Balabit, Pureco and AAM replaced PannErgy, Kürt, IKR, Laurel, Aquaprofit in 2013. Although the three largest companies among the top 20 held the same spots in both years, other companies changed places: for example large movements occurred on our list for Mediso (up to 7th in 2013 from 11th in 2011), KÉSZ (up to 4th from 7th), and Jász-Plasztik (down from 6th to 9th). These are mainly due to company-level restructuring and changes (selling and buying affiliates). However, in the case of Jász-Plasztik, there were only minor changes in foreign assets (up from 38 US$ million in 2011 to 40 US$ million in 2013). Its new rank is thus due only to movements of other companies in the top 20.

- **Principal industries.** The companies on the list are from 15 different industries. In terms of foreign assets, the industry of the leading company, MOL Group, accounts for almost 93% of the total assets in Table 1 above. MOL Group's activities include multiple industries: oil and gas exploration, production, refining and retail. Pharmaceuticals come next, represented by Gedeon Richter. In terms of the number of firms, construction, transportation-storage, IT services, food products and other research and experimental development in natural sciences and engineering (two companies for each of these three industries) are the leading industries. In the group as a whole services dominate: there are 11 service providers, eight manufacturers and one conglomerate, MOL Group, that invests in multiple sectors, including the primary sector.

- **Foreign affiliates and geographic distribution.** The 20 companies on the list have 169 affiliates in 41 countries, most of them in Europe (Annex Figure 2). The first MNE on our list, MOL Group, has the largest number of affiliates, 64 in 25 countries. Although most of these affiliates are in Central and Western Europe, MOL Group also has subsidiaries in more distant locations such as in Iraq, Oman and Pakistan, with resource-seeking investments in fields in the exploratory stage. There was an increase in the number of MOL-affiliates since the last report due to the aforementioned acquisitions and increases in ownership shares. The second-ranked Gedeon Richter has the second largest number of foreign affiliates, 33 in 24 countries, in Eastern and Western Europe and in Central Asia. Masterplast, which produces building materials, comes third and has 15 affiliates in 13 countries, also mainly in Central and Western Europe.

Affiliates of the top 20 are concentrated in "Other Europe", and inside that, in Central Europe (Annex Figure 2). This may be explained by reference to a number of factors, among which the geographic, economic and cultural closeness of these countries, as well as inherited economic, infrastructure and personal ties from the Council for Mutual Economic Assistance (CMEA) period are of special importance. The exceptions to the rule are Videoton, KÉSZ, Masterplast and SMP, for which a substantial share of affiliates is located in Eastern Europe and Central Asia (with which Hungary also shares a CMEA heritage), and for MPF Holding, for which East Asia and the Pacific host half of the affiliates.

As far as the industries of the top 20 are concerned, they are similarly concentrated in "Other Europe", and inside that, in Central and Western Europe (Annex Figure 3). Oil and gas exploration, production, refining, and retail (MOL Group) are also to be found in Eastern Europe and Central Asia and in the Middle East and North Africa. Other industries that are slightly more "spread out" are the manufacturing of basic pharmaceutical products (Gedeon Richter); manufacture of electrical equipment; transportation and storage; construction; manufacturing of building materials; information and communication, and professional, scientific and engineering services with affiliates mainly in Eastern Europe and Central Asia in addition to Other Europe" (See Annex Table 2).

- **Ownership and public status.** Although none of the companies on the list is a majority state-owned enterprise, the state does own a share of both of the top two firms in the ranking. In MOL Group, the state's ownership of shares in the company grew to 24.70% in 2013;[10] the state also owns a special "B" share in that company that gives it special voting rights.[11] In Gedeon Richter, which was privatized through the stock exchange, the state has a 25.27% stake.[12] Of the 20 companies ranked, the majority (16 out of 20) are unlisted. Of those four that are listed, all are listed on the Budapest Stock Exchange Ltd. Masterplast and Synergon are listed on the Budapest Stock Exchange only, while two companies – MOL Group and Gedeon Richter, the top two firms on the list, are also listed on foreign stock exchanges: MOL Group on the Luxembourg Stock Exchange and the Warsaw Stock Exchange, and Gedeon Richter on the Luxembourg Stock Exchange (Annex Table 3). Cross listings are thus characteristic for the top two companies and can be explained by the

[10] See the ownership structure as of 30 September 2014 at http://ir.mol.hu/en/about-mol/ownershipbrstructure/

[11] MOL shareholders own registered A series ordinary shares with a par value of HUF 1,000 each, and there is one registered B series preferred share with a par value of HUF 1,000 with special preferential rights attached to it. This B share entitles the Hungarian state, i.e. the Hungarian government to veto certain strategic decisions, including ownership changes in the company. See http://www.mol.hu/annualreport2012/mobil/corporate-governance/corporate-and-shareholder-information

[12] See the ownership structure as of 31 December 2013 at http://www.richter.hu/en-US/investors/company-reports/Company%20report/Richter-Gedeon-Annual-Report-2013-END.pdf, p. 8

small size of the Budapest Stock Exchange and the European (Gedeon Richter) and global (MOL Group) presence of the two firms. The Warsaw Stock Exchange is the biggest stock market in the Central and Eastern European countries, while Luxemburg is one of the hubs of Western European finance.[13]

- **Location of head offices.** Eleven companies have their head offices in Budapest, which is the capital city and the economic and cultural center of the country and the only city in Hungary with substantial population (1.75 million without the agglomeration; the next largest city, Debrecen has a resident population of 203,000).[14] The rest are concentrated in a few other counties, predominantly in Western and Central Hungary. In the western part of Hungary, Székesfehérvár and nearby Sárszentmihály are home to two companies (Videoton and Masterplast, respectively); while Kecskemét in Central Hungary is home to two companies: Fornetti and KÉSZ (Annex Figure 4).

- **Nationality and gender of management.** Hungarian CEOs lead all of the 20 companies. Foreign board members were present only in four companies, MOL Group, Gedeon Richter, Masterplast and AAM, though their share is relatively low (30%, 18%, 20% and 20%, respectively). Furthermore, managers reporting directly to the CEOs are predominantly Hungarians, as are members of the supervisory boards of the top 20 companies. In terms of gender, there are six companies with women on the board of directors or in senior management. In three companies, their share is negligible, while in the other three, women represent 50% of the board of directors and senior management.

- **Official languages.** The official language of all the companies on the list is Hungarian. There are five companies (MOL, Gedeon Richter, Mediso, Solvo Biotechnology and Balabit) for which English is indicated as a second official language. The reason for that may be the high level of internationalization (either through foreign direct investments and/or through exports) of these companies. Mediso, Solvo Biotechnology and Balabit for example have sold their products in a high number of countries and provide maintenance and other after sale services. As a result, English can be considered as a "natural" working language for them. Furthermore, Solvo Biotechnology carries out R&D activities and is highly integrated in world science in its field (transporter assay services and products), the working language of which is English.

