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United States Government Accountability Office  
Washington, DC 20548

November 13, 2006

The Honorable Henry J. Hyde  
Chairman  
Committee on International Relations  
House of Representatives

Subject: *Analysis of Data for Exports Regulated by the Department of Commerce*

In light of the September 2001 terror attacks, you had asked us to examine the Department of Commerce's Bureau of Industry and Security's (BIS) dual-use export control system. We reported our findings in a June 26, 2006, report,<sup>1</sup> saying that BIS has not systematically evaluated the overall effectiveness and efficiency of the dual-use export control system. Specifically, we reported that BIS has not conducted comprehensive analyses of available data about items that have actually been exported from the United States. We made several recommendations in that report, including that Commerce should use the available data to evaluate the system's effectiveness. Because we had difficulty obtaining data on actual exports from Commerce, we were unable to provide you with specific details about these data in time for our June 2006 report. We have since obtained the data and are now transmitting to you our analysis of the data for 2004 and 2005.

In assessing what dual-use items were exported in 2004 and 2005, we analyzed data from the U.S. Census Bureau, which is part of the Department of Commerce and is responsible for collecting and maintaining data provided by exporters through the Automated Export System. The data comprise items that Commerce regulates under the Export Administration Regulations (EAR).<sup>2</sup> Because electronic filing of export documentation has greatly increased in the past few years—previously, paper filings were more common—the data we analyzed were for 2004 and 2005 and represent the most complete data from the Automated Export System.<sup>3</sup> We examined selected fields of data, such as license codes, country of destination, commodity type, and dollar value of items. The data we present do not include exports to Canada because Census relies on Canada's data on what it imported from the United States to represent U.S. exports to Canada. The data also do not include exports filed on paper; in 2005, paper filings represented only 4 percent of the value of all exports. We excluded Census data for U.S. territories and possessions because shipments to these locations are not covered under the EAR. We assessed data reliability by performing electronic testing of the data, obtaining and reviewing system documentation, and interviewing Census officials and found the data to be sufficiently reliable for the purpose of this analysis. We also interviewed BIS officials to determine how they use these data. The following analyses focus on 2005 data, as data for 2004 are not substantially different. Detailed data for 2004 and 2005 are contained in enclosure 1. We conducted our review between July and November 2006 in accordance with generally accepted government auditing standards.

<sup>1</sup> GAO, *Export Controls: Improvements to Commerce's Dual-Use System Needed to Ensure Protection of U.S. Interests in the Post-9/11 Environment*, GAO-06-638 (Washington, D.C., June 26, 2006).

<sup>2</sup> 15 C.F.R. §§ 730-774.

<sup>3</sup> Electronic filings became mandatory for all items on the Commerce Control List in October 2003.

## Summary

The data we obtained provide an overall picture of the dollar value of commodities subject to Commerce regulations and of the countries receiving these exports. Most items do not require government review and approval in the form of a license prior to export. We found that less than 1 percent of exports subject to Commerce regulations were licensed in 2005. The dollar value of unlicensed exports from the United States in 2005 was about \$624 billion, while the value of licensed exports was about \$1.2 billion. BIS regulates the export of dual-use items that have both commercial and military applications, as well as purely commercial items. These items are either specifically identified on a control list or fall into a catch-all category referred to as EAR99. We analyzed the data according to recipient country, type of commodity, and dollar value. Items identified on the control list, whether licensed or unlicensed, were generally exported to Asian countries, such as China, Taiwan, and Singapore, and to European countries, such as France and the United Kingdom. Aircraft, computers, equipment to manufacture semiconductors, telecommunications equipment, and chemicals were some of the top commodities in terms of highest dollar value for exports identified on the control list. Turning to EAR99 items, Mexico was the largest recipient of unlicensed exports in terms of dollar value, while Cuba and Syria—embargoed countries—were the top two recipients of licensed exports. Some of the top commodities in terms of dollar value for unlicensed EAR99 exports were industrial machinery, chemicals, computers, and semiconductors, while agricultural commodities dominated licensed EAR99 exports. The insight we gained from analyzing these data further supports our prior recommendation to Commerce that it use available data to evaluate the effectiveness of its export control system. The data could aid in determining the economic impact of current regulations and in evaluating whether exporters are complying with regulations. BIS officials told us they periodically use portions of the data for enforcement activities but currently do not use the data to evaluate the system's effectiveness.

