

Republic (6). The average figure for the transnationality index (TNI), a measure of firms' degree of internationalization, is relatively high at 44 compared to many other emerging economies at roughly the same level of GDP per capita (to be discussed later).⁵ With a TNI of 85, the leading company, MOL Group, is amongst the most "transnationalized" firms in the group of emerging multinationals (see Table 2 and Figure 2 in the Annex for details).

Table 1. The top 20^a non-financial Hungarian MNEs by foreign assets^b, 2011 (USD 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)	17,301
2	Gedeon Richter	Pharmaceutical products	Listed (31.35%)	721
3	Videoton	Manufacture of electrical equipment	Unlisted (Nil)	241
4	MPF Holding	Transportation and storage	Unlisted (Nil)	95
5	Waberer's Holding	Transportation and storage	Unlisted (Nil)	56
6	Jász-Plasztik	Plastics production	Unlisted (Nil)	38
7	KÉSZ	Construction	Unlisted (Nil)	37
8	Masterplast	Building materials	Listed (Nil)	34
9	Arcadom	Construction	Unlisted (Nil)	28
10	PannErgy	Electricity, gas, steam and air conditioning supply	Listed (Nil)	27
11	Mediso	Manufacture of medical, precision and optical instruments	Unlisted (Nil)	26
12	IKR	Agricultural products and services	Unlisted (Nil)	18
13	Synergon	IT services	Listed (Nil)	12
14	Laurel	IT services	Unlisted (Nil)	6
15	Fornetti	Food products	Unlisted (Nil)	5
16	SMP	IT services	Unlisted (Nil)	5
17	Lambda-Com	Other research and experimental development on natural sciences and engineering	Unlisted (Nil)	5
18	Matusz-Vad	Food products	Unlisted (Nil)	3
19	Kürt	IT services	Unlisted (Nil)	1
20	Aquaprofit	Engineering activities and related technical consultancy	Unlisted (Nil)	1
Total				18,600

⁵ TNIs for other countries and firms are taken from country studies prepared in the framework of the EMGP project, for details see <http://www.vcc.columbia.edu/content/emerging-market-global-players-project>.

Source: ICEG-VCC survey of Hungarian multinationals, 2013.

^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 31, 2011: USD 1 = HUF 240.68 and USD 1 = EUR 0.77285.

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

Profile of the top 20

- **Key drivers.** For the companies in the survey, the primary motive for investing abroad was to find new markets, especially in geographically close countries, the growth of which was higher in recent years than that of the Hungarian economy.⁶ Thus Hungarian outward investment by most of the ranked MNEs was mainly of a market-seeking nature. The exceptions include resource-seeking investments made by MOL Group and a few efficiency-seeking investments that looked for lower wage costs, of which Videoton’s Bulgarian and Ukrainian investments are examples.⁷ A few faraway investments by MOL Group (e.g. in Cameroon, Iraq, Kazakhstan, Oman, Pakistan or Yemen) when acquiring oil fields are resource-seeking. Yet the majority of MOL Group’s foreign investments are in refining and distribution for the local markets, thus mainly market-seeking. Another exception may be some of the activities of Gedeon Richter. Although its motives for investing abroad were mainly market-seeking, it also made a few strategic-asset or knowledge-seeking investments as well, such as the acquisition of the Swiss PregLem, announced in October 2010, and the German Grünenthal GmbH in November 2010. In the case of the PregLem, its existing and currently researched (in clinical and pre-clinical development) female healthcare products complement Richter’s existing portfolio in this field, while its existing market presence in Western Europe also benefits Richter’s expansion in that market. In the case of the Grünenthal, Richter acquired the worldwide (excluding Latin America) distribution and marketing rights of the German firm’s oral contraceptive portfolio in order to further widen the range of its female healthcare products.
- **Concentration.** 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 compared to previous years. Even the share of the top three (adding Videoton, 98%) showed an increase over previous years. The increase in the level of concentration is mainly due to a process of

⁶ See e.g. p. 11 of the European Commission’s analysis at

http://ec.europa.eu/economy_finance/publications/european_economy/2012/pdf/ee-2012-1_en.pdf

⁷ Wage costs were 2.6 times higher in Hungary than in Bulgaria and were almost three times higher in Hungary than in Ukraine. See <http://www.iwkoeln.de/de/infodienste/iwd/archiv/beitrag/industrielle-arbeitskosten-gute-arbeit-kostet-91863>.

“polarization”: an increase in the top companies’ assets and a decrease in smaller firms’ assets in the top 20.

Box 1. The foreign investments of Videoton

Videoton is a large-sized Hungarian-owned electronic manufacturing services (EMS) provider, which by now is among the largest regional players, supplying European, US and Japanese electronics and automotive companies. It supplies, among others, Bosch, Continental, Delphi, Luk, Suzuki and Visteon in the automotive sector and ABB, Braun, Electrolux, Legrand, Panasonic, Philips, Siemens, Stadler and Schneider Electric in electronics. It is the fourth largest European EMS provider. Its predecessor was established in 1938. It was privatized in 1992 by Hungarian individuals. The company group employs more than 7,300 employees, out of which more than 1,200 work in foreign affiliates. In 2011, its revenues amounted to more than US\$ 380 million. In production, besides electronics and automotive activities, the company carries out related metalworking and plastics production. The firm also provides various services to its buyers, such as engineering, supply chain management, back-end technologies, and logistics. The company’s headquarters are located in Székesfehérvár, but its plants are located in 11 various cities in and outside Hungary. It is a group of at least 20 companies linked to each other through various direct and indirect equity relationships.

Videoton acquired 98% of the shares of a Bulgarian firm in Stara Zagora in 1999. It established a joint venture with a Ukrainian company, Tochpribor, in 2009 in Mukachevo. Moreover, it owns a Bulgarian holding company located in the capital, Sofia. Relevant wages in both countries were and are substantially lower than in Hungary. As a response to the pressure of increasing wages in Hungary, the company transferred the most labour-intensive activities to these foreign affiliates. That is why it can be considered as one of the few examples of efficiency-seeking outward investors in Hungary.

Source: ICEG-VCC survey of Hungarian multinationals, 2013.

- **Size.** In size, Hungarian multinationals clearly lag behind some of their emerging-market counterparts.⁸ Only the largest foreign investor, MOL Group, had more than US\$ 17 billion in foreign assets in 2011 and employed a significant number of people abroad (more than 27,000). However, both the data for assets and employees abroad show a slight decline compared to the previous year, indicating an overall drop in the foreign involvement of MOL Group. These numbers are the result of various developments. On the one hand, there was a decrease in foreign assets due to unsuccessful exploratory research activities in oil and gas fields in India, Pakistan (and Hungary), the discounted value of assets in Syria as a result of increased country risks, and MOL Group’s sale of its 47% share in a small Irish company, which operated in service and repair. On the other hand, there was a slight increase in the ownership share in a number of affiliates (in most of the cases from 47 to 49%, as for example in the case of the Croatian, Italian, Dutch, Slovenian, UK etc. affiliates). 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.
- **Changes in corporate players compared to 2010.** There are four newcomers on the list: PannErgy, Laurel, Lambda-Com, and Aquaprofit, replacing E-Star Alternatív, Abo Holding, Cerbona and Eurobus-Invest in 2010. Although the three largest companies among the top 20 held the same spots in both years,

⁸ See e.g. UNCTAD’s list of the top 100 non-financial TNCs from developing countries at <http://unctad.org/en/Pages/DIAE/World%20Investment%20Report/Annex-Tables.aspx>.

other companies changed places: for example large movements occurred on our list for MPF Holding (up to 4th in 2011 from 13th in 2010), Arcadom (9th in 2011 from 14th in 2010) and Fornetti (down to 15th in 2011 from 9th in 2010). These are mainly due to company-level restructuring and changes (selling and buying affiliates).

