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Outward FDI from Germany and its policy context: update 2011

by
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In 2010, German companies strongly increased their investments in foreign affiliates, with outward foreign direct investment (OFDI) flows having reached their third highest value on record (US$ 105 billion).[1] *Flows were driven by rising exports and growing profits of the German corporate sector. In 2010, the German economy made a robust recovery from the worldwide economic and financial crisis and became a growth engine among European Union (EU) countries. A further increase of OFDI is expected in 2011, as German companies are seeking to strengthen their strategic position in their main markets, although the pre-crisis level of OFDI flows of US$ 171 billion in 2007 will be hard to achieve. The German Government has continued to support the internationalization process of the German corporate sector by expanding its network of bilateral investment treaties and providing financial support and information services.*

Trends and developments

Country-level developments

In 2009, German OFDI stock grew by 7%, to US$ 1,418 billion (annex table 1).[2] Germany ranked among the four largest outward-investing countries worldwide. German companies

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[1] The historical background and the longer-term development of German OFDI and its main determinants were analyzed in a previous *Columbia FDI Profile* (see Ralph Hirdina and Thomas Jost, "German outward FDI and its policy context," *Columbia FDI Profiles,* April 2010, available at: www.vcc.columbia.edu.) This article is an update of that *Profile* and analyzes FDI flows in 2010 and the German FDI stock at the end of 2009.

[2] The German OFDI stock figures that are used for the analysis in this article are consolidated primary and secondary direct investment stock figures. This is a special calculation by the Deutsche Bundesbank that includes FDI stock in the direct investment enterprises of dependent (majority-owned) holding companies outside Germany.

operated 31,283 foreign affiliates that employed 5.8 million workers, with an overall turnover of US$ 2,483 billion.[3]

In 2010, German OFDI flows grew by 34% over those of the crisis year 2009 in which flows stagnated at a level of US$ 78.5 billion, roughly the value of 2008 (annex table 2). At US$ 105 billion in 2010, German OFDI flows reached their third highest value on record. Germany's investments abroad were affected less in the aftermath of the worldwide financial and economic crisis than were the OFDI flows of France and the United Kingdom, which continued to decline in 2010 (annex table 2). The increase in German OFDI in 2010 was also much stronger than the 13% growth of worldwide OFDI flows in 2010.[4]

German companies increased their equity capital investments abroad by US$ 56 billion in 2010. Reinvested earnings in foreign affiliates rose by US$ 30 billion. The improved financial situation of the German corporate sector is reflected in an increase of net credits to their foreign affiliates of US$ 18 billion. In the crisis year 2009, German companies had withdrawn large amounts of funds (US$ 25 billion) from their foreign affiliates.[5] This swing in the lending behavior of German companies largely explains the performance of outflows.

In 2010, the German manufacturing sector invested heavily abroad (US$ 27 billion). The bulk of these investments were made by firms in the motor vehicles, trailers and semi-trailers industry (US$ 17 billion) and the chemical industry (US$ 9 billion).[6] With an outward FDI stock of US$ 87 billion and US$ 109 billion, respectively, at the end of 2009 (annex table 3), these industries are the biggest German investors abroad. The car industry is the industry with the largest share of companies with outward FDI (73%). Moreover, 65% of the German automobile manufacturers are planning higher OFDI in 2011.[7] The German banking and insurance industry, which comprised 37% of total German OFDI stock at the end of 2009, further expanded abroad, by US$ 23 billion in 2010.

More than half of German OFDI flows in 2010 were invested in the European Monetary Union (EMU) countries – a trend that has continued since the start of the EMU in 1999.[8] At the end of 2009, EMU-17 countries hosted 36% and EU-27 countries 57% of total German OFDI stock

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These figures are not comparable with the OFDI stock figures of most other countries, which only take primary FDI into account. Primary German OFDI stock is often lower than consolidated primary and secondary FDI because the FDI stock in the dependent holding companies is lower than the FDI stock of German companies in their foreign affiliates. The reason for this is that the dependent holding companies use not only the capital received from their German investors but also additional capital from other sources to finance their secondary FDI enterprises. FDI stocks are calculated from the book value of the foreign affiliates' own funds.

