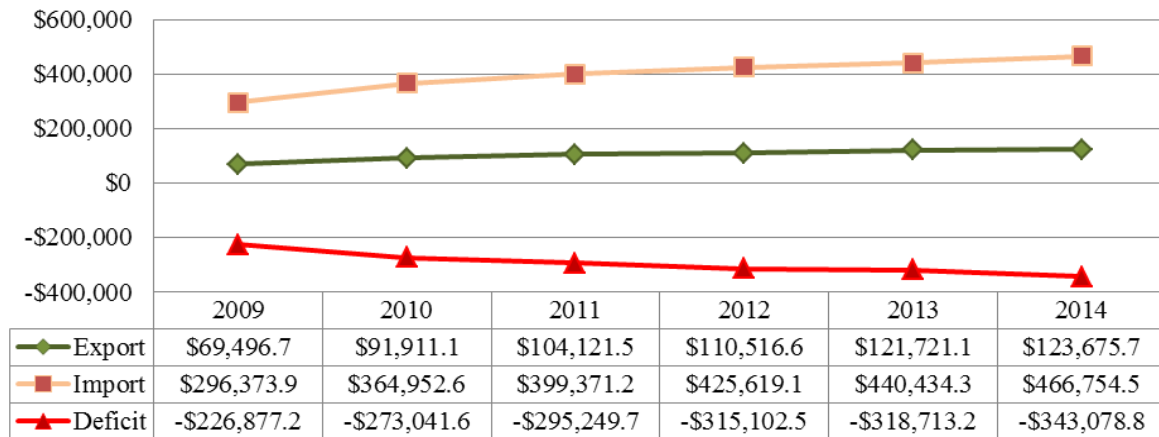


Statistical Analysis of U.S. Trade with China 2014

Office of Technology Evaluation

In 2014, U.S. exports of goods to China were \$124.0 billion, a \$2.0 billion (1.6%) increase from 2013; U.S. imports of goods from China were \$466.8 billion, a \$26.2 billion (6.0%) increase; and the trade deficit of goods was \$343.1 billion, a \$24.4 billion (7.6%) increase.

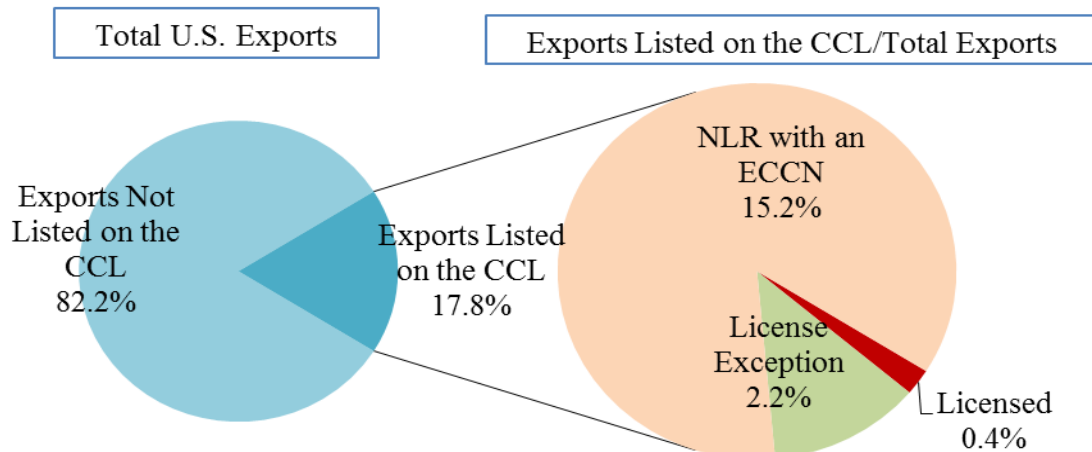
U.S. Trade with China 2009-2014
Smillions



Source: The U.S. Census Bureau Trade Statistics, July 2015

In 2014, only \$496.9 million (0.4% of total exports to China) was exported under the license authorization of the Bureau of Industry and Security (BIS) of the U.S. Department of Commerce.