- **Principal industries.** The companies on the list are from 14 different industries. In terms of foreign assets, the industries of the leading company, MOL Group, account for almost 93% of the total assets in Table 1 above. MOL Group's activities include oil and gas exploration, production, refining and retail. Pharmaceuticals come next, represented by Gedeon Richter. In terms of the *number* of firms, IT services (four firms) and transportation-storage, construction, and food products (two companies for each of these three industries) are the leading industries. The group as a whole is distributed fairly evenly between the sectors of manufacturing and services: there are nine manufacturers and 11 service providers.

Box 2. Hungarian investments in Croatia

In the total stock of Hungarian outward FDI, Croatia is the leading host country in the East-Central European region with a 15.7% share in 2011. With Croatia having joined the European Union in July 2013, outward FDI in that country has further increased the already large stock of Hungarian investments in the European Union.

In Croatia, FDI started to increase considerably after 1999, with Hungarian companies playing a significant role in that process. In 2012, Hungary was the fourth largest investor country, following Austria, the Netherlands and Germany. Hungary's share in the total inward FDI stock of Croatia was roughly 9%.

Among the top Hungarian investors in Croatia, the largest investor in our list, MOL Group, is also the most important one in Croatia. It acquired shares in the Croatian oil and gas company, INA, and owns a gas station network, Titon. The Hungarian OTP in financial services acquired a bank (OTP Banka Hrvatska), which is the eighth largest one in Croatia. From the top 20, Fornetti in the food sector is also present in Croatia with Fornetti Peciva and with a large network of franchise partners. Tri-Granit in real estate and construction built and manages the Arena Centar, the largest shopping center in the capital, Zagreb. Rabalux in wholesale trade of lighting products owns Rabalux Rasvjeta.

Source: ICEG-VCC survey of Hungarian multinationals, 2013.

- **Foreign affiliates and geographic distribution.** The 20 companies on the list have 137 affiliates in 31 countries, most of them in Europe (Annex Figure 2). The first MNE on our list, MOL Group, has the largest number of affiliates, 34, mainly in Central and Western Europe, but is also present in more distant locations such as in Iraq, Oman and Pakistan, with resource-seeking investments in fields in the exploratory stage. The second-ranked Gedeon Richter has the second largest number of foreign affiliates, 31, in Eastern and Western Europe and in Central Asia. Masterplast, which produces building materials, comes third and has 14 affiliates, also mainly in Central and Western Europe. This number decreased significantly between 2010 and 2011, from 23 to 14. The top two firms also experienced decreases in the number of their affiliates, though the declines were less significant. These drops were due to a consolidation process, when affiliates are merged or even closed down.

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 is the geographic, economic and cultural closeness among these countries, as well as inherited economic ties from the Council for Mutual Economic Assistance (CMEA) period.⁹ Moreover, as the majority of the top 20 companies are of small to medium size, they are likely more inclined to effectuate their foreign expansion, at least in early years of such expansion, in geographically close or neighbouring countries. Another relevant factor may be that numerous state-owned companies were put up for sale in the region in the framework of privatization, which offered good opportunities for those Hungarian companies that had experience with restructuring formerly state-owned companies and adapting them to operate in a gradually developing market environment. The exceptions to the rule are Videoton, IKR and Synergon, for which at least half of each firm’s affiliates are located in Eastern Europe and Central Asia (with which Hungary also shares a CMEA heritage), and MPF Holding, for which East Asia and the Pacific host half of the affiliates. The industry-sector operations abroad of the top 20 are concentrated in Central and Western Europe (see Annex Figure 3). Oil and gas exploration, production, refining, and retail (MOL Group) are also to be found in Eastern Europe and Central Asia (3), the Middle East and North Africa (3). Another industry that is more “spread out” is the manufacturing of basic pharmaceutical products (Gedeon Richter), with affiliates in North America (3), developed Asia Pacific (3) and Eastern Europe and Central Asia (13) (See Annex Table 2).

- **Ownership and status.** Although none of the companies on the list is a majority state-owned enterprise, the state does own a share of each of the top two firms in the ranking. In MOL Group, the state’s ownership of shares in the company grew to 23.82% in 2010;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 31.35% stake. Of the 20 companies ranked, the majority (15 out of 20) are unlisted. Of those five that are listed (i.e., MOL Group, Gedeon Richter, Masterplast, PannErgy, and Synergon), all are listed on the Budapest Stock Exchange Ltd. And two – 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

⁹ CMEA was an economic organization under the leadership of the Soviet Union that comprised the countries of the Eastern Bloc along with a number of socialist states elsewhere in the world during 1949-1991. This organization was the Eastern Bloc’s reply to the formation of the Organisation for European Economic Co-operation (now known as the Organisation for Economic Co-operation and Development) in Western Europe.

¹⁰ See the EMGP report of Hungary for 2010, available at http://www.vcc.columbia.edu/files/vale/documents/EMGP_Hungary_Report_2011.pdf.

¹¹ MOL GROUP shareholders own registered A series of 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 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>.

top two companies and can be explained by the 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, notably among the new member states of the European Union, while Luxemburg is one of the hubs of Western European finance.¹²

- **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. The rest are concentrated in a few other counties, predominantly in the Western part of Hungary. Székesfehérvár and the very closely located Sárszentmihály are home to three companies (Annex Figure 4).
- **Nationality and gender of management.** Hungarian CEOs lead each of the 20 companies. There are foreigners on the board of directors only in the case of the top two companies, MOL Group and Gedeon Richter, though their share is relatively low in both cases (27% and 18%, 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 only four companies with women on the board of directors or in senior management.
- **Official languages.** The official language of all the companies on the list is Hungarian. There are three companies (MOL, Gedeon Richter, and Mediso) for which English is indicated as a second official language.
- **TNI.** The average TNI was 44 (Annex Table 1). While there was a decrease in the average TNI of the top 20 MNEs compared to the previous year, a few of the firms still rank relatively high on the TNI (Annex Table 1). MOL Group has the highest index of 85, followed by Mediso (medical precision instruments manufacturing, 77), Arcadom (construction, 71%), PannErgy (energy, 65) and Laurel (IT services, 64). Compared to other emerging economies of roughly equivalent level of GDP per capital, the average TNI of the top Hungarian 20 firms is higher than those in Brazil (20), Chile (32), Poland (29), and Russia (35), and lower than those in Israel (57).¹³

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

¹² See e.g. the report of the Federation of European Securities Exchanges http://www.fese.eu/_lib/files/EUROPEAN_EXCHANGE_REPORT_2011_FINAL.pdf.

¹³ For country details see <http://www.vcc.columbia.edu/content/emerging-market-global-players-project>.

