



Reshoring Initiative Data Report: Reshoring and FDI Continued to Boost U.S. Manufacturing in 2015

Introduction

This report contains data on trends in U.S. reshoring and FDI (Foreign Direct Investment) by companies that have returned or added new U.S. production from offshore. The first section of the report, Group A, contains data cumulative thru 2015. The second section, Group B, shows data for 2015 only. See chart sources to confirm the specific years represented. All data is for the U.S. only, unless otherwise noted,

The combined reshoring and related FDI trends continued strong in 2015, adding 68,000 jobs and bringing the total number of manufacturing jobs brought from offshore to over 249,000 since the manufacturing employment low of 2010.

The trend was off 6% in 2015 due to: the [strong dollar](#); low oil prices and shipping rates; and most competitor countries having weaker economies than the U.S.

Data Chart Index

Group A¹: Reshoring Trends, Cumulative Totals

1. Reshored + FDI Manufacturing Jobs: The Bleeding Has Stopped – table
2. Reshored + FDI Manufacturing Jobs, cumulative adjusted 2007-2015
3. Reshoring + FDI by Tech Level, 2010-2015
4. Reasons Cited for Reshoring + FDI, 2007-2015
5. Reshoring + FDI by Industry, 2010-2015
6. Reshoring + FDI by Country from, 2010- 2015
7. Reshoring + FDI by International Region From, 2010- 2015
8. Reshoring + FDI Cases by State, 2010- 2015
9. Reshoring + FDI by U.S. Region, 2010- 2015
10. International Summary –Cases of Reshoring + FDI outside the U.S.
11. Nearshoring, Cumulative 2010-2015

Group B: Reshoring Trends, 2015 only

1. Reshoring + FDI by Tech Level
2. Reasons Cited for Reshoring + FDI
3. Reshoring + FDI by Industry
4. Reshoring + FDI by Country from
5. Reshoring + FDI by International Region From
6. Reshoring + FDI Cases by State
7. Reshoring + FDI by U.S. Region
8. Nearshoring 2015

¹ The data for these reports comes from: the Reshoring Initiative's Reshoring Library of approx. 3000 published articles; privately submitted Reshoring Case Studies; and some other privately documented cases. Reshoring and FDI (Foreign Direct Investment) are both motivated by the same logic: the financial advantages the company achieves by producing near the consumer.

Group A²: Reshoring Trends, Cumulative Totals

1. Reshored + FDI Manufacturing Jobs: The Bleeding Has Stopped

The bleeding of manufacturing jobs to offshore has stopped. In the last decade the U.S. has gone from losing about 220,000 manufacturing jobs per year to breakeven. There are still 3 to 4 million manufacturing jobs offshore, a huge potential for U.S. economic growth.

Manufacturing Jobs/Year 2015: The Bleeding Has Stopped			
	2000 – 2003 Annual average	2015	% Change
New Offshoring	~ 240,000*	60,000*	-75%
New Reshoring & FDI	12,000*	67,000**	+400%
Net Jobs Gained	~ -220,000	~ +0	N/A

