

FDI in Ceramics and Glass

January 2003 to June 2014



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Introduction

The report examines foreign direct investment (FDI) trends by all companies investing in the ceramics & glass sector between January 2003 and June 2014.

The report includes estimated values on capital investment and the number of jobs created in cases where information was not available at project announcement.

Headline figures

No of FDI projects	775
Total jobs created	181,734
Average project size (jobs)	234
Total capital investment	USD 40,355.10 m
Average project size	USD 52.10 m

Executive Summary

FDI projects peaked in 2008

Some 108 projects, or 13.9% of projects, were recorded in 2008. This was the year in which the highest numbers of projects were recorded. During this period a total of 23,817 jobs were created and USD 8.78 billion capital was invested by these projects, equating to a 13.1% and 21.8% of total jobs and capital investment respectively.

Domestic Market Growth Potential key motive for investors

Domestic Market Growth Potential was the top motive cited by companies for 41.4% of projects. This was followed by proximity to markets or customers and infrastructure and logistics at 28.4% and 17.2%, respectively.

Key investors account for the majority of projects.

The top 10% of investors have created a total of 395 projects, 51% of the total projects. These investors have created a combined total of 106,662 jobs, which equates to the majority of the overall total. The combined capital investment from these companies reached USD 22.47 billion, equating to the majority of the total for all companies.

Manufacturing is top business activity with the majority of projects.

Out of a total of 11 business activities, Manufacturing accounted for 78.7% of projects. Project volume in this business activity peaked during 2008, with 88 projects tracked. Total jobs creation and capital investment in this business activity was 172,561 jobs and USD 38.95 billion respectively.

Largest projects originate in China

With an average project size of USD 71.10 million, projects originating in China are approximately one and a half times larger than the average across all source countries. Ranked tenth in overall projects recorded with 27 in total, China created a total of 11,270 jobs and USD 1.92 billion capital investment.

Top five destinations attract two-fifths of projects.

Out of a total of 78 destination countries, the top five account for two-fifths of projects. United States is the top destination country accounting for more than one-tenth of projects tracked. Total investment into United States resulted in the creation of 7,366 jobs and USD 1.59 billion capital investment, equating to an average of 89 jobs and USD 19.40 million investment per project.

Key FDI Trends

Between January 2003 and June 2014 a total of 775 FDI projects were recorded. These projects represent a total capital investment of USD 40.36 billion, which is an average investment of USD 52.10 million per project. During the period, a total of 181,734 jobs were created.

The largest number of projects was announced in 2008, with 108 projects that year. In 2008 was also the year where the average capital investment was at its highest. In terms of job creation, 2014 has seen the highest average project size of 323 jobs per project.