## Background

BIS is responsible for implementing and enforcing the EAR.<sup>4</sup> For fiscal year 2005, BIS had a staff of 414 (including 48 licensing officers) and a budget of \$67.5 million, of which \$33.9 million was for the administration of the export control system.<sup>5</sup> The Commerce Control List (CCL)<sup>6</sup> generally specifies dual-use items that are designated by a specific Export Control Classification Number (ECCN), which describes a particular item and shows the controls placed on that item. Dual-use items are regulated for a variety of reasons, including restricting exports that could significantly enhance a foreign country's military potential, preventing exports to countries that sponsor terrorism, and limiting proliferation of chemical, biological, and nuclear weapons and their delivery systems. If an item is not listed on the CCL but is subject to the EAR, it falls into the category known as EAR99.

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<sup>4</sup> Other U.S. government agencies regulate other exports. For example, the Department of State regulates the export of defense articles and services. In fiscal year 2003, State had 35 licensing officers who reviewed about 54,700 license applications.

<sup>5</sup> In addition to administering the dual-use export control system, BIS is responsible for enforcing dual-use export control regulations and law, along with the Departments of Homeland Security and Justice. BIS is also responsible for monitoring the viability of the defense industrial base, ensuring industry compliance with arms control treaties, enforcing antiboycott laws, and assisting other countries in developing effective export control systems.

<sup>6</sup> 15 C.F.R. Part 774, Supp. 1.

Exporters are ultimately responsible for determining whether the items they want to export are subject to the EAR and if a license is required prior to export. The EAR requires exporters to follow several steps, including

- classifying their item to determine if it is on the CCL,
- determining the restrictions that apply to the country the item is being exported to,
- reviewing several lists to determine if they are exporting to a denied person or person of concern, and
- determining if the item will be used for a prohibited purpose.

By following these steps, exporters are to determine whether a license is required or one of the licensing exceptions permissible under the EAR is applicable. Exporters can request a commodity classification when unsure of the requirements for exporting an item subject to the EAR.<sup>7</sup> Through outreach efforts, BIS also educates exporters on export requirements.

After an exporter has either obtained an export license from BIS or determined that a license is not needed, the exporter is required in most cases<sup>8</sup> to document the actual export with a Shipper's Export Declaration. Most declarations are filed electronically through the Automated Export System. The Census Bureau maintains this system and publishes some aggregate data for the purpose of reporting U.S. trade statistics. In most cases,<sup>9</sup> exporters are not required to file an export declaration for exports to Canada because the United States and Canada exchange import data, which are used by each country to represent its export statistics.

### **Most Items Subject to Commerce's Regulations Were Exported Without Licenses, with Asia and Europe as Major Recipients of Certain Commodities**

Our analysis of export data shows that more than 99 percent of CCL and EAR99 items—or about \$624 billion—were exported without licenses in 2005. These items were exported worldwide, while top recipient countries of CCL items were chiefly in Asia and Europe. The majority of items, about \$555.3 billion worth, were declared by exporters to be EAR99. About \$1 billion of CCL items were exported with licenses. The primary commodities exported from the United States comprised aircraft, certain gas turbine engines, industrial and service machinery, and computers. Because 2004 data are not substantially different, we focus on 2005 data in this section of our letter. Both years' data are in enclosure 1. The insight we gained from analyzing this data further supports our prior recommendation to Commerce that it use available data to evaluate the effectiveness of its export control system.