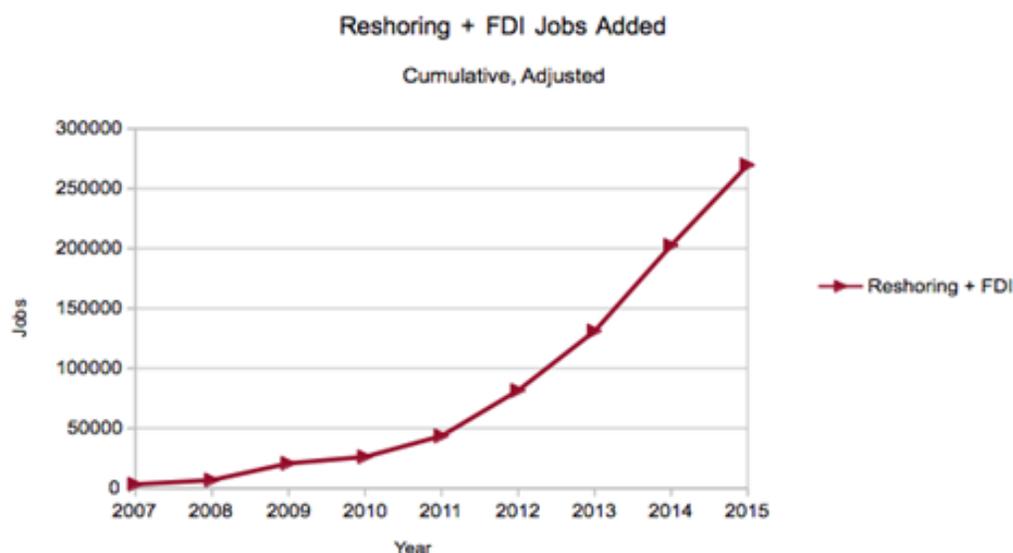
* Estimated ** Calculated – Reshoring Library through Dec 31, 2015

We have found no one systematically tracking offshoring. We have made rough offshoring estimates based on the changes in the level of imports using relationships developed using mfg. employment and import data from the period 2000 to 2007.

² The data for these reports comes from: the Reshoring Initiative's Reshoring Library of approx. 3000 published articles; privately submitted Reshoring Case Studies; and some other privately documented cases. Reshoring and FDI (Foreign Direct Investment) are both motivated by the same logic: the financial advantages the company achieves by producing near the consumer.

2. Reshored + FDI Manufacturing Jobs, cumulative adjusted 2007-2015

The trend continued in 2015.



3. Reshoring + FDI by Tech Level, Cumulative

It is generally agreed that high tech manufacturing jobs are more desirable than low-tech: more investment, more R&D, higher pay, less risk of loss to low wage countries, etc. Reshoring is moderately more prevalent in higher tech.

Reshoring + FDI by Tech Level, Cumulative						
Product Technology Level	Reshoring		FDI		Reshoring + FDI	
	Jobs	Companies	Jobs	Companies	JOBS	COMPANIES
H	20%	16%	15%	16%	16%	16%
MH	49%	27%	46%	38%	47%	33%
ML	15%	34%	31%	35%	27%	34%
L	16%	23%	7%	12%	9%	17%

Ratings are based on classifications derived from NSF (<http://www.nsf.gov/statistics/seind12/c6/c6s.htm#sb5>) and OECD systems (http://www.oecd-ilibrary.org/science-and-technology/revision-of-the-high-technology-sector-and-product-classification_134337307632).

4. Reasons Cited for Reshoring + FDI, 2007-2015

Understanding the reasons for reshoring is necessary for companies to proceed to quantifying those reasons. The reasons for reshoring and FDI are similar with the following exceptions. Reshoring places higher emphasis on Made in USA image, automation and re-design of the product. FDI places more emphasis on government incentives and skilled workforce. Since reshoring is almost all from low-wage countries, the companies have to minimize labor cost here to enable reshoring and can provide more perceived increase in value by offering Made in USA branding. Since most FDI is from other developed countries, Made in USA is a less powerful sales argument. Foreign companies can be recruited by all 50 states and often have larger projects, thus they receive and benefit from more government incentives.

Reasons Cited for Reshoring + FDI, 2007-2015				
Negative Reasons not to Offshore	# of Cases Cited		Positive Reasons to Reshore or FDI	# of Cases Cited
Quality/rework/ warranty	133		Government Incentives	251
Freight cost	117		Skilled workforce availability/training	148
Rising wages	85		Lead time/time to market	146
Total cost, TCO	70		Eco-system synergies/Localization	138
Delivery	57		Proximity to market/customers	133
Inventory	51		Image/brand	101
Supply chain interruption risk	46		Automation/technology (incl. 3D)	81
Intellectual property risk	33		U.S. price of natural gas, chemicals, electricity	66
Communications	32		Infrastructure	62
Currency variation	26		Manufacturing/Engineering joint innovation	54
Loss of control	25		Customer responsiveness improvement	51
Travel cost	25		Walmart	51
Price	23		Higher productivity	50
Green considerations	21		Re-design of the part	46
Difficulty of innovation/product differentiation	14		Lean or other business process improvements	39
Political instability	10		Other: Contracted/Customers Reshoring	31
Duties/Tariffs/Customs	8		Raw materials cost/quality	27
Emergency air freight	7		Labor concessions	17
Regulatory compliance	7		Customization/Flexibility	15
Burden on staff	6		Lower real-estate/construction cost	13
Social/ethical concerns	6		Under-utilized capacity	11
Product liability	5		Other: Location	7
Natural disaster risk,	4 each		Other: Macroeconomics	6