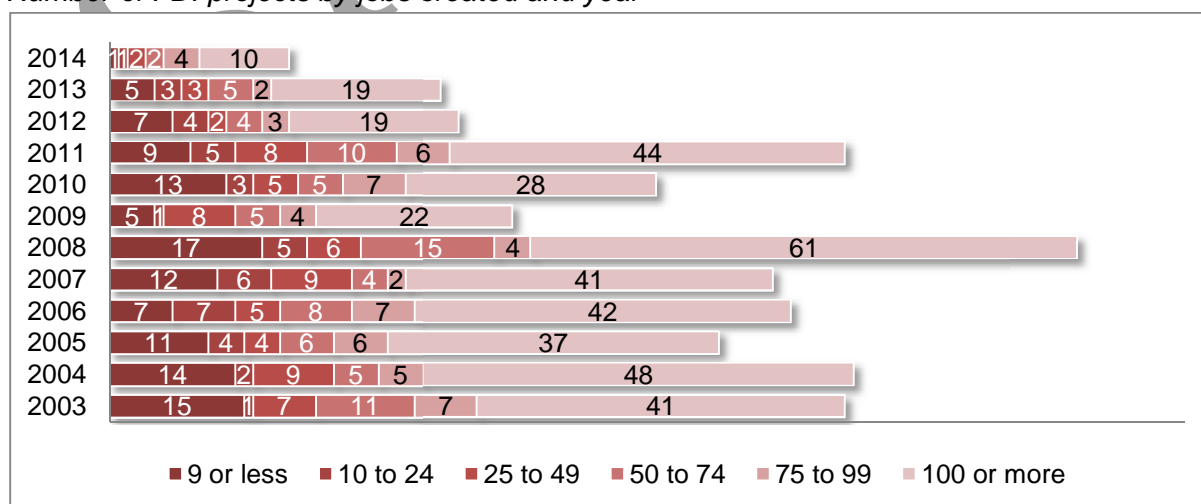
Headline FDI trends by year

Year	Number of projects	% growth per annum	Jobs created		Capital investment	
			Total	Average	Total (USD m)	Average (USD m)
2014	20	n/a	6,469	323	1,247.20	62.40
2013	37	n/a	7,172	193	1,446.90	39.10
2012	39	n/a	6,705	171	1,747.90	44.80
2011	82	34.4	14,815	180	4,054.70	49.40
2010	61	35.6	14,100	231	2,953.70	48.40
2009	45	n/a	11,782	261	2,347.90	52.20
2008	108	45.9	23,817	220	8,778.70	81.30
2007	74	n/a	17,838	241	3,813.00	51.50
2006	76	11.8	21,741	286	3,954.30	52.00
2005	68	n/a	21,082	310	3,725.00	54.80
2004	83	1.2	19,526	235	3,137.80	37.80
2003	82	n/a	16,687	203	3,148.00	38.40
Total	775	n/a	181,734	234	40,355.10	52.10

Source: fDi Markets from The Financial Times Ltd

When allocated into bands, projects creating 100 jobs or more represent the majority of projects, while projects creating nine jobs or less represent almost one-sixth of projects.

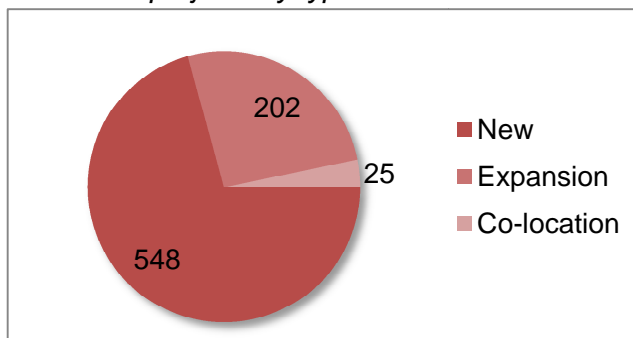
Number of FDI projects by jobs created and year



Source: fDi Markets from The Financial Times Ltd

In terms of project type, 70.7% of projects are new investments. New projects have an average capital investment of USD 58.10 million and job creation of 263 per project.

