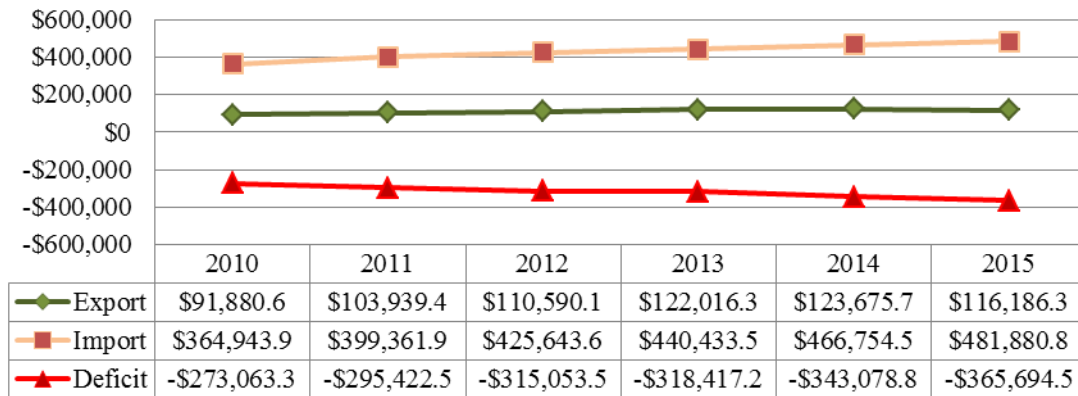


# Statistical Analysis of the U.S. Trade with China for Calendar Year 2015

## I. The U.S Trade with China<sup>1</sup>

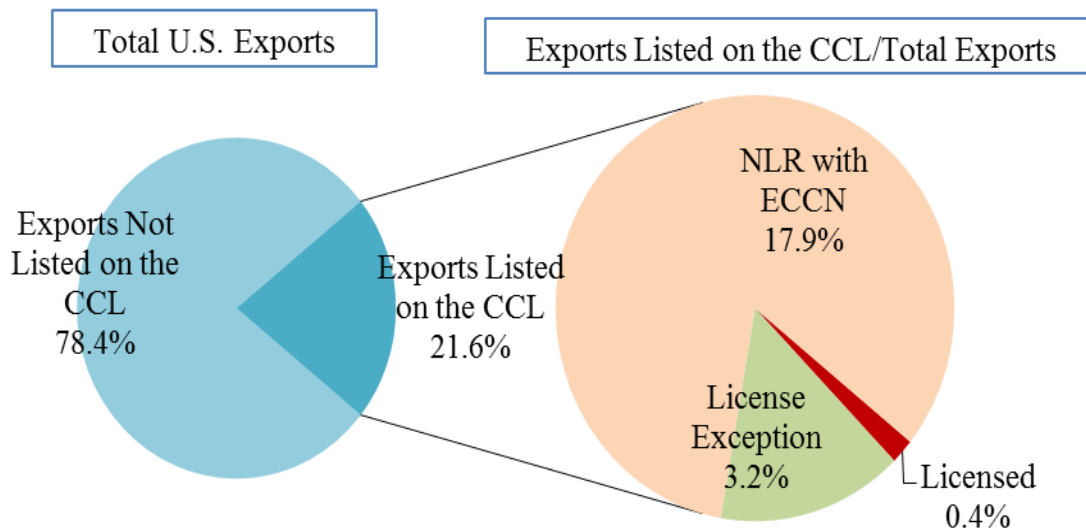
**U.S. Trade with China 2010-2015**  
Smillions



In 2015, the U.S. exports to China were \$116.2 billion, 6.1% (\$7.5 billion) decrease from 2014; the U.S. imports from China were \$481.9 billion, 3.2% (\$15.1 billion) increase; and the trade deficit was \$365.7 billion, 6.6% (\$22.6 billion) increase.

## II. Impact of BIS Export Controls on U.S.-China Trade<sup>2</sup>

**2015 U.S. Exports to China**



Note: For the purpose of this report, exports not listed on the Commerce Control List (CCL) include EAR99 items and items under No License Required (NLR) designation without an Export Control Classification Number (ECCN), and exports regulated by other government agencies.

<sup>1</sup> Source: U.S. Census Bureau Trade Statistics, retrieved on March 4, 2016.