[3] Deutsche Bundesbank, "Bestandserhebung über Direktinvestitionen," *Statistische Sonderveröffentlichung 10*, April 2011, p. 12.

[4] UNCTAD, *World Investment Report 2011: Non-equity modes of international production and development* (New York and Geneva, United Nations, 2011) p. 187.

[5] Deutsche Bundesbank, "The German balance of payments in the year 2010," *Monthly Report March 2010*, p. 32.

[6] Deutsche Bundesbank, "Direct investment according to the balance of payments statistics (for the reporting period 2007-2010)," April 2011, available at: http://www.bundesbank.de/download/statistik/stat_direktinvestitionen_en.pdf, p. 44f.

[7] Deutscher Industrie –und Handelskammertag (DIHK), *Auslandsinvestitionen in der Industrie: Frühjahr 2011 (Ergebnisse der DIHK-Umfrage bei den Industrie- und Handelskammern)*, available at: dihk.de, p. 3.

[8] Deutsche Bundesbank, 2011, *op. cit.*, p. 14.

(annex table 4). In 2010, the Netherlands (US$ 13.5 billion), France (US$ 11.5 billion) and Belgium (US$ 9 billion) attracted the largest shares of German OFDI flows to the EU,[9] while German companies invested US$ 14 billion in the United States, and another $15 billion in developing emerging markets.[10]

The corporate players

In 2010, 11 German companies (annex table 5) were among the world's top-100 non-financial multinational enterprises (MNEs).[11] They included two of the big-four German energy suppliers, three of the large German car producers as well as two chemical companies. In fact, many of these companies recorded a higher value added abroad than on the domestic market. These companies were also very active in 2010 in expanding their worldwide production and distribution activities via mergers and acquisitions (M&As) (annex table 6) and greenfield FDI (annex table 7).

German companies made fewer (only four) cross-border M&A mega-deals (i.e. of US$ 1 billion or more) in 2010 than in the pre-crisis boom years (annex table 6). The largest was the acquisition of Millipore, a US company, for US$ 6.9 billion by the German pharmaceutical company Merck KGaA. The largest German cross-border M&As were concentrated in Europe (seven out of ten). In contrast, the largest greenfield investments of German companies were concentrated in developing and Commonwealth of Independent States (CIS) economies (nine out of ten) (annex table 7). Several of these investments were made in alternative and renewable energy.

Five German financial MNEs were among the world's top-50 financial MNEs in 2010.[12] During the same year, German banks and insurance companies further expanded abroad. Three of the ten largest German cross-border M&As were made by German banks (annex table 6).

Special developments

A considerable part of the OFDI of the German corporate sector goes hand in hand with export activities. Many studies and surveys show that there is a positive correlation between German exports and OFDI, with exports stimulating OFDI and vice versa.[13] According to a recent survey by the German Industry Federation, German companies stated that their OFDI plans for 2011 are

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[9] In contrast to the stock data (annex table 1), the German balance-of-payments flow data (annex table 2) only show the direct target economy of German OFDI abroad. As part of outward FDI is routed via holding companies and special purpose entities abroad (trans-shipped), the ultimate target economy can differ. This is particularly true for a large part of German investments in the Netherlands and Belgium that are trans-shipped to third countries.

[10] Deutsche Bundesbank, "The German balance of payments in the year 2010," *Monthly Report March 2010*, p. 32.

[11] Information on the world's largest MNEs from UNCTAD's FDI/TNC database, available at: http://www.unctad.org/templates.

[12] UNCTAD, *op. cit*.