- **Transnationality Index (TNI).** The transnationality index (TNI) is calculated by averaging the following three ratios: foreign assets to total assets, foreign sales to total sales and foreign employees to total employees and expressed as a percentage. The average TNI of the top 20 MNEs is 39%, a decrease as

[13] See e.g. the report of the Federation of European Securities Exchanges http://www.fese.eu/_lib/files/EUROPEAN_EXCHANGE_REPORT_2011_FINAL.pdf
[14] See the data of the Hungarian Central Statistical Office for 2014 at http://www.ksh.hu/docs/hun/hnk/hnk_2014.pdf

compared to previous years. However, a few companies still rank relatively high in terms of their TNI (Annex Table 1). MOL has the highest index of 91%, followed by Mediso (medical precision instruments manufacturing, 81%), Arcadom (construction, 75%), MPF Holding (transportation and storage, 60%), Masterplast (building materials, 52%) and Gedeon Richter (pharmaceutical products, 50%). Compared to other countries in the region taking part in the EMGP project (Poland, Slovenia and Turkey), TNIs of Hungarian multinationals are on average higher; while compared to countries of more or less similar size the average TNI of the Hungarian top 20 firms is lower than that of the Israeli (59% in 2011) and Taiwanese (61% in 2009) top 20 firms, while higher than that of the top Chilean (32% in 2011) companies.[15]

- **Timeline of foreign investments.** MOL Group was the first firm among the top 20 to establish a major foreign affiliate, in 1994, in Romania and Ukraine. Gedeon Richter founded its first foreign firm in Russia and Mediso established its own in Poland in 1996. They were followed by Arcadom (Romania) in 1997. Videoton and Masterplast set up their first foreign affiliates in 1999 in Bulgaria and Slovakia respectively, and MPF Holding in Romania in 2000. The affiliates of all the other firms in the ranking were established in the 21st century (see Annex Figure 7 for details).

- **Top mergers and acquisitions (M&As).** The leading investors on our list, MOL Group and Gedeon Richter, were responsible for the five top M&As in the five-year period from 2009 through 2013, which represented more than 90% of the total value of the transactions listed in Annex Table 4. While the value of certain deals is not disclosed, the transaction with the largest known value was Gedeon Richter's purchase of 100 % of the shares of PregLem, s Swiss company, for US$ 463 million. The second largest transaction was MOL Group's purchase at the beginning of 2013 of selected non-operated assets on the UK Continental Shelf. MOL Group acquired 14 licenses in the North Sea, including non-operated equity stakes in the Broom field (29%) as well as the Catcher (20%), Cladhan (33.5%) and Scolty/Crathes (50%) developments and the Sullom Voe Terminal and the Brent Pipeline System. The deal was part of the restructuring of MOL's exploratory activities, similarly to the fifth largest transaction, where MOL acquired 49% of the shares of JSC Karpovskiy Severniy in Kazakstan in 2012. Karpovskiy Severniy JSC is a subsoil use right holder under the contract for exploration of oil, gas and condensate at Karpovskiy Severniy contract area in the Western Kazakhstan region

- **Top greenfield announcements**. While 2011 showed a decline in greenfield projects, the number of such transactions grew again in 2012 and 2013. However, the value of these transactions was still lower than the value of transactions by TriGranit and MOL Group in 2009, which are still on the top of our list (see Annex Table 5). TriGranit realised another large greenfield project in 2013 in Poznan, Poland. Similarly to the company's previous projects, it constructed a multi-use complex in the city center, at the city's railway station. TriGranit's sector of operation (real estate development)

[15] For country details see http://ccsi.columbia.edu/publications/emgp/

explains its choice of the entry mode. However, the transactions of this company are not contained in the relevant data of the Hungarian balance of payments (see Box 3 in the 2010 report[16]). MOL Group realized the second and sixth largest projects over the five-year period, with more than US$ 500 million invested in 2009 and more than US$ 200 million in 2012, both in Croatia. For MOL Group, these greenfield investments are the dominant entry mode for its downstream operations in neighbouring countries. The third largest greenfield project was that of the MVM Group, which takes part in energy developments in Bosnia and Herzegovina.

- **Changes in aggregate assets, sales and employment over 2009-2013.** The foreign assets of the top 20 decreased by 1% between 2009 and 2013, which is smaller compared to their decline in total assets (Table 2). Foreign sales grew over the entire period, though their growth rate was the highest at the beginning of the analysed period. Foreign employment decreased by 24% between 2009 and 2013, with a continuous decrease over the five-year period. However, without the largest foreign investor, MOL Group, these trends are different. If MOL Group were excluded, there would be a much larger fall in foreign assets (-51%) and foreign employment (-64%), and a slight decrease in foreign sales. Thus, as in previous years, MOL Group was responsible for the overwhelming majority of the increase in foreign assets and foreign sales, while its relatively slight decline in foreign employment as compared to the other 19 firms slowed the overall pace of the drop in foreign employees.

  Foreign assets as a percentage of the total assets increased in 2012 and 2013 compared to the previous years. The share of foreign sales in total sales of the top 20 MNEs also continued to increase, rising from 62% in 2009 to 87% in 2012 and in 2013. This can be explained by the shrinking domestic market in the analysed years;[17] however, this trend is not expected to continue due to the higher growth rate of the Hungarian GDP.[18] As far as the ratio of foreign to total employment is concerned, foreign employment gradually became a smaller part of the total employment of the 20 ranked firms: starting at 71% in 2009 it went down to 58% in 2013. Here again, without MOL Group, the share of foreign assets would have been much lower, dropping from 48% in 2009 to 26% in 2013. The share of foreign sales in total would have been lower as well over the five-year period for the top 19 without MOL, fluctuating between 52% and 54%. Similarly, as far as employment is concerned, the share would have been lower without MOL, decreasing from 61% in 2009 to 25% in 2013.

[16] Sass and Kovács, 2011, op. cit., pp. 124-125.
[17] See sectoral data on changes in domestic sales at the website of the Central Statistical Office at http://www.ksh.hu/docs/hun/xstadat/xstadat_eves/i_oia014a.html
[18] See e.g. Eurostat data at http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=teina011&plugin=1

Table 2. Snapshot of the top 20 multinationals, 2009-2013 (US$ million and number)

Variable	2009	2010	2011	2012	2013	% change by, between 2009-2013
Assets						
Foreign	20,528	19,326	18,660	20,226	20,280	*-1%*
Total	28,075	26,425	25,570	26,603	27,060	*-4%*
Share of foreign in total (%)	*73%*	*73%*	*73%*	*76%*	*75%*	
Sales						
Foreign	9,700	18,371	20,755	24,772	25,261	*160%*
Total	15,697	23,875	25,556	28,482	29,052	*85%*
Share of foreign in total (%)	*62%*	*77%*	*81%*	*87%*	*87%*	
Employment						
Foreign	45,088	41,071	36,099	35,590	34,147	*-24%*
Total	63,882	61,314	59,874	58,246	59,181	*-7%*
Share of foreign in total (%)	*71%*	*67%*	*60%*	*61%*	*58%*	

Source: ICEG-CCSI survey of Hungarian multinationals, 2015.

The big picture

The outward FDI stock of Hungary exceeded US$ 39 billion (UNCTAD WIR) at the end of 2013. With this amount, Hungary is still among the **leading outward investor countries** among the new member states of the European Union. In terms of overall OFDI-stock, Hungary is surpassed only by Poland, and in terms of per capita OFDI stock, only by Estonia. Transit FDI[19] still distorts the data as both in 2012 and in 2013 large amounts were transferred through foreign-owned subsidiaries operating in Hungary, which are not deducted from the country and sector composition data of OFDI. Thus the methodological approach used in our report, which is based on company-level data and surveys, may give a clearer picture about the destination country and sector composition of Hungarian outward FDI than the aggregate data.

