United States General Accounting Office

GAO

Briefing Report to the Chairman, Panel on Foreign Trade Statistics, Committee on National Statistics, National Academy of Sciences

April 1989

FEDERAL STATISTICS

Merchandise Trade Statistics: Some Observations

GAO/OCE-89-1BR

GAO

United States
General Accounting Office
Washington, D.C. 20548

Office of the Chief Economist

B-233416

April 21, 1989

Dr. Robert E. Baldwin
Chairman, Panel on Foreign Trade Statistics
Committee on National Statistics
National Academy of Sciences

Dear Dr. Baldwin:

Given the growing importance of foreign trade to the economy and users' concerns about the quality of trade statistics, we undertook a review of how the nation's trade data are collected and compiled. During our review, we learned that the Bureau of the Census has contracted with the Committee on National Statistics of the National Academy of Sciences to assemble a panel of experts, which you will chair, to analyze the nation's foreign trade statistics system. Therefore, we curtailed our effort and briefed Customs and Census officials on what we learned during our review. The attached material summarizes the observations we made during those briefings. We hope it will be of use to your panel.

The objectives of our study were to

- review how timely, accurate, and comprehensive the merchandise trade statistics are;
- examine possible shortcomings of the trade statistics collection and reporting system; and
- identify possible areas for improvement in the system.

The scope of the study was limited to merchandise trade statistics.

Our observations were based on (1) an overview of the procedures and controls of the trade statistics system, (2) interviews with major users in the public and private sectors, and (3) a review of the published statistics and a comparison of U.S. trade data with those of major trading partners.

Our observations are as follows:

- Volatility: Trade balances are inherently volatile. The monthly trade balance represents the difference between two very large numbers, imports and exports, which fluctuate from month to month. Small changes in imports and/or exports can produce large percentage changes in the monthly trade balance. Volatility in the trade balance,

therefore, does not necessarily indicate that the trade data are of poor quality. Nonetheless, variations in processing lags (carryovers) from month to month, from port to port, and between exports and imports do add to the fluctuations in the overall monthly trade balance. Such variations also affect the accuracy of the data at the commodity level.

- An Indicator of Trends: Merchandise trade statistics, viewed either on an annual basis or over a period of years, indicate the underlying trends in the nation's trade flows. Past statistics point to a dramatic growth in U.S. trade and a substantial change in U.S. trade patterns in recent decades. Nonetheless, because of wide fluctuations in the monthly data, changes in a month's data do not necessarily indicate changes in trade performance.

- Timeliness: U.S. monthly trade statistics are published on a less timely basis than those of Japan, Canada, the United Kingdom, and France but on a more timely basis than those of West Germany. Nonethless, the 2-week delay in release of the monthly data, which began in February 1987, has allowed Customs and Census more time for processing and has significantly reduced carryovers. Reductions in carryovers tend to enhance the accuracy of the trade data.

- Accuracy: The lack of substantial verification of export documents and the absence of an adequate mechanism to assure complete and timely reporting of exports diminish the accuracy of the export data. Although the underreporting of exports to Canada has been addressed, there is a strong possibility that U.S. exports to other major trading partners are not fully counted; as a result, the U.S. merchandise trade deficit possibly has been overstated for the past several years.

  The accuracy of the trade data is further compromised by errors in commodity classification, quantity, value, and country of origin/destination, as well as by arbitrary imputations by Census' staff where documentation is incomplete.

  Although a count of the errors reported by users to Census was not available, the number of data investigations undertaken by Census in response to users' inquiries has increased in recent years.

- Comprehensiveness: Although universal coverage of import and export transactions and Census' publication of 40 different monthly and annual reports at various levels of detail meet the diverse needs of many users, several developments in the world trade environment have made the

data coverage less than comprehensive. Over the past decade, globalization of production, intracompany trade, foreign trade zone activities, and countertrade have increased substantially. Yet the existing data do not reflect these developments. Because the present statistical system was set up some 30 years ago, the changing international environment has rendered the data less informative than they once were.

We recognize that collecting and disseminating timely, accurate, and comprehensive data meeting vast and varying user needs is a challenging task. The trade-off between timeliness and accuracy, the costs of collecting information from disparate sources, and the growing complexity of trade flows account for some of the difficulties. We are aware of the efforts made by the Customs Service and Census in the past 2 years to improve the quality of the nation's trade statistics. We also believe that the adoption by the United States of the international Harmonized Commodity Description and Coding System in January 1989, as authorized by the Omnibus Trade and Competitiveness Act of 1988, will simplify the commodity codes of the trade statistics system. Nonetheless, even in today's stringent budgetary environment, there appear to be opportunities to improve the quality of the trade data in the near term that the panel might consider. These include:

- improving communication and coordination among all groups and individuals involved in the collection and reporting processes, assigning a higher priority to their efforts, and better ensuring that exporters and importers comply with existing requirements to file timely and accurate transaction statements;

- further automating data collection and reporting and tightening administrative and statistical controls; and

- examining the extent of underreporting of U.S. exports to other major trading partners and devising means to reconcile U.S. and foreign data.

Over the longer term, in deciding how the trade statistics system might better reflect the changing trade environment, we believe the panel should carefully evaluate the cost-effectiveness of alternative approaches, including who should bear the cost and who would benefit from the data, before changing the system.

This work was prepared under the direction of Annie Y. Kester. If you have any questions, please call Annie Y. Kester at (202) 275-5697.

Sincerely yours,

James L. Bothwell
Acting Chief Economist

Contents

Abbreviations

ABI	Automated Brokers Interface
AERP	Automated Export Reporting Program
DPD	Data Preparation Division
FTD	Foreign Trade Division
ITA	International Trade Administration
SED	Shippers' Export Declaration
USDA	Department of Agriculture

Uses of Trade Statistics and Users' Major Concerns

Federal Uses of Trade Data

For years, federal agencies have used the merchandise trade data to assess import duties, administer tariffs and quotas, implement export controls for national security and foreign policy purposes, monitor effects of trade policies, and support trade negotiations. The data have also been essential for computing components of the nation's balance of payments account and the gross national product.

Federal Uses of Merchandise Trade Data

- Assess import duties
- Administer tariffs and quotas
- Implement export controls
- Monitor effects of trade policies
- Support trade negotiations
- Measure trade flows

Increasing Use of Trade Data

Over the past decade, the volume of U.S. trade has greatly expanded, and large trade deficits have had a significant impact on the domestic economy. As a result, the use of merchandise trade statistics has become more widespread, and the monthly trade balance has become one of the most closely watched of the nation's economic indicators. Several times in recent years, the release of the monthly trade statistics reportedly has had a substantial effect on financial markets.

The use of merchandise trade data has increased, especially by a few federal agencies that closely monitor U.S. international transactions. These agencies include the Federal Reserve Board, the Department of Commerce, the Department of Agriculture, the International Trade Commission, and the Office of the U.S. Trade Representative.

The Federal Reserve Board's major concerns have included the trade outlook and exchange and interest rates, which are interrelated. These concerns have arisen at a time when central banks in industrialized countries have been seeking to coordinate their economic policies more closely.