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<sup>7</sup> GAO, *Export Controls: Processes for Determining Proper Control of Defense-Related Items Need Improvement*, GAO-02-996 (Washington, D.C.: Sept. 20, 2002.)

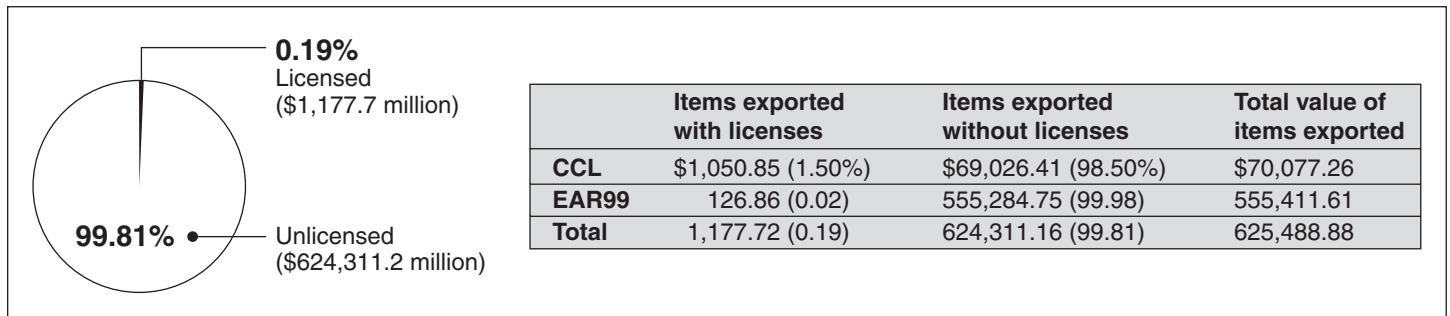
<sup>8</sup> Per the Foreign Trade Statistics Regulations (15 C.F.R. Part 30), an export declaration is required for most countries for any commodity valued at \$2,500 or above, with certain limited exemptions. In general, a declaration is required for all items requiring an export license.

<sup>9</sup> Generally, export declarations are not required to Canada unless an export license is required or the items are being transhipped through Canada to another country.

## Overview of Export Data

About \$625 billion of U.S. exports were subject to Commerce regulations in 2005.<sup>10</sup> Exporters declared that about \$70 billion of these items were on the CCL, representing about 11 percent of all exports subject to Commerce regulations. The remaining \$555 billion fell under the general designation of EAR99. About 98.5 percent of the CCL items were exported without licenses, and 99.98 percent of EAR99 items were exported without licenses, as shown in figure 1. Commerce regulations permit both CCL and EAR99 items to be exported without a license under a variety of circumstances.

**Figure 1: Value of Licensed and Unlicensed Exports Subject to Commerce’s Regulations, 2005**  
(in millions of dollars)



Source: U.S. Census Bureau (data); GAO (analysis and presentation).

Note: Figure does not include data for Canada. Some numbers may not add because of rounding.

<sup>10</sup> In 2005, U.S. world exports, excluding Canada, totaled about \$693 billion.

## Countries

The top countries receiving exports of items identified by exporters as being on the CCL were largely in Asia and Europe. In 2005, China, Taiwan, Singapore, and France were the largest recipients of both licensed and unlicensed CCL exports (see table 1). Among the top five recipients of these items, the percentages in terms of dollar value of items exported with licenses to those countries ranged from 1.4 to 3.6. The majority of EAR99 items exported with a license were to Cuba, an embargoed country. In contrast, Mexico—a major U.S. trading partner—received the largest dollar value of unlicensed EAR99 exports.