Onsite audit cost, Strained offshore relationships			
Employee turnover	3		Other: Idealism 4
Personnel risk	2		
Reputation risk	1		

Note: Many of the positive and negative reasons are manifestations of proximity, e.g. inventory, travel, risk, communications, etc.

5. Reshoring + FDI by Industry - 2007-2015

Only products that have been imported can be reshored. Thus, the products least suitable for offshoring never left, such as heavy high volume minerals or customized automation systems. The most active reshoring is by those that left and probably should not have done so, including machinery, transportation equipment and appliances.

The table below is primarily sorted by 3-digit NAICS code industry. We also break out several active industries that are in the NAICS Miscellaneous Manufacturing category. Generally, reshoring is focused on products whose size and weight suggest offshoring never offered great Total Cost savings.

The Reshoring Initiative tracks actual cases of reshoring. Interestingly, five of our top six industries correlate with the list of seven *Tipping Point Industries*³ that Boston Consulting Group's analytical studies project to be reshored based on wage rates, productivity, total cost, etc.

FDI is more heavily weighted towards transportation equipment because of the ongoing investment in automotive assembly plants and related suppliers. It also benefits the most from the Government Incentives.

Reshoring + FDI by Industry - 2007-2015		
Industry	Jobs	Companies
Transportation Equipment	55673	174
Electrical Equipment, Appliances, Components	17430	101
Fabricated Metal Products	12690	105
Plastic/Rubber Products	11549	84
Computer/Electronic Products	7707	46
Apparel/Textiles	6688	102
Chemicals	6474	59

3

https://www.bcgperspectives.com/content/articles/manufacturing_supply_chain_management_us_manufacturing_nears_the_tipping_point/

Machinery	6466	59
Wood & Paper Products	5212	41
Food & Beverage	3563	32
Non-Metallic Mineral Products	3414	18
Primary Metal Products	2887	16
Energy, Petroleum & Coal Products	2440	12
Hobbies	1620	40
Medical Equipment	1390	28
Castings & Foundries	981	12
Furniture & Related Products	898	4
Misc.	790	10
Services	3	4

6. Reshoring + FDI by Country from 2010-2015

Reshoring is about 60% from China. FDI is heavily from Germany and Japan.

Reshoring + FDI by Country from 2010-2015			
Country	Jobs	Companies	Average Jobs/Facility
China	27694	285	97
Germany	26995	87	310
Japan	15885	77	206
Canada	8001	53	151
Mexico	7498	39	192
Korea	6442	16	403
Switzerland	4109	21	196
Spain	2710	11	246
Denmark	2620	9	291
United Kingdom	2212	19	116
United Arab Emirates	2172	2	1086
India	2015	24	84
Singapore	1700	1	1700
Sweden	1590	5	318
France	1513	14	108
Italy	1486	26	57
Austria	1230	6	205
Taiwan	1148	12	96