Number of projects by type

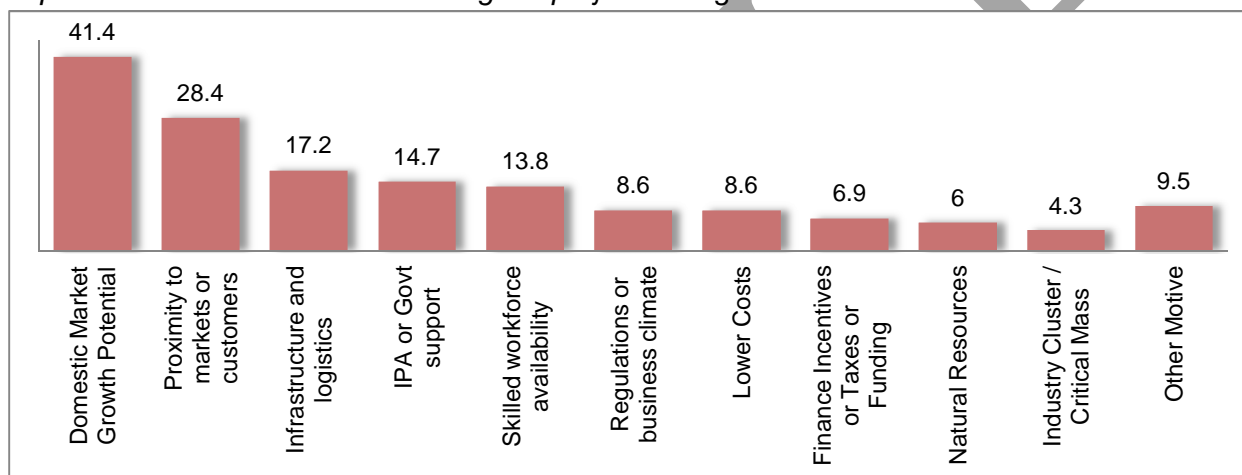


Source: fDi Markets from The Financial Times Ltd

The average capital investment for expansion and co-location is USD 36.20 million and USD 49.00 million respectively. The average number of jobs created in these project types is 154 and 254 respectively.

The motives for investment were cited by companies for 116 projects. The key reasons for investment were domestic market growth potential, proximity to markets or customers, infrastructure and logistics, in that order.

Top location determinants: Percentage of projects citing investment motive

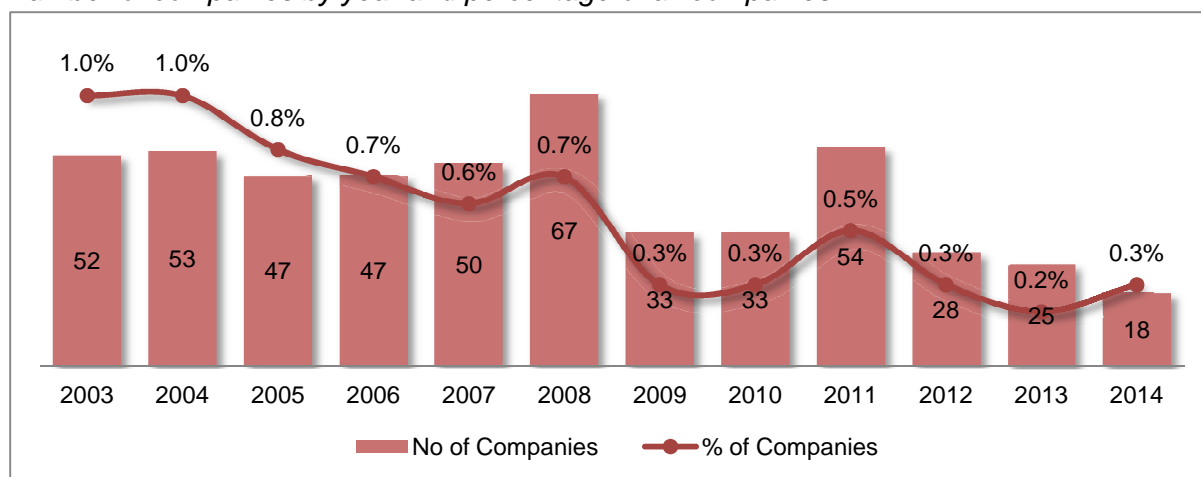


Sample: 116 projects. Source: fDi Markets from The Financial Times Ltd

Companies

A total of 293 companies invested in ceramics & glass sectors between January 2003 and June 2014, out of a total 47,804 companies investing in FDI globally.

Number of companies by year and percentage of all companies



Source: fDi Markets from The Financial Times Ltd

The top 10 companies accounted for a combined total of 266 projects (34.3% of projects). Within the past 12 months, six of the top 10 companies have announced projects, with Saint-Gobain being the top investor for this period with five projects.