As far as the **geographical distribution** of Hungarian FDI is concerned, 2013 data show that neighboring and geographically close countries (especially Croatia, Slovakia, Bulgaria, Romania, Russia, and Ukraine) have always had a relatively large, though declining share in outflows. These countries together with the Macedonia, Czech Republic, Poland, Montenegro, Serbia and Slovenia accounted for 28% of the Hungarian outward FDI stock in 2013. (The share of these 12 countries in Hungarian OFDI stock was 56% in 2008 and 43% in 2011. This decline however is due to an increase in the shares of other destinations, as the absolute value of the OFDI stock in these 12 countries slightly increased over time.) Inside Europe, new destination

[19] See http://www.mnb.hu/Root/Dokumentumtar/ENMNB/Statisztika/mnben_statisztikai_idosorok/mnben_BPM6_FDI/BOP_meth_notes_BPM6_EN.pdf for more details. Transit FDI flows are recorded in the balance of payments in FDI and outward FDI, because they fulfil all the relevant criteria for being included in these data, but in reality does not result in lasting direct investments inside and outside of Hungary. Capital in transit includes the use of equity capital investment received by a Hungarian enterprise from a non-resident investor to acquire or establish foreign direct investment company, increase capital or lend abroad using such financing received from a non-resident investor. In 2012, this amounted to EUR 4,310 million (US$ 5,682 million) and in 2013, EUR 530 million (US$ 730.5 million).

countries include Belgium (11% in 2013, while previously negligible[20]) and Luxemburg (9%, with volatile shares previously), Cyprus (7%) and Switzerland (6.5% in 2012, gradually gaining shares from 3.5 % in 2008, and declining to 2 % in 2013). The most important destination country however is still outside Europe: the Dutch Antilles accounted for almost 27% of Hungarian OFDI stock, increasing gradually from 7% in 2008. These target countries and the changes in the values of Hungarian investments in them highlights two important patterns: one is the importance of large transactions in changing the composition of host countries,[21] and the other is the significance of outward investments in tax havens with tax optimization purposes. The increasing share of the Dutch Antilles in inward FDI (9% in 2013) points at a possible round-tripping element in Hungarian FDI flows.

As far as the **sectoral composition** of the stock of outward FDI is concerned, due to significant changes during the 2000s, by 2013 *Other business services* is the leading industry with a 29% share. FDI data also show that Hungarian MNEs were involved in providing *financial and insurance services* (11 % of the total OFDI stock in 2013), *professional, scientific and technical activities* (8%) and *activities of head offices and management consultancy services* (8%). Manufacturing represented 17%, with *Pharmaceuticals* (8.4 % of total) being the most significant, mainly due to the activities of Gedeon Richter, one of the leading companies amongst our top investors. The relatively high share of *Manufacturing of petrol* (3 %) is due to the activities of MOL, our leading top investor. Another of our top 20 companies, Videoton is partly responsible for the relatively high share (3%) of *Electronics*. *Mining and quarrying*'s high share (10%) is also due to the foreign activities of MOL.

Box 2 Indirect OFDI from Hungary

Besides the incumbent, Hungarian-owned and/or –controlled companies, there are important **foreign-owned affiliates** in Hungary, which were used by their multinational parent to invest abroad: thus realizing so-called indirect outward investments.[22] One of the most well-known cases is that of the German Deutsche Telekom, which used its Hungarian affiliate to invest in Macedonia and Montenegro. In 2001, the Macedonian state-owned telecom company was acquired, which was the largest transaction at that time, representing around 75% of the total annual outflow.[23] In 2005, 51.12 % of the shares of the state-owned Telekom Montenegro were sold to the Hungarian MATAV, the subsidiary of Deutsche Telekom.[24] Another important investment is that of the Hungarian Samsung subsidiary, which established a manufacturing company in Slovakia.[25] There are many other such cases, even in recent years. However, according to our estimation, the share of outward FDI of incumbent companies in total OFDI stock has been increasing over indirect OFDI.
Source: ICEG-CCSI survey of Hungarian multinationals, 2015

[20] This increase in the share of Belgium is most probably due to an acquisition of shares in a Belgian Volkswagen affiliate by the Hungarian Audi affiliate with a value of EUR 3 billion. (This information is based on the tax report of the Hungarian Audi affilate.)
[21] As for example the Audi transaction mentioned in the previous footnote or large M&A transactions by the MOL Group and Gedeon Richter, shown amongst the large M&A transactions above.
[22] See e.g. Kálmán Kalotay, "Indirect FDI", 13 Journal of World Investment and Trade 542-555 (2012)
[23] See for more details and for a corruption background connected to the operation of the affiliate: http://www.justice.gov/criminal/fraud/fcpa/cases/magyar-telekom/2011-12-29-information-magyar-telekom.pdf
[24] See e.g. http://www.telekom.me/magyar-telekom-eng.nspx
[25] See the balance sheets of Samsung Electronics Magyar Zrt. http://e-beszamolo.kim.gov.hu/kereses-Display.aspx?b=wMM%2bSbtG1HGsdBAJra6PPg%3d%3d&o=feoEk3a4enAR4eMYtH8vuQ%3d%3d&so=1

As described in the previous EMGP report,[26] there was a considerable change in the **economic policy stance** towards outward FDI when the new conservative government came into power in 2010.[27] The most pronounced change is manifest in the changing country targets of foreign economic relations, which is reflected by the slogan "Opening to the East" (in Hungarian: Keleti nyitás). The main country targets are outside-European Union economies, such as China, Russia, certain CIS-countries, India, countries in Far-East and Middle-East, Africa and South-America.[28]

[26] See http://ccsi.columbia.edu/files/2013/10/Hungary_2013.pdf
[27] For more details see http://ccsi.columbia.edu/files/2014/03/Profiles-Hungary_OFDI_26_Aug_2012_-_FINAL_0.pdf
[28] See e.g. http://www.kkvhaz.hu/cikk/824-a-keleti-nyitas-%E2%80%93-a-reszletek; http://www.hita.hu/hu/keletinyitas or a short analysis in English: Kalan D. (2014) The Who Sow the Wind. PISM Bulletin No. 37, 19 March. http://www.pism.pl/files/?id_plik=16891

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Emerging Markets Global Players Project
This report on Hungarian multinationals was prepared in the framework of the Emerging Markets Global Players (EMGP) project, an international collaborative effort led by the Columbia Center on Sustainable Investment. It brings together researchers on FDI from leading institutions in emerging markets to generate annual reports on the leading multinationals in each participating country. Since 2007, reports have been published on 14 countries: Argentina, Brazil, Chile, China, Hungary, India, Israel, Republic of Korea, Mexico, Poland, Russia, Slovenia, Taiwan and Turkey. For further information, visit http://ccsi.columbia.edu/publications/emgp/.

ICEG European Center
The ICEG European Center is an independent economic research institute based in Budapest that was founded by Dr. Pál Gáspár in 2001. The Center focuses on research, policy advice and the dissemination of its research output through conferences and publications. The main research topics of the Center are: European macroeconomic issues, empirical and policy-oriented research on economic growth, competitiveness, and the role of multinationals and FDI. Another important research area is public economics with particular attention to the analysis of tax systems, healthcare and public administration. Finally, the Center also carries out research on regional economics and regional developments. For a full picture of the Center's activities and publications, visit: http://www.icegec.hu.