**Table 1: Top Five Countries in Terms of Dollar Value for Items Exported with and without Licenses (2005)**

CCL items							
Exported with licenses				Exported without licenses			
Rank	Country	Value (in millions of dollars)	Percentage of all CCL exports	Rank	Country	Value (in millions of dollars)	Percentage of all CCL exports
1	France	\$168.47	3.64%	1	Japan	\$8,751.83	99.58%
2	China	123.95	1.96	2	China	6,196.96	98.04
3	United Kingdom	101.95	2.49	3	Taiwan	5,176.88	98.61
4	Taiwan	72.80	1.39	4	France	4,454.73	96.36
5	Singapore	70.30	1.61	5	Singapore	4,301.76	98.39

EAR99 items							
Exported with licenses				Exported without licenses			
Rank	Country	Value (in millions of dollars)	Percentage of all EAR99 exports	Rank	Country	Value (in millions of dollars)	Percentage of all EAR99 exports
1	Cuba	\$104.32	40.46%	1	Mexico	\$105,197.71	100.00%
2	Syria	4.89	3.55	2	Japan	40,074.20	100.00
3	Taiwan	3.75	0.02	3	China	33,076.30	99.99
4	China	2.85	0.01	4	United Kingdom	30,369.41	100.00
5	Uzbekistan	2.03	2.82	5	Germany	29,262.51	100.00

Source: Census Bureau (data); GAO (presentation and analysis).

Note: Table does not include data for Canada.

## Commodities

The CCL consists of about 500 ECCNs, which describe the item or types of items and designate the controls placed on that item. The top CCL items exported with a license include items listed on the Wassenaar Arrangement<sup>11</sup> munitions list, navigation equipment, semiconductor manufacturing equipment, aircraft, and chemicals (see table 2). Aircraft and certain aircraft engines were the most common CCL item exported without a license in terms of dollar value. Other top unlicensed items included computers and electronics.

**Table 2: Top Five Exports of CCL Items by Dollar Value and Export Control Classification Numbers, 2005**

Rank	ECCN	Descriptions of CCL items exported with licenses	Value (in millions of dollars)
1	9A018	Equipment on the Wassenaar munitions list <sup>a</sup>	\$129.21
2	7A103	Instrumentation, navigation equipment/systems	116.24
3	3B001	Equipment for manufacture of semiconductors	89.41
4	9A991	Aircraft and certain gas turbine engines	69.50
5	1C350	Chemicals and precursors for toxic chemical agents	68.42

Rank	ECCN	Descriptions of CCL items exported without licenses	Value (in millions of dollars)
1	9A991	Aircraft and certain gas turbine engines	\$29,198.03
2	4A994	Computers, electronic assemblies, and related equipment	8,079.06
3	5A991	Telecommunications equipment	6,736.68
4	3A991	Other electronic devices and components not covered under 3A001	3,490.47
5	3A001	Electronic devices and components	3,360.13

Source: Census Bureau (data); GAO (presentation and analysis).

Note: Table does not include data for Canada.

<sup>a</sup> Items that fall under 9A018 include certain military trainer aircraft including parts and components and ground transport vehicles with specific ballistic protection.

<sup>11</sup> The Wassenaar Arrangement on Export Controls for Conventional Arms and Dual-Use Goods and Technologies is one of four multilateral export control regimes in which the United States participates. The arrangement establishes lists of items for which member countries are to apply export controls. The lists include dual-use goods and technologies such as materials, electronics, navigation and propulsion, as well as munitions including weapons and ammunition.

In terms of dollar value, most EAR99 items exported with a license were agricultural and food-related (see table 3). These items required a license because they were exported to an embargoed country, such as Cuba, or were exported to an end user of concern or in support of a prohibited use. In contrast, top U.S. exports that were unlicensed EAR99 included industrial machinery, computers, and chemicals.