[13] See Timo Mitze, Bjorn Alecke and Gerhard Untied, "Trade-FDI linkages in a system of gravity equations for German regional data," *Ruhr Economic Papers*, 84, January 2009, available at: rwi-essen.de; and, Deutsche Bundesbank, "German foreign direct investment (FDI) relationships: recent trends and macroeconomic effects," *Deutsche Bundesbank Monthly Report* (September 2006), pp. 43-58, available at: www.bundesbank.de/download/volkswirtschaft/mba/2006/200609mba_en_foreign.pdf.

mainly market-seeking and related to distribution, sales and marketing activities, confirming similar findings in previous years.[14] Cost-motivation factors have become less important during the past few years as the German economy has gained international price competitiveness on account of relatively low increases in wages and prices in the past decade compared to its main competitors in world markets.

The policy scene

The German Government has built up a dense network of bilateral investment treaties (BITs) with other countries in the past five decades. In 2010, Germany expanded this network by signing two BITs (a first BIT with Iraq and a renegotiated BIT with the Republic of Congo); five BITs (with Bahrain, Libyan Arab Jamahiriya, Jordan, Oman, and Trinidad and Tobago) entered into force.[15] With a total of 139 BITs at the end of 2010, Germany maintained its leading position in the world as regards BITs, ahead of Switzerland (118 BITs) and China (127 BITs).[16]

Germany's BITs with other countries are a prerequisite for the German Government's guarantees to safeguard German OFDI against political risk. About 50% of requests made by German corporations to insure investment projects against political risk are made by small and medium-sized enterprises (SMEs).[17] The German Government favors the insurance of sustainable investments, in line with the commitments in its international investment agreements (IIAs). For instance, investment guarantees are only granted for projects that will have a positive impact on the host economy, such as by contributing to the creation of employment, training of local employees, transfer of knowhow and/or a high share of domestic value-added as well as exports of the host economy. The responsible institutions also evaluate the environmental impact of German FDI abroad by using screening, reviewing and monitoring instruments based on international standards.[18]

In 2010, the German Government granted investment guarantees for 83 FDI projects in 24 developing countries with a total value of US$ 7.7 billion.[19] The most important target countries were China, Russia and Ukraine. There were also many guarantees for investments in Africa (e.g. Ethiopia and Angola) that can contribute to the economic development of these economies even while operating in an unstable political climate or a weak legal framework. Total outstanding guarantees at the end of 2010 amounted to US$ 37.2 billion.[20] This volume is the highest in the world among all public- and private-sector risk insurers.[21]

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[14] Deutscher Industrie- und Handelskammertag, 2011, *op. cit.*
[15] Bundesministerium für Wirtschaft und Technologie, "Übersicht über die bilateralen Investitionsförderungs- und Schutzverträge (IFV) der Bundesrepublik Deutschland," March 21, 2011, available at: www.bmwi.de.
[16] UNCTAD, "Total number of bilateral investment treaties concluded," available at: www.unctad.org/sections/dite_pcbb/docs/bits.
[17] Bundesministerium für Wirtschaft und Technologie (BMWi), *"Bundesregierung stärkt Exporte und Auslandsinvestitionen,"* Pressemitteilung, 24 June 2010, p. 1.
[18] Bundesministerium für Wirtschaft und Technologie (BMWi), *"Investitionsgarantien der Bundesrepublik Deutschland,"* Jahresbericht 2006, available at: bwmi.de, p. 38f.
[19] Bundesministerium für Wirtschaft und Technologie (BMWi), *"Investitionsgarantien der Bundesrepublik Deutschland,"* Jahresbericht 2010, available at: www.bmwi.de, pp. 1-2.
[20] Bundesministerium für Wirtschaft und Technologie (BMWi), *op. cit.*, p. 2.
[21] BMWi, *op. cit.*, p. 11.