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Annex Table 1. Hungary: The top 20 multinationals: Key variables, 2013 (US$ million[a] and number)

Rank by foreign assets	Name	Industry	Assets		Sales		Employment		Transnationality Index (TNI)[b]	Number of foreign affiliates	Number of host countries
			foreign	total	foreign	total	foreign	total			
1	**MOL Group**	Oil and gas exploration, production, refining and retail	18,816	21,467	23,056	24,980	26,507	28,769	91	64	25
2	**Gedeon Richter**	Pharmaceutical products	743	3,314	1,480	1,626	4,299	11,446	50	33	24
3	**Videoton**	Manufacture of electrical equipment	277	557	25	525	712	7,474	21	3	2
4	**KÉSZ**	Construction	100	301	154	274	91	676	34	7	6
5	**Waberer's Holding**	Transportation and storage	67	488	56	496	440	4,200	12	9	5
6	**MPF Holding**	Transportation and storage	55	110	163	186	22	52	60	2	2
7	**Mediso**	Manufacture of medical, precision and optical instruments	43	49	32	41	158	208	81	2	2
8	**Masterplast**	Building materials	41	72	36	112	417	628	52	15	13
9	**Jász-Plasztik**	Plastics production	40	431	120	472	556	3,211	17	2	1
10	**Arcadom**	Construction	39	50	1	2	25	26	75	8	6
11	**Vajda-Papír**	Manufacture of household and sanitary goods and of toilet requisites	25	55	52	102	200	410	48	2	2
12	**Synergon**	IT services	10	56	8	48	45	166	21	1	1
13	**Fornetti**	Food products	7	48	46	70	544	1,320	40	3	2
14	**SMP**	IT services	4	11	18	40	4	20	34	4	4
15	**Solvo Biotechnology**	Research and experimental development on biotechnology	3	9	4	5	2	92	36	1	1
16	**Lambda-Com**	Other research and experimental development on natural sciences and engineering	3	13	1	9	12	70	17	7	7
17	**Matusz-Vad**	Food products	3	11	4	37	40	140	23	2	2
18	**Balabit**	Computer programming activities	2	6	1	10	41	160	25	1	1
19	**Pureco**	Other research and experimental development on natural sciences and engineering	1	4	2	8	4	25	22	4	3
20	**AAM**	Business and other management consultancy activities	1	9	2	11	28	88	20	2	2
Total (average for TNI)			**20,280**	**27,060**	**25,261**	**29,052**	**34,147**	**59,181**	**39**	**169**	**110**

Source: ICEG-CCSI survey of Hungarian multinationals, 2015.[a] The exchange rate used is the IMF rate of December 31, 2013: US$ 1= HUF 216,19. [b] The TNI is calculated as the average of the following three ratios: foreign assets to total assets, foreign sales to total sales, and foreign employment to total employment.

Annex Table 2. Hungary: The top 20 multinationals: Regionality Index[a] (percentages), 2013

Rank	Company	Middle East & North Africa	Sub-Saharan Africa	East Asia & the Pacific	South Asia	Developed Asia-Pacific[b]	Eastern Europe & Central Asia	Other Europe[c]	Latin America & the Caribbean	North America
1	**MOL Group**	10	1		1		13	75		
2	**Gedeon Richter**			6		3	15	70	3	3
3	**Videoton**						33	67		
4	**KÉSZ**						29	71		
5	**Waberer's Holding**							100		
6	**MPF Holding**			50				50		
7	**Mediso**							100		
8	**Masterplast**			7			27	66		
9	**Jász-Plasztik**							100		
10	**Arcadom**			13				87		
11	**Vajda-Papír**							100		
12	**Synergon**							100		
13	**Fornetti**							100		
14	**SMP**						25	75		
15	**Solvo Biotechnology**									100
16	**Lambda-Com**							100		
17	**Matusz-Vad**							100		
18	**Balabit**							100		
19	**Pureco**							100		
20	**AAM**							100		

Source: ICEG-CCSI survey of Hungarian multinationals, 2015.

[a] The Regionality Index is calculated by dividing the number of a firm's foreign affiliates in a particular region of the world by its total number of foreign affiliates and multiplying the result by 100.
[b] Developed Asia-Pacific' stands mainly for Japan, Australia and New Zealand. [c] 'Other Europe' stands roughly for Western and Central Europe.

Annex Table 3. Hungary: The top 20 multinationals: Stock exchange listings, 2013

Rank	Companies	Domestic	Foreign
1	**MOL Group**	Budapest	Luxembourg, Warsaw
2	**Gedeon Richter**	Budapest	Luxembourg
3	**Videoton**	*None*	*None*
4	**KÉSZ**	*None*	*None*
5	**Waberer's Holding**	*None*	*None*
6	**MPF Holding**	None	*None*
7	**Mediso**	None	*None*
8	**Masterplast**	Budapest	*None*
9	**Jász-Plasztik**	*None*	*None*
10	**Arcadom**	*None*	*None*
11	**Vajda-Papír**	*None*	*None*
12	**Synergon**	Budapest	*None*
13	**Fornetti**	*None*	*None*
14	**SMP**	*None*	*None*
15	**Solvo Biotechnology**	*None*	*None*
16	**Lambda-Com**	*None*	*None*
17	**Matusz-Vad**	*None*	*None*
18	**Balabit**	*None*	*None*
19	**Pureco**	*None*	*None*
20	**AAM**	*None*	*None*

Source: ICEG-CCSI survey of Hungarian multinationals, 2015.

Annex Table 4. Hungary: Top 10 outward M&A transactions, 2009-2013 (US$ million)

Date	Acquirer's name	Target name	Target industry	Target economy	% of shares acquired	Value of transaction
10/07/2010	Gedeon Richter	PregLem SA	Pharmaceutical preparations	Switzerland	100.0	462.63
01/01/2013	MOL Group	Wintershall	Oil and gas	UK	14 licences between 20 and 50	375.00
15/05/2009	MOL Group	Pearl Petroleum Company Ltd.	Oil and gas	Iraq	10.0	341.63
12/01/2010	Gedeon Richter	Grünenthal Contraceptives	Pharmaceutical preparations	Germany	100.0	334.28
16/11/2012	MOL Group	JSC Karpovskiy Severniy	Oil and gas	Kazakstan	49	329.55*
04/21/2011	Tisza Cipő Rt.	PV Rentals Ltd.	Rental and leasing services	US	100.0	17.00
05/25/2010	Mai Nap, Reform Newspapers	AGO SAS	Business services	France	100.0	14.11
11/06/2013	GFK Hungária	Sensemetric Web & Social Media Mining GmbH	Business services	Germany	100	n.d.
01/10/2012	MOL Group	Bohemia Realty and Pap Oil Cerpaci Stanice	Oil and gas	Czech Republic	100	n.d.
12/10/2012	Olajterv	I&C Energo	Gas, Oil and chemical industries	Czech Republic	100	n.d.
Total						**1,734.29**