Impact of BIS Export Control on the U.S. Exports to China 2014

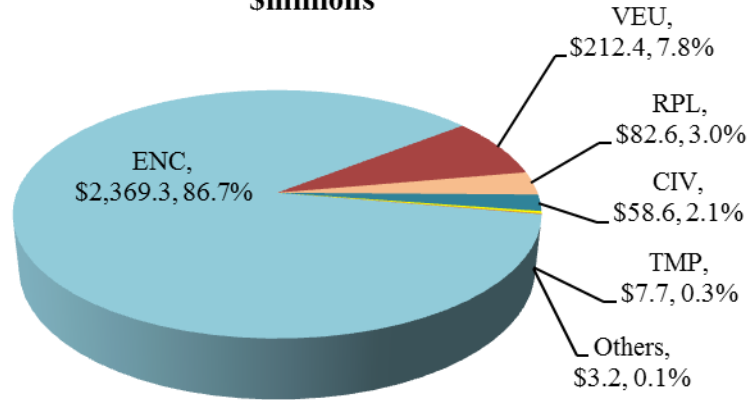


Source: The U.S. Census Bureau, Automated Export System, June 2015

Note: Exports not listed on the Commerce Control List (CCL) include EAR99 items not licensed, items under No License Required (NLR) where the ECCN was left blank, and exports regulated by other government agencies.

Of the \$2.7 billion in U.S. export under a BIS license exception to China in 2014, \$2.4 billion, 86.7% of the total, included Encryption commodities, Software and Technology (ENC).

**2014 U.S. Exports to China by BIS License Exception
Smillions**



Source: Automated Export System, June 2015

BIS License Exceptions:

ENC: Encryption Commodities and Software

VEU: Validated End User Authorization

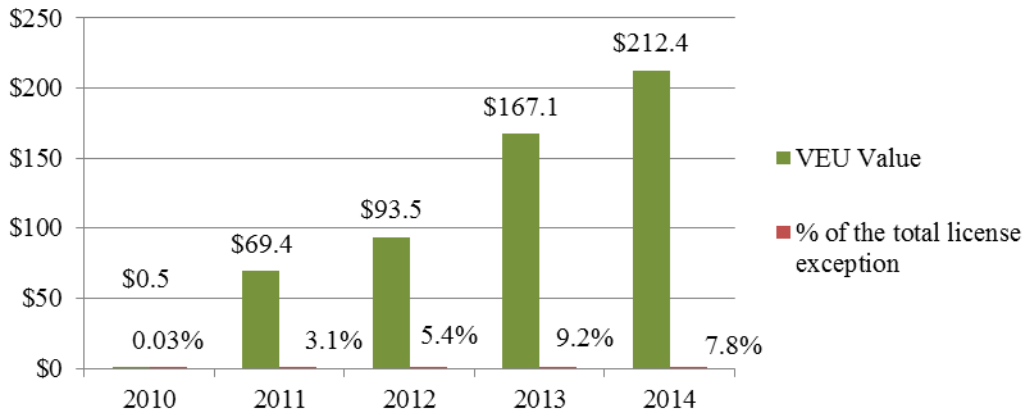
RPL: Servicing and replacement of parts and equipment

CIV: Civil End Users

TMP: Temporary imports, exports, re-exports, and transfers (in-country)

Exports under BIS Validated End User Authorization increased 27.1% from \$167.1 million in 2013 to \$212.4 million in 2014.

**The Increasing Value of U.S. Exports to China
under Validated End User Authorization
Smillion**



Source: Automated Export System, June 2015

2014 U.S. Exports to China by ECCN and BIS License Designation

<i>Top Four ECCNs by Export Value – Licensed</i>	
ECCN	Description
3B001	Equipment for the manufacturing of semiconductor devices or materials
3A233	Mass spectrometers
2B001	Machine tools
3C003	Organo-inorganic compounds

<i>Top Four ECCNs by Export Value– License Exception</i>	
ECCN	Description
5A002	"Information security" systems, equipment and "components"
3B001	Equipment for the manufacturing of semiconductor devices or materials
9A991	Aircraft and gas turbine engines and "parts" and "components"
5D002	Software

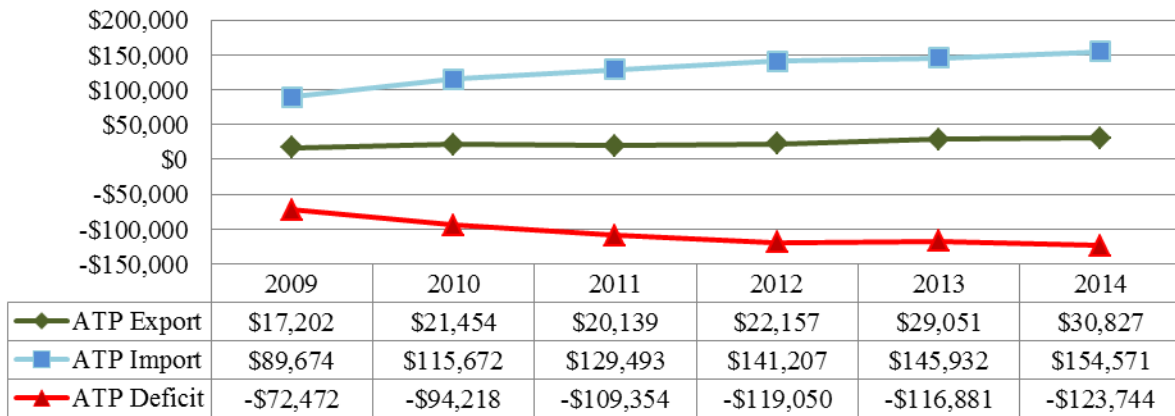
<i>Top Four ECCNs by Export Value – No License Required</i>	
ECCN	Description
9A991	Aircraft and gas turbine engines and "parts" and "components"
5A992	Equipment not controlled by 5A002
5A991	Telecommunication equipment not controlled by 5A001
3B991	Equipment not controlled by 3B001 for the manufacture of electronic "parts," "components" and materials

