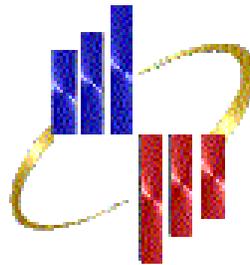


Outbound Process Improvements: Quality of U.S. Export Trade Statistics

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**FOREIGN TRADE
STATISTICS** YOUR KEY
TO TRADE
U. S. CENSUS BUREAU
DEPARTMENT OF COMMERCE



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Overview

The merchandise trade statistics, collected principally by the U.S. Customs Service and published by the Bureau of the Census, measure goods traded between the United States and other countries. They are the official source of information about U.S. imports, exports, and balance of merchandise trade. Census analysts predict U.S. Exports to increase 6-10 percent a year. As a leading economic indicator and a major component of the Gross Domestic Product (GDP), the statistics provide critical information to a wide and varied group of users in the public and private sectors.

The Census Bureau strives, with available resources, to provide accurate, high-quality statistics to meet these needs. However, to use the information wisely and appropriately, users need to understand the nature and limitations of the merchandise trade statistics program. This paper discusses issues affecting the quality of the statistics, some known limitations, and recent dramatic improvements in compliance of Shippers Export Declaration (SED) and Manifest data.

Background

The following report will identify great improvements which have been made in the export reporting field. However, it is equally clear much work remains before appropriate levels of confidence can be achieved.

Data on U.S. export merchandise trade have evolved gradually from imprecise annual estimates of aggregate exports in the early 19th century to the current broad range of highly-detailed statistics on foreign merchandise trade. The existing export data collection system was developed in the early 1900's by the U.S. Department of Commerce, Bureau of the Census, Foreign Trade Division. Enhancements to the collection system (i.e. Automated Export Reporting Program and the Canadian Data Exchange in the 70's and 80's respectively) have been integrated, but the base system design has remained constant. In recent years, various federal agencies have made significant efforts to improve the data collection and compilation systems (Automated Export System) to allow statistical reporting to become an integral part of a company's business transaction.

According to recommendations made by the National Academy of Science, the Panel on Foreign Trade Statistics (see Annotated Bibliography) concludes that the agencies must undertake two sets of activities:

- Enhancing data accuracy, coverage, and usability through increased emphasis on compliance by data filers and through increased productivity in data collection processes; and
- Improving the data collection and data analysis interface to ensure relevant data are compiled.

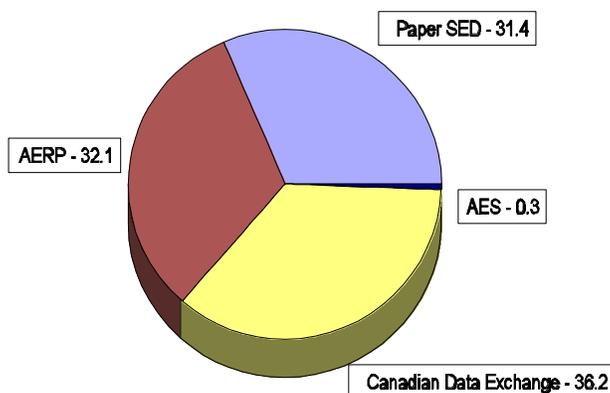
Two major economic forces have been shaping the international trading environment over the past several decades - rapid technological changes and the liberalization and deregulations of domestic and international markets. These forces have accelerated the movement of goods, services, labor, capital, and information across national boundaries. These developments have altered the nature and extent of international transactions and made it more interdependent with other countries.

Source of the Statistics

The Census Bureau compiles export statistics from the following sources of data:

Export Sources of Data

Annual 1997 - Percent of Total Records



In 1997, the Census Bureau collected trade statistics on more than 19,000,000 export transactions. This information represented shipments through more than 400 ports of entry and exit in the United States, Puerto Rico, and the Virgin Islands. Approximately 68 percent of the export transactions were submitted electronically. The remainder of the export statistics were captured from paper documents (SED - Commerce form - 7525-V and 7525-V alt.).

Quality Issues

Users of the statistics often assume that, since the Customs Service collects the information on export transactions, the published statistics represent an exact accounting of merchandise trade. In practice, the collection of export documentation is only one of many responsibilities of the

Customs Service.