- **Top mergers and acquisitions (M&As).** The leading investors on our list, MOL Group and Gedeon Richter, were responsible for the most important M&As in the three-year period from 2009 through 2011. The transaction with the largest value was realised by Gedeon Richter in Switzerland when it purchased 100% of PregLem SA's shares for US\$ 463 million. The second largest transaction was realised by MOL GROUP in Iraq, and the third one again by Gedeon Richter. The underlying motives of Gedeon Richter's acquisitions have already been explained, while in the case of MOL, share swapping with Pearl Petroleum meant cash-free access to a 10% share of Dana Gas. In the risky and legally unstable local environment,¹⁴ that mode of entry provided the most secure access to the gas fields in Kurdistan, which thus further widened MOL Group's upstream operations. Other acquisitions were of a much smaller value, each falling below US\$ 20 million (see Annex Table 4).
- **Top greenfield announcements.** There were only a few small greenfield investments in 2011 compared to the previous two years. The largest transaction over the three-year period was realized by TriGránit in 2009. TriGránit's sector of operation (real estate development) explains the entry mode selection. 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 report¹⁵). MOL Group realized the second largest project over the three-year period, with more than half a billion US dollars invested in Croatia in 2009. One of the two 2011 deals was also realized by MOL Group in Romania, where it extended its network of gas and petrol stations. For MOL Group, these greenfield investments are the dominant entry mode for its downstream operations in neighbouring countries (see Annex Table 5).
- **Changes in aggregate assets, sales and employment over 2009-2011.** The foreign assets of the top 20 decreased by 3.4% between 2010 and 2011, and by 9.1% between 2009 and 2011 (Table 2). Foreign sales more than doubled over the three-year period, while between 2010 and 2011 their growth rate amounted to almost 13%. Foreign employment decreased by 20% between 2009 and 2011, with a continuous decrease over the three-year period. However, without the largest foreign investor, MOL Group, these trends are somehow different. If MOL Group were excluded, there would be a relatively substantial increase in foreign assets (10%), while the increase in foreign sales would be less significant (16%), and the decrease in foreign employment more pronounced (-30%). Thus MOL Group's (1) shrinking foreign assets masked the overall growth in the other firms' holdings abroad; (2) significant foreign sales accounted for the overwhelming majority of the overall increase in foreign sales; and (3) relatively slow drop in the number of foreign employees slowed the pace at which foreign employment by the full group of 20 fell.

The ratio of foreign to total assets remained the same for the whole period (73%), while that of foreign to total sales of the top 20 MNEs has continued to

¹⁴ For instance, see MOL's gas projects in Iraq's Kurdistan region at http://www.jamestown.org/single/?no_cache=1&tx_ttnews%5Btt_news%5D=35009&tx_ttnews%5BbackPid%5D=7&cHash=44d6ce205f#.UbV7qdb-kb0.

¹⁵ Sass and Kovács, 2011, op. cit., pp. 124-125.

increase from 62% in 2009 to 77% in 2010 and 81% in 2011. This is certainly a reflection of the shrinking domestic market, which was widespread in the economy with a particularly high decline in construction (close to 25% between 2008 and 2011), mining and quarrying (24%), certain manufacturing sectors (especially textile-clothing-rubber-vehicle production, more than 20%).¹⁶ The domestic use of Hungarian GDP declined by 89.5% in 2009, 99.5% in 2010 and 100.1% in 2011 compared to the previous year. Thus overall the decline in domestic use went down by more than 10% between 2008 and 2011.¹⁷ The decline in GDP in Hungary between 2008 and 2012 was the largest in the Central and Eastern European region.¹⁸

In contrast to the ratio between foreign and total assets, which remained relatively steady over the three-year period, the ratio of foreign to total employment shifted, with foreign employment becoming a smaller part of the total employment of the 20 ranked firms: starting out with 71% in 2009, going down to 67% in 2010 and decreasing to 60% in 2011. Here again, without MOL Group, these shares of foreign assets and employment are significantly lower, 28% and 30%, respectively. A closer look at the company-level data reveals a relatively substantial decline in foreign employment in two companies (Richter Gedeon and Waberer), which was not accompanied by a substantial decrease in foreign assets, and thus may be a result of a company-level restructuring.

Table 2. Snapshot of the top 20 multinationals, 2009-2011 (US\$ million and number)

Variable	2009	2010	2011	% change by 2009-2011
Assets				
Foreign	20,528	19,326	18,660	-9%
Total	28,075	26,425	25,570	-9%
Share of foreign in total (%)	73%	73%	73%	
Sales				
Foreign	9,700	18,371	20,755	113%
Total	15,697	23,875	25,556	63%
Share of foreign in total (%)	62%	77%	81%	
Employment				
Foreign	45,088	41,071	36,099	-20%
Total	63,882	61,314	59,874	-6%
Share of foreign in total (%)	71%	67%	60%	

Source: ICEG-VCC survey of Hungarian multinationals, 2013.

¹⁶ 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

¹⁷ On the basis of the data provided by the Hungarian national accounts, see <http://www.ksh.hu/docs/hun/xftp/idoszaki/monsz/monsz0911.pdf>

¹⁸ See e.g. p. 11 of the European Commission's analysis at http://ec.europa.eu/economy_finance/publications/european_economy/2012/pdf/ee-2012-1_en.pdf

The big picture

The outward FDI stock of Hungary exceeded US\$ 24 billion at the end of 2011. With this amount, Hungary is still among the leading sources of FDI among the new member states of the European Union. Since 2003, annual outflows have amounted to at least US\$ 1 billion. Further, in 2003, 2007, 2009 and 2011, FDI outflows came very close to FDI inflows. During the crisis years, this can be partly attributed to the dominance of the so-called transit FDI in certain quarters. In the case of transit FDI, a multinational company reallocates capital between countries via its operational subsidiaries, which may inflate actual FDI and outward FDI data. According to data provided by the Hungarian National Bank, this happened in Hungary in certain quarters between 2008 and 2012, where transit capital amounted to more than US\$5 billion in the first quarter of 2009 and the third quarter of 2012 (see Annex Figure 5A for the cumulative annual values of transit capital). These flows are recorded in the balance of payments as FDI and outward FDI, because they fulfill all the relevant criteria for being included in these data.¹⁹ Such flows, however, do not result in lasting direct investments inside and outside of Hungary. Consequently, it is difficult to state with certainty what happened in Hungarian outward FDI in recent years. However, the methodological approach used in our report, which is based on company-level data and surveys, may give a clearer picture about Hungarian outward FDI than the aggregate data.

As far as the geographical dispersion of Hungarian foreign investment is concerned, neighboring and geographically close countries (especially Croatia, Slovakia, Bulgaria, Romania, Ukraine, and Serbia) have always hosted a relatively large share of Hungary's outward FDI flows. The pattern is affirmed by our report as well. These six countries held 35.5% of Hungary's outward FDI stock in 2011. However, there are significant changes in the shares of other European countries, in part due to the activities of the top 20 outward investor companies and especially that of Gedeon Richter. Survey data positions Switzerland as the fourth most important destination of Hungarian outward FDI. Partly due to the activities of MOL, Italy is the seventh. Another European country, Cyprus, which was popular mainly for tax optimization purposes, is the fifth largest recipient. One-off large transactions are responsible for the relatively large share of outward investment in Central America and the Republic of Korea. The Netherlands Antilles, an offshore financial center in the Caribbean, is the top destination, with a 26% share, while 1.8% of the outward FDI stock went to the Republic of Korea.