The Department of Commerce (in particular, its International Trade Administration (ITA)) has recently launched programs that aim to promote actively U.S. exports in international markets. The ITA is charged with the function of analyzing and disseminating trade information to assist industry in trade development.

The Department of Agriculture (USDA) plays a key role in monitoring agricultural trade data. This role is especially important now that the United States is engaged in bilateral and multilateral (the Uruguay Round of the General Agreement on Tariffs and Trade) negotiations to reduce agricultural trade barriers.

With the enactment of the Omnibus Trade and Competitiveness Act of 1988, which strengthens import relief and adjustment assistance to industry, the International Trade Commission is likely to face a greater volume of cases in which it is called upon to assess the impact of trade on domestic industry.

The Office of the U.S. Trade Representative uses detailed trade data in multilateral and bilateral negotiations and in resolving trade conflicts, which have proliferated over the past decade.

Among other major users are state and local government agencies, businesses, and private analysts. State and local governments monitor trade patterns affecting the economic development of their jurisdictions. Businesses use trade data to assess foreign competition and to identify sales opportunities at home and abroad. Increasingly, the transportation industry relies on shipment data to plan where and how much to invest in terminals and other facilities. Other analysts review trade performance to identify changes in general economic conditions.

Increasing Use of Trade Data

- The Federal Reserve Board - economic policy coordination
- ITA - trade promotion programs
- USDA - Uruguay Round of General Agreement on Tariffs and Trade
- ITC - the Omnibus Trade and Competitiveness Act of 1988
- USTR - rising bilateral and multilateral trade negotiations
- State and local governments - economic development
- Businesses - sales opportunities
- Transportation industry - investments in terminals

Users' Major Concerns

The users we interviewed expressed the following concerns:

The monthly merchandise trade deficits display wide fluctuations. (See fig. 1.1.) Reported levels of imports and exports also vary from month to month. (See figs. 1.2 and 1.3.) Such volatility raises concerns about the data's reliability as indicators of the underlying trade performance of the U.S. economy.

The monthly data include not only import entries and export shipments that actually occurred in that month but also transactions that occurred in earlier months but were not processed in time to be included in prior months' statistics (carryovers). Sizable carryovers can affect the timeliness of trade data, as well as distort the reported patterns of trade flows.

Errors in the trade statistics persist, despite Census' recurring efforts to enhance the quality of the monthly data. Each quarter, Census publishes an errata report listing errors and corrections of trade transactions. Not all errors detected, however, are listed. Meanwhile, the recent discovery of the substantial underreporting of U.S. exports to Canada raises the possibility of similar undercounts of U.S. exports to other countries.

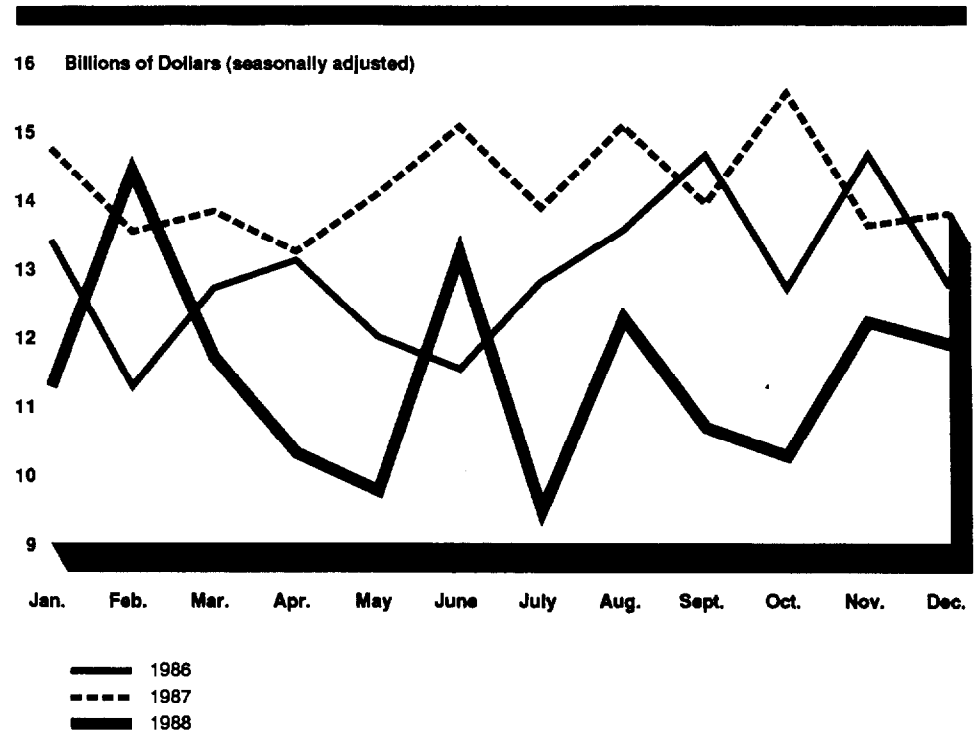
Unlike other monthly economic indicators (such as the unemployment rate and the consumer price index), which are developed from estimates based on periodic surveys and sampling techniques, trade statistics are compiled from an enumeration of all actual import and export shipment data reported to Customs and Census. This statistical framework was constructed in the early 1950s when U.S. trade was considerably less extensive and less complex. The rapidly changing trade environment has raised concerns about the comprehensiveness of the trade data in reflecting the complexity of the nation's trade.

The surge in trade volume and budgetary constraints affecting federal statistical collection and reporting have raised concerns about the adequacy of the resources devoted to compiling the nation's trade statistics.

Users' Major Concerns

- Volatility
- Timeliness
- Accuracy
- Comprehensiveness
- Adequacy of resources

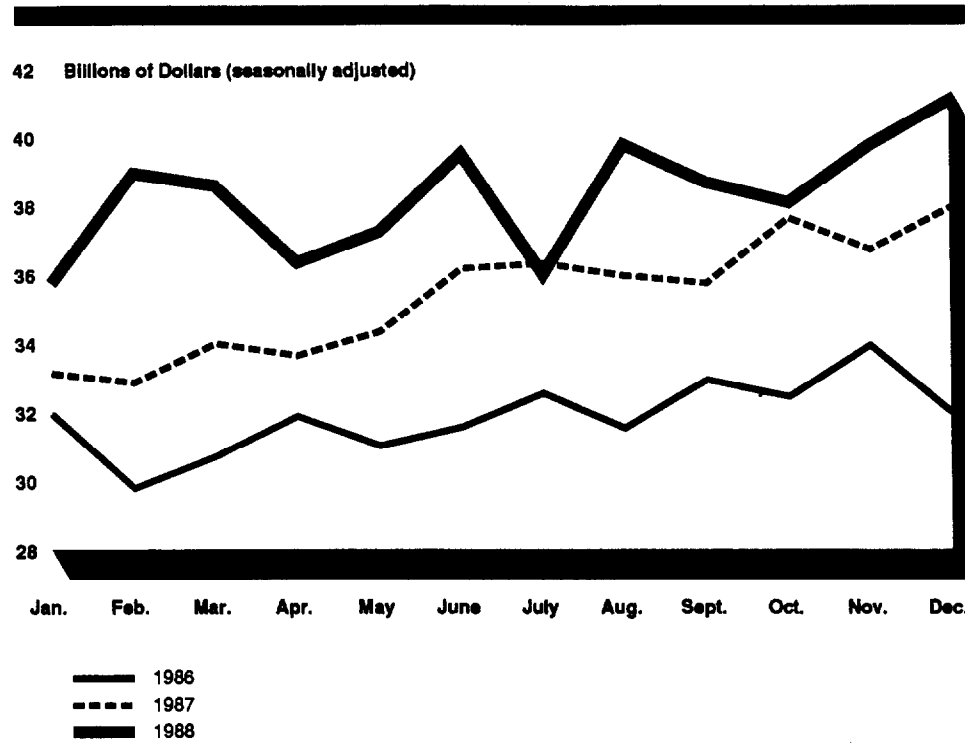
Figure 1.1: Fluctuations in Monthly Trade Deficits