Top 10 companies: number of projects

Company name	Source country	No of projects	Global projects*	% of global projects**	Projects in last 12 mths
Saint-Gobain	France	67	168	39.8	5
Asahi Glass (AGC Group)	Japan	49	68	72	3
Sisecam	Turkey	30	34	88.2	1
Nippon Sheet Glass	Japan	24	26	92.3	1
Carl-Zeiss-Stiftung	Germany	22	42	52.3	1
Guardian Industries	United States	20	38	52.6	0
Roca	Spain	16	19	84.2	0
Owens-Illinois (O-I)	United States	16	17	94.1	2
Dleteren	Belgium	11	18	61.1	0
RAK Ceramics	UAE	11	13	84.6	0

*Total number of projects worldwide from the company regardless of report criteria.

** The share of global projects from the company which match report criteria.

Source: fDi Markets from The Financial Times Ltd

The top 10 companies account for 37.4% of job creation and 38.5% of capital investment.

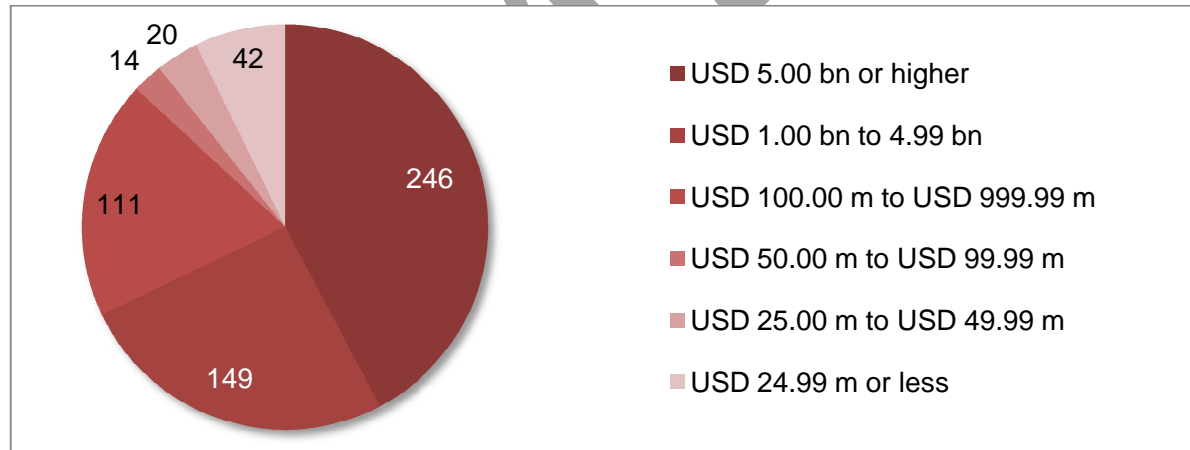
Top 10 Companies: Jobs Created and Capital Investment

Company Name	Jobs created		Capital investment	
	Total	Average per project	Total (USD m)	Average (USD m)
Saint-Gobain	17,706	264	3,970.20	59.30
Asahi Glass (AGC Group)	16,826	343	3,815.10	77.90
Sisecam	8,897	296	2,045.40	68.20
Nippon Sheet Glass	6,911	287	1,614.40	67.30
Carl-Zeiss-Stiftung	4,348	197	902.60	41.00
Guardian Industries	4,178	208	1,433.60	71.70
Roca	2,199	137	567.30	35.50
Owens-Illinois (O-I)	1,480	92	490.50	30.70
Dleteren	1,521	138	143.40	13.00
RAK Ceramics	3,942	358	562.10	51.10

Source: fDi Markets from The Financial Times Ltd

In terms of company size, more than two-fifths of companies have an annual turnover of USD 5.00 billion or higher, while 7.2% of companies have a turnover of USD 24.99 million or less.