The sectoral composition of the stock of outward FDI was largely affected by the top 20 Hungarian MNEs, especially MOL Group, the largest Hungarian MNE. As of 2011, MOL Group's foreign investments took 19.2% in the outward FDI stock in the mining and quarrying sector, 19.1% in the manufacturing sector, and 8.1% in oil and gas sectors. The company "responsible" for the relatively high share of pharmaceuticals (4.6% of the total outward FDI stock) is also among the top 20 companies: Gedeon Richter. Moreover, it is partly due to the foreign expansion of Videoton that the share of the electronics sector amounted to 3% in the total outward FDI stock in 2011. However, with a share of 58.5% in the 2011 outward FDI stock,

¹⁹ See Chapter 6, from paragraphs 6.8 to 6.35 (especially paragraph 6.34), on funds in transit in the Sixth Edition of *the IMF's Balance of Payments and International Investment Position Manual* at <http://www.imf.org/external/pubs/ft/bop/2007/bopman6.htm>.

the services sectors was the dominant industry. Inside the services sectors, financial services, trade and repair, and business services are the leading industries, with six representative companies on the list of our top 20.

The dominant entry mode of the Hungarian companies is acquisitions, especially through participation in the privatization programs in neighboring countries. This might be due to the competitive advantage Hungarian companies had gained in such transactions through their own previous experiences in privatizing and restructuring formerly state-owned firms. Cases can be found in manufacturing and in the financial services sector. Greenfield investments are more frequent in the real estate, pharmaceuticals and oil and gas sectors.

Our list of the top 20 outward investor companies shows that the concentration in terms of the number of investing companies is relatively high, with a few large companies and large transactions being responsible for the overwhelming majority of outward flows and stock.

Future reports might paint a different picture due to government policies. Since the new conservative government came to power in 2010, the policy environment surrounding outward investment has changed considerably. For one, the government is shifting its regional focus. Fast growing emerging markets like China are joining the Central European region (and particularly the other Visegrad countries of Czech Republic, Poland and Slovakia) as preferred targets. Exemplar policies and government initiatives include the so-called “Opening to the East” program.²⁰ Additionally, the government has been focusing on the internationalization of Hungarian small and medium-sized enterprises (SMEs). Both these new directions of support (Eastern emerging markets and Hungarian SMEs) and the institutional background serving them are described in detail in the new foreign economic strategy of the government.²¹ Furthermore, the institutional background has also changed, because a new government agency with more limited financial means and independence than the previous one was established: the Hungarian Investment and Trade Agency (HITA) replaced Hungarian Investment and Trade Development Agency (ITDH),²² and commenced its operations to manage and support international trade and investment as of January 1, 2011.

²⁰ See e.g. <http://www.budapesttimes.hu/2013/05/25/export-drive-spotlights-east/>.

²¹ See the draft version of the *Foreign Economic Strategy of the Hungarian Government*, available only in Hungarian at http://www.kormany.hu/download/1/d7/30000/kulgazdasagi_strategia.pdf.

²² For more details see Czakó E. and Sass M. (2012). Outward FDI from Hungary and its policy context 2012. *Columbia FDI Profiles*, available at http://www.vcc.columbia.edu/files/vale/documents/Profiles-Hungary_OFDI_26_Aug_2012_-_FINAL_0.pdf.

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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 Vale Columbia Center on Sustainable International 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://www.vcc.columbia.edu/content/emerging-market-global-players-project>.

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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>.

Vale Columbia Center on Sustainable International Investment

The Vale Columbia Center on Sustainable International Investment (VCC), a joint center of Columbia Law School and the Earth Institute at Columbia University, is a leading forum for discussion by scholars, policy makers, development advocates, practitioners, and other stakeholders of issues related to FDI in the global economy, paying special attention to the impact of this investment on sustainable development. The VCC bridges education, scholarship and practice in the field of sustainable investment. Its objectives are to analyze important topical policy-oriented issues related to investment and to develop and disseminate practical approaches and solutions to promote development outcomes. For more information, visit <http://www.vcc.columbia.edu>.

Annex Table 1. Hungary: The top 20 multinationals: Key variables, 2011 (US\$ million^a and number)

Rank by foreign assets	Name	Industry	Assets		Sales		Employment		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	17,301	20,745	18,796	22,201	27,688	31,471	85	34	25
2	Gedeon Richter	Pharmaceutical products	721	2,860	1,131	1,279	3,963	10,773	50	31	18
3	Videoton	Manufacture of electrical equipment	241	424	177	375	1,226	7,287	40	2	1
4	MPF Holding	Transportation and storage	95	141	114	149	17	47	60	2	2
5	Waberer's Holding	Transportation and storage	56	354	32	331	687	3,650	15	8	5
6	Jász-Plasztik	Plastics production	38	357	83	418	901	3,161	20	2	2
7	KÉSZ	Construction	37	203	125	190	45	473	31	6	5
8	Masterplast	Building materials	34	62	52	106	446	637	58	14	14
9	Arcadom	Construction	28	83	59	60	63	77	71	9	7
10	PannErgy	Electricity, gas, steam and air conditioning supply	27	59	78	79	14	27	65	1	1
11	Mediso	Manufacture of medical, precision and optical instruments	26	30	18	27	135	179	77	2	2
12	IKR	Agricultural products and services	18	109	20	143	244	866	19	4	4
13	Synergon	IT services	12	47	16	69	149	324	31	2	2
14	Laurel	IT services	6	8	8	11	28	79	64	1	1
15	Fornetti	Food products	5	40	28	45	426	453	56	3	2
16	SMP	IT services	5	18	12	21	4	20	34	3	3
17	Lambda-Com	Other research and experimental development on natural sciences and engineering	5	9	3	7	9	39	38	7	7
18	Matusz-Vad	Food products	3	9	1	32	20	150	15	1	1
19	Kürt	IT services	1	9	2	4	20	100	28	3	3
20	Aquaprofit	Engineering activities and related technical consultancy	1	3	2	9	14	61	23	2	2
Total (average for TNI)			18,660	25,570	20,757	25,556	36,099	59,874	44	137	31

Source: ICEG-VCC survey of Hungarian multinationals, 2013.

^aThe exchange rate used is the IMF rate of December 31, 2011: USD 1= HUF 240.68.

^bThe 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 2011 (percentage)

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	3					3	94		
2	Gedeon Richter					3	13	81		3
3	Videoton						100			
4	MPF Holding			50				50		
5	Waberer's Holding							100		
6	Jász-Plasztik							100		
7	KÉSZ						33	67		
8	Masterplast			14			22	64		
9	Arcadom			11			22	67		
10	PannErgy							100		
11	Mediso							100		
12	IKR						50	50		
13	Synergon						50	50		
14	Laurel							100		
15	Fornetti						25	75		
16	SMP						33	67		
17	Lambda-Com						14	86		
18	Matusz-Vad							100		
19	Kürt	25						50		25
20	Aquaprofit							100		

Source: ICEG-VCC survey of Hungarian multinationals, 2013.