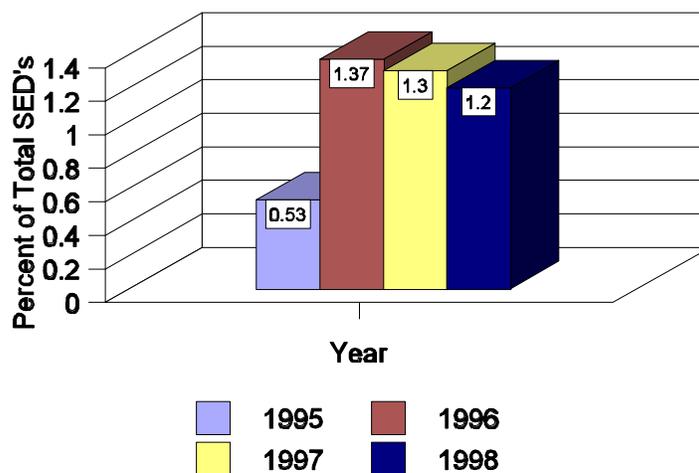
Customs targets much of its interdictory and investigatory efforts on illegal exports (i.e., unreported bulk currency exports and money laundering, stolen vehicles, embargo violations, high technology shipments, munitions, and drug precursor chemicals). Licensed shipments represent **less than five percent** of total export shipments. For most shipments, Customs merely collects and forwards the Shipper's Export Declaration (SED) to the Census Bureau for processing. Until recently, few ports screened for missing SED.

The major sources of error in the merchandise trade statistics include:		
Missing Documentation	Timeliness of Data	Incomplete or Inaccurate Reporting

Underreporting of exports is related to the voluntary compliance by filers, and there are few incentives or penalties for exporters to file promptly and accurately. Underreporting of exports can be attributed to a failure to file as well as to inaccurate filing to avoid high shipping costs, circumvent export controls, and reduce tariffs and duties in importing countries. Past lax enforcement efforts have also perpetuated the underreporting.

Timing problems result when export shipments are not included in the correct transaction month. Late document reporting by the exporter or carrier and scarce U.S. Customs field resources coupled with dramatic increases in the number of export transactions delay the delivery of large numbers of documents to the Census Bureau processing center. These late arrivals are often too late for inclusion in the proper month's statistics and are carried over into a subsequent month's data, thus the term "carry-over."

Annual SED Carry-Over



Note: 1998 data is based on 1st quarter statistics.

Census regulations (15 CFR, Part 30) require an exporter to deliver export documents (SED) to the carrier prior to or at the time of exportation. Carriers are given 4 days after the exportation to file the manifest and all required SED with Customs. A large portion of exporters and freight forwarders feel the 4 day-filing delay applies to them.

Research conducted by Census in 1997 indicated 50 percent of approximately 500,000 monthly Shippers Export Declaration's contain at least one error. Export statistics are estimated to be underreported from 3-7 percent (estimates based on Census trade reconciliations - adjustments for differences in trade definitions, valuations, timing, and errors) and may be as high as 10 percent (based on Census and Customs port audits). Using the 1997 Annual export data of \$689 billion, the statistics were underreported approximately \$21 - \$69 billion or one-third of the 1997 trade deficit.

Manifest Problems

The Customs Service Outbound Mission is to develop, execute, and oversee outbound policies and processes resulting in informed compliance, targeted enforcement, collection of accurate data, and a reliable level of service for the public and private sector. In recognition of the importance of this facet of Customs field operations, the office of the Outbound Process Owner was created in 1995. This office, for the first time, created a single office to oversee all export responsibilities for both Headquarters and port operations. Outbound interdiction activities are included but not investigated.

In support of the Outbound Mission, the Customs Service National Outbound Process Owner (NPO) commissioned a team of Customs and Bureau of the Census subject matter experts in July 1995 to identify potential weaknesses that may be defeating the efforts in compiling accurate vessel manifest data. The mission of this survey was to determine national "baseline" compliance rates for outbound vessel manifests.

The NPO also commissioned a similar team of subject matter experts to identify potential weaknesses with compliance in the outbound aircraft manifest environment and southern border land shipments that also may be affecting Customs ability to meet the goals of the Outbound Mission.