Size of companies by turnover



Source: fDi Markets from The Financial Times Ltd

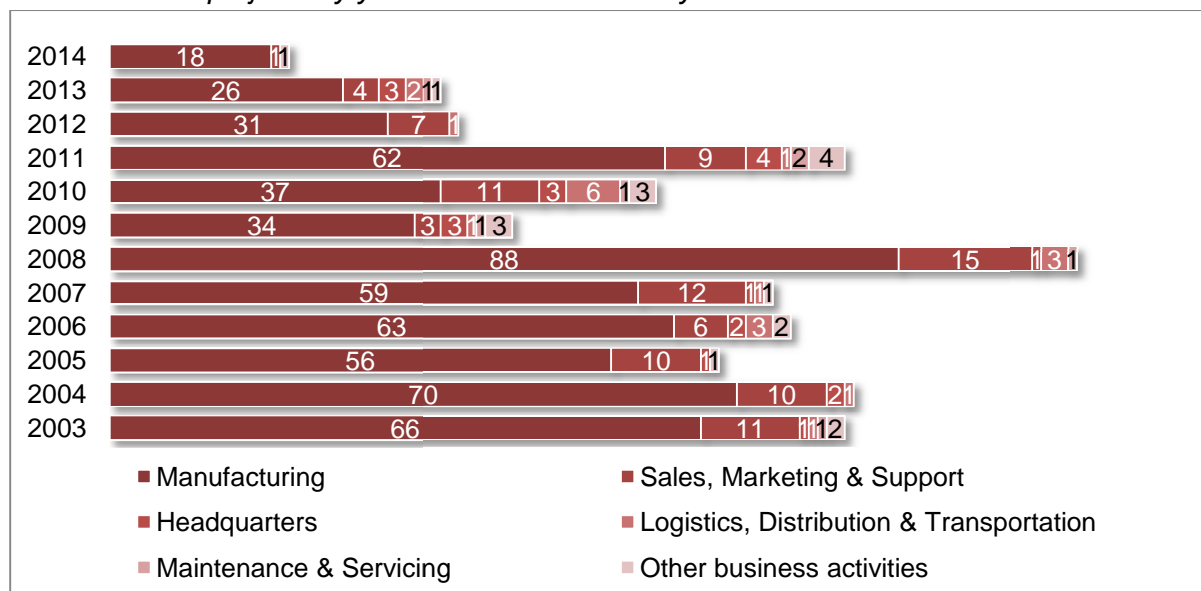
During the period July 2013 to June 2014, 9 projects were announced by 9 companies that had not previously had a project recorded by fDi Markets since 2003.

These investments created a total of 2,258 jobs and generated USD 638.33 million capital investment.

Industry Analysis: Business Activity

Out of a total of 11 business activities, Manufacturing accounts for the majority of projects. Project volume in this business activity peaked during 2008, with 88 projects tracked.

Number of FDI projects by year and business activity



Source: fDi Markets from The Financial Times Ltd

Manufacturing has generated the highest number of total jobs and greatest investment with a total of 172,561 jobs and USD 38.95 billion investment. This business activity also has the largest project size on average in terms of both investment and jobs creation.