Conclusions

A further increase in German OFDI flows can be expected in 2011. The strong performance of the German economy with an expected real GDP growth of 3.1%,[22] rising corporate profits and an easing of financing conditions[23] in combination with the recovery of Germany's main export markets are all factors supporting this forecast. According to the spring 2011 survey of the German Industry Federation on the investment behavior of 7,000 German manufacturing companies in 2011, 43% of the companies are planning to invest abroad, 44% are expecting higher investments abroad than in 2010, while only 9% are planning lower investments. The results of the survey show the highest positive difference on record between the proportion of respondents planning higher investments and those planning lower investments since the start of this annual survey in 1993.[24]

Additional readings

Arnold, Jens M., "Exports versus FDI in German manufacturing: firm performance and participation in international markets," *Review of International Economics*, vol. 18 (2010), pp. 595-606.

Temour, Yama, "German outward FDI and firm performance," *Applied Economics Quarterly*, Vol. 56 (2010), pp. 31-50.

Görg, Holger, "FDI liberalization, firm heterogeneity and foreign ownership: German firm decisions in reforming India," *The Journal of Development Studies*, vol. 46 (2010), pp. 1367-1384.

Hebous, Shafik, Martin Ruf and Alfons Weichenrieder, "The effects of taxation on the location decisions of multinational firms: M&A versus greenfield investments", *CESifo working paper* 3076 (2010).

Useful websites

Deutsche Bundesbank, "Special statistical publication 10: foreign direct investment stock statistics," available at: www.bundesbank.de/download/statistik/stat_soner/statso10_en.pdf.

Deutsche Bundesbank, "Direct investment according to the balance of payments statistics (for the reporting period 2007-2010) ", April 2011, available at: www.bundesbank.de/download/statistik/stat_direktinvestitionen_en.pdf.

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[22] Forecast of Deutsche Bundesbank as of June 10, 2011 (press release available at: www.bundesbank.de).

[23] In a recent study, Buch et al. found out that external financial frictions influence investment strategies of German companies. They restrict OFDI more than exports and large companies more than smaller ones. A lack of internal funds – on the other hand - constrains small companies more than big ones (see Claudia M. Buch, Iris Kesternich, Alexander Lipponer, and Monika Schnitzer, "Exports versus FDI revisited: Does finance matter?" *Deutsche Bundesbank Discussion Paper Series 1*, no. 3, 2010.

[24] Deutscher Industrie- und Handelskammertag, *op. cit*.

www.bundesbank.de/statistik/statistik_zeitreihen.en.php

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The Vale Columbia Center on Sustainable International Investment (VCC), led by Dr. Karl P. Sauvant, is a joint center of Columbia Law School and The Earth Institute at Columbia University. It seeks to be a leader on issues related to foreign direct investment (FDI) in the global economy. VCC focuses on the analysis and teaching of the implications of FDI for public policy and international investment law.

Statistical annex

Annex table 1. Germany: outward FDI stock,[a] 1990-2009[b]

(US$ billion)

Economy	1990	1995	2000	2005	2008	2009
Germany: consolidated primary and secondary outward FDI stock	151.6	268.4	537.8	978.1	1,327.0	1,418.3
Germany: primary outward FDI stock[c]	148.5	258.1	484.0	794.2	1,190.0	1,285.2
Memorandum: comparator economies						
United States	731.8	1,363.8	2,694.0	3,638.0	3,103.7	4,302.9
United Kingdom	229.3	304.9	897.8	1,198.6	1,531.1	1,651.7
France	112.4	204.4	925.8	1,232.2	1,308.2	1,719.7
Japan	201.4	238.5	278.4	386.6	680.3	740.9

Sources: For Germany, Deutsche Bundesbank, "Special statistical publication 10: foreign direct investment stock statistics," available at: www.bundesbank.de. The end- of- year stock data in Euro (since 1999) and in D-Mark (before 1999) were converted into US$-values by using end of year Dollar/Euro and Dollar/D-Mark exchange rates of the IMF (International Monetary Fund, Exchange Rate Archives by Month, available at: www.imf.org/external/np/fin/data/param_rms_mth.aspx). For comparator countries, UNCTAD's FDI/TNC database, available at: http://unctadstat.unctad.org.