<sup>2</sup> Source: U.S. Census Bureau Trade Statistics and Automated Export System (AES), retrieved on March 4, 2016.

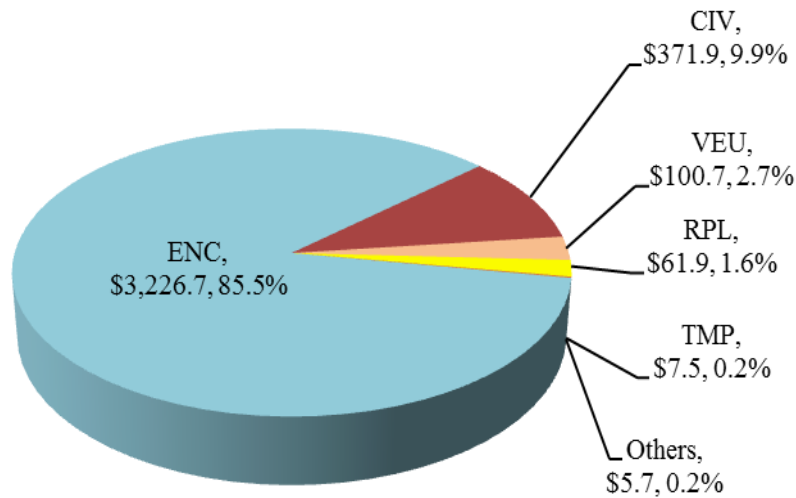
Of the \$116.2 billion in U.S. exports to China in 2015, only 0.4% required a BIS license.

Of the \$25.1 billion in U.S. exports of items listed on the Commerce Control List<sup>3</sup> (CCL) to China, 1.9% required a BIS license in 2015.

Of the \$4.3 billion in U.S. exports subject to a BIS license requirement to China in 2015, 88.7% were exported under a BIS license exception.

In 2015, the U.S. exports to China shipped under a BIS license exception valued \$3.8 billion, of which, \$3.2 billion (85.5% of the total) included Encryption commodities, Software and Technology (ENC). It is notable that the U.S. exports under Civil End-users (CIV) increased significantly from \$58.6 million in 2014 to \$371.9 million. This value is more than 6 times of that in 2014.

**2015 U.S. Exports to China by BIS License Exceptions  
Smillions**



ENC	Encryption Commodities, Software and Technology
VEU	Authorization Validated End User
RPL	Servicing and Replacement of Parts and Equipment
CIV	Civil End Users
TMP	Temporary Imports, Exports, Re-exports, and Transfer (in-country)

<sup>3</sup> Items listed on the CCL include licensed, license exceptions and NLR with an ECCN.

### III. 2015 Trends in Exports by ECCN and License Designation<sup>4</sup>

#### *Top Four Exports by ECCNs to China by Value – Licensed (\$millions)*

ECCN	Description	Value
3B001	Equipment for the manufacturing of semiconductor devices or materials	\$206.9
3A233	Mass spectrometers	\$48.9
9A001	Aero gas turbine engines	\$25.6
2B001	Machine tools	\$17.4

#### *Top Four Exports by ECCNs to China by Shipment Count – Licensed*

ECCN	Description	Shipment Count
3B001	Equipment for the manufacturing of semiconductor devices or materials	1,516
2B230	Pressure transducers	1,009
2B350	Chemical manufacturing facilities and equipment	508
3A233	Mass spectrometers	386

#### *Top Four Exports by ECCNs to China by Value– License Exception (\$millions)*

ECCN	Description	Value
5A002	"Information security" systems, equipment and components	\$3,186.6
3B001	Equipment for the manufacturing of semiconductor devices or materials	\$446.3
9A991	Aircraft and gas turbine engines	\$45.4
5D002	Software for information security	\$29.7

