



US Trade of Passenger Vehicles vs. US Trade of Fasteners

by Cori Rogers

The fluctuation in the trade of fasteners depends on the rise and fall of a multitude of industries. Growth in areas including aerospace, shipbuilding, construction, vehicles and more, has a significant effect on the trade of fasteners. **The data in the article will explore the US trade of passenger motor vehicles and the role it plays in the United States' imports and exports of fasteners.**

Data note: Passenger motor vehicles or cars are represented by total value (USD) by all trade under the Harmonized System (HS) code 8703. Fastener trade is represented by all codes under HS 7318, measured by total value.

US Imports of Passenger Vehicles

US imports of passenger motor vehicles (HS 8703) grew 8 percent in total value from 2014 to 2015 and amounted to over \$167.2 billion. This is positive compared to the zero growth in import value seen from 2013 to 2014, and the 4 percent growth from 2012 to 2013.

US Annual Imports of Cars by HTS (Total Value HS 8703)

HTS Code 10-digit	2015		2014		% Change
	Total Value	% of Total Value	Total Value	% of Total Value	
8703230052	\$36,517,625,998	21.84%	\$27,588,142,292	17.85%	32%
8703240058	\$27,238,449,612	16.29%	\$31,115,939,810	20.14%	-12%
8703230048	\$19,206,178,842	11.49%	\$15,523,936,082	10.05%	24%
8703230046	\$18,661,323,044	11.16%	\$19,412,985,195	12.56%	-4%
8703230044	\$10,372,832,644	6.20%	\$8,796,092,319	5.69%	18%
TOTAL	\$167,207,570,817	100.00%	\$154,514,141,248	100.00%	8%

US Annual Imports of Cars by Country (Total Value HS 8703)

Country	2015		2014		% Change
	Total Value	% of Total Value	Total Value	% of Total Value	
Canada	\$42,674,417,550	25.52%	\$43,173,242,175	27.94%	-1%
Japan	\$35,780,301,135	21.40%	\$33,920,547,063	21.95%	5%
Germany	\$26,613,975,674	15.92%	\$25,994,512,689	16.82%	2%
Mexico	\$23,838,981,601	14.26%	\$21,463,776,354	13.89%	11%
S. Korea	\$17,278,450,985	10.33%	\$14,687,239,400	9.51%	18%
U. K.	\$6,765,844,875	4.05%	\$5,247,841,275	3.40%	29%
Italy	\$4,078,010,687	2.44%	\$2,301,357,090	1.49%	77%
Hungary	\$2,064,928,999	1.23%	\$1,562,693,536	1.01%	32%
South Africa	\$1,365,698,688	0.82%	\$1,260,719,122	0.82%	8%
Sweden	\$1,324,115,078	0.79%	\$796,038,889	0.52%	66%
TOTAL	\$167,207,570,817	100.00%	\$154,514,141,248	100.00%	8%

The top HS code for passenger motor vehicles in 2015 was 8703.23.0052 (Passenger Motor Vehicles with Spark ignition combustion piston engines with Cylinders Cap over 1500 N/0 3000 Cc, 4 Cyl & Undr, Int Volume Exceeding 3.4 Cbm, New). HTS 8703.23.0052 had a total US import value of \$36.5 billion, which is 21.8 percent of all passenger vehicle import codes and increased from 2014 to 2015 by 32 percent.

Most US passenger vehicle imports come from Canada. In 2015, 25.5 percent of all US car imports were imported from Canada. This decreased in market share from 2014 by over 2 percent. Total US car imports from Canada totaled \$42.6 billion and declined from 2014 by 1 percent. Japan is the second-largest car provider to the United States. In 2015, US imports from Japan totaled \$35.7 billion and increased 5 percent from 2014. Germany is the third-largest provider of cars to the United States, which had a total value of \$26.6 billion in 2015 and increased 2 percent from 2014.

