

Jobs Supported by State Exports 2015

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Executive Summary

In 2015, exports of goods and services supported an estimated 11.5 million U.S. jobs. Nationally, goods exports consisting of manufactured products, agricultural products, natural resources and used/second-hand products supported 6.7 million jobs. The export of services accounted for the remaining 4.8 million jobs supported.

In this report, we present estimates of jobs supported by exports of goods at the state level. We find that goods exports from the states of Texas, California, Washington, Illinois, and New York supported an estimated 2.8 million jobs in 2015. This figure represents 41 percent of all U.S. jobs supported by goods exports in 2015.

Since 2009, we estimate that the number of jobs supported by the export of goods nationally has grown by 900 thousand. Goods exports from the states of Texas, California, Washington, Louisiana and Michigan supported nearly 50 percent of the total change in jobs supported over this time period.

Introduction

In 2015, exports of goods and services supported an estimated 11.5 million U.S. jobs. Nationally, goods exports consisting of manufactured products, agricultural products, natural resources and used/second-hand products supported 6.7 million jobs. The export of services accounted for the remaining 4.8 million jobs supported.

This paper presents estimates of jobs supported by goods exports from the 50 states (Table 1).¹ Because data on exports of services by state is unavailable, the breakout is limited to jobs supported by the export of goods.² The complete set of results for jobs supported by goods exports from all 50 states and the District of Columbia for the years 2000-2015 can be found at http://trade.gov/mas/ian/employment/index.asp.

State Export Data

The state goods export data employed in the breakout here is taken from two sources. For all products other than agriculture we use the Origin of Movement (OM) series produced by the United States Census Bureau. The OM series generally provides export data based on the state from which the good began its journey to the port of export. However, in some cases, the origin of movement data does not reflect the state from which the export was initially transported. For example, when shipments are consolidated, the OM data will reflect the consolidation point of the shipment as opposed to the transportation origin. The effect of consolidation on the data is particularly noticeable for agricultural exports that are shipped down the Mississippi River to New Orleans. For these products, Louisiana is identified as the state of origin in the data rather than the states where the commodities were produced and originally shipped.³

A similar problem can arise when looking at exports of other non-manufactured goods when those goods are stored and then exported by central offices or intermediaries: exports from the state in which the consolidation occurs will be overstated.⁴

¹ For the national figures see Rasmussen, April, 2016, "Jobs Supported by Exports 2015: An Update." U.S. Department of Commerce, International Trade Administration, Washington, DC. <u>http://www.trade.gov/mas/ian/employment/index.asp</u>

² Goods exports consist of manufactured exports (NAICS 31-33), agricultural and natural resource and mining exports (NAICS 11 and NAICS 21) and scrap/second hand goods.

³ For a discussion of the OM data series see the Foreign Trade Division's State Data series page located at <u>https://www.census.gov/foreign-trade/aip/elom.html.</u>

⁴ Ibid.

Therefore, for agricultural exports as defined by NAICS, we use state export data from the Economic Research Service (ERS) of the United States Department of Agriculture (USDA), which attempts to trace agricultural exports back to the states where their production originated. The ERS estimates of state agricultural exports use a measure of state-level farm cash receipts from USDA farm survey data. Each state's export value is then derived using the state's share of cash receipts by sub-industry. These shares are applied to U.S. national export values to create state export values.⁵

Methodology

The first step of the state-level estimates for years prior to 2015, takes a states' share of exports of a commodity for that year and applies it to the number of jobs supported nationally by the export of that commodity for the same year. For 2015, we assume that the commodity shares of total jobs supported are unchanged from 2014. The state results are then summed across commodities to obtain the total number of jobs supported by goods exports for each state.

Interpretation of the Results

Given the data used to estimate job supported by state-level exports, care should be taken in the interpretation of the results. The figures presented in this paper should best be thought of as representing the number of jobs supported by the exports *from* a state as opposed to the number of jobs supported by exports *within* a state. As calculated, exports from a particular state are not necessarily produced in that state and, therefore, not all the labor embodied in the production of the export will be located in the state.