[a] Due to differences in statistical recording, data for the selected economies are not fully comparable.

[b] In Germany, the Deutsche Bundesbank is responsible for the statistical recording of FDI flow and stock data. Flow data are published monthly in the German balance-of-payments statistics. Statistical recording follows the international rules of the IMF and the OECD. German FDI stock statistics are based on reports by domestic enterprises and individuals and are published annually with a time lag of about 15 months. The German stock statistics are of a high quality. Detailed methodological notes are published in Deutsche Bundesbank, "Special statistical publication 10: foreign direct investment stock statistics," available at: www.bundesbank.de

[c] For international comparisons, the German primary outward FDI stock should be used (see the explanation in footnote 2 of the text).

Annex table 2. Germany: outward FDI flows, 2001-2010

(US$ billion)

Economy	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
Germany	39.7	19.0	5.9	20.5	75.9	118.8	170.9	77.5	78.5	105.0
Memorandum: comparator economies										
United States	124.9	134.9	129.4	294.9	15.4	224.2	414.0[a]	351.1[a]	268.7[a]	345.6[a]
United Kingdom	58.9	50.3	62.2	91.0	80.8	86.3	318.4	161.1	44.6[b]	24.7[b]
France	86.8	50.4	53.1	56.7	115.0	110.7	164.3	161.1	103.3[c]	84.2[c]
Japan	38.3	32.3	28.8	31.0	45.8	50.3	73.5	128.0	74.7	n.a.

Sources: For Germany, Deutsche Bundesbank, "Zahlungsbilanzstatistik, Statistisches Beiheft 3," April 2011, available at: www.bundesbank.de/volkswirtschaft/zahlungsbilanzstatistik/2011/zahlungsbilanzstatistik042011.pdf. The annual flow data in Euro were converted into US$-values by using annual average Dollar/Euro exchange rates of the IMF (International Monetary Fund, Exchange Rate Archives by Month, available at: www.imf.org/external/np/fin/data/param_rms_mth.aspx). For comparator countries, UNCTAD's FDI/TNC database, available at: http://unctadstat.unctad.org.

[a] U.S. Department of Commerce, Bureau of Economic Analysis, "U.S. international transactions, fourth quarter and year 2010," available at: www.bea.gov.

[b] United Kingdom Office for National Statistics, Statistical Bulletin, "Balance of payments, 4th quarter and annual 2010," available at: www.statistics.gov.uk.

[c] Bank de France, ''La balance de paiements de la France en mars 2011," Statinfo, le 11 mai 2011, available at: www.banque-france.fr.

Annex table 3. Germany: distribution of outward FDI stock, by economic sector and industry,[a] 2000, 2009

(US$ billion)

Sector/industry	2000	2009
All sectors/industries	**537.8**	**1,418.3**
Primary	**4.8**	**15.6**
Agriculture, hunting, forestry, and fishing	0.6	1.4
Mining, quarrying and petroleum	4.2	14.1
Secondary	**165.4**	**383.6**
Food, beverages and tobacco	3.7	8.6
Chemicals and chemical products	49.0	109.1
Rubber and plastic products	5.4	12.5
Other non-metallic mineral products	7.2	22.9
Basic metals	2.3	14.6
Fabricated metal products, except machinery and equipment	4.5	12.1
Machinery and equipment	15.1	34.7
Electrical machinery and apparatus	16.4	23.6
Radio, television and communication equipment	5.7	7.2
Medical, precision and optical instruments	6.5	29.0
Motor vehicles, trailers and semi-trailers	38.8	87.0
Services	**367.6**	**1,019.1**
Electricity, gas, and water supply	3.9	72.2
Trade, repair of motor vehicles, motorcycles and personal and household goods	65.3	172.6
Transport and communication	7.3	58.9
Finance and insurance	215.8	521.5
of which: Monetary intermediation	56.2	91.5
Other monetary intermediation	126.3	325.3
Insurance and pension funding (except compulsory social security)	24.0	72.8
Real estate, renting and business activities	69.2	175.0
of which: Holding companies	41.6	66.4