Compared with Fastener Imports

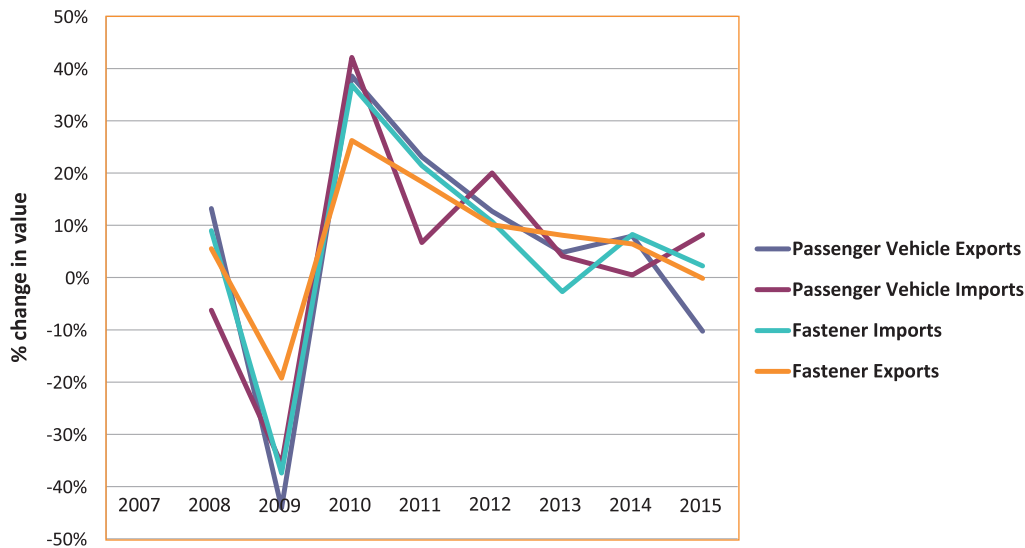
Total US fasteners imports also grew from 2014 to 2015 by 2 percent and totaled \$4.98 billion. Though vehicle imports were stagnant from 2013 to 2014, US imports of fasteners grew

8 percent. See the right for the annual percentage changes of the US fastener trade and the US passenger vehicle trade from year to year since. The percentage changes don't match but a similar trend line is visible for the past nine years.

Countries of Origin for US Fastener Imports:

Most US imports of fasteners come from Taiwan, which increased 6 percent from 2014 to 2015 and totaled over \$1.5 billion. Followed by China, which had zero growth and Japan, which declined by 5 percent.

Annual Percentage Change of US Trade Fasteners vs. Passenger Vehicles



US Annual Imports of Fasteners by HTS (Total Value)

HTS Code 10-digit	2015		2014		% Change
	Total Value	% of Total Value	Total Value	% of Total Value	
7318160085 - Other Threaded Nuts Of Iron Or Steel, Nesoi	\$835,468,395	16.76%	\$839,966,865	17.22%	-1%
7318141060 - Self-tapping Screws Having Shanks Or Threads With A Diameter Of Less Than 6 Mm, Of Iron Or Steel Other	\$597,310,638	11.98%	\$533,810,135	10.95%	12%
7318290000 - Other Non-threaded Articles (fasteners) Of Iron Or Steel, Nesoi	\$328,939,749	6.60%	\$338,270,014	6.94%	-3%
7318158066 - Cap Screws Of Iron Or Steel, With Hexagonal Heads, Having Shanks Or Threads With A Diameter Of 6 Mm Or More	\$281,689,891	5.65%	\$310,669,882	6.37%	-9%
7318152095 - Bolts And Bolts And Their Nuts Or Washers Entered Or Exported In The Same Shipment, Of Iron Or Steel, Having Shanks Or Threads With A Diameter of 6mm Or more Nesoi	\$281,128,801	5.64%	\$271,751,518	5.57%	3%
TOTAL	\$4,985,344,443	100.00%	\$4,877,054,666	100.00%	2%