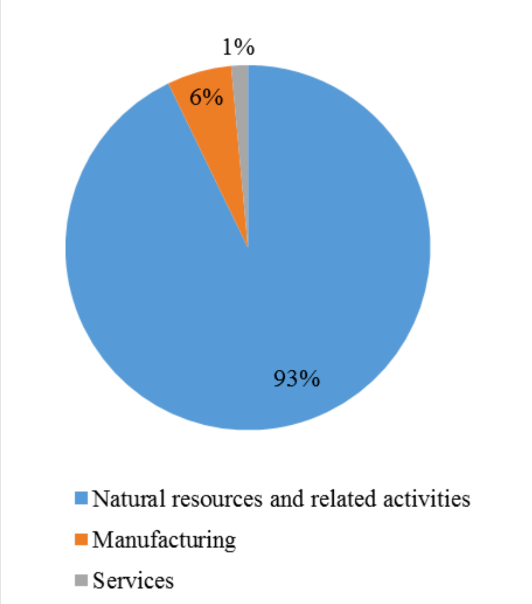
Source: Adapted from Thomson ONE Banker. Thomson Reuters, for transactions before 2011. Transactions after 2011: ICEG EC FDI database. The exchange rate used is the IMF rate of December 30, 2013: US$ 1 = HUF 216.19 and US$ 1 = EUR 0.7255 and the IMF rate of December 28, 2012: US$ 1 = HUF 220.93 and US$ 1 = EUR 0.7586
http://www.wintershall.com/en/press-news/detail/news/wintershall-to-sell-selected-oil-and-gas-assets-in-the-north-sea-to-hungarian-based-mol.html
http://www.portfolio.hu/vallalatok/egeszsegugy/braziliaba_tor_be_a_richter.193020.html
http://acquisition-intl.com/index.php/deal-wire/the-deal-wire/701-mol-acquisition-of-49-of-shares-in-jsc-karpovskiy-severniy
http://newsfeed.i-com.org/2013/06/in-germany-gfk-acquires-sensemetric-web-social-media-mining-gmbh-expands-social-media-insigh.html
*estimation, the value of the transaction is not disclosed

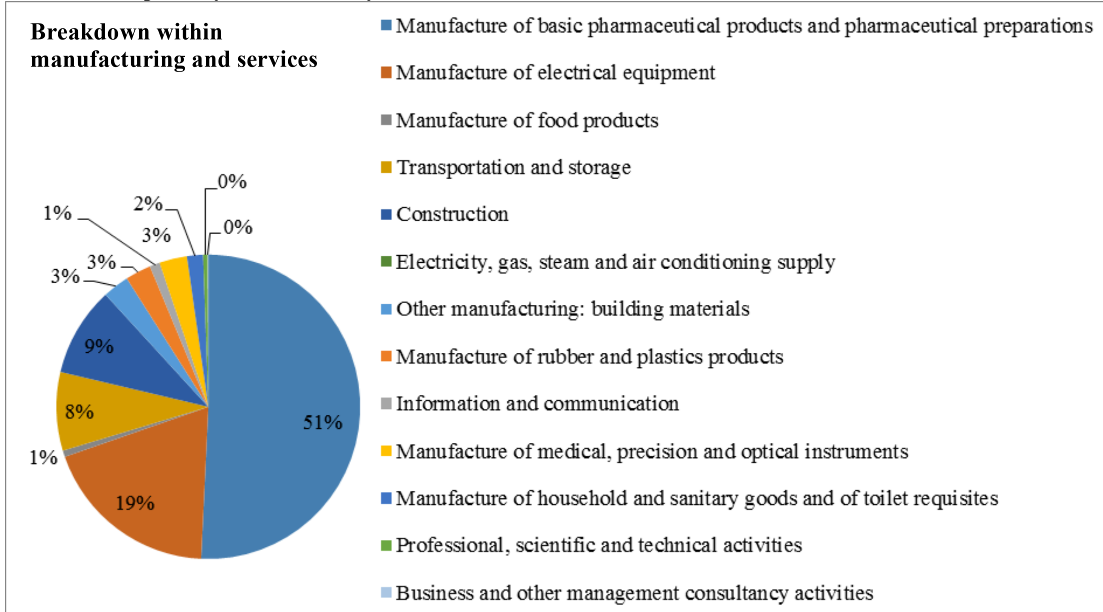
Annex Table 5. Hungary: Top 10 outward greenfield investments, 2009-2013 (US$ million)

Date	Company	Destination	Industry	Value of transaction
Oct-09	TriGranit	Slovakia	Real estate development	2,230.35
Nov-09	MOL Group	Croatia	Coal, oil and natural gas	523.80[a]
Sep-12	MVM Group	Bosnia-Herzegovina	Energy	495.50
Oct-13	TriGranit	Poland	Real estate development	385.00
Feb-11	Quaestor Group	Russia	Construction-Real estate development	270.00
Feb-12	MOL Group	Croatia	Coal, oil and natural gas	212.20
Apr-10	NanGenex	UK	Pharmaceuticals	59.50[a]
Dec-09	Genesis Energy	Spain	Renewable energy	58.30[a]
Dec-10	Gedeon Richter	China	Pharmaceuticals	51.70[a]
Apr-13	Wizzair	Russia	Air transportation	78.80
Total				**4,365.15**

Source: Adapted from fDi Intelligence, a service from the Financial Times Ltd. for the years 2009 and 2010, and ICEG EC FDI database for 2011, 2012 and 2013.
[a] This is an estimated amount.

Annex Figure 1. Hungary: Breakdown of the foreign assets of the top 20, by main industry, 2013