Source: Deutsche Bundesbank, "Special statistical publication 10: foreign direct investment stock statistics," available at: www.bundesbank.de. The end of year stock data in Euro were converted into US$-values by using end of year Euro-Dollar exchange rates of the IMF (International Monetary Fund, Exchange Rate Archives by Month, available at: www.imf.org/external/np/fin/data/param_rms_mth.aspx).

[a] Figures relate to FDI stock by economic activity of the foreign affiliate in the ultimate host economy (including that made by direct investors themselves as well as by their dependent holding companies abroad on a consolidated basis).

Annex table 4. Germany: geographical distribution of outward FDI stock,[a] 2000, 2009

(US$ billion)

Region/economy	2000	2009
World	**537.8**	**1,418.3**
Developed economies	**479.6**	**1,234.2**
Europe	**262.4**	**907.6**
Austria	17.1	42.2
Belgium	22.1	73.9
Czech Republic	6.7	31.7
France	30.5	66.1
Hungary	6.6	24.5
Ireland	7.6	12.8
Italy	17.4	48.7
Luxembourg	18.5	66.4
Malta	n.a.	36.4
Netherlands	33.7	80.0
Poland	7.3	28.4
Spain	12.5	42.8
Sweden	6.1	23.5
Switzerland	15.8	50.9
United Kingdom	50.1	174.2
EU-27	**n.a.**	**809.0**
EMU-17	**n.a.**	**505.2**
North America	**203.1**	**327.9**
Canada	6.0	15.3
United States	197.1	312.6
Other developed economies	**n.a.**	**n.a.**
Australia	5.0	19.2
Japan	8.9	17.1
Developing economies	**54.9**	**184.3**
Africa	**4.4**	**10.8**
South Africa	2.8	7.2
Asia and Oceania	**17.5**	**120.0**
China	5.2	31.7
India	1.4	8.4
Singapore	4.5	13.5
Korea, Republic of	2.8	6.9
Latin America and the Caribbean	**24.4**	**52.0**
Cayman Islands	3.1	3.0
Brazil	7.9	27.5
South-East Europe and the CIS	**n.a.**	**n.a.**
Russia	1.4	19.7
Ukraine	0.3	2.7

Source: Deutsche Bundesbank, "Special statistical publication 10: foreign direct investment stock statistics," available at: www.bundesbank.de. The end of year stock data in Euros were converted into US$-values by using end of year Euro-Dollar exchange rates of the IMF (International Monetary Fund, Exchange Rate Archives by Month, available at: www.imf.org/external/np/fin/data/param_rms_mth.aspx).

[a] Figures relate to FDI stock by economic activity of the foreign affiliates in the ultimate host economy (including that made by direct investors themselves as well as by their dependent holding companies abroad on a consolidated basis).

Annex table 5. Germany: Top non-financial MNEs and financial MNEs, 2010, ranked by foreign assets