US Annual Imports of Fasteners by Country (Total Value)

Country	2007	2008	2009	2010	2011	2012	2013	2014	2015
Taiwan	\$1,255,196,649	\$1,310,202,240	\$789,401,398	\$1,116,792,447	\$1,336,542,608	\$1,384,976,883	\$1,387,900,973	\$1,502,512,233	\$1,594,517,220
China	\$717,960,406	\$889,979,173	\$564,696,960	\$728,386,127	\$932,191,075	\$1,025,749,843	\$979,253,965	\$1,136,225,969	\$1,135,293,767
Japan	\$558,216,956	\$536,063,590	\$363,784,073	\$539,669,279	\$571,363,543	\$758,117,402	\$687,617,685	\$649,669,661	\$619,784,501
Canada	\$296,565,154	\$322,798,083	\$185,610,203	\$245,412,015	\$279,112,691	\$268,742,222	\$248,759,288	\$287,392,284	\$300,557,506
Germany	\$201,544,443	\$199,051,922	\$133,307,508	\$172,345,836	\$249,837,777	\$277,490,119	\$282,930,858	\$348,465,746	\$347,083,822
S. Korea	\$86,175,952	\$95,546,649	\$53,850,313	\$121,852,760	\$156,210,356	\$198,559,863	\$216,448,169	\$214,836,157	\$237,455,761
Italy	\$80,302,092	\$95,475,877	\$46,805,322	\$75,610,144	\$98,055,753	\$101,955,633	\$95,303,150	\$117,272,448	\$112,100,807
India	\$66,450,533	\$82,853,368	\$51,983,553	\$64,173,005	\$91,326,839	\$90,937,199	\$80,862,845	\$80,220,646	\$105,174,793
U.K.	\$71,055,112	\$81,879,039	\$56,246,266	\$59,948,049	\$60,065,886	\$65,892,203	\$65,270,773	\$74,764,513	\$65,743,690
Thailand	\$66,397,371	\$83,424,465	\$40,000,261	\$61,848,204	\$73,300,219	\$66,339,425	\$68,778,579	\$48,091,348	\$51,774,054
TOTAL	\$3,687,757,757	\$4,019,084,512	\$2,515,843,977	\$3,443,027,993	\$4,180,888,770	\$4,628,842,493	\$4,505,115,300	\$4,877,054,666	\$4,985,344,443

US Exports of Passenger Vehicles

US exports of passenger motor vehicles (HS 8703) declined by 10 percent from 2014 to 2015 and totaled \$55.3 billion. This is a big difference from 2013 to 2014 where exports grew 8 percent.

US Annual Exports of Cars by Country (Total Value HS 8703)

The top HS code for passenger motor vehicle exports in 2015 was 8703.24.0060 and totaled \$12.5 billion (Passenger Motor Vehicles W/spark Ignition Internal Combustion Piston Engine, Nesoi, New, With Cylinder Capacity Over 3000 Cc & More Than 4 But Le 6 Cyinders).

Like imports, most US exports of cars head to Canada. Canada imports about 26.7 percent of all US car exports, by total value. In 2015, Canada imported \$14.75 billion in cars from the United

Country	2015		2014		% Change
	Total Value	% of Total Value	Total Value	% of Total Value	
Canada	\$14,759,969,364	26.67%	\$15,232,595,980	24.70%	-3%
China	\$9,143,266,008	16.52%	\$11,163,212,414	18.10%	-18%
Germany	\$6,149,682,896	11.11%	\$5,634,565,577	9.14%	9%
Saudi Arabia	\$3,845,809,912	6.95%	\$3,948,438,367	6.40%	-3%
Mexico	\$3,119,908,918	5.64%	\$3,783,860,140	6.14%	-18%
United Arab Emirates	\$2,587,942,457	4.68%	\$2,722,494,136	4.41%	-5%
U.K.	\$2,172,282,308	3.93%	\$1,864,923,102	3.02%	16%
Australia	\$1,766,035,296	3.19%	\$2,058,808,363	3.34%	-14%
S. Korea	\$1,289,032,629	2.33%	\$1,020,226,085	1.65%	26%
Kuwait	\$653,155,513	1.18%	\$708,643,468	1.15%	-8%
TOTAL	\$55,343,418,725	100.00%	\$61,675,220,265	100.00%	-10%