FDI trends by business activity

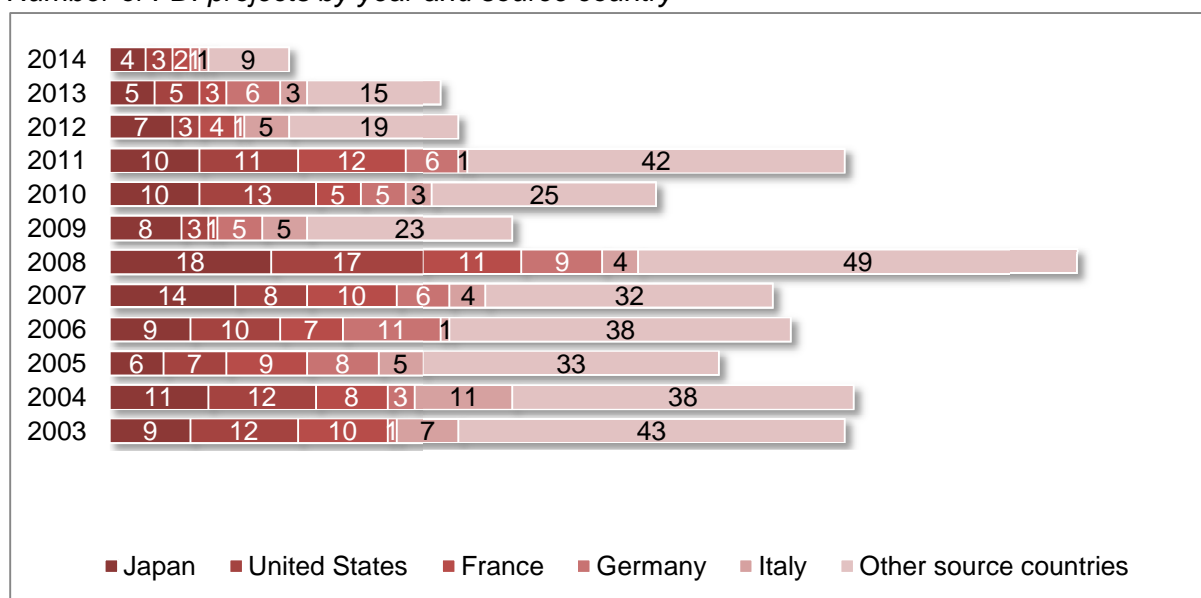
Business activity	No of projects	Jobs Created		Capital investment	
		Total	Average	Total (USD m)	Average (USD m)
Manufacturing	610	172,561	282	38,953.30	63.90
Sales, Marketing & Support	99	565	5	144.30	1.50
Headquarters	21	1,863	88	489.80	23.30
Logistics, Distribution & Transportation	20	4,396	219	540.40	27.00
Maintenance & Servicing	7	391	55	57.40	8.20
Customer Contact Centre	5	1,290	258	52.30	10.50
Recycling	5	99	19	19.80	4.00
Design, Development & Testing	3	240	80	48.50	16.20
Shared Services Centre	2	214	107	20.90	10.40
Research & Development	2	110	55	26.60	13.30
Other business activities	1	5	5	1.70	1.70
Total	775	181,734	234	40,355.10	52.10

Source: fDi Markets from The Financial Times Ltd

Source Countries

Out of a total of 56 source countries, the top five account for the majority of projects. Japan is the top source country accounting for more than one-eighth of projects tracked. Project volume in this source country peaked during 2008, with 18 projects tracked.

Number of FDI projects by year and source country



Source: fDi Markets from The Financial Times Ltd

Japan has generated the highest number of total jobs and greatest investment with a total of 38,433 jobs and USD 7.05 billion investment. China has the largest project size on average in terms of both investment and jobs creation.

FDI trends by source country

Source country	No of projects	No of companies	Jobs Created		Capital investment	
			Total	Average	Total (USD m)	Average (USD m)
Japan	111	45	38,433	346	7,051.10	63.50
United States	104	41	27,997	269	6,531.00	62.80
France	82	37	20,291	247	4,647.20	56.70
Germany	62	37	12,523	201	2,436.40	39.30
Italy	50	37	6,979	139	1,596.90	31.90
Turkey	43	16	10,041	233	2,377.40	55.30
Spain	43	29	5,509	128	1,190.90	27.70
UK	34	22	5,915	173	1,123.20	33.00
Austria	30	18	2,344	78	791.70	26.40
China	27	15	11,270	417	1,920.70	71.10
Other source countries	189	122	40,432	213	10,688.90	56.60
Total	775	418	181,734	234	40,355.10	52.10

Source: fDi Markets from The Financial Times Ltd

Source Cities

Out of a total of 189 source cities, the top five account for almost one-third of projects. Tokyo is the top source city accounting for one-eighth of projects tracked. Project volume in this source city peaked during 2008, with 16 projects tracked.