Vessel:

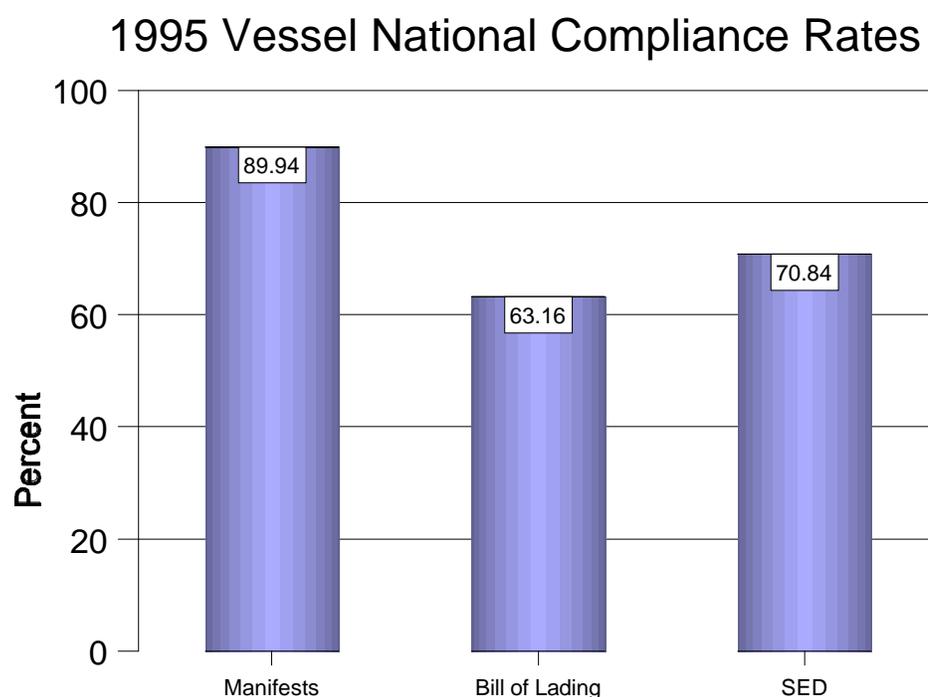
Manifest reporting to Customs has also had its problems with missing or late manifests. Additionally, a practice called "rollover," which occurs when the vessel carrier receives late documentation from the exporter or forwarding agent and does not include the bill of lading and SED with the correct manifest. The carrier then changes the vessel name and voyage number on both the bill of lading and SED and files the bill of lading and SED with the vessel manifest they

are currently submitting. The ‘roll-over’ practice, which is illegal and subject to Customs penalties, was identified to be at approximately 11 percent in the vessel manifest survey conducted June 1, 1995 - August 31, 1995.

The vessel manifest survey also indicated that approximately 15 percent of the bills of lading and related SED are not filed with Customs or Census and only 37 percent of the bills of lading filed with Customs were accurate in regard to the proper vessel, voyage, and bill of lading number.

The industry-wide practice of providing incomplete and inaccurate manifest documentation is carried out in varying degrees by virtually every carrier. Customs historically has done little or no verification on the documentation, and carrier compliance in this area is unknown. Bills of Lading were not compared to SED.

A National Compliance Rate profile was developed for timely manifests, bills of lading, and SED.



Based on the 1995 Outbound Manifest Vessel Survey, the national measurement of bill of lading compliance (63 percent) appears to represent a significantly low level of compliance based upon current Customs regulations. Additionally, a closer review of the manifest data and the carrier’s outbound processes uncovered a systematic universal practice of sacrificing the accurate filing of manifest documentation in order to meet the regulatory grace period - not later than the fourth business day after clearance.

The vessel survey revealed a wide range of knowledge and awareness regarding the export process. Carrier knowledge ranged from cohesive standard operating procedures and total awareness to unclear procedures and minimal awareness. This disparity of knowledge depends on the degree of involvement the individual has in the process. Another factor is the centralization of some carrier's document control operations and the fact that some carrier offices have little or no responsibilities in this part of the export process.

Additionally, due to competitive concerns, vessel carriers will not "hold" cargo nor delay the shipment's export while awaiting documents. Some carriers allow SED to be faxed to them and then duplicate it on yellow paper to conform with Census requirements.

Air:

Due to priorities for other programs, outbound air manifest processing has been allowed to deteriorate into a state that does not meet the needs of internal and external customers. A recent survey conducted in 1997 of the air outbound manifest program found these discrepancies in both Customs and air carrier procedures. The serious discrepancies prevented a statistically valid survey to ascertain the compliance rate with export reporting requirements for the air carriers.