**Table 3: Top Five Commodity Type Categories for Exports of EAR99 Items by Dollar Value (2005)**

<b>Rank</b>	<b>Commodity type of EAR99 items exported with licenses</b>	<b>Value (in millions of dollars)</b>
1	Other agricultural foods	\$41.11
2	Feedstuff	35.06
3	Industrial and service machinery	8.38
4	Soybeans and other oil seeds and food oils	8.35
5	Chemicals, excluding medicinals and food additives	7.63
<b>Rank</b>	<b>Commodity type of EAR99 items exported without licenses</b>	<b>Value (in millions of dollars)</b>
1	Industrial and service machinery	\$60,590.56
2	Computers, peripherals, and semiconductors	58,664.01
3	Chemicals, excluding medicinals and food additives	58,465.29
4	Other consumer nondurables	34,248.71
5	Civilian aircraft, engines, parts	24,194.69

Source: Census Bureau (data); GAO (presentation and analysis).

Note: These commodity type categories were developed by the Census Bureau and the Bureau of Economic Analysis utilizing the international Harmonized Tariff Schedule categories. Table does not include data for Canada.

## **BIS Analysis**

In our June 2006 report, we recommended that BIS obtain and analyze available data to systematically evaluate its export control system. While BIS is responsible for regulating a wide range of dual-use and commercial items, it only has visibility over the small portion of items it has licensed for export. BIS has not conducted comprehensive analysis of export data from Census. BIS officials told us they have access to Automated Export System data and can view individual export declarations. They said they periodically use these data for enforcement activities, such as targeting licensed exports for post-shipment verification.

Analysis of the data gave us insight into how the data could be used. We analyzed the data on a macro level to gain insight into the magnitude of items leaving the United States, in terms of recipient countries and commodities. To gain insight on a micro level, the specific data elements could be examined, for example, to determine the economic impact of a proposed regulatory change that would add or remove licensing requirements for commodities to a country. The data could also be used to evaluate industry compliance of regulations, especially for unlicensed exports, and target industry outreach activities.

During the course of our review, BIS officials told us the bureau recognizes the value of analyzing overall export data and has recently established an Office of Technology Evaluation to perform this type of analysis. BIS is in the process of hiring analysts with the needed skills for this office. In addition, BIS is determining how it can better utilize Automated Export System data for analyses.

## **Agency Comments**

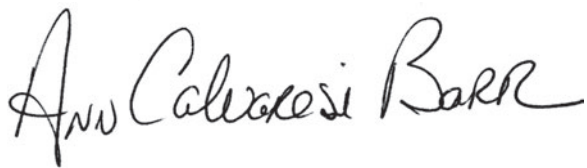
We provided Commerce the results of our analysis and obtained oral comments. Commerce officials agreed with our analysis and the value of using export data to assess the effectiveness of the export system. They also provided technical comments, which we incorporated as appropriate.



We plan no further distribution of this letter until 30 days from the letter date. At that time, we will send copies to the Secretary of Commerce and interested congressional committees. We will also make copies available to others upon request. In addition, the report will be available at no charge on GAO's Web site at <http://www.gao.gov>.

If you have any questions about this letter or need additional information please contact me at (202) 512-4841 or [calvaresibarra@gao.gov](mailto:calvaresibarra@gao.gov). Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this letter. Key contributors to this letter were Anne-Marie Lasowski, Assistant Director; Bradley Terry; Brandon Booth; Lily Chin; and Karen Thornton.

Sincerely,

A handwritten signature in black ink that reads "Ann Calvaresi Barr". The signature is written in a cursive, flowing style.

Ann Calvaresi-Barr  
Director, Acquisition and Sourcing Management

Enclosure

## Enclosure I: Analysis of Export Data for 2004 and 2005

We are providing export data for 2004 and additional data for 2005. The data include overall dollar value of exports under Commerce regulations, the top 10 countries of destination, and top 10 commodities for both years.