Brazil	1142	8	143
Israel	1126	10	113
Netherlands	950	8	119
Belgium	577	6	96
Australia	532	8	67
South Africa	500	1	500
Turkey	408	4	102
Ireland	402	5	80
Portugal	340	4	85
Thailand	280	3	93
Chile	250	2	125
Unknown Country (Asia)	244	18	14
Poland	170	1	170
Unknown Country (E. Eur.)	160	2	80
Latvia	150	1	150
Finland	140	3	47
Honduras	120	1	120
Vietnam	92	4	23
Lithuania	85	1	85
Hungary	70	2	35
Colombia	50	1	50
Lebanon	18	1	18
Norway	13	2	7
Pakistan	7	1	7
Sri Lanka	5	1	5
Russia	1	1	1
Malaysia	0	3	0
Indonesia	0	2	0
Egypt	0	2	0
Iceland	0	1	0
New Zealand	0	1	0
Oman	0	1	0
Unknown Country (M. East)	0	1	0
Unknown Country (W. Eur.)	0	1	0
All Countries	124852	818	153

7. Reshoring + FDI by International Region From

Most reshoring is from Asia, most FDI is from Western Europe.

Reshoring + FDI by International Region From			
Country	Jobs	Companies	Average Jobs/Facility
Asia	55512	445	125
Western Europe	46887	228	206
North America	15499	92	168
Middle East	3724	21	177
South America	1562	12	130
Eastern Europe	636	8	80
Australia/Oceania	532	11	48
Africa	500	1	500
All Regions	124852	818	153

8. Reshoring + FDI Cases by State

The largest reshoring projects tend to go into the Southeast and Texas. The Midwest is second based on reshoring to its strong industrial base.

Reshoring + FDI by State, Cumulative 2010-2015				
Rank by job #'s	State	Total Jobs	Total Companies	Jobs/Facility
1	SC	22572	66	342
2	TN	16190	43	377
3	GA	11551	43	269
4	NC	8710	48	181
5	AL	8143	30	271
6	TX	6554	39	168
7	MI	6476	42	154
8	OH	5198	49	106
9	NY	5109	31	165
10	VA	4649	20	232
11	MS	4426	22	201
12	IN	3470	31	112
13	CO	2976	20	149
14	KY	2903	22	132
15	LA	2901	14	207
16	FL	2118	19	111
17	UT	2118	13	163
18	AR	1110	16	69
19	CA	1479	38	39
20	MO	1382	11	126

21	KS	1100	4	275
22	PA	1131	26	44
23	NV	1000	5	200
24	VT	690	6	115
25	NJ	668	13	51
26	OR	605	8	76
27	CT	575	8	72
28	IL	537	27	20
29	SD	500	3	167
30	MA	470	20	24
31	MD	425	14	30
32	NM	400	2	200
33	PR	400	2	200
34	DE	382	5	76
35	NH	366	5	73
36	WI	268	18	15
37	RI	200	3	67
38	IA	195	7	28
39	ME	176	11	16
40	WA	168	6	28
41	WV	130	2	65
42	ID	100	2	50
43	AZ	80	4	20
44	MN	64	11	6
45	NE	50	3	17
46	WY	45	3	15
47	MT	25	2	13
48	OK	0	1	0
49	ND	0	1	0

9. Reshoring + FDI by U.S. Region

Reshoring + FDI by U.S. Region			
Region	Total Jobs	Companies	Average Jobs/ Facility
South	93164	406	229
M. West	19240	207	93
N. East	9385	123	76
West	8996	103	87
Total	138215	857	161

10. International Summary –Cases of Reshoring + FDI outside the U.S.

Reshoring is bringing the work back to the home country, especially to be sold in the home country. Reshoring efforts are underway in many countries, sometimes motivated by government actions. The U.K. appears to be the leader outside of the U.S.

11. Nearshoring, Cumulative 2010-2015

Nearshoring (in our case, mostly bringing work back to Mexico) benefits the U.S. because more components are sourced from the U.S. in Mexican production than in Asian. Our data is not as complete for Nearshoring because it less often reported in US news sources.

Mexico	5900	11	536
Canada	1530	7	219

Group B: Reshoring = FDI, 2015 Only

1. Reshoring + FDI by Tech Level

A lower percentage of reshoring and of FDI was high tech in 2015 than in earlier years.