Source: Automated Export System, June 2015

Exports of Advanced Technology Products (ATP) to China

In 2014, U.S. Advanced Technology Products (ATP) exports to China valued \$30.8 billion, a \$1.8 billion (6.1%) increase from 2013; U.S. ATP imports from China were \$154.6 billion, a 5.9% (\$8.6 billion) increase; and the trade deficit was \$123.7 billion, a 5.9% (\$6.9 billion) increase.

U.S. ATP Trade with China 2009 - 2014
\$millions



Source: The U.S. Census Bureau Trade Statistics, June 2015

Advanced Technology Products (ATP) - Approximately 500 of some 22,000 Harmonized System commodity classification codes contain products from ten recognized high technology categories (e.g., biotechnology, aerospace).

\$30.8 billion, 24.9% of U.S. exports to China, were considered ATP items. Of these, \$254.8 million (0.8% of the total ATP exports) were shipped under a BIS license and \$2.6 billion (8.4%) were shipped under a BIS license exception.

U.S. ATP Exports to China 2009-2014 (\$millions)								
ATP Category	2009	2010	2011	2012	2013	2014	% of the Total	% change from 2013
Biotechnology	124	168	206	284	399	497	1.6%	24.6%
Life Science	1,591	1,967	2,316	2,782	3,017	3,111	10.1%	3.1%
Opto-Electronics	204	463	326	328	401	392	1.3%	-2.2%
Information & Communications	3,570	4,041	3,801	3,920	4,681	4,619	15.0%	-1.3%
Electronics	5,283	6,491	4,730	4,004	4,840	5,549	18.0%	14.6%
Flexible Manufacturing	786	2,286	2,049	1,995	2,649	2,436	7.9%	-8.0%
Advanced Materials	254	214	219	294	181	177	0.6%	-2.2%
Aerospace	5,356	5,787	6,418	8,440	12,638	13,977	45.3%	10.6%
Nuclear Technology	34	37	74	109	243	67	0.2%	-72.4%
Grand Total	17,202	21,454	20,139	22,157	29,051	30,827	100.0%	6.1%

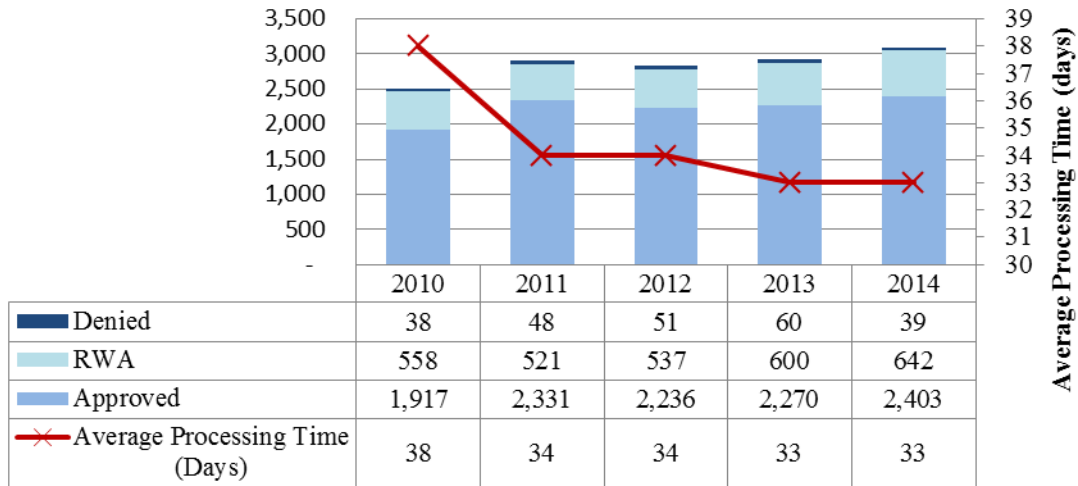
Source: The U.S. Census Bureau Trade Statistics, June 2015

BIS Licensing of Items Destined for China

Exports to China are controlled under the Export Administration Regulations (EAR) for CB:1, CB:2, CB:3, NP:1, NS:1, NS:2, MT:1, RS:1, RS:2, CC:1, and CC:3 reasons.