Rank	Name	Industry	Foreign assets (US$ billion)	Transnationality Index[a]	Number of foreign affiliates
	Non-financial MNEs				
1	Volkswagen Group	Motor vehicles	176.8	64.8	n.a.
2	E.ON AG	Utilities (electricity, gas and water)	135.3	57.1	n.a.
3	Siemens AG	Electrical, electronic equipment	114.6	80.1	n.a.
4	Deutsche Telekom AG	Telecommunications	104.3	52.8	n.a.
5	Daimler AG	Motor vehicles	80.8	53.9	n.a.
6	BMW AG	Motor vehicles	63.0	50.1	n.a.
7	RWE AG	Electricity, gas and water	62.3	46.1	n.a.
8	BASF AG	Chemicals	50.6	59.2	n.a.
9	Deutsche Post AG	Transport and storage	39.1	68.7	n.a.
10	Thyssenkrupp AG	Metal and metal products	38.5	62.9	n.a.
11	Linde AG	Chemicals	32.7	88.9	n.a.
	Financial MNEs			**Internationalization Index[b]**	
1	Deutsche Bank AG		2,547.1	76.0	571
2	Commerzbank AG		1,008.2	53.6	203
3	Allianz AG		835.3	78.8	685
4	DZ Bank AG		512.5	30.5	93
5	Muenchener Rückversicherungs AG		315.9	50.2	261

Source: UNCTAD's FDI/MNE database, available at: http://www.unctad.org/templates/Page.asp?intItemID=5545&lang=1

[a] UNCTAD's Transnationality Index is the average of the following three ratios: foreign assets to total assets, foreign sales to total sales and foreign employment to total employment.
[b] UNCTAD's Internationalization Index is calculated as the number of foreign affiliates divided by the number of all affiliates.

Annex table 6. Germany: main M&A deals, by outward investing firm, 2008-2010

Year	Acquiring company	Target company	Target industry	Target economy	Shares acquired (%)	Transaction value (US$ million)
2010	Merck KGaA	Millipore Corp.	Pharmaceuticals	United States	100.0	6,869.0
2010	Deutsche Bahn	Arriva PLC	Rail transport	United Kingdom	100.0	3,706.8
2010	Volkswagen AG	Suzuki Motor Corp.	Motor vehicles	Japan	19.9	2,527.4
2010	Deutsche Bank AG	Sal Oppenheim jr & Cie SCA	Banking	Luxembourg	100.0	1,913.7
2010	Deutsche Bank AG	ABN AMRO – Business Unit	Banking	Netherlands	100.0	951.0
2010	Daimler AG	Renault SA	Motor vehicles	France	3.2	898.6
2010	Deka Immobilien Inv. AG	Chevron House	Real estate	Singapore	100.0	404.8
2010	Daimler AG	Nissan Motor Co Ltd.	Motor vehicles	Japan	3.2	778.4
2010	Investor Group	STOXX AG	Investors	Switzerland	33.3	306.0
2010	Pfeiffer Vacuum Technology AG	Adixen	Machinery (pumps)	France	100.0	282.7
2009	RWE AG	Essent NV	Electricity, energy	Netherlands	100.0	11,488.6
2009	BASF AG	Ciba Specialty Chemicals	Chemicals	Switzerland	82.9	4,549.0
2009	E.on AG	Severneftegazprom	Coal, oil, natural gas	Russia	25.0	3,958.7
2009	Fleet Investments BV	LeasePlan Corp NV	Car leasing	Netherlands	50.0	1,773.8
2009	K+S AG	Morton International Inc	Mining	United States	100.0	1,675.0
2009	MANSE	Volkswagen Caminhoes e Onibus	Motor vehicles	Brazil	100.0	1,611.6
2009	Deutsche Lufthansa AG	Austrian Airlines AG	Air transport	Austria	53.8	1,443.7
2009	Colexon Energy AG	Renewagy A/S	Alternative energy	Denmark	100.0	1,292.3
2009	Nordzucker AG	Danisco Sugar	Consumer goods	Denmark	100.0	938.6
2009	Munich Re	HSB Group Inc.	Insurance	United States	100.0	739.0
2008	E.on AG	Endesa Italia	Electricity, energy	Italy	80.0	14,342.2
2008	Fresenius SE	APP Pharmaceuticals Inc	Medical instruments and apparatus	United States	100.0	5,611.6
2008	Henkel AG & Co. KGaA	Natl Starch & Chem Co-Adh.	Consumer goods	United States	100.0	5,506.9
2008	SAP AG	Business Objects SA	Software	United States	78.0	5,131.3
2008	Volkswagen AG	Scania AB	Motor vehicles, trucks	Sweden	16.8	4,377.5
2008	Deutsche Telekom AG	OTE SA	Telecommunications	Greece	20.0	4,009.3
2008	E.on AG	Enel Viesgo SA	Electricity, energy	Spain	100.0	3,210.0
2008	Investor Group	Porterbrook Leasing Co Ltd	Investors	United Kingdom	100.0	3,111.2
2008	Allianz SE	Hartford Fin Svcs Group Inc	Insurance	United States	23.7	2,500.0
2008	Heinrich Bauer Verlag KG	EMAP Consumer Media	Media	United Kingdom	100.0	1,435.1