States, which was 3 percent less than 2014. China is the second-largest importer of US cars. In 2015, the United States exported \$9.1 billion in passenger vehicles to China, which declined by 18 percent. Germany is the third-largest importer of American passenger vehicles and increased imports from 2014 to 2015 by 9 percent, which totaled \$6.15 billion.

US Annual Exports of Fasteners by Country (Total Value)

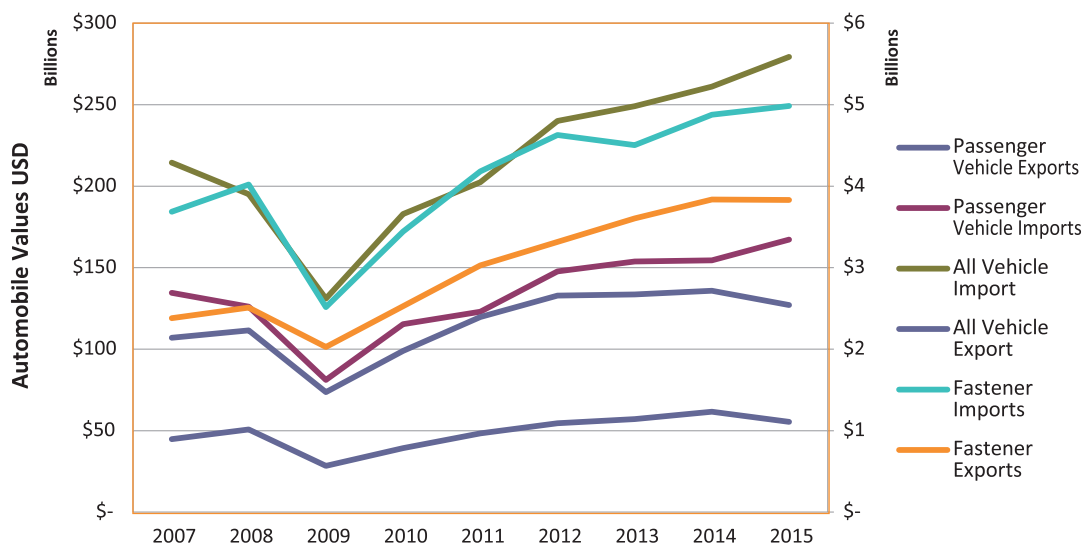
Country	2007	2008	2009	2010	2011	2012	2013	2014	2015
TOTAL	\$2,379,243,930	\$2,510,540,673	\$2,027,389,455	\$2,559,145,714	\$3,027,769,626	\$3,333,534,759	\$3,603,549,908	\$3,835,260,538	\$3,829,746,235
Mexico	\$576,340,860	\$607,594,687	\$499,351,803	\$663,219,831	\$805,785,594	\$988,787,203	\$1,103,567,251	\$1,277,549,669	\$1,322,016,918
Canada	\$968,883,910	\$927,171,901	\$699,952,898	\$881,120,790	\$998,766,029	\$1,080,209,675	\$1,074,983,519	\$1,089,754,647	\$1,020,122,030
China	\$52,503,505	\$69,434,240	\$72,596,356	\$101,207,884	\$132,462,120	\$119,011,354	\$141,156,161	\$146,071,695	\$169,574,676
UK	\$133,789,215	\$140,877,955	\$99,993,803	\$114,790,603	\$141,704,078	\$154,207,638	\$159,206,927	\$165,161,860	\$161,491,426
Germany	\$46,589,066	\$56,003,363	\$50,040,156	\$69,095,147	\$81,129,414	\$77,313,987	\$85,673,416	\$111,478,461	\$110,226,760
Brazil	\$22,326,277	\$41,318,741	\$43,870,959	\$69,615,861	\$81,241,300	\$84,448,573	\$97,756,135	\$102,905,004	\$98,612,804
France	\$66,428,103	\$68,499,561	\$64,617,632	\$66,209,054	\$73,267,084	\$88,773,140	\$101,887,222	\$91,210,485	\$95,229,292
Japan	\$79,632,924	\$103,460,216	\$60,966,811	\$61,367,904	\$65,062,235	\$75,273,860	\$85,691,422	\$82,444,567	\$82,748,850
S. Korea	\$39,851,608	\$41,170,444	\$36,708,728	\$48,083,808	\$64,800,902	\$59,379,679	\$65,071,808	\$69,246,702	\$73,470,040
Singapore	\$65,896,668	\$49,993,566	\$41,849,513	\$66,498,945	\$88,267,407	\$80,970,511	\$87,581,925	\$78,750,085	\$68,310,550