**Table 4: Dollar Value and Percentage of Exports for Items Regulated by Commerce in 2004 and 2005**  
(in millions of dollars)

2004			
Items	Exported with licenses	Exported without licenses	Total value of items exported
CCL	\$1,166.45 (2.50%)	\$45,518.53 (97.50%)	\$46,684.98
EAR99	143.55 (0.03)	506,411.17 (99.97)	506,554.72
<b>Total value of items exported</b>	<b>1,310.01 (0.24)</b>	<b>551,929.69 (99.76)</b>	<b>553,239.70</b>
2005			
Items	Exported with licenses	Exported without licenses	Total value of items exported
CCL	\$1,050.85 (1.50%)	\$69,026.41 (98.50%)	\$70,077.26
EAR99	126.86 (0.02)	555,284.75 (99.98)	555,411.61
<b>Total value of items exported</b>	<b>1,177.72 (0.19)</b>	<b>624,311.16 (99.81)</b>	<b>625,488.88</b>

Source: Census Bureau (data); GAO (presentation and analysis).

Note: Table does not include data for Canada. Some numbers do not add because of rounding.

**Table 5: Top 10 Countries in Terms of Dollar Value for CCL Items Exported with and without Licenses in 2004 and 2005**

2004							
Exported with licenses				Exported without licenses			
Rank	Country	Value (in millions of dollars)	Percentage of all CCL exports	Rank	Country	Value (in millions of dollars)	Percentage of all CCL exports
1	China	\$214.04	6.60%	1	Japan	\$6,652.52	99.42%
2	Taiwan	201.68	4.60	2	Taiwan	4,179.20	95.40
3	Singapore	118.71	3.44	3	France	3,526.08	98.03
4	France	70.95	1.97	4	Singapore	3,336.20	96.56
5	Germany	49.21	2.80	5	China	3,027.06	93.40
6	Philippines	46.26	3.69	6	Netherlands	2,597.68	99.58
7	Brazil	42.22	9.92	7	Malaysia	2,593.53	99.43
8	Japan	38.73	0.58	8	United Kingdom	2,366.76	98.43
9	United Kingdom	37.86	1.57	9	South Korea	1,901.32	99.85
10	Israel	36.87	8.66	10	Germany	1,707.68	97.20

2005							
Exported with licenses				Exported without licenses			
Rank	Country	Value (in millions of dollars)	Percentage of all CCL exports	Rank	Country	Value (in millions of dollars)	Percentage of all CCL exports
1	France	\$168.47	3.64%	1	Japan	\$8,751.83	99.58%
2	China	123.95	1.96	2	China	6,196.96	98.04
3	United Kingdom	101.95	2.49	3	Taiwan	5,176.88	98.61
4	Taiwan	72.80	1.39	4	France	4,454.73	96.36
5	Singapore	70.30	1.61	5	Singapore	4,301.76	98.39
6	Germany	37.95	1.38	6	United Kingdom	3,993.26	97.51
7	Japan	36.79	0.42	7	Netherlands	3,855.56	99.46
8	Thailand	34.97	5.32	8	South Korea	3,151.91	99.44
9	Mexico	30.77	1.09	9	Mexico	2,793.47	98.91
10	Israel	22.21	4.11	10	Germany	2,714.32	98.62

Source: Census Bureau (data); GAO (presentation and analysis).

Note: Table does not include data for Canada. Percentages for some countries may not add to 100 percent due to rounding.

**Table 6: Top 10 Countries in Terms of Dollar Value for EAR99 Items Exported with and without Licenses in 2004 and 2005**

2004							
Exported with licenses				Exported without licenses			
Rank	Country	Value (in millions of dollars)	Percentage of all EAR99 exports	Rank	Country	Value (in millions of dollars)	Percentage of all EAR99 exports
1	Cuba	\$124.46	41.67%	1	Mexico	\$92,469.83	100.00%
2	Syria	8.36	4.42	2	Japan	39,539.58	100.00
3	India	2.86	0.06	3	United Kingdom	29,302.72	100.00
4	France	1.13	0.01	4	China	28,735.62	100.00
5	Russia	0.99	0.04	5	Germany	26,999.23	100.00
6	Germany	0.74	0.00	6	South Korea	21,152.20	100.00
7	China	0.61	0.00	7	Netherlands	20,055.12	100.00
8	United Arab Emirates	0.58	0.02	8	France	16,161.87	99.99
9	Taiwan	0.55	0.00	9	Belgium	15,818.76	100.00
10	Switzerland	0.44	0.01	10	Taiwan	14,929.96	100.00