Source: The author, based on Thomson ONE Banker, Thomson Reuters.

Annex table 7. Germany: main greenfield projects, by outward investing firm, 2008-2010

(US$ million)

Year	Company name	Destination economy	Investment	Industry	Business activity
2010	Thyssen Krupp	Brazil	6,800.0	Metals	Manufacturing
2010	Solar Millenium	United States	3,507.7[a]	Alternative/renewable energy	Solar electricity generation
2010	Siemens	Russia	3,000.0	Non-automotive transport OEM	Manufacturing
2010	Fuchs Petrolub	Sudan	1,701.0[a]	Coal, oil and natural gas	Manufacturing
2010	SIF&B	Russia	1,266.0	Real estate	Construction
2010	Volkswagen AG	Hungary	1,205.0	Automotive OEM	Manufacturing
2010	Daimler AG	Brazil	670.0	Automotive OEM	Manufacturing
2010	SMOTEC Plus	Saudi Arabia	611.9[a]	Chemicals	Manufacturing
2010	Volkswagen AG	Mexico	550.0	Engines & turbines	Manufacturing
2010	RWE AG	Romania	636.3[a]	Alternative/renewable energy	Electricity
2009	RWE AG	Netherlands	2,857.6	Coal, oil and natural gas	Electricity
2009	E.on AG	Equatorial Guinea	1586.0[a]	Coal, oil and natural gas	Manufacturing
2009	Volkswagen AG	Spain	1068.7[a]	Automotive OEM	Manufacturing
2009	Daimler AG	India	1,014.0	Automotive OEM	Manufacturing
2009	Wacker	United States	1,000.0	Chemicals	Manufacturing
2009	Mühlbauer AG	United States	986.1[a]	Semiconductors	Manufacturing
2009	BASF AG	Qatar	899.9[a]	Chemicals	Manufacturing
2009	Conergy	Turkey	881.0	Alternative/renewable energy	Electricity
2009	RWE AG	Turkey	812.8	Coal, oil and natural gas	Electricity
2009	Rohde & Schwarz	Mexico	800.0	Communications	Design, developing and testing
2008	ThyssenKrupp	Brazil	5,200.0	Metals	Manufacturing
2008	Q-Cells AG	Mexico	3,500.0	Electronic components	Manufacturing
2008	RWE AG	United Kingdom	2,400.0	Alternative/renewable energy	Electricity
2008	RWE AG	Poland	2,320.0	Coal, oil and natural gas	Electricity
2008	MAN	Russia	2,058.0	Wood products	Manufacturing
2008	BASF AG	Qatar	1,951.0[a]	Coal, oil and natural gas	Extraction
2008	Marquard & Bahls	United States	1,800.0	Coal, oil and natural gas	Logistics & distribution
2008	Daimler AG	Hungary	1,239.6	Automotive OEM	Manufacturing
2008	WPD	France	1,200.0	Alternative/renewable energy	Electricity
2008	Volkswagen AG	Mexico	1,000.0	Automotive OEM	Manufacturing

Source: The author, based on fDi Intelligence, a service from the Financial Times Ltd.

[a] Estimated investment.