Sources of Revisions

This release of Jobs Supported by State Exports includes preliminary values for the year 2015 and revised values for the years 2000 to 2014. Sources of revisions include: updated national Jobs Supported by Exports estimates, revised USDA State Agricultural Export estimates, and revised Census State Merchandise Export values.

⁵ For a discuss of the ERS methodology employed in their state export data see: <u>http://www.ers.usda.gov/data-products/state-export-data/documentation.aspx</u>

Jobs Supported by Goods Exports from Individual States 2015

The state-level estimates of jobs supported by goods exports are presented in Figures 1 and 2. Goods exports from the fifteen states whose exports supported the most jobs accounted for almost 4.8 million jobs supported (71 percent of total jobs supported by goods exports) with exports from the states of Texas and California supporting one out of every four jobs. Exports from the remaining 35 states accounted for 29 percent of all jobs supported by goods exports.



Figure 1: The 15 States Whose Goods Exports Supported the Most Jobs in 2015

Figure 2: Shares of Jobs Supported by Total Goods Exports, State Breakout



Jobs Supported by Manufactured Exports from Individual States in 2015

Since manufacturing plays a large role in the economies of individual states, we also estimate jobs supported by manufactured exports at the state-level. Manufactured products account for 89 percent of all jobs supported by the export of goods. Nationally we estimate that exports of manufactured products supported approximately 6.0 million jobs in 2015. Jobs supported by manufactured exports broken down by state are presented in Figure 3.





Reflecting the predominance of manufactured products in the composition of all goods exports, the 15 states whose exports of manufactured goods supported the greatest number of jobs are also the 15 states whose total goods exports supported the greatest number of jobs. Overall, the 15 states whose manufactured exports supported the most jobs accounted for 73 percent of jobs supported by the export of manufactured products (Figure 4).



Figure 4: Shares of Jobs Supported by Manufactured Exports, State Breakout

Changes in Jobs Supported by Goods Exports from Individual States

The export of goods supported nearly 900,000 additional jobs in 2015 as compared to the low level during the end of the recession in 2009. Figure 5 presents the 15 states with the largest change in jobs supported by exports over the period 2009-2015. Exports from these 15 states supported almost 821,000 more jobs in 2015 than in 2009, while exports from the remaining 35 states accounted for almost 62,000 additional jobs supported.



Figure 5: Change in Jobs Supported by Exports, 2009-2015

Figure 6 shows the 2009 to 2015 trend in jobs supported for the five states whose exports supported the most jobs in 2015.



Figure 6: Jobs Supported by Goods Exports 2009-2015, Top Five States

The exports of 27 states supported more jobs in 2015 than in 2014. Figure 7 presents the 15 states with the largest change in jobs supported by exports over the period 2014-2015. Exports from these 15 states supported over 70,000 more jobs in 2015 than the previous year.



Figure 7: Change in Jobs Supported by Exports, 2014-2015

Conclusion

In 2015, goods exports from the states of Texas, California, Washington, Illinois and New York supported an estimated 2.8 million or 41 percent of all U.S. jobs supported by the export of goods. Manufactured exports from the same five states supported 2.5 million U.S. jobs.