^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 The largest economies in the "Developed Asia Pacific" region are 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, 2011

Rank	Company	Domestic	Foreign
1	MOL Group	Budapest	Luxembourg, Warsaw
2	Gedeon Richter	Budapest	Luxembourg
3	Videoton	<i>None</i>	<i>None</i>
4	MPF Holding	<i>None</i>	<i>None</i>
5	Waberer's Holding	<i>None</i>	<i>None</i>
6	Jász-Plasztik	<i>None</i>	<i>None</i>
7	KÉSZ	<i>None</i>	<i>None</i>
8	Masterplast	Budapest	<i>None</i>
9	Arcadom	<i>None</i>	<i>None</i>
10	PannErgy	Budapest	<i>None</i>
11	Mediso	<i>None</i>	<i>None</i>
12	IKR	<i>None</i>	<i>None</i>
13	Synergon	Budapest	<i>None</i>
14	Laurel	<i>None</i>	<i>None</i>
15	Fornetti	<i>None</i>	<i>None</i>
16	SMP	<i>None</i>	<i>None</i>
17	Lambda-Com	<i>None</i>	<i>None</i>
18	Matusz-Vad	<i>None</i>	<i>None</i>
19	Kürt	<i>None</i>	<i>None</i>
20	Aquaprofit	<i>None</i>	<i>None</i>

Source: ICEG-VCC survey of Hungarian multinationals, 2013.

Annex Table 4. Hungary: Top 10 outward M&A transactions, 2009-2011 (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
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
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
03/09/2011	Tech In Central & Eastern Europe	Avangate BV	Business services	The Netherlands	n.a.	5.56
11/16/2010	Admiral Electronic Club	Hotel Carrera, Lima	Hotels and motels	Peru	100.0	5.30
11/18/2009	Tech in Central & Eastern	Internet Corp SRL	Miscellaneous publishing	Romania	n.a.	2.99
11/22/2010	Állami Nyomda Nyrt.,	GPV Mail Services SRL ²³	Postal services	Romania	50.0	2.04
02/09/2009	Tech in Central & Eastern	Investor BG AD	Computer facilities management services	Bulgaria	16.77	1.67
Total						2416.07

Source: Adapted from Thomson ONE Banker. Thomson Reuters, except for the MOL GROUP transactions: MOL GROUP Annual Report 2009, p. 64 for the Pearl transaction.

²³ Starting with October 10, 2011, GPV Mail Service SRL's name is Zipper Data SRL. Source: Állami Nyomda, "State Printing House Plc. Interim management report Jan – Sept 2011 results," p. 9, available at: <http://www.allaminyomda.hu/file/1001009>.

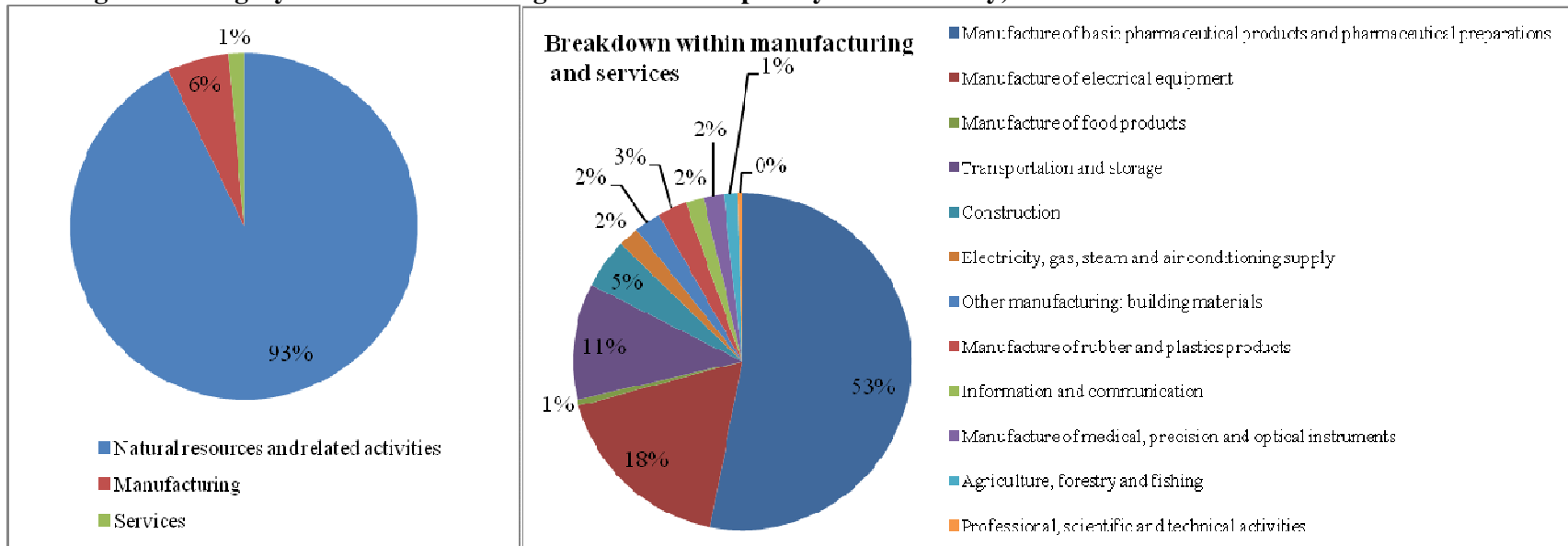
Annex Table 5. Hungary: Top 10 outward greenfield investments, 2009-2011 (US\$ million)

Date	Company	Destination	Industry	Value of transaction
Oct-09	TriGranit	Slovakia	Real estate	2,230.35
Nov-09	MOL Group	Croatia	Coal, oil and natural gas	523.80 ^a
Jan-10	Omninvest	Uzbekistan	Pharmaceuticals	100.00
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
Nov-09	MOL	Pakistan	Coal, oil and natural gas	40.00
Jul-09	Babati és Társa	Vietnam	Food and tobacco	19.60 ^a
Dec-11	MOL	Romania	Coal, oil and natural gas	12.94 ^a
n.d.-11	Gedeon Richter	Russia	Pharmaceuticals	7.70
Total				3,122.69

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.

^aThis is an estimated amount.