The following findings illustrate this point:

- 21.5 percent underreporting of airway bill manifests.
- 47.2 percent of the manifests reviewed had all of the house airway bill manifests included in the Customs complete manifest.
- 37.6 percent of the manifests reviewed had all of the required SED attached to the Customs complete manifest.
- 60 percent of those SED included in the Customs complete copy of the manifest were completed correctly.
- No internal mechanism exists for ensuring that carriers filing an incomplete manifest at the time of departure actually submit a complete copy to Customs within 4 days of departure.
- Customs record retention practices for outbound manifests were seriously deficient. Baseline manifest compliance measurements for airports using this survey team's methodology cannot proceed until the findings are remedied.

Southern Border Overland Shipments:

Five southern border ports started conducting a compliance survey for truck shipments effective August 1, 1998 - October 31, 1998. A rail shipment compliance survey will follow the truck survey.

Data Improvements

Previous individual attempts by Customs and Census to improve compliance and data reporting problems were not successful. However, recent joint efforts to battle the compliance and data reporting problems have shown dramatic positive results. Efforts began with an upward battle of reviewing and updating internal procedures. After internal procedures were updated, Customs initiated Compliance Workshops nationwide. Customs, with the cooperation of Census, started with Compliance Workshops for the export trade community and followed 6 months later with Compliance activities.

The Compliance Workshops have been conducted in both vessel and air environments. The purpose of the workshops are to perform outreach presentations to the carriers, freight forwarders and exporters, and educate the export community of their responsibilities under the law and instruct them in the proper submission of the Shippers Export Declaration (SED).

Profile of the Outbound Manifest Compliance Workshops		
Outbound Measure:	Vessel	Air
Number of Workshops	350	153
Number of Participants	13,000	3,912
Number of Companies	4,000	1,749

A result of the Compliance Workshops, quarterly Vessel Outbound Compliance Rates are reviewed to measure effectiveness of the workshops and to identify shortcomings for additional outreach visits to rectify persistent problems. Additionally, penalties are now being assessed for non-compliant violations and compliance counseling is taking place to remedy occurrences of non-compliance.

National Outbound Vessel Compliance Rates			
Measurement:	1996	1998	Percent Change
Timely filing of the Manifest	89.94%	90.15%	+ .21
Filing of Bill of Lading	63.16%	89.48%	+ 26.32
Filing of SED	70.84%	85.01%	+ 14.17

While there were improvements in the number of timely manifests, the major improvements have been in the timely filing of the bills of lading and SED.

Air Outbound Compliance Rates will begin quarterly measurements with the fourth quarter of 1998 to track compliance violations and identify where compliance counseling is needed.

The industry-wide practice of providing fraudulent and inaccurate manifest documentation, “rollover,” was reduced by 9 percent to a 2 percent discrepancy rate.

In recognition of the effectiveness of enforced compliance from the Process Owners at the port level, significant SED filing improvements have been noted for exports to Mexico through Laredo, Texas. Between January and July 1997, SED filing there increased 30.1 percent by value. In the same period, the SED document count increased by 44 percent.

U.S. Exports through Laredo, TX, to Mexico				
Month	Value (in millions)	Number of Documents	Percent Increase (Documents)	Number of Exporters
January '97	1,648.	40,620		7,839
May	1,839.	50,974	25%	9,808
July	2,144.	58,507	44%	10,490
November	2,410.	67,880	67%	(*)
May '98	2,154.	77,727	91%	(*)

(*) Not available

There was a significant increase in exporter reporting through AES in May 1997 in anticipation of the start of enforced compliance in June 1997. The compliance awareness work at Laredo increased the number of exporters that were reporting by 33.8 percent. This represents the largest portion of the increase in SED filings.

Laredo enforced compliance efforts included random “spot checks” of trucks on all bridges to Mexico to ensure the truckers had the appropriate paperwork - both SED and commercial invoice. When the appropriate paperwork was not available, the truck was either turned around or a runner was sent with the missing documentation. Usually the runners arrive within 10 minutes with the missing paperwork.

Automated Export System (AES)

The Automated Export System (AES) is a joint venture between the U.S. Customs Service, the Foreign Trade Division of the Bureau of Census (Commerce), the Bureau of Export Administration (Commerce), the Office of Defense Trade Controls (State), other federal agencies, and the export trade community to electronically process U.S. export data. AES is an information gateway designed to provide information for all government export data. Additionally, AES will validate existing licenses and assure compliance with and enforcement of laws and regulations relating to exporting, improve trade statistics, improve customer service and has as its goal “paperless reporting” of export information by the year 2002.