Monthly figures for 1986 are not adjusted for undocumented exports to Canada; deficit based on imports, including insurance and freight.

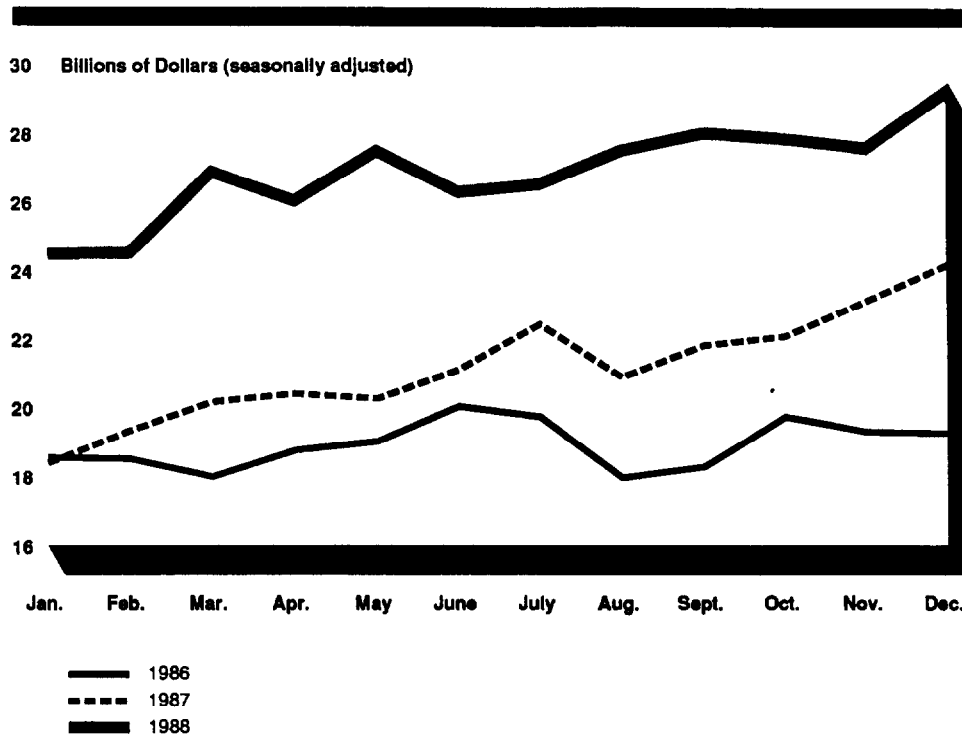
Source: Commerce Department.

Figure 1.2: Fluctuations in Monthly Imports



Source: Commerce Department.

Figure 1.3: Fluctuations in Monthly Exports



Source: Commerce Department.

GAO Observations

Volatility

Trade balances are inherently volatile. Large and uneven transactions are characteristic of grain shipments, timber sales, automobile deliveries, aircraft sales, and oil imports. Such inherent fluctuations are evidenced by the month-to-month changes (after adjusting for carryovers) in the trade balance for agricultural commodities, automobiles, and petroleum. Events including domestic and foreign labor strikes and seasonal factors can also affect monthly trade flows. In addition, the monthly trade balance represents the difference between two very large numbers of imports and exports which fluctuate from month to month. Small changes in imports and/or exports can produce large percentage changes in the monthly trade balance.

Volatility in the trade balance, therefore, does not necessarily indicate that the trade data are of poor quality. Nonetheless, because of the fluctuations in the monthly data, changes in a month's data may not reflect underlying changes in trade performance.

Figure 2.1: Monthly Percent Change in Trade Balance for Agricultural Commodities (March 1987 to August 1988)

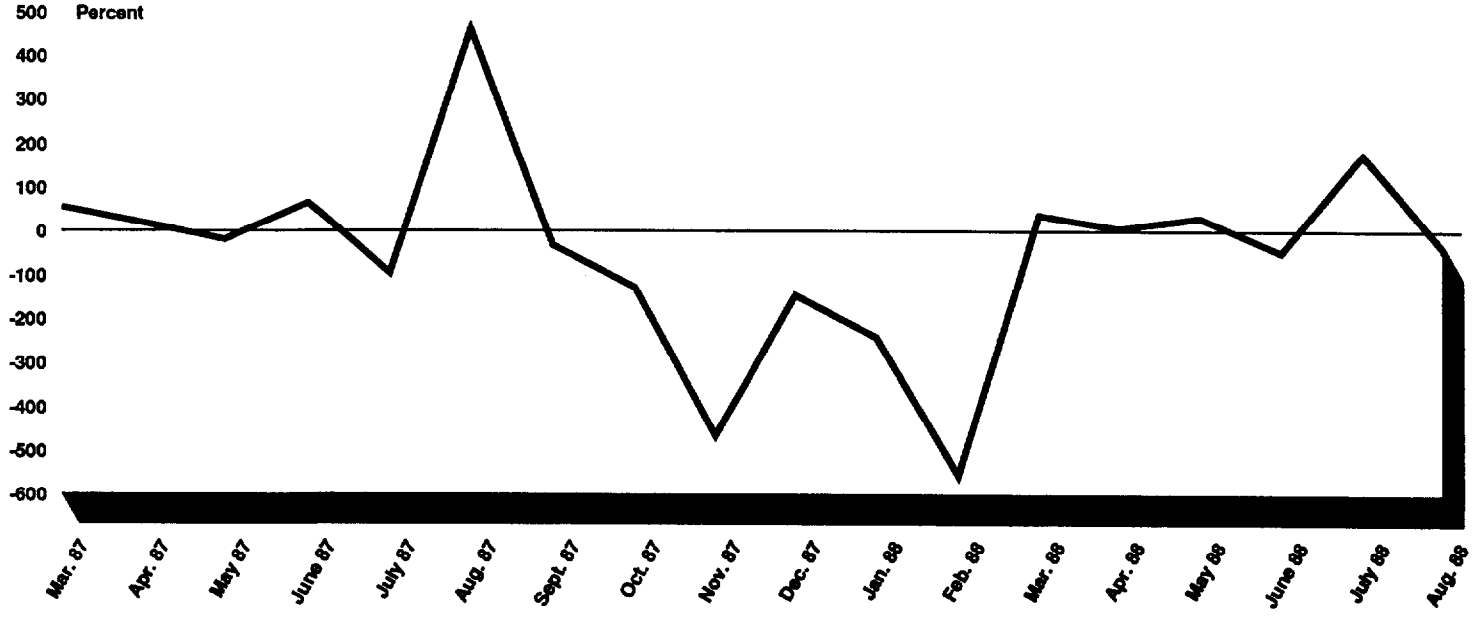


Figure 2.2: Monthly Percent Change in Trade Balance for Automotive Vehicles, Parts, and Engines (March 1987 to August 1988)