Reshoring + FDI by Tech Level						
Product Technology Level	Reshoring		FDI		Reshoring + FDI	
	Jobs	Companies	Jobs	Companies	JOBS	COMPANIES
H	0%	1%	8%	12%	7%	9%
MH	36%	26%	56%	35%	53%	33%
ML	31%	39%	32%	42%	32%	41%
L	33%	34%	3%	10%	7%	17%

2. Reasons Cited for Reshoring + FDI, 2015 Only

In comparison to cumulative data Negative reasons not to offshore in 2015 remained similar, with the exception of an increased in supply chain interruption. The ratio of citations of Positive reasons remained similar. Companies continue to report more on positive U.S. reasons than negative offshore reasons.

Reasons Cited for Reshoring + FDI, 2015 Only			
Negative Reasons not to Offshore	# of Cases Cited	Positive Reasons to Reshore or FDI	# of Cases Cited
Quality/rework/ warranty	8	Government Incentives	87

Supply chain interruption risk	5	Proximity to market/customers	72
Freight cost	5	Eco-system synergies/Localization	64
Delivery	4	Skilled workforce availability/training	34
Communications	3	Customer responsiveness improvement	22
Difficulty of innovation/product differentiation	3	Lead time/time to market	20
Green considerations	2	Image/brand	16
Inventory	2	Other: Contracted/Customers Reshoring	11
Product liability	2	Automation/technology (incl. 3D)	10
Currency variation	1	Manufacturing/Engineering joint innovation	10
Intellectual property risk	1	U.S. price of natural gas, chemicals, electricity	9
Loss of control	1	Infrastructure	8
Natural disaster risk	1	Walmart	8
Political instability	1	Lean or other business process improvements	5
Price	1	Customization/Flexibility	4
Total cost, TCO	1	Higher productivity	3
Regulatory compliance	1	Raw materials cost/quality	3
Rising wages	1	Other: Macroeconomics	2
		Under-utilized capacity	2

3. Reshoring + FDI by Industry, 2015 only

Transportation equipment remained at the top of the list, due mostly to FDI. Chemicals showed the largest gain in 2015, moving from 7th to second place, probably due to shale gas. Apparel, though not ranked high on job numbers, reported the second highest number of companies returning.

Reshoring + FDI by Industry, 2015 only		
Industry	Jobs	Companies
Transportation Equipment	17850	66
Chemicals	3855	26
Electrical Equipment, Appliances, Components	2858	14
Fabricated Metal Products	2175	20
Plastic/Rubber Products	1922	27
Computer/Electronic	1814	14

Products		
Wood & Paper Products	1751	11
Non-Metallic Mineral Products	1615	7
Apparel/Textiles	1614	30
Furniture & Related Products	1262	12
Castings & Foundries	687	2
Food & Beverage	542	9
Machinery	482	5
Medical Equipment	251	7
Primary Metal Products	215	3
Misc.	65	3
Services	3	1
Hobbies	0	3
Energy, Petroleum & Coal Products	0	1

4. Reshoring + FDI by Country from

As in the cumulative data, China leads in reshoring and Germany in FDI

Reshoring + FDI by Country From			
Country	2015 Jobs	2015 Companies	2015 Average Jobs/Facility
China	8955	53	169
Germany	7959	37	215
Japan	5652	26	217
Switzerland	2634	16	165
Canada	1960	13	151
Spain	1660	4	415
India	1533	10	153
Austria	1030	3	343
Denmark	960	4	240
Korea	900	3	300
Taiwan	800	1	800
Italy	768	11	70
United Kingdom	664	13	51
Mexico	490	6	82
Australia	402	4	101
Israel	311	5	62
Thailand	260	2	130
Chile	250	1	250

Portugal	170	2	85
Brazil	164	2	82
Netherlands	150	1	150
Finland	140	3	47
Ireland	87	2	44
Lithuania	85	1	85
Belgium	77	2	39
Unknown: Asia	75	3	25
France	70	1	70
Turkey	38	2	19
Lebanon	18	1	18
Pakistan	7	1	7
Norway	6	1	6
Malaysia	0	1	0
Unknown: W. Europe	0	1	0
Vietnam	0	1	0
All Countries	38275	237	161