Tokyo has generated the highest number of total jobs and greatest investment with a total of 30,127 jobs and USD 6.15 billion investment. Dubai and NYC (NY) have the largest project size on average in terms of investment and jobs creation, respectively.

FDI trends by source city

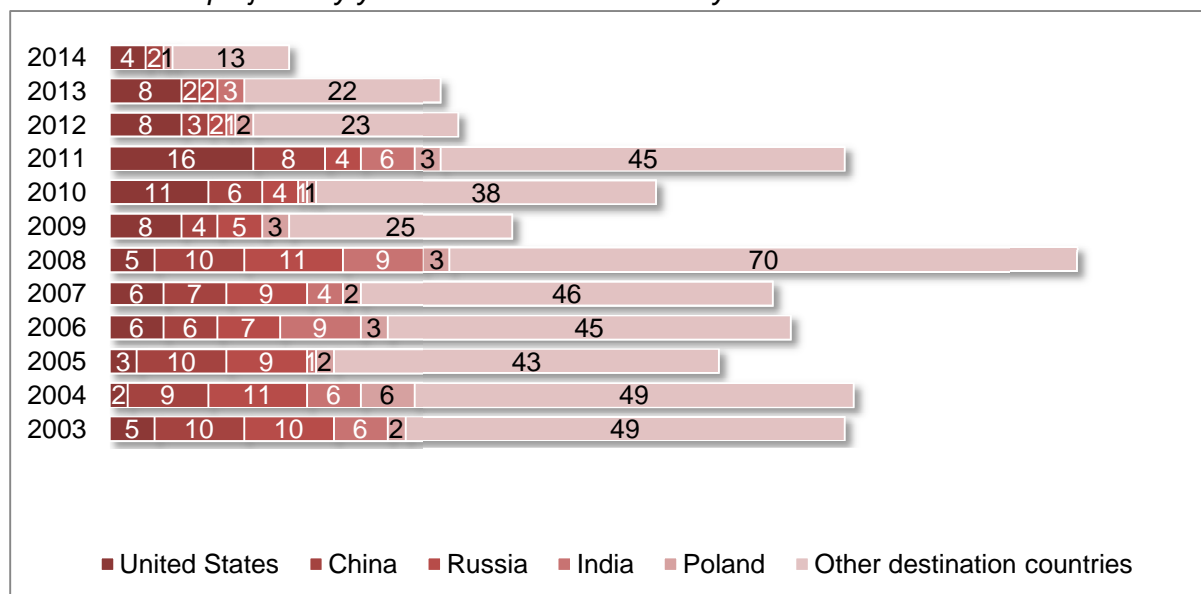
Source city	Projects		Companies		Jobs Created	Capital Investment (USD m)
	No	%	No	%		
Tokyo	89	11.48	32	7.66	30,127	6,153.40
Paris	74	9.55	32	7.66	19,006	4,181.20
Istanbul	41	5.29	14	3.35	9,766	2,268.50
Oberkochen	22	2.84	5	1.20	4,348	902.60
Toledo (OH)	20	2.58	7	1.67	4,128	962.70
Auburn Hills (MI)	20	2.58	3	0.72	4,178	1,433.60
Barcelona	16	2.06	8	1.91	2,199	567.30
Brussels	14	1.81	7	1.67	1,847	201.90
London	12	1.55	7	1.67	1,035	248.20
Ras al Khaimah	11	1.42	2	0.48	3,942	562.10
San Pedro Garza García	10	1.29	2	0.48	822	79.10
Vienna	8	1.03	5	1.20	762	184.90
Pittsburgh (PA)	8	1.03	3	0.72	1,973	301.10
Taipei	8	1.03	1	0.24	4,418	658.40
Perrysburg (OH)	8	1.03	1	0.24	500	199.50
NYC (NY)	8	1.03	2	0.48	8,009	1,626.40
Bethany (CT)	7	0.90	3	0.72	1,536	163.50
Bangkok	7	0.90	5	1.20	1,489	210.80
Butzberg	7	0.90	3	0.72	3,569	888.90
Dubai	7	0.90	5	1.20	2,002	3,364.90
Other source cities	305	39.35	217	51.91	57,741	12,165.90
Not Specified	73	9.42	61	14.59	18,337	3,030.30
Total	775	100.00	418	100.00	181,734	40,355.10