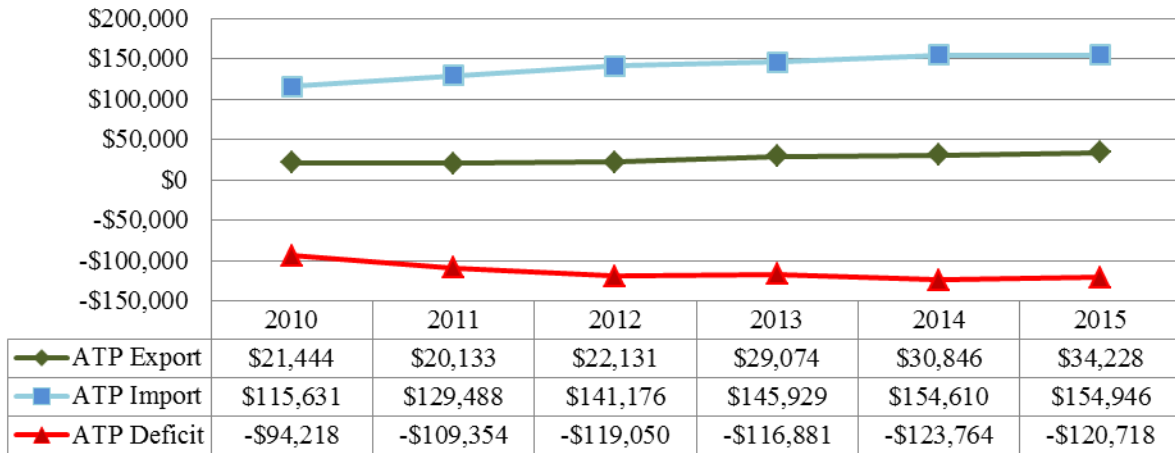
#### *Top Four Exports by ECCNs to China by Value – NLR (\$millions)*

ECCN	Description	Value
9A991	Aircraft and gas turbine engines	\$14,551.7
5A992	Low-level information security systems and equipment	\$1,554.0
5A991	Telecommunication equipment	\$923.0
3B991	Equipment not controlled by 3B001 for the manufacture of electronic components and materials	\$775.3

<sup>4</sup> Source: AES, retrieved on March 4, 2016.

IV. Analysis of U.S.-China Trade in Advanced Technology Products (ATP)<sup>5</sup>

**U.S. ATP Trade with China 2010 - 2015**  
Smillions



In 2015, the U.S. ATP exports to China valued \$34.2 billion, an 11.0% (\$3.4 billion) increase from 2014; the U.S. ATP imports from China were \$154.9 billion, a 0.2% (\$336 million) increase; and the trade deficit was \$120.7 billion, a 2.5% (\$3.0 billion) decrease.

**U.S. ATP Exports to China 2010-2015**  
(\$millions)

ATP Category	2010	2011	2012	2013	2014	2015	% of the Total	% change from 2014
Biotechnology	168	206	283	400	497	796	2.3%	60.2%
Life Science	1,964	2,318	2,758	3,011	3,112	3,316	9.7%	6.6%
Opto-Electronics	463	326	327	401	392	465	1.4%	18.6%
Information & Communications	4,036	3,803	3,920	4,680	4,616	5,178	15.1%	12.2%
Electronics	6,490	4,714	4,004	4,840	5,549	6,023	17.6%	8.5%
Flexible Manufacturing	2,286	2,054	1,998	2,650	2,458	2,541	7.4%	3.4%
Advanced Materials	214	219	294	181	177	211	0.6%	19.2%
Aerospace	5,786	6,418	8,437	12,668	13,978	15,481	45.2%	10.8%
Nuclear Technology	37	74	109	243	67	215	0.6%	220.9%
<b>Grand Total</b>	<b>21,444</b>	<b>20,133</b>	<b>22,131</b>	<b>29,074</b>	<b>30,846</b>	<b>34,228</b>	100.0%	11.0%

In 2015, the largest categories of the U.S. ATP exports to China were comprised of Aerospace at \$15.5 billion (45.2% of the total ATP exports); Electronics at \$6.0 billion (17.6%); and Information and Communications at \$5.2 billion (15.1%).

<sup>5</sup> Source: U.S. Census Bureau Trade Statistics, retrieved on March 11, 2016.

Advanced Technology Products: about 500 of some 22,000 commodity classification codes contain products from a recognized high technology category (e.g., biotechnology).