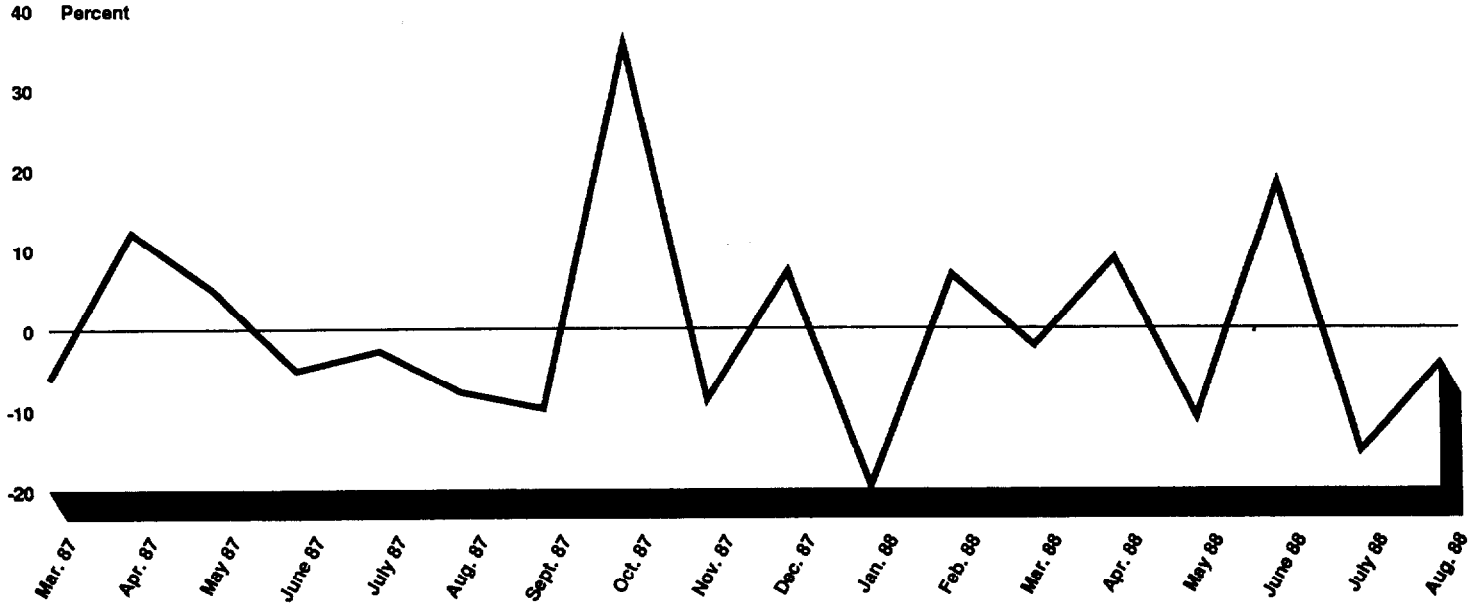
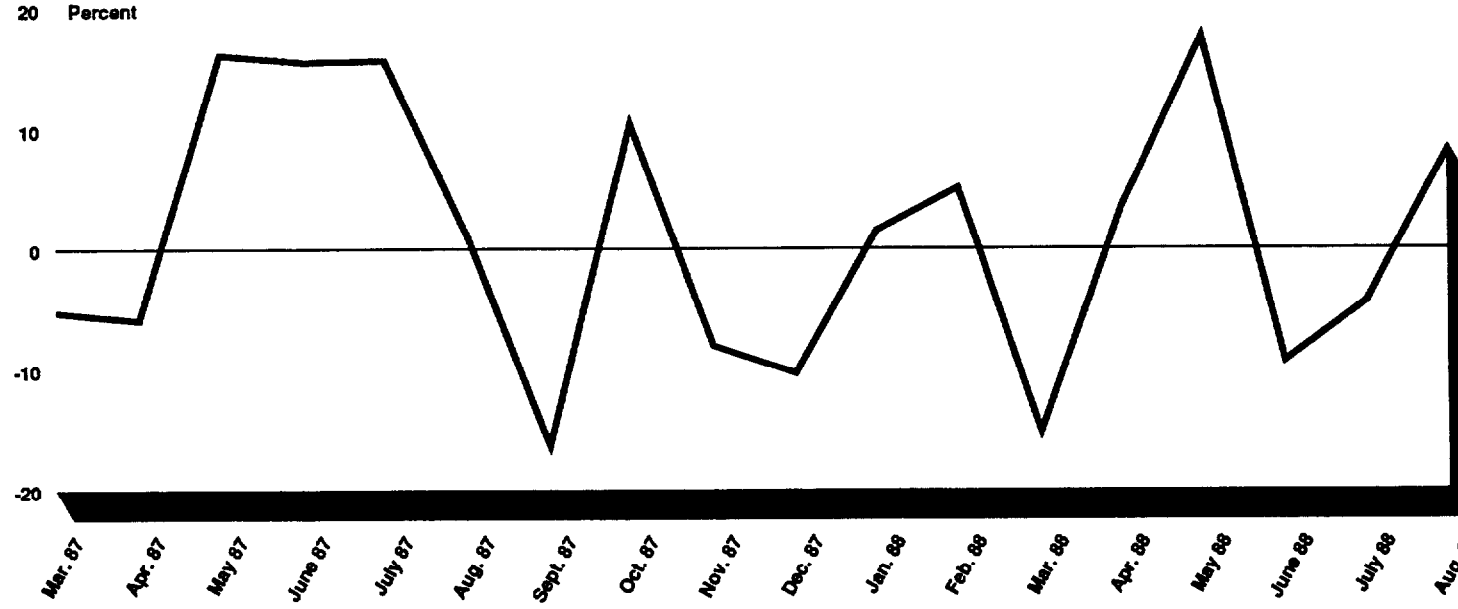


Figure 2.3: Monthly Percent Change in Trade Balance for Petroleum (March 1987 to August 1988)