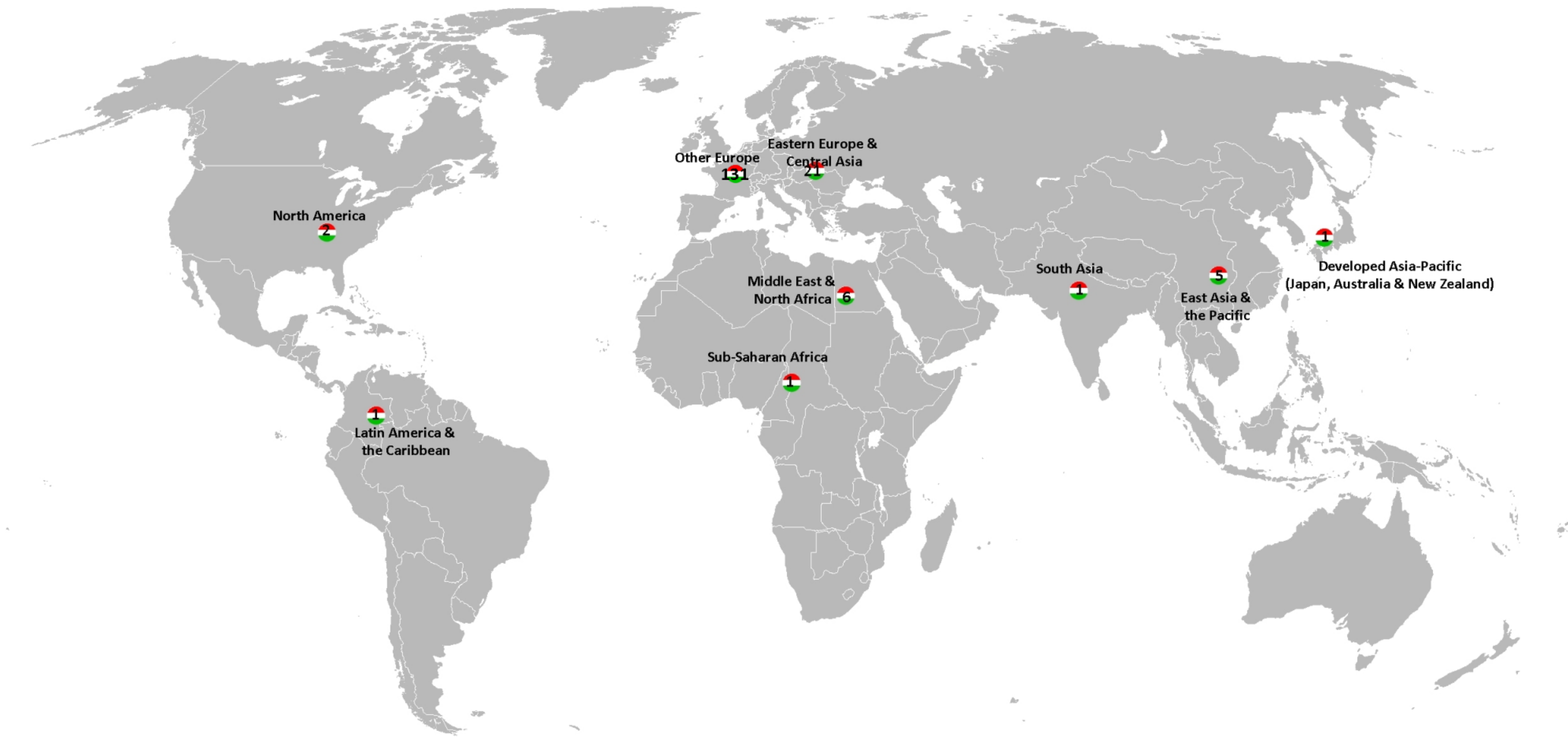




Industry	Foreign assets (USD millions)	Companies
Mining and quarrying, petrochemicals	18,816	MOL Group
Manufacture of basic pharmaceutical products and pharmaceutical preparations	743	Gedeon Richter
Manufacture of electrical equipment	277	Videoton
Manufacture of food products	10	Fornetti, Matusz-Vad
Transportation and storage	122	Waberer's, MPF Holding
Construction	139	KÉSZ, Arcadom
Other manufacturing: building materials	41	Masterplast
Manufacture of rubber and plastics products	40	Jász-Plasztik
Information and communication	16	Synergon, SMP, Balabit
Manufacture of medical, precision and optical instruments	43	Mediso, Medicor Kéziműszer
Manufacture of household and sanitary goods and of toilet requisites	25	Vajda-Papír
Professional, scientific and technical activities	7	Lambda-Com, Pureco, Solvo
Business and other management consultancy activities	1	AAM

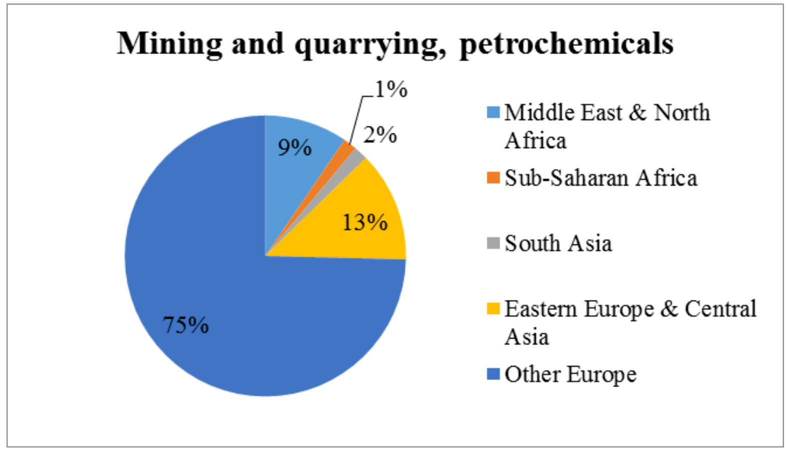
Source: ICEG-CCSI survey of Hungarian multinationals, 2015.

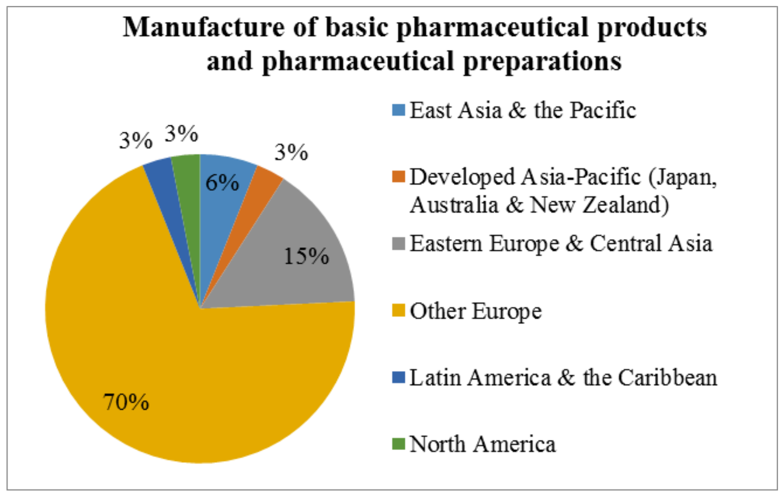
Annex Figure 2. Hungary: Foreign affiliates of the top 20, by region, 2013 (number of affiliates)

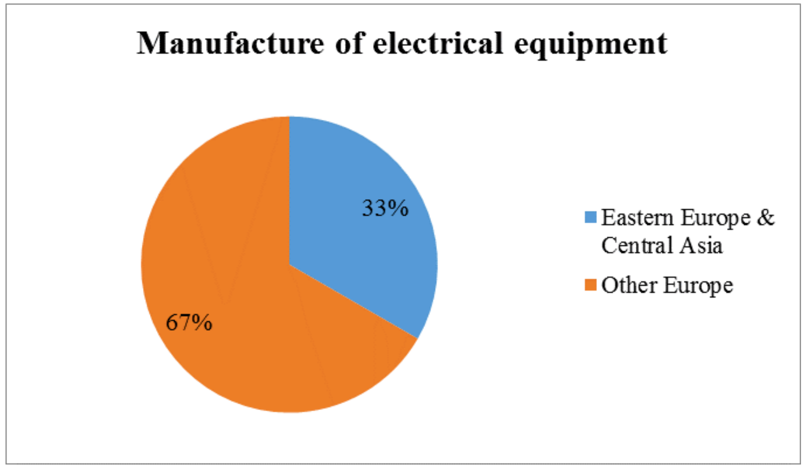


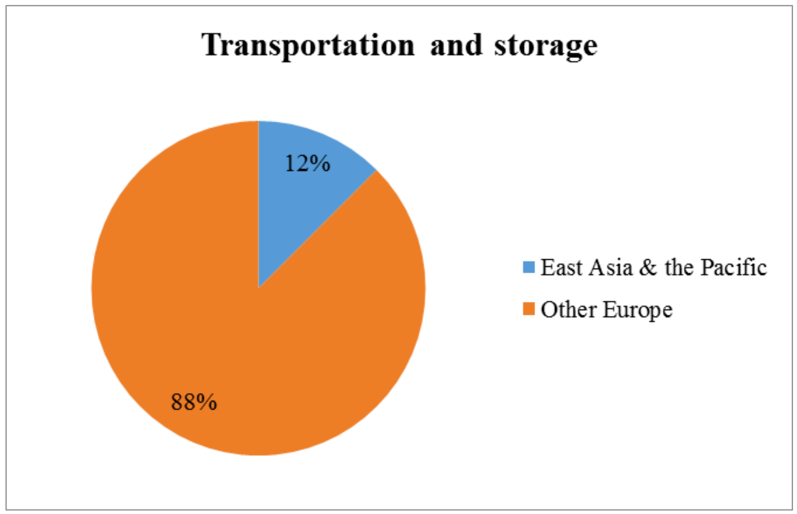
Source: ICEG-CCSI survey of Hungarian multinationals, 2015.