Source: fDi Markets from The Financial Times Ltd

Destination Countries

Out of a total of 78 destination countries, the top five account for two-fifths of projects. United States is the top destination country accounting for more than one-tenth of projects tracked. Project volume in this destination country peaked during 2011, with 16 projects tracked.

Number of FDI projects by year and destination country



Source: fDi Markets from The Financial Times Ltd

China has received the highest number of total jobs and has the largest project size with 393 jobs per project on average. Russia has the highest total investment, while India has the highest average investment at USD 115.20 million per project.

FDI trends by destination country

Destination country	No of projects	No of companies	Jobs Created		Capital investment	
			Total	Average	Total (USD m)	Average (USD m)
United States	82	62	7,366	89	1,589.10	19.40
China	77	54	30,261	393	4,597.00	59.70
Russia	74	56	17,072	230	6,321.20	85.40
India	46	33	17,480	380	5,299.20	115.20
Poland	28	24	5,788	206	1,251.30	44.70
Bulgaria	28	19	9,540	340	1,430.50	51.10
France	27	23	1,283	47	370.50	13.70
Spain	27	16	2,217	82	713.20	26.40
Germany	26	25	1,740	66	1,433.30	55.10
Vietnam	24	17	8,746	364	878.90	36.60
Other destination countries	336	298	80,241	238	16,470.90	49.00
Total	775	418	181,734	234	40,355.10	52.10

Source: fDi Markets from The Financial Times Ltd

Destination Cities

Out of a total of 390 destination cities, the top five account for 5% of projects. Shanghai is the top destination city accounting for 1.3% of projects tracked. Project volume in this destination city peaked in both 2004 and 2008 with two projects tracked in each of these periods.

Beijing has received the highest number of total jobs and has the largest project size, with 920 jobs per project. Chennai has both the highest total and highest average investment at USD 3.27 billion overall and USD 816.30 million per project.

FDI trends by destination city

Destination city	Projects		Companies		Jobs Created	Capital Investment (USD m)
	No	%	No	%		
Shanghai	10	1.29	10	2.39	1,434	173.30
Dubai	8	1.03	8	1.91	139	27.30
Ras al Khaimah	8	1.03	8	1.91	944	476.60
Ho Chi Minh	7	0.90	6	1.44	2,274	239.70
Calarasi	6	0.77	4	0.96	3,035	439.50
Singapore	6	0.77	6	1.44	852	162.00
Suzhou	6	0.77	6	1.44	1,715	217.30
Monterrey	5	0.65	4	0.96	731	146.30
Ha Noi	5	0.65	5	1.20	3,014	257.70
Tianjin	5	0.65	4	0.96	1,251	160.60
Targovište	5	0.65	1	0.24	2,296	398.20
Llodio	4	0.52	1	0.24	363	132.80
Kunshan	4	0.52	2	0.48	1,308	175.20
Moscow	4	0.52	4	0.96	757	248.60
Beijing	4	0.52	4	0.96	3,682	888.00
Sao Paulo	4	0.52	4	0.96	774	337.60
Paris	4	0.52	4	0.96	81	11.00
Chennai	4	0.52	3	0.72	2,585	3,265.00
Sevlievo	4	0.52	3	0.72	457	17.40
Hong Kong	3	0.39	3	0.72	53	44.70
Other destination cities	454	58.58	435	104.07	97,987	20,904.20
Not Specified	215	27.74	147	35.17	56,002	11,632.60
Total	775	100.00	418	100.00	181,734	40,355.10

Source: fDi Markets from The Financial Times Ltd

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