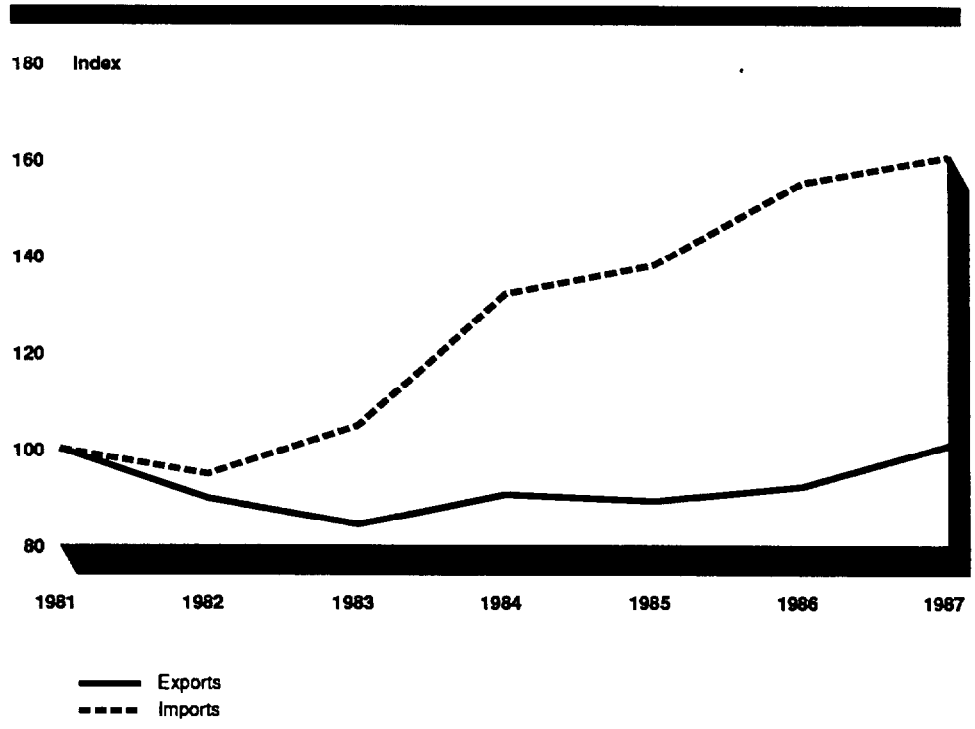


Source: Commerce Department.

An Indicator of Trends

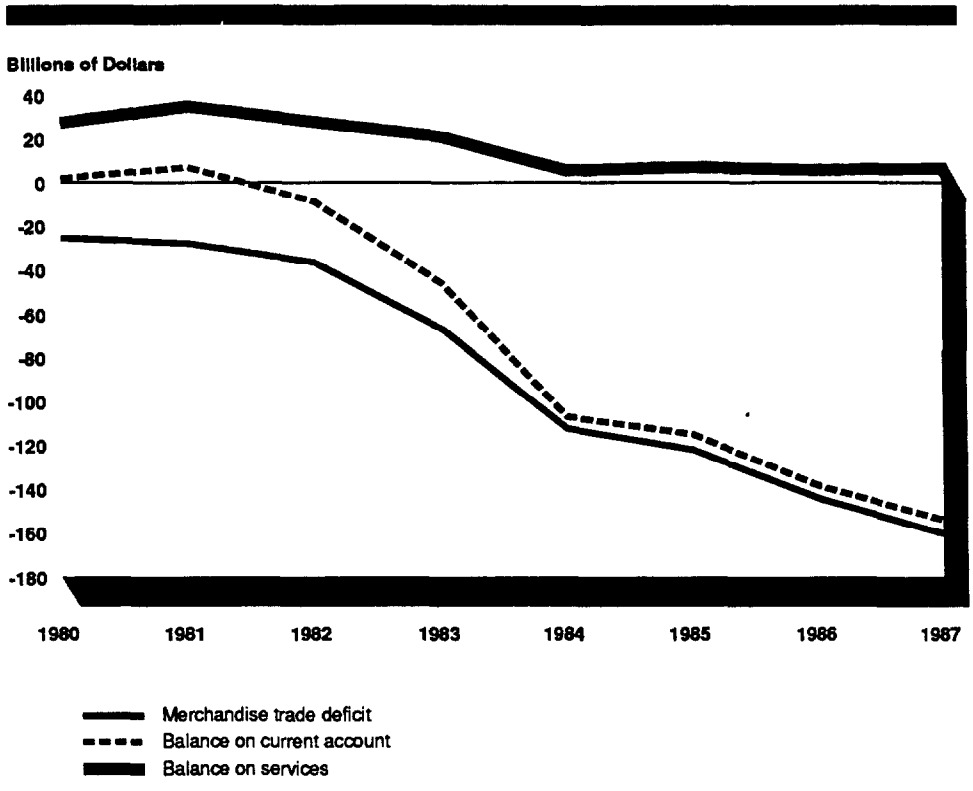
Merchandise trade statistics, viewed either on an annual basis or over a period of years, indicate the underlying trends in the nation's trade flows. Past statistics point to a dramatic growth in U.S. trade and a substantial change in U.S. trade patterns in recent decades. Figure 2.4 illustrates the diverging growth rates in the nation's imports and exports in the 1980s. Figure 2.5 shows that persistent, large merchandise trade deficits since the early 1980s have dominated the size and trends of the U.S. current account balances.

Figure 2.4: Volume of Merchandise Trade (1981-87)



Source: Commerce Department.

Figure 2.5: U.S. International Transactions (1980-87)



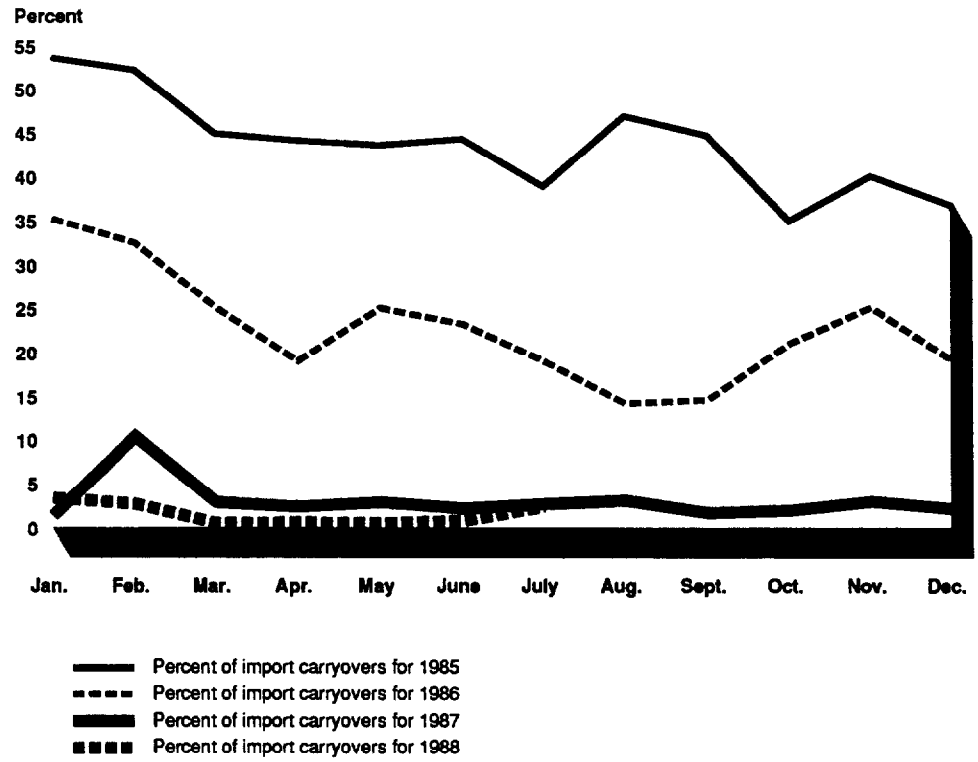
Source: Commerce Department.