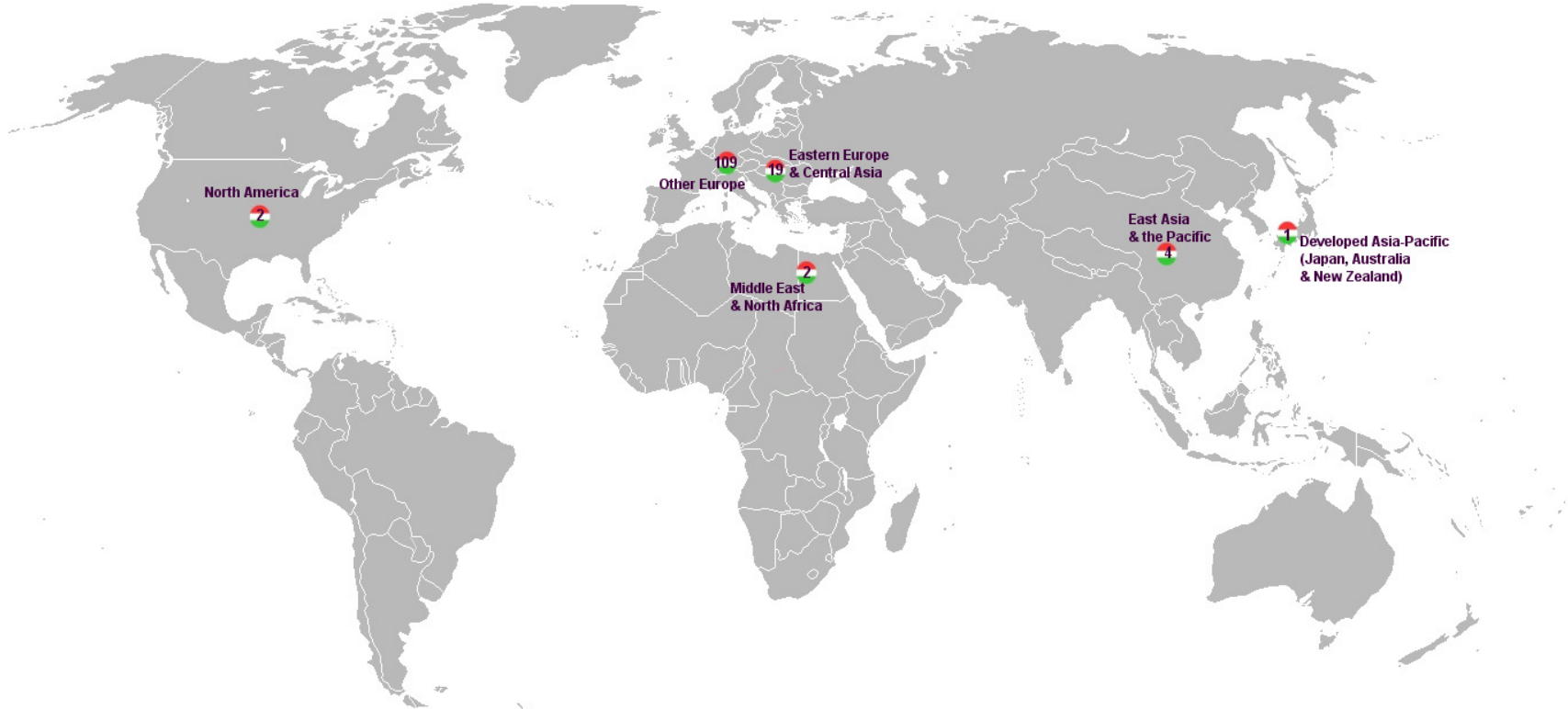
Annex Figure 1. Hungary: Breakdown of foreign assets of the top 20 by main industry, 2011



Industry	Foreign assets (US\$ million)	Companies
Mining and quarrying, petrochemicals	17,301	MOL Group
Manufacture of basic pharmaceutical products and pharmaceutical preparations	721	Gedeon Richter
Manufacture of electrical equipment	241	Videoton
Manufacture of food products	8	Fornetti, Matusz-Vad
Transportation and storage	151	Waberer's, MPF Holding
Construction	65	KÉSZ, Arcadom
Electricity, gas, steam and air conditioning supply	27	PannErgy
Other manufacturing: building materials	34	Masterplast
Manufacture of rubber and plastics products	38	Jász-Plasztik
Information and communication	24	Synergon, Kürt, Laurel, SMP
Manufacture of medical, precision and optical instruments	26	Mediso
Agriculture, forestry and fishing	18	IKR
Professional, scientific and technical activities	6	Aquaprofit, Lambda-Com

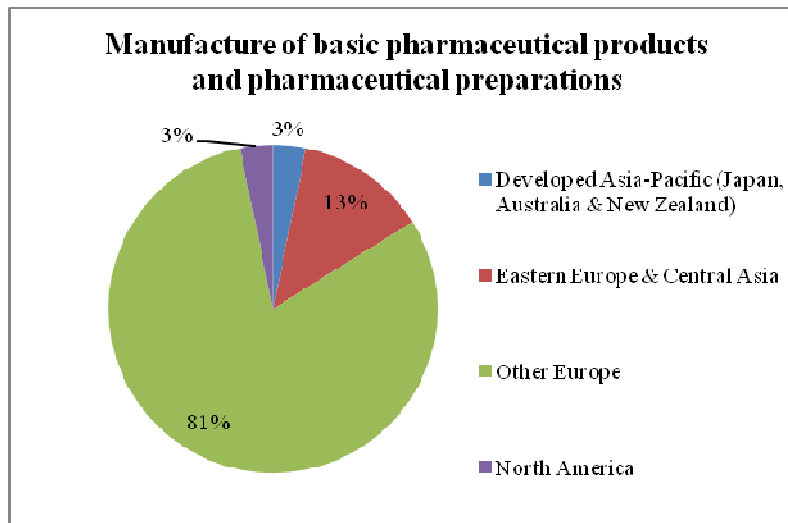
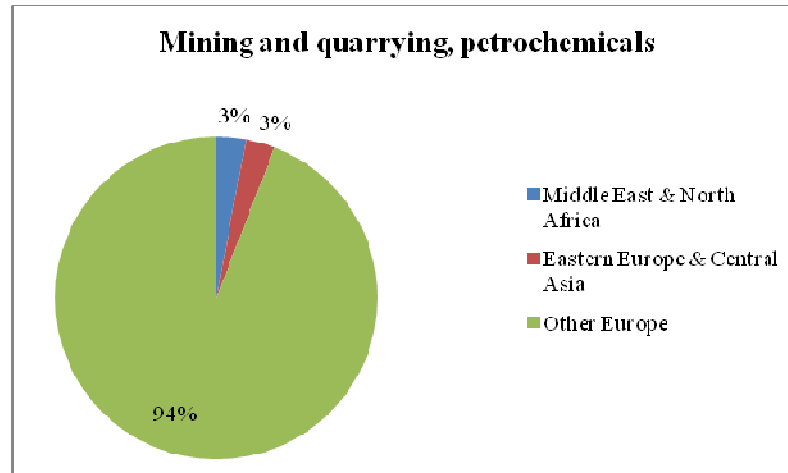
Source: ICEG-VCC survey of Hungarian multinationals, 2013.