In 2014, BIS reviewed 3,084 export/re-export applications for China. Of these, 2,403 (77.9% of the total applications) were approved; and 39 (1.3%) were denied.

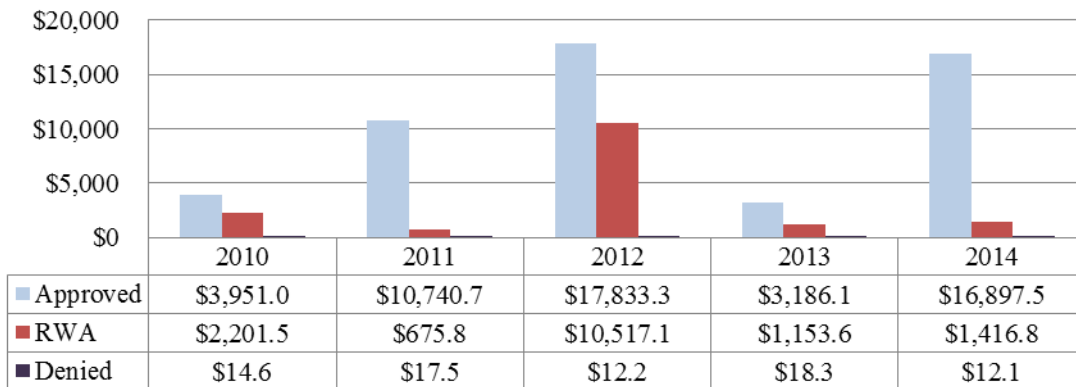
Licenses for Tangible Items, Software and Technology for China by Count 2010-2014



Source: Commerce U.S. Exports Exporter Support System, March 2015

Note: Figures above do not include deemed export applications.

Licenses for Tangible Items, Software and Technology for China by Value 2010-2014 Smillions



Source: Commerce U.S. Exports Exporter Support System, March 2015

In 2014, BIS reviewed 661 deemed export applications for China.

- 644 (97.4% of the total) were approved;
- 15 (2.2%) were returned without action; and
- 2 (0.3%) were denied.

Summary of U.S. Exports to China 2014			
	Value (\$million)	ATP to Total Exports	
Total Exports	\$123,676		
Total ATP Exports	\$30,827	24.9%	
Detailed Summary of EAR-Controlled Exports			
License Description	Value (\$million)	Percentage of Total	Percentage Description
Licenses	\$492.8	99.2%	
Special Comprehensive License (SCL)	\$4.1	0.8%	
Total of Licensed	\$496.9	0.4%	total licensed/total exports
License Exceptions			
Civil End Users (CIV)	\$58.6	2.1%	
Temporary Imports, Exports, and Re-exports (TMP)	\$7.7	0.3%	
Servicing and Replacement of Parts and Equipment (RPL)	\$82.6	3.0%	
Government and International Organizations (GOV)	\$0.03	0.001%	
Gift Parcels and Humanitarian Donations (GFT)	\$0.0002	0.000%	
Technology and Software - Unrestricted (TSU)	\$1.5	0.1%	
Aircraft and Vessels (AVS)	\$1.5	0.06%	
Encryption Commodities and Software (ENC)	\$2,369.3	86.7%	
Computers (APP)	\$0.1	0.003%	
Authorization for Validated End-User for Certain Authorized Exports and Reexports (VEU)	\$212.4	7.8%	
Total of License Exceptions	\$2,733.7	2.2%	total license exceptions/ total exports
		84.6%	total license exceptions/ total subject to license requirement
Total subject to License Requirement (Licensed and License Exceptions)	\$3,230.6	2.6%	subject to license requirement/total exports
Not Listed on the CCL			
NLR containing an ECCN	\$18,821.4		
Total of NLR with an ECCN	\$18,821.4	15.2%	total NLR with an ECCN/ total export
Total listed on the CCL			
Total listed on the CCL (Licensed, License Exceptions and NLR with an ECCN)	\$22,052.0	17.8%	total listed on the CCL/ total exports
		2.3%	total licensed/total listed on the CCL
ATP Exports			
ATP Licensed	\$254.8	0.8%	ATP licensed/ total ATP Exports
ATP License Exceptions	\$2,595.0	8.4%	ATP license exceptions/ total ATP Exports
Total ATP subject to License Requirement (Licensed and License Exceptions)	\$2,849.7	91.1%	ATP license exceptions/ ATP exports subject to license requirement

Source: U.S. Census Bureau Trade Statistics and Automated Export System