Processing SED’s costs businesses \$18 - \$75 per SED, according to a study by the National Council on International Trade Development. AES reduces this cost to between \$3 and \$5.

Enhancements:

IBN

Successful Interest-Based Negotiations (IBN) were recently concluded between representatives of the Federal Government and the Trade on the timing of filing commodity data. As a result of the IBN negotiations, the AES system will provide additional filing options to increase flexibility to the Trade while meeting government interests.

For those shipments in which exporters do not have all of the information pre-departure, exporters will supply minimal pre-departure information - 14 key data elements. There will also be a provision for approved exporters to file information on qualified shipments within 10 days of export.

State Department Decrementation

The AES system will validate, decrement, and automatically close out (date/dollar) expired State Department licenses (DSP-5). Implementation of this interface will result in the elimination of

requirements for the presentation of the paper State Munitions License, as well as three-paper SED, by the exporter/authorized agent to Customs, depending upon the type of State license and whether the filer is an AES participant. Customs inspectors will electronically decrement all DSP5 licenses in AES for non-AES participants, while AES participant licenses will be automatically decremented.

Conclusion

Customs is regaining control over the Outbound Process. Developmental changes and process reviews have been initiated which will enable Customs to facilitate the export of cargo; increase enforcement capabilities; and provide timely, reliable, and accurate outbound trade information to both Government and the Nation.

Customs must continue to balance compliance efforts (i.e., outreach and compliance counseling to remedy instances of non-compliance and facilitate future voluntary compliance) with enforced compliance (i.e., post audits and penalties) to address violations and deter future occurrences. These efforts should be enacted after process reviews have been conducted and should be based on the nature, extent, and impact of the non-compliance.

The quality of AES data is **superior** to non-AES data because it includes two-way editing against pre-established country and commodity parameters within the AES software. Fatal errors are returned to the exporter, forwarder, or carrier for correction and resubmission. Data filed via AES has an error rate of 3 percent versus 23 percent for AERP data and 50 percent for manual (paper) SED data.

AES provides an automated platform for compliance measurement, enforcement, and targeting where one does not exist otherwise.

According to Census, exports will grow 6-10 percent per year for the next 10 years. Census projects that 60-70 percent of non-Canadian exports (7.8-9.3 million SED) will report to AES by 12/31/99 when the AERP program will be eliminated.

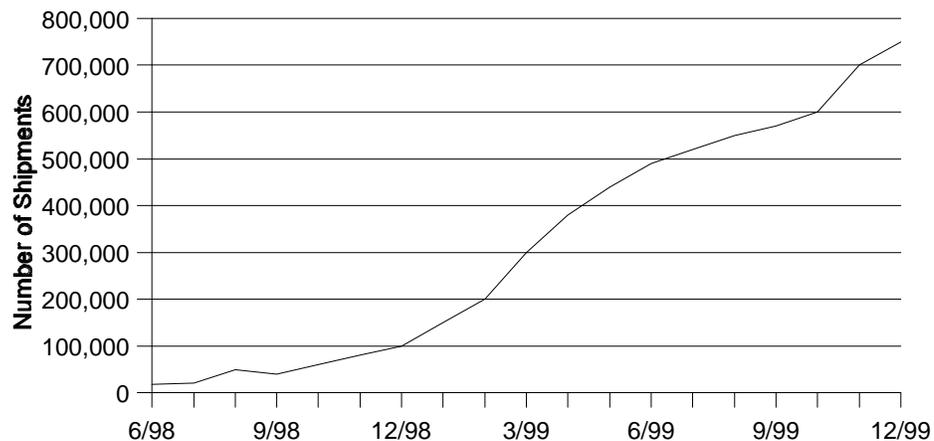
In summary, AES facilitates the export information collection process, eases the reporting burden through automation, improves the quality and coverage of the data, provides additional information in a format that can be used for targeting and analysis, and accomplishes this with expanded communication with and cooperation of the export trade community. The goals of AES will be met through the integration of government needs with the realities of international business processes.

The U.S. Government agencies involved in the export process, in cooperation with private industry, need to continue to make improvements to the export reporting process.

Specifically they must:

- increase the number of shipments reported to Customs/Census via AES.
- continue to monitor export traffic using statistically valid compliance measures.
- concentrate improvement efforts on modes of transportation and individual companies showing the low compliance.
- continue outreach/informed compliance seminars to inform private industry of the export requirements.
- use automation to streamline the export process, shorten processing time, and reduce costs for both the Government and private industry.

Projected Growth of AES



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