State	Number of Jobs Supported						
	2009 (R)	2010 (R)	2011 (R)	2012 (R)	2013 (R)	2014 (R)	2015 (P)
Alabama	78,301	82,002	88,911	97,366	94,563	92,970	97,098
Alaska	30,884	34,081	41,837	38,199	38,461	38,431	41,566
Arizona	78,554	75,975	83,392	82,192	84,516	89,992	101,579
Arkansas	48,752	44,910	43,888	54,936	50,324	47,667	49,387
California	658,719	683,610	710,381	682,964	689,239	703,360	706,969
Colorado	35,964	38,439	41,120	42,947	42,338	41,656	41,849
Connecticut	77,205	78,680	77,174	75,483	76,494	73,180	70,038
Delaware	22,950	23,653	23,834	21,905	22,050	21,691	23,672
Florida	266,427	273,786	293,220	286,998	257,739	249,563	243,755
Georgia	150,167	167,779	190,357	188,549	190,915	195,736	198,488
Hawaii	3,189	3,412	4,299	3,383	2,621	5,568	8,434
Idaho	22,686	26,831	29,716	29,453	27,087	24,500	21,124
Illinois	284,927	305,920	354,660	371,288	329,717	338,502	333,674
Indiana	156,017	168,813	175,220	187,472	176,519	188,736	190,511
Iowa	102,061	106,142	112,785	121,072	105,129	110,049	101,986
Kansas	65,647	68,951	70,934	65,874	66,138	64,776	59,175
Kentucky	111,279	108,050	105,261	114,457	128,532	137,886	140,352
Louisiana	100,425	113,785	136,180	156,359	168,872	170,488	155,428
Maine	16,037	19,115	19,636	18,271	16,619	16,314	17,543
Maryland	53,446	52,237	49,992	54,028	53,459	54,942	46,385
Massachusetts	127,738	128,907	126,922	113,563	113,355	114,579	111,875
Michigan	207,450	239,415	250,559	284,596	286,080	270,035	270,240
Minnesota	118,788	126,027	127,928	129,533	124,240	123,845	119,119
Mississippi	41,043	43,328	49,139	54,370	54,080	51,945	53,945
Missouri	74,047	86,013	87,109	84,125	77,720	84,824	87,927
Montana	10,217	11,978	15,035	11,958	12,771	12,084	12,085
Nebraska	56,655	56,791	67,861	63,220	58,983	64,600	58,300
Nevada	28,732	26,247	29,600	36,309	31,281	28,873	34,492
New Hampshire	17,802	22,720	21,259	16,213	15,973	17,849	18,281
New Jersey	143,387	150,105	158,424	143,537	141,279	143,489	137,140
New Mexico	7,497	8,220	10,004	12,838	11,564	15,131	15,144
New York	279,371	296,143	328,608	312,109	313,262	318,308	315,221
North Carolina	144,773	148,651	152,681	156,176	152,930	160,211	158,222
North Dakota	27,462	28,968	32,430	35,478	32,480	33,715	34,767
Ohio	226,728	240,979	245,309	255,794	256,480	258,170	260,436
Oklahoma	31,121	33,409	33,974	36,693	37,166	33,406	28,530
Oregon	71,337	76,181	76,174	73,957	74,325	80,183	81,547
Pennsylvania	165,354	180,743	192,465	181,199	185,692	183,995	190,351
Rhode Island	8,574	9,410	10,010	9,352	8,477	9,330	9,117
South Carolina	110,261	115,620	130,263	131,390	134,461	149,622	158,242
South Dakota	24,316	23,040	25,692	25,636	23,166	26,172	23,848
Tennessee	123,109	134,157	144,532	149,685	151,594	153,241	158,078
Texas	849,510	918,398	988,943	1,036,176	1,063,052	1,084,456	1,046,549
Utah	51,913	59,297	65,167	65,782	57,011	48,590	55,795
Vermont	16,277	18,671	18,031	16,660	15,508	13,888	12,698
Virginia	86,225	89,556	88,854	87,390	81,921	86,374	87,259
Washington	278,448	258,083	293,924	331,127	359,096	385,249	375,009
West Virginia	28,593	32,564	40,899	53,813	39,880	35,034	30,458
Wisconsin	109,939	115,032	122,411	127,066	121,428	120,101	118,958
Wyoming	4,969	4,660	5,506	6,468	5,895	6,627	5,369

Table 1 – Jobs Supported by Goods Exports from Individual States 2009-2015

Note: Values for 2009-2014 are revised. Values for 2015 are preliminary.

Source: ITA calculations from USDA and BEA data.