Compared with Fastener Exports

Comparing US car exports with US fastener exports, car exports declined by 10 percent and US fastener exports had zero growth. From 2013 to 2014, car exports increased 8 percent and fastener exports increased 6 percent.

Below is a chart displaying the annual trends by value for the US vehicle trade and

US Vehicle Trade Vs. US Fastener Trade



the US fastener trade. The value for fasteners is along the right Y-axis. Again, the growth doesn't exactly match up but there is visible similarities looking at a large chunk of time. This chart includes all vehicles and passenger vehicles separated out.

Countries of Destination for Fastener Exports:

Most US exports of fasteners head to Mexico. In 2015, Mexico imported \$1.32 billion in fasteners from the United States, 6 percent less than 2014. The second-largest consumer of American fastener exports is Canada. In 2015, the United States exported \$1.02 billion in fasteners to Canada, which was 16 percent higher than 2014.

US Annual Exports of Fasteners by Country (Total Value)

Country	2007	2008	2009	2010	2011	2012	2013	2014	2015
TOTAL	\$2,379,243,930	\$2,510,540,673	\$2,027,389,455	\$2,559,145,714	\$3,027,769,626	\$3,333,534,759	\$3,603,549,908	\$3,835,260,538	\$3,829,746,235
Mexico	\$576,340,860	\$607,594,687	\$499,351,803	\$663,219,831	\$805,785,594	\$988,787,203	\$1,103,567,251	\$1,277,549,669	\$1,322,016,918
Canada	\$968,883,910	\$927,171,901	\$699,952,898	\$881,120,790	\$998,766,029	\$1,080,209,675	\$1,074,983,519	\$1,089,754,647	\$1,020,122,030
China	\$52,503,505	\$69,434,240	\$72,596,356	\$101,207,884	\$132,462,120	\$119,011,354	\$141,156,161	\$146,071,695	\$169,574,676
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France	\$66,428,103	\$68,499,561	\$64,617,632	\$66,209,054	\$73,267,084	\$88,773,140	\$101,887,222	\$91,210,485	\$95,229,292
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Singapore	\$65,896,668	\$49,993,566	\$41,849,513	\$66,498,945	\$88,267,407	\$80,970,511	\$87,581,925	\$78,750,085	\$68,310,550

Recap

In all, the trade trends of US imports and exports of fasteners vs. motor vehicles aren't a perfect match, but the lines do follow suit over the years. While US imports of cars have grown 8 percent by value in 2015, we can likely expect trade in fasteners will grow with it. Yet, US exports of automobiles have declined, which can negatively affect the need for fasteners. It's important to keep an eye on the auto industry to help predict the effects on the global fastener trade in the future. ■