Carryovers

Customs and Census have made great strides in reducing monthly carryovers (in particular, import carryovers), albeit with a delay of 2 weeks in the release of the trade statistics. In January 1985, for example, carryovers accounted for as much as 55 percent of the value of imports reported that month and 13 percent of the exports. In July 1988, both import and export carryovers accounted for less than 5 percent of the reported values of imports and exports. (See figs. 2.6 and 2.7.)

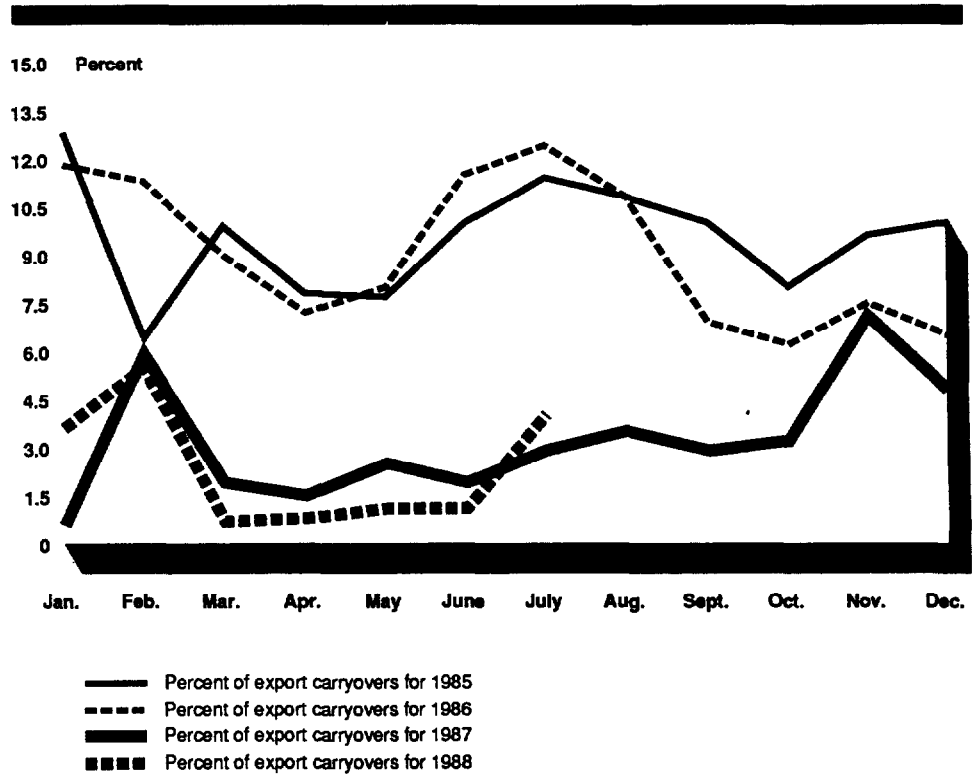
Nonetheless, unlike import carryovers, export carryovers have not been consistently reduced. (See fig. 2.7.) In addition, carryovers still vary from month to month (see figs. 2.6 and 2.7), between imports and exports (see figs. 2.6 and 2.7), and by Customs region (see figs. 2.8 and 2.9.) Such variations affect the timeliness (and accuracy) of the data, particularly at the commodity level, and contribute to the volatility of the monthly merchandise trade balance.

Figure 2.6: Import Carryovers by Month (1985-88)



Imports valued at cost-insurance-freight (CIF) basis.

Figure 2.7: Export Carryovers by Month (1985-88)



Exports valued at freight alongside ship (FAS) basis.

Figure 2.8: Import Carryovers by Customs Region (July 1988)

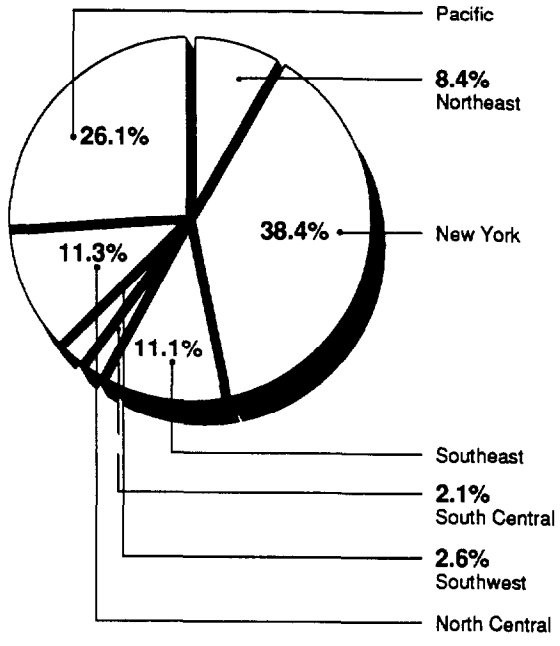
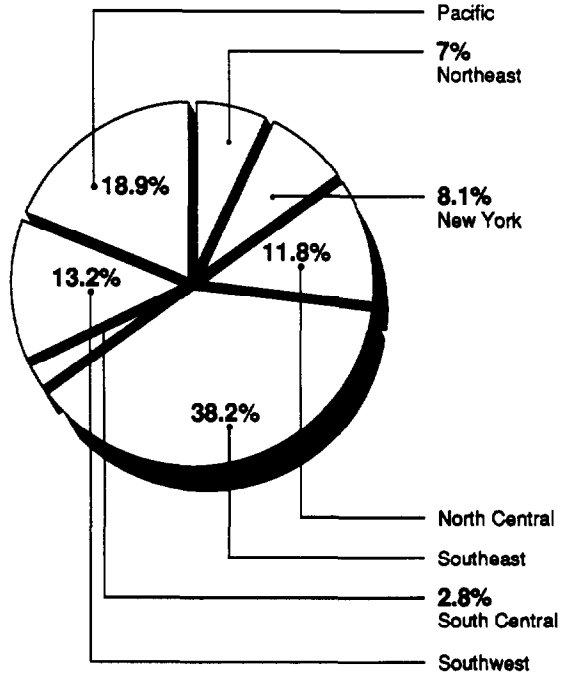