Annex Figure 2. Hungary: Foreign affiliates of the top 20 by region, 2011 (number of affiliates)

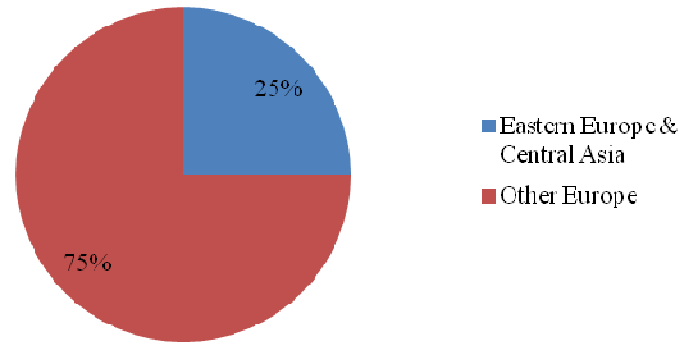


Source: ICEG-VCC survey of Hungarian multinationals, 2013

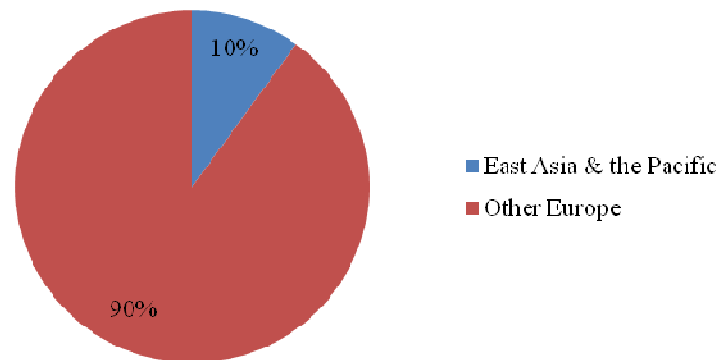
Annex Figure 3. Hungary: Geographic distribution of assets of the top 20 multinationals by main industry, 2011



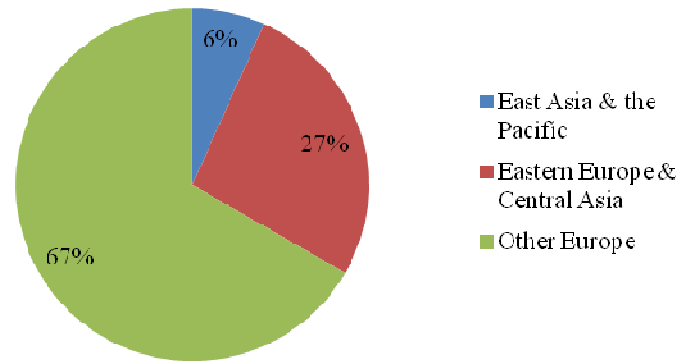
Manufacture of food products



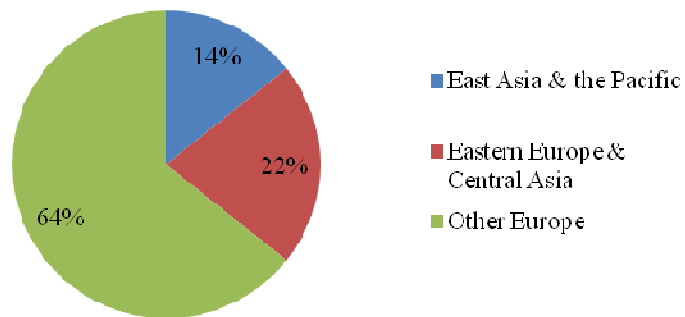
Transportation and storage



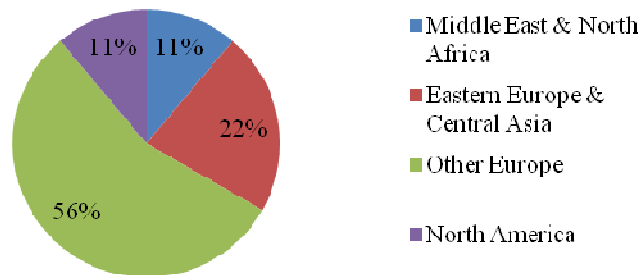
Construction



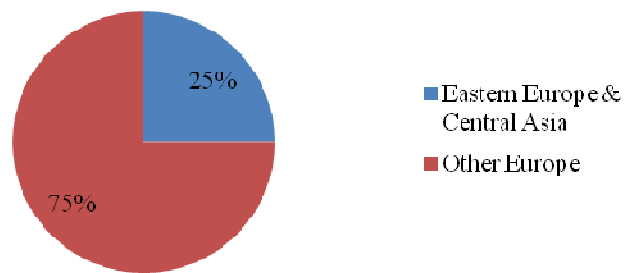
Other manufacturing: building materials



Information and communication



Agriculture, forestry and fishing



Source: ICEG-VCC survey of Hungarian multinationals, 2013.

Note: The following activities are entirely (100%) in Other Europe: manufacture of electrical equipment; electricity, gas, steam and air conditioning supply; manufacture of rubber and plastics products; manufacture of medical, precision and optical instruments; professional, scientific and technical activities. UN Industry Classification codes are used.

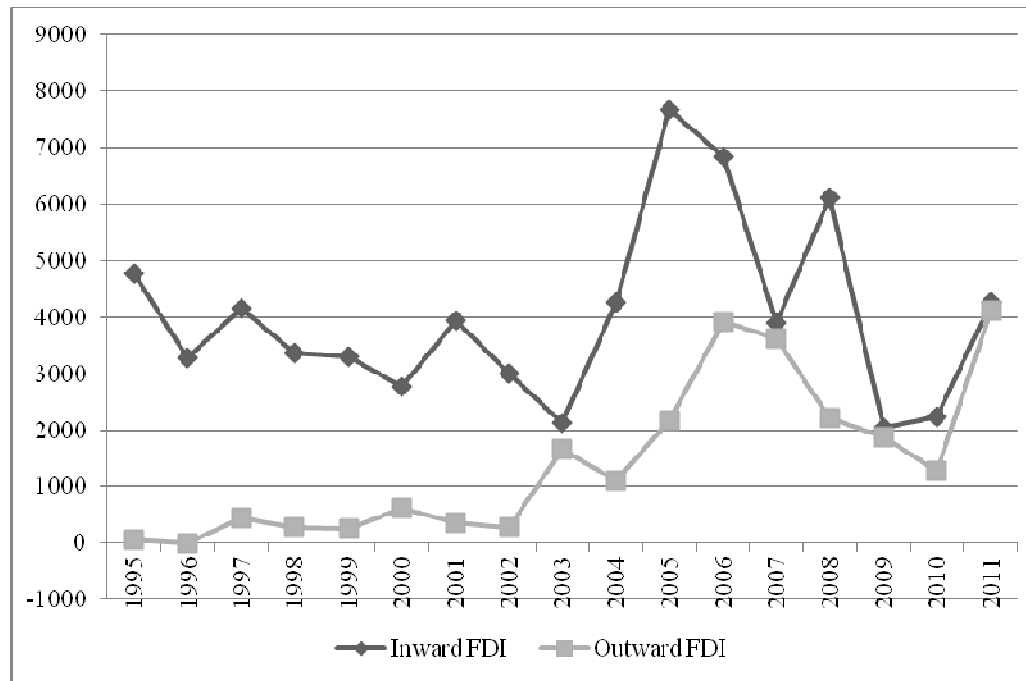
Annex Figure 4. Hungary: Head office locations of the top 20, 2011

Companies	Head office
MOL	Budapest
Richter	Budapest
Videoton	Székesfehérvár
MPF Holding	Budapest
Waberer's Holding	Budapest
Jász-Plasztik	Jászberény
KÉSZ	Kecskemét
Masterplast	Sárszentmihály
Arcadom	Biatorbágy
PannErgy	Budapest
Mediso	Budapest
IKR	Bábolna
Synergon	Budapest
Laurel	Székesfehérvár
Fornetti	Kecskemét
SMP	Budapest
Lambda-Com	Budapest
Matusz-Vad	Győr
Kürt	Budapest
Aquaprofit	Budapest