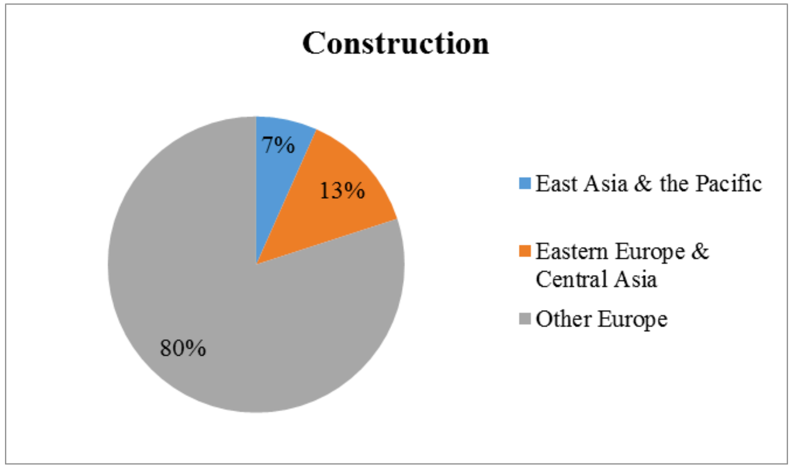
Annex Figure 3. Hungary: Geographic distribution of the assets of the top 20 multinationals, by main industry, 2013

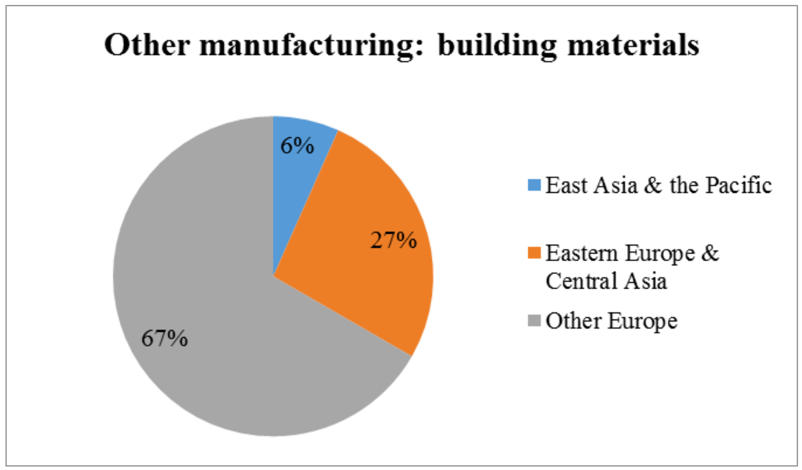


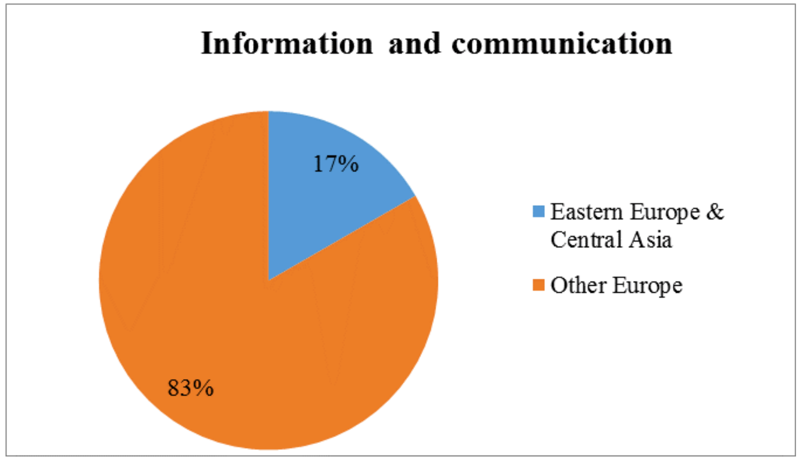


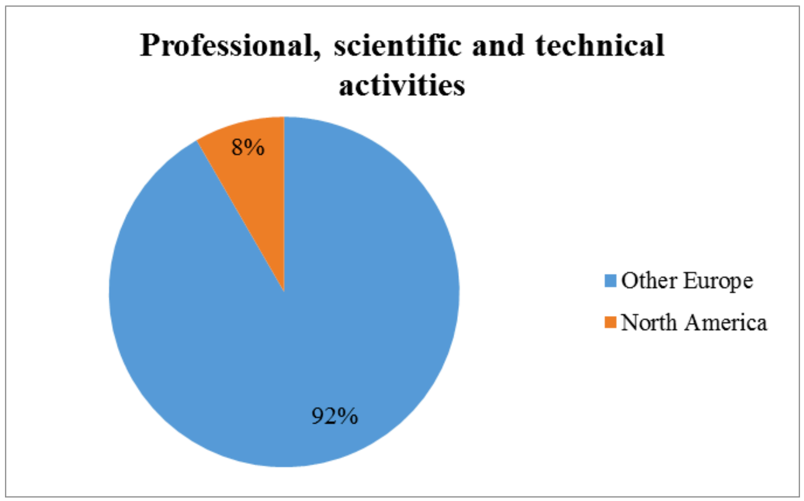

Manufacture of electrical equipment
33%
67%
Eastern Europe & Central Asia
Other Europe


Transportation and storage
12%
88%
East Asia & the Pacific
Other Europe


Construction
7%
13%
80%
East Asia & the Pacific
Eastern Europe & Central Asia
Other Europe


Other manufacturing: building materials
6%
27%
67%
East Asia & the Pacific
Eastern Europe & Central Asia
Other Europe