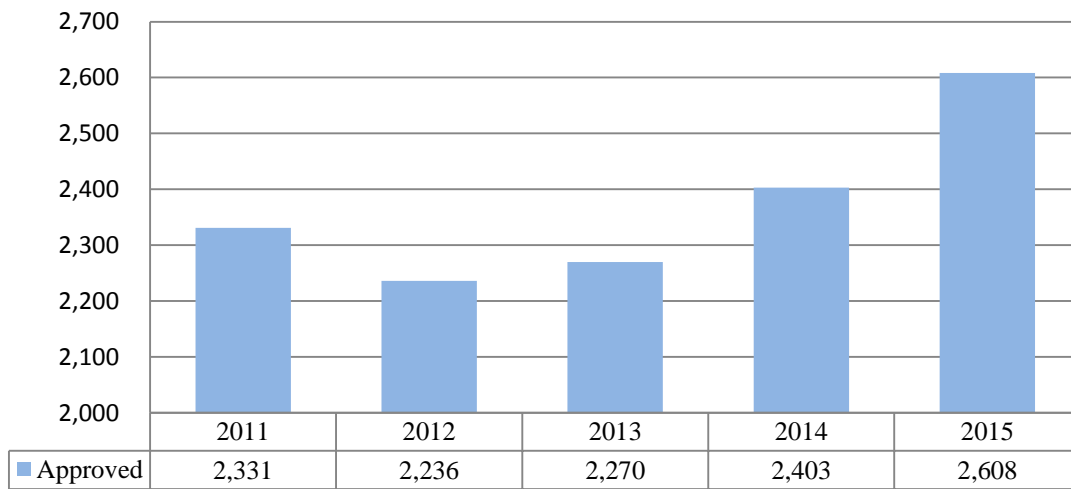
Compared with 2014, there were increases in all ATP categories, especially over 200% increase in Nuclear Technology, and 60.2% increase in Biotechnology.

In 2015, 29.5% (\$34.2 billion) of the U.S. exports to China were considered ATP items. Of these, 0.7% required a *BIS license*.

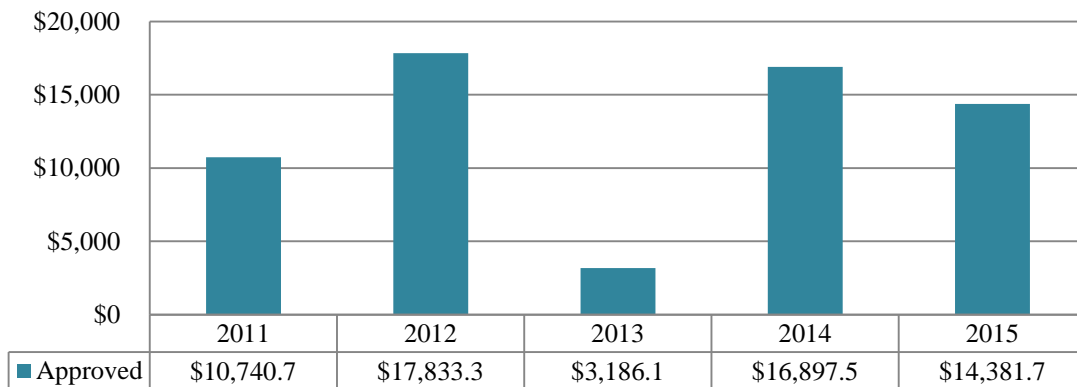
Of the \$3.9 billion in the U.S. *ATP exports subject to a BIS license requirement* to China in 2015, 93.5% were exported under a license exception.

V. 2015 Trends in China Licensing<sup>6</sup>

**Licenses for Tangible Items, Software and Technology for China by Count 2011-2015**



**Licenses for Tangible Items, Software and Technology for China by Value 2011-2015 \$millions**



Note: Figures above do not include deemed export applications.

<sup>6</sup> Source: CUESS, retrieved on March 1, 2016.

In 2015, BIS reviewed 3,223 export/re-export applications (not including deemed export applications) valued at \$14.8 billion for China, out of a total of 35,018 applications worldwide valued at \$561.3 billion.

- Approved applications for China totaled 2,608 (80.9% of the total applications) for \$14.4 billion, compared to the 29,283 (83.6%) approved applications valued at \$505.1 billion for all destinations.

In 2015, BIS reviewed 692 deemed export applications for China, compared to 1,317 for all destinations.

- Approved deemed export applications for China totaled 665, compared to 1,211 approved worldwide.