2005							
Exported with licenses				Exported without licenses			
Rank	Country	Value (in millions of dollars)	Percentage of all EAR99 exports	Rank	Country	Value (in millions of dollars)	Percentage of all EAR99 exports
1	Cuba	\$104.32	40.46%	1	Mexico	\$105,197.71	100.00%
2	Syria	4.89	3.55	2	Japan	40,074.20	100.00
3	Taiwan	3.75	0.02	3	China	33,076.30	99.99
4	China	2.85	0.01	4	United Kingdom	30,369.41	100.00
5	Uzbekistan	2.03	2.82	5	Germany	29,262.51	100.00
6	Russia	1.77	0.06	6	South Korea	21,566.24	100.00
7	India	1.50	0.02	7	Netherlands	20,894.29	100.00
8	United Kingdom	1.23	0.00	8	Belgium	16,931.39	100.00
9	France	0.73	0.00	9	France	16,239.72	100.00
10	Azerbaijan	0.62	0.48	10	Taiwan	15,120.5	99.98

Source: Census Bureau (data); GAO (presentation and analysis).

Note: Table does not include data for Canada. Percentages for some countries may not add to 100 percent due to rounding.

**Table 7: Top 10 Exports of CCL Items by Dollar Value and Export Control Classification Numbers in 2004**

Exported with licenses				Exported without licenses			
Rank	ECCN	Descriptions of CCL items	Value (in millions of dollars)	Rank	ECCN	Descriptions of CCL items	Value (in millions of dollars)
1	3B001	Equipment for the manufacture of semiconductors	\$296.87	1	9A991	Aircraft and certain gas turbine engines	\$15,809.81
2	3A001	Electronic devices and components	194.33	2	4A994	Computers, electronic assemblies, and related equipment	5,704.23
3	7A103	Instrumentation, navigation equipment/systems	90.58	3	5A991	Telecommunication equipment	4,735.27
4	5A002	Systems/equipment/integrated circuits for information security	79.49	4	3B991	Other manufacturing and test equipment	3,598.29
5	1C350	Chemicals and precursors for toxic chemical agents	68.76	5	3A991	Other electronic devices and components not covered under 3A001	3,265.88
6	9A018	Equipment on the Wassenaar munitions list	49.09	6	3A001	Electronic devices and components	2,930.56
7	6A003	Cameras	34.07	7	3B001	Equipment for the manufacture of semiconductors	1,759.16
8	6A001	Acoustics	31.13	8	3B992	Equipment for the inspection/testing of components	1,491.37
9	9A003	Gas turbine engine propulsion systems	24.68	9	5A002	Systems/equipment/integrated circuits for information security	1,008.54
10	3A101	Electronic equipment and devices not covered under 3A001	20.54	10	5A992	Information security equipment	886.05

Source: Census Bureau (data); GAO (presentation and analysis).

Note: Table does not include data for Canada.