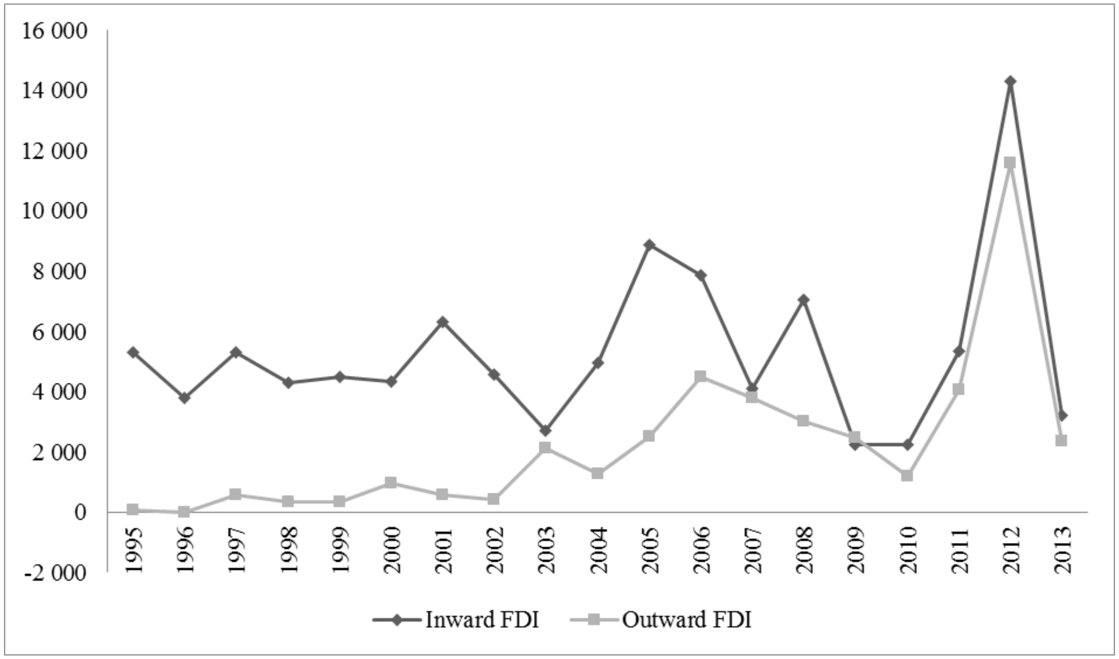
Source: ICEG-CCSI survey of Hungarian multinationals, 2015.
Note: The following activities are entirely (100%) in Other Europe: Manufacture of food products; Manufacture of rubber and plastics products; Manufacture of medical, precision and optical instruments; Manufacture of household and sanitary goods and of toilet requisites; and Business and other management consultancy activities. UN Industry Classification codes are used.

Annex Figure 4. Hungary: Head office locations of the top 20, 2013

Companies	Head office
MOL	Budapest
Richter	Budapest
Videoton	Székesfehérvár
KÉSZ	Kecskemét
Waberer's Holding	Budapest
MPF Holding	Budapest
Mediso	Budapest
Masterplast	Sárszentmihály
Jász-Plasztik	Jászberény
Arcadom	Biatorbágy
Vajda-Papír	Dunaharaszti
Synergon	Budapest
Fornetti	Kecskemét
SMP	Budapest
Solvo Biotechnology	Szeged
Lambda-Com	Budapest
Matusz-Vad	Győr
Balabit	Budapest
Pureco	Budapest
AAM	Budapest

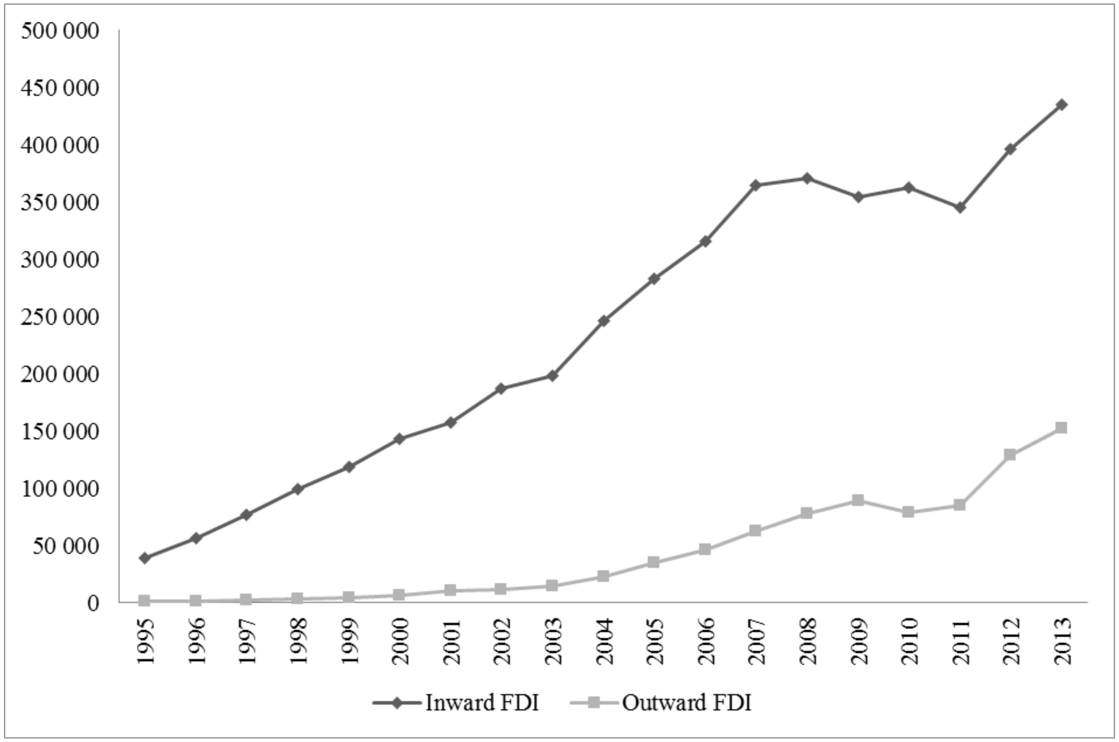
Source: ICEG-CCSI survey of Hungarian multinationals, 2015.

Annex Figure 5. Inward and outward FDI flows to and from Hungary, 1995-2013 (US$ million)



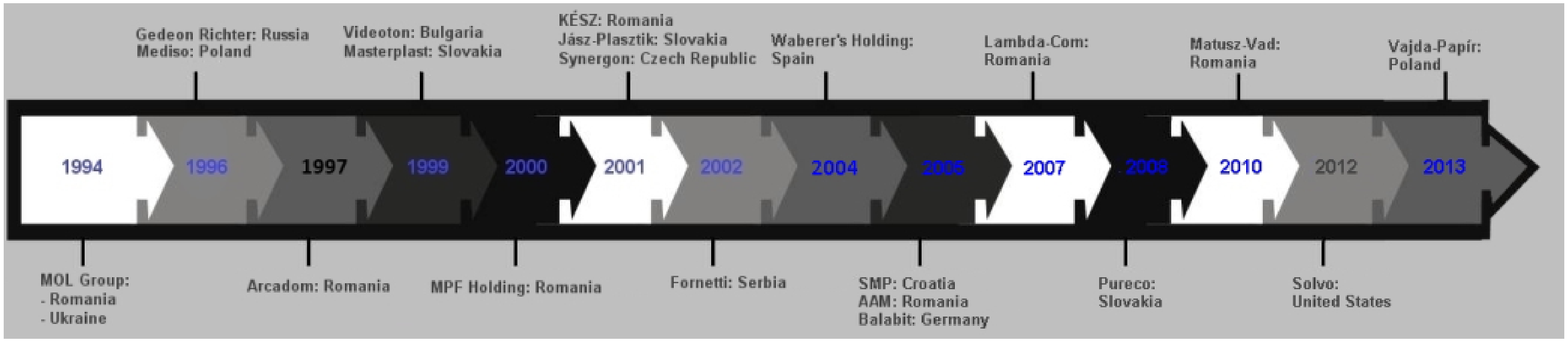
Source: Hungarian National Bank (MNB), data without special purpose entities.

Annex Figure 6. Inward and outward FDI stock to and from Hungary, 1995-2013 (US$ million)



Source: Hungarian National Bank (MNB), data without special purpose entities.

Annex Figure 7. Hungary: Timeline tracking the opening of the first major foreign affiliate for each of the top 20



Source: ICEG-CCSI survey of Hungarian multinationals, 2015