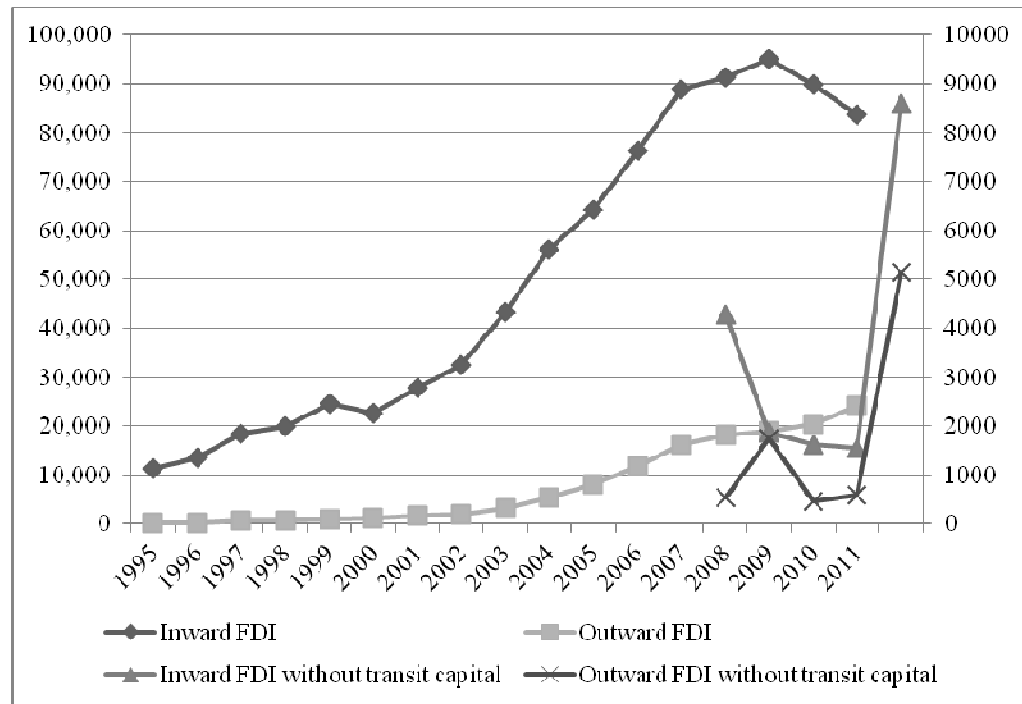
Source: ICEG-VCC survey of Hungarian multinationals, 2013.

Annex Figure 5. FDI inward and outward flows to and from Hungary, 1995-2011 (US\$ million)



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

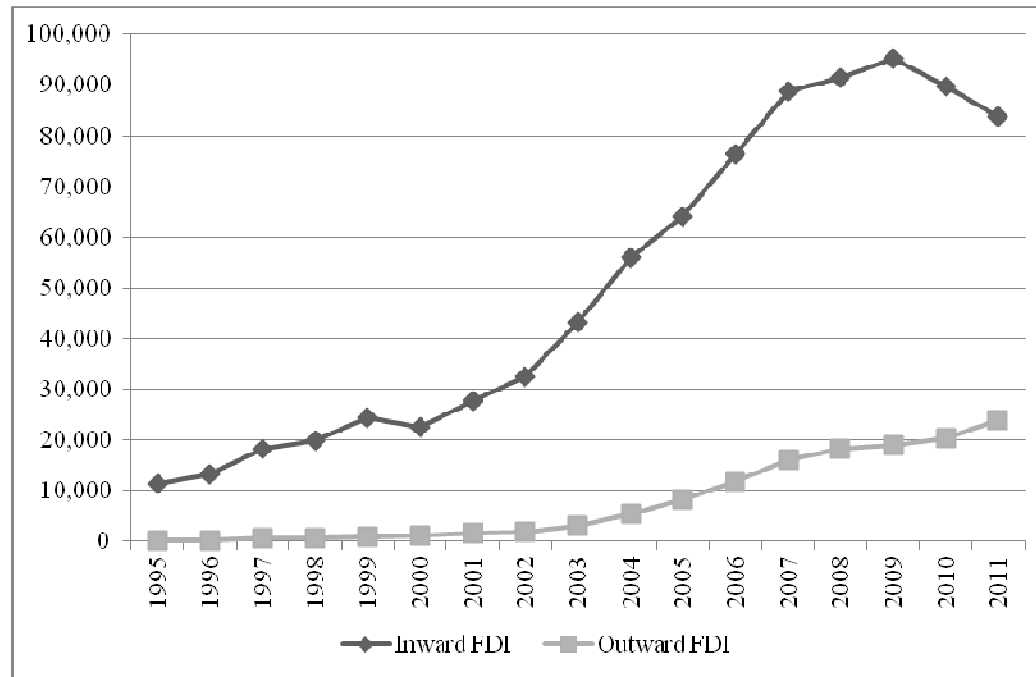
Annex Figure 5A. FDI inward and outward stock to and from Hungary, 1995-2011 (US\$ million)



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

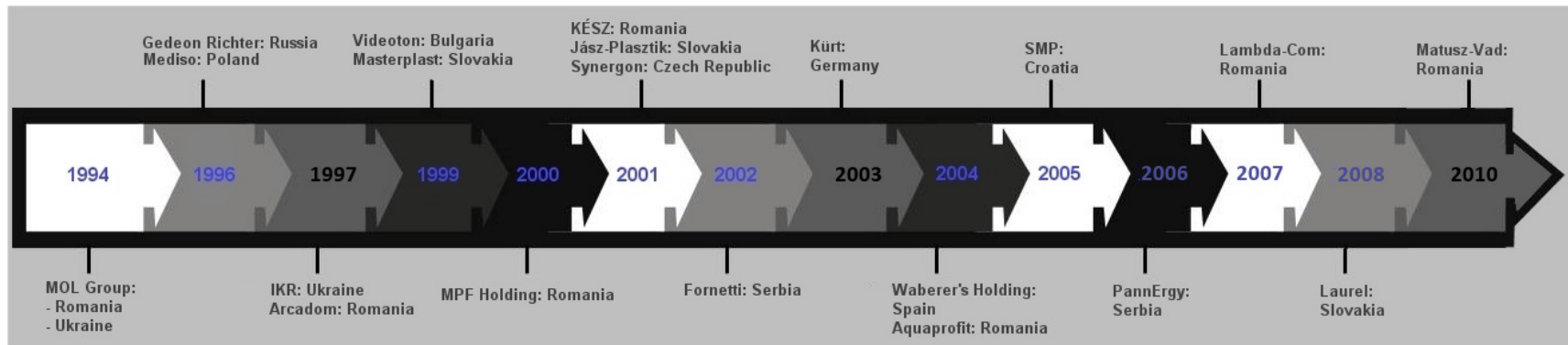
Note: left axis refers to inward FDI as well as outward FDI without special purpose entities; while right axis refers to inward FDI without transit capital and outward FDI without transit capital.

Annex Figure 6. Inward and outward FDI stock to and from Hungary, 1995-2011 (US\$ million)



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

Annex Figure 7. Hungary: Tracking timeline of the first major foreign affiliate for each of the top 20



Source: ICEG-VCC survey of Hungarian multinationals, 2013.