**Table 8: Top 10 Exports of CCL Items by Dollar Value and Export Control Classification Numbers in 2005**

Exported with licenses				Exported without licenses			
Rank	ECCN	Descriptions of CCL items	Value (in millions of dollars)	Rank	ECCN	Descriptions of CCL items	Value (in millions of dollars)
1	9A018	Equipment on the Wassenaar munitions list	\$129.21	1	9A991	Aircraft and certain gas turbine engines	\$29,198.03
2	7A103	Instrumentation, navigation equipment/systems	116.24	2	4A994	Computers, electronic assemblies, and related equipment	8,079.06
3	3B001	Equipment for the manufacture of semiconductors	89.41	3	5A991	Telecommunications equipment	6,736.68
4	9A991	Aircraft and certain gas turbine engines	69.50	4	3A991	Electronic devices and components not controlled in 3A001	3,490.47
5	1C350	Chemicals and precursors for toxic chemical agents	68.42	5	3A001	Electronic devices and components	3,360.13
6	2A983	Explosives or detonator detection equipment	67.45	6	3B991	Equipment for manufacture of electronic components not controlled in 3B001	3,087.06
7	2B350	Chemical manufacturing facilities and equipment	35.14	7	5A002	Systems/equipment/integrated circuits for information security	2,663.15
8	5A002	Systems/equipment/integrated circuits for information security	34.30	8	3B992	Equipment for inspection/testing of components	1,955.29
9	6A001	Acoustics	32.88	9	3B001	Equipment for the manufacture of semiconductors	1,605.87
10	6A003	Cameras	29.66	10	5A992	Information security equipment	1,335.98

Source: Census Bureau (data); GAO (presentation and analysis).

Note: Table does not include data for Canada.

**Table 9: Top 10 Exports of EAR99 Items by Dollar Value of Commodity Type in 2004 and 2005**

2004					
Exported with licenses			Exported without licenses		
Rank	Descriptions of EAR99 items	Value (in millions of dollars)	Rank	Descriptions of EAR99 items	Value (in millions of dollars)
1	Wheat, rice, other food grains	\$34.19	1	Computers, peripherals, and semiconductors	\$61,269.08
2	Other agricultural foods	32.60	2	Industrial and service machinery	54,963.48
3	Feedstuff	31.47	3	Chemicals, excluding medicinals and food additives	49,678.48
4	Soybeans and other oil seeds and food oils	13.15	4	Other consumer nondurables	30,876.08
5	Trucks, buses, and special purpose vehicles	6.98	5	Civilian aircraft, engines, parts	27,654.48
6	Scientific, hospital, and medical machinery	3.33	6	Electric and electric generating equipment	22,311.43
7	Lumber and other wood supplies	3.23	7	Parts, engines, bodies, and chassis	21,108.78
8	Paper and paper base stocks	2.74	8	Scientific, hospital, and medical machinery	19,472.02
9	Chemicals, excluding medicinals and food additives	2.73	9	Other nonagricultural industrial materials	16,327.74
10	Cotton, including linters-raw	2.05	10	Other agricultural foods	15,401.20
2005					
Exported with licenses			Exported without licenses		
Rank	Descriptions of EAR99 items	Value (in millions of dollars)	Rank	Descriptions of EAR99 items	Value (in millions of dollars)
1	Other agricultural foods	\$41.11	1	Industrial and service machinery	\$60,590.56
2	Feedstuff	35.06	2	Computers, peripherals, and semiconductors	58,664.01
3	Industrial and service machinery	8.38	3	Chemicals, excluding medicinals and food additives	58,465.29
4	Soybeans and other oil seeds and food oils	8.35	4	Other consumer nondurables	34,248.71
5	Chemicals, excluding medicinals and food additives	7.63	5	Civilian aircraft, engines, parts	24,194.69
6	Lumber and other wood supplies	4,75	6	Electric and electric generating equipment	24,103.62
7	Wheat, rice, other food grains	4.00	7	Scientific, hospital, and medical machinery	22,393.25
8	Scientific, hospital, and medical machinery	3.85	8	Parts, engines, bodies, and chassis	22,222.83
9	Other domestic exports	2.93	9	Other agricultural foods	18,178.09
10	Recreational equipment and materials	1.34	10	Other nonagricultural industrial materials	17,930.81

Source: Census Bureau (data); GAO (presentation and analysis).

Note: These commodity type categories were developed by the Census Bureau and the Bureau of Economic Analysis utilizing the international Harmonized Tariff Schedule categories. Table does not include data for Canada.

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