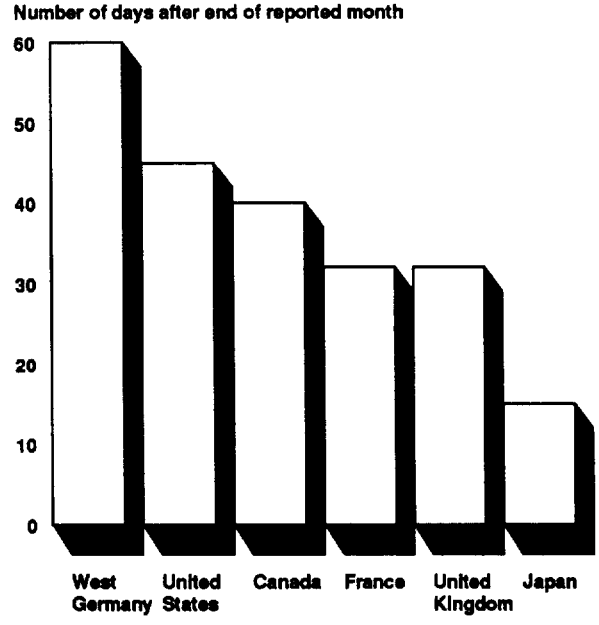
Figure 2.9: Export Carryovers by Customs Region (July 1988)



Timeliness

Compared with its major trading partners, the United States publishes monthly merchandise trade statistics on a less timely basis than Japan, Canada, the United Kingdom, and France but more timely than West Germany. U.S. statistics are published about 45 days after the end of the reported calendar month, compared with 10 to 15 days for Japan, about 40 days for Canada, 30 to 35 days for France and the United Kingdom, and about 60 days for West Germany. (See fig. 2.10.)

Figure 2.10: Release Schedule of Merchandise Trade Data for Selected Countries

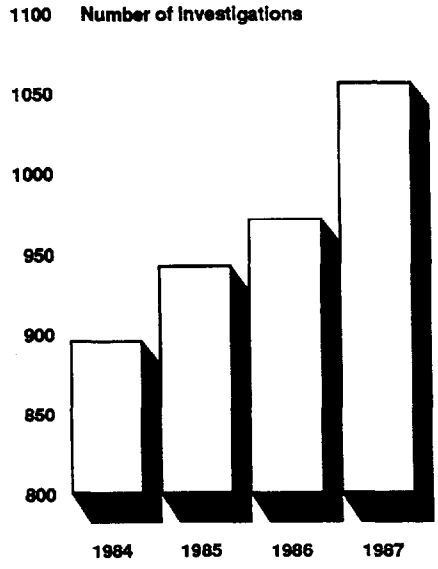


Source: International Monetary Fund.

Accuracy

Although a count of the errors detected by users and reported to Census was not available, Census confirmed that the number of data investigations it undertook in response to users' inquiries and reported errors rose from 895 in 1984 to 1,056 in 1987. (See fig. 2.11.)

Figure 2.11: Census' Data Investigations on the Rise



Source: Commerce Department.

Types and Value of Errors Detected

In the errata reports published by Census since 1984, product misclassification was the most common type of error detected. Incorrect specifications of the country of destination/origin or of the transaction quantity were also common. Less frequent were valuation errors.

To examine the impact of errors on trade performance, we reviewed the entries in the 1986 annual errata report. Although many corrections offset one another, the 1986 compilations summed to a $399 million subtraction for imports and a $252.2 million addition for exports—1.04 percent of total imports and 1.11 percent of total exports. The overall impact of the errors on the trade balance was about $650 million, or about 0.5 percent.

Type of Errors Reported by Users

- Product misclassifications
- Mislabeling of country of origin/destination
- Incorrect quantities
- Erroneous valuations

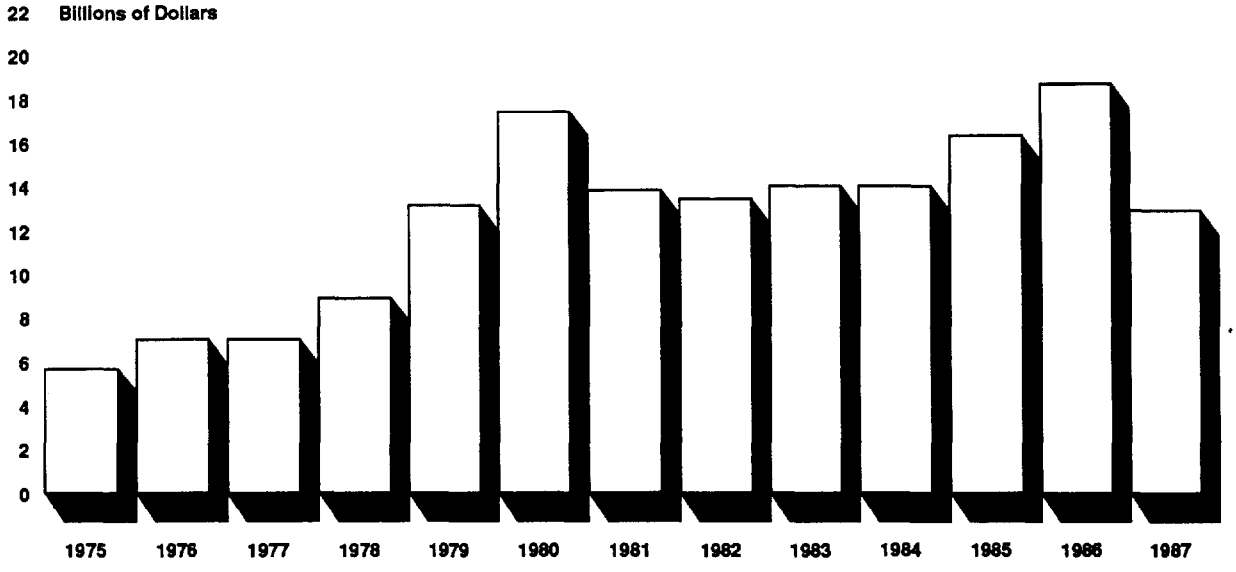
Possible Underreporting of U.S. Exports

Although the underreporting of U.S. exports to Canada has been addressed, the possibility of similar undercounts of U.S. exports to other countries exists. This could be a major problem related to accuracy because underreported exports can overstate the nation's trade deficit.

The annual (1975-87) and monthly (January 1984 to December 1987) trade data for the United States and several of its major trading partners (Canada, Japan, West Germany, France, the United Kingdom, and the Netherlands), as reported in the International Monetary Fund's Direction of Trade, show significant discrepancies between U.S. export data and corresponding foreign import data.

- On an annual basis over the 13-year period, U.S. export data consistently fell short of foreign country import data (except for the Netherlands, for which U.S. export data were consistently higher). The shortfalls rose from $5.7 billion in 1975 to $18.7 billion in 1986. They then declined slightly to $13 billion in 1987, after the monthly United States-Canadian data reconciliation program began. As a percentage of reported exports, such "underreporting" also appeared to be rising. (See fig. 2.12.)