5. Reshoring + FDI by International Region From

Reshoring + FDI by International Region From			
Country	2015 Jobs	2015 Companies	2015 Average Jobs/Facility
Asia	18182	101	180
Western Europe	16375	101	162
North America	2450	19	129
South America	414	3	138
Australia/Oceania	402	4	101
Middle East	367	8	46
Eastern Europe	85	1	85
Africa	0	0	0
All Regions	38275	237	161

6. Reshoring + FDI Cases by State

The Southeast continues to lead. Michigan, Indiana and Ohio are high mainly due to automotive.

Reshoring + FDI Cases by State				
Ranked by job #s	State	2015 Jobs	2015 Companies	2015 Jobs/Facility
1	SC	6004	28	214
2	TN	3675	15	245
3	NC	3464	13	266
4	MI	2584	17	152



5	TX	2252	15	150
6	IN	2240	15	149
7	AL	2174	9	242
8	GA	2150	14	154
9	OH	1395	12	116
10	LA	1326	9	147
11	MS	1325	10	133
12	NY	1312	4	328
13	UT	1260	5	252
14	KY	1042	10	104
15	FL	682	6	114
16	MA	680	8	85
17	VT	450	2	225
18	DE	357	2	179
19	MO	262	3	87
20	CA	230	5	46
21	AR	200	3	67
22	OR	175	3	58
23	NH	140	2	70
24	VA	139	6	23
25	PA	86	4	22
26	CT	80	4	20
27	AZ	80	1	80
28	NJ	60	3	20
29	ME	51	4	13
30	WV	50	1	50
31	WI	48	3	16
32	IL	45	5	9
33	NE	30	1	30
34	WY	25	1	25
35	WA	18	2	9
36	MD	15	4	4
37	CO	13	4	3
38	IA	0	1	0
39	SD	0	1	0
40	NV	0	1	0

7. Reshoring + FDI by U.S. Region, 2015 only

The south continues to gain the most jobs. The most notable change in 2015 is that the West has displaced the Midwest as the second highest region.

Reshoring + FDI by U.S. Region, 2015 only			
Region	2015 Jobs	2015 Companies	2015 Avg. Jobs/ Facility
South	24855	145	171
West	6604	58	114
N. East	2859	31	92
M. West	1801	22	82

8. Nearshoring 2015 only

This is what we know. We don't capture as much data about nearshoring due to less US reporting on the subject. We would appreciate hearing about more cases that other people know about.

Mexico	4400	5	880
Canada	0	0	0

Conclusion

Reshoring is still in its early stages. The purpose of this report is to provide trend data, which should motivate companies to reevaluate their sourcing and siting decisions and make better decisions that consider all of the cost, risk and strategic impacts flowing from those decisions. Recently FDI has been stronger than reshoring. Both trends are based on the logic of localization, producing in the market.

2016 Projections

2016 trends will depend on the USD and the strength of the U.S. economy relative to competitor countries. The strong USD hurts both trends. The strong U.S. economy probably hurts reshoring more than FDI as foreign companies act to increase their position in a strong market such as the U.S. In contrast U.S. companies are largely making sourcing decisions on a cost basis. There is probably a 12 month lag time between these changes and a significant response in the trends. Balancing those headwinds, reshoring and FDI continue to gain credibility - companies are becoming more aware of TCO, and skilled workforce recruitment and training are improving. Due to the strong currency and relatively strong U.S. economy throughout 2015, it will be an uphill fight in 2016. Best guess forecast: 2016 reshoring and FDI drop by 20% vs. 2015. We encourage readers to use our data and tools to help the U.S. improve our forecast.

Data refinement is ongoing.

-To see a full list of companies in the database [click here](#).

-If your company is listed, [email us](#) to request your company's data to review, edit and return.

Please include your company name and detailed contact info.

- To add your company, go to the Reshoring Initiative's [database entry form](#).