Figure 2.12: Total "Underreporting" of U.S. Exports to Major Trading Partners (1975-87)



- In 1986, the largest shortfall in dollar terms was with Canada, followed in descending order by Japan, France, West Germany, and the United Kingdom. (See fig. 2.13.) As a percentage of U.S. exports to these countries, however, the shortfalls were highest with France, followed by West Germany, Japan, Canada, and the United Kingdom. (See fig. 2.14.)

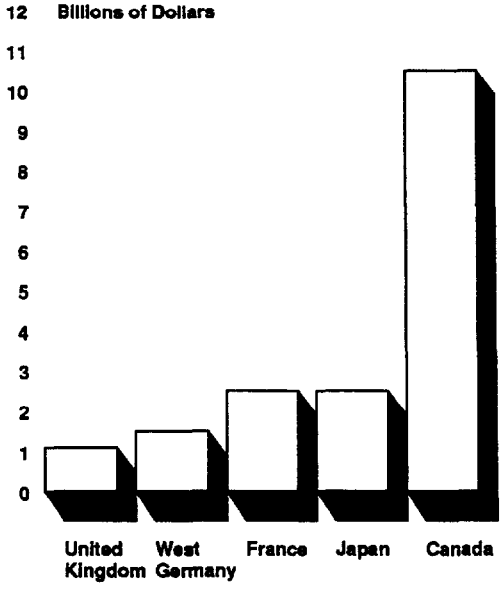
- U.S. exports to these countries accounted for about half of the total exports in 1986. In the same year, trade imbalances with these nations also accounted for about two-thirds of the total merchandise trade deficit.

- As was the case with U.S. data, both Japan and Canada showed significant overreporting of their exports to the Netherlands (as a percentage of their total exports). These discrepancies may be partly due to export transshipments through the Netherlands to final destinations elsewhere in Europe. Although similar discrepancies existed between West Germany and the Netherlands and between France and the Netherlands, the magnitude was much smaller.

  Time lags, exchange rate calculations, and valuation and definition differences may account for some, but not all, of the discrepancies. U.S. import data and corresponding foreign export data show no similar (in magnitude) or consistent discrepancies between U.S. imports and trading partners' exports. In addition, the export data of Japan, Canada, and West Germany show no similar (in magnitude) or consistent overreporting or underreporting with their major trading partners.

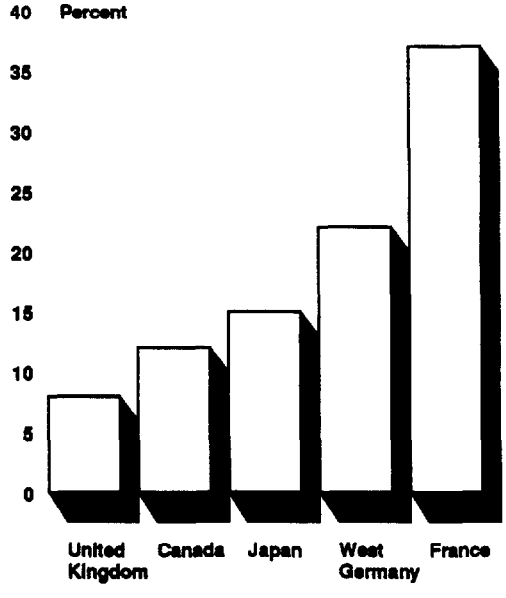
  The lack of substantial verification of export documents and the absence of an adequate mechanism to assure complete and timely reporting of exports can diminish the accuracy of the export data.

Figure 2.13: Value of "Underreported" U.S. Exports by Major Trading Partner (1986)



Source: International Monetary Fund.

Figure 2.14: Percent of "Underreported" U.S. Exports by Major Trading Partner (1975-87)



Source: International Monetary Fund.

Comprehensiveness

Current Coverage

Current coverage of trade appears to be fairly comprehensive. Trade statistics include all actual shipments, except those valued under $1,500 for exports and under $1,000 for imports. Census publishes 40 different monthly and annual reports which provide information on bilateral trade flows with about 130 countries. The trade data cover commodity classification, value, quantity, country of origin/destination, and method of transportation. The data are reported on aggregate and disaggregate levels and are adjusted for seasonal factors and changes in prices and exchange rates.

Current Coverage

- All actual shipments, except low-value
- 40 different monthly and annual reports
- Aggregate and commodity levels
- Bilateral trade flows with about 130 countries
- Quantity, value, and transportation mode
- Seasonal adjustments
- Nominal and constant dollar

Internationalization of Production

Nonetheless, the past decade has seen a substantial increase in globalization of production. Multinational corporations have engaged in outsourcing and have developed multiproduction centers and/or joint ventures to exploit the comparative advantages of different countries. Increasingly, final goods are made by assembling parts manufactured in different countries. (This is especially true for the electronics and automotive industries.)

Such internationalized production is not reflected in the existing foreign trade system, which was set up on the assumption that production would be in the country of origin. This limitation poses a particular problem in assessing the impact of imports on domestic industry.

In addition, since the trade data system monitors only the physical movements of goods and not ownership, judging the competitiveness of U.S. firms is difficult when the imports could actually come from their foreign affiliates.

Intracompany Trade

Similarly, intracompany shipments within multinationals are increasing. According to the Survey of Current Business (June 1988), approximately 22.5 percent of U.S. imports and exports moved between U.S. multinationals and their foreign affiliates in 1986. Because the nature of these transactions is not reflected in the monthly trade statistics, gauging the impact of trade on the nation's output and employment is difficult.

Foreign Trade Zone Activities

The recent rise in foreign trade zone activities in the United States poses another problem. Exports from the zones are not always included in the nation's overall export data, nor are accurate country-of-origin data consistently available for imports from the zones. With the huge flow of materials and finished goods in and out of the zones, it is difficult to determine whether the goods are merely transshipped through the area or significantly altered, representing exports from the zone or imports into the country.

Because such transactions are not identified and accorded separate coverage, analysts may have problems in determining whether foreign trade zone activities generate jobs and stimulate U.S. trade, as originally intended.

Countertrade

Another international trade development is the growth in countertrade. Countertrade involves barter or quasi-barter arrangements between private firms and/or government entities under which the seller is obligated to accept specified goods or services as payment from the buyer.

The emergence and growth of countertrade since the late 1970s has been related to balance-of-payments difficulties and the scarcity of foreign exchange in developing countries seeking new financing techniques for trade and servicing of external debt. Countertrade is increasingly used by centrally planned economies (the U.S.S.R. and Eastern European countries) and developing nations to save hard currency. The more common countertrade arrangements have involved exchanges of crude oil for manufactured goods, including military equipment. In the United States, military sales and agricultural trade with some of these countries involve countertrade.

Because countertrade is not labeled as such in the U.S. trade statistics, it is often difficult to identify and the trade data are less informative than they could be.

Present Coverage Does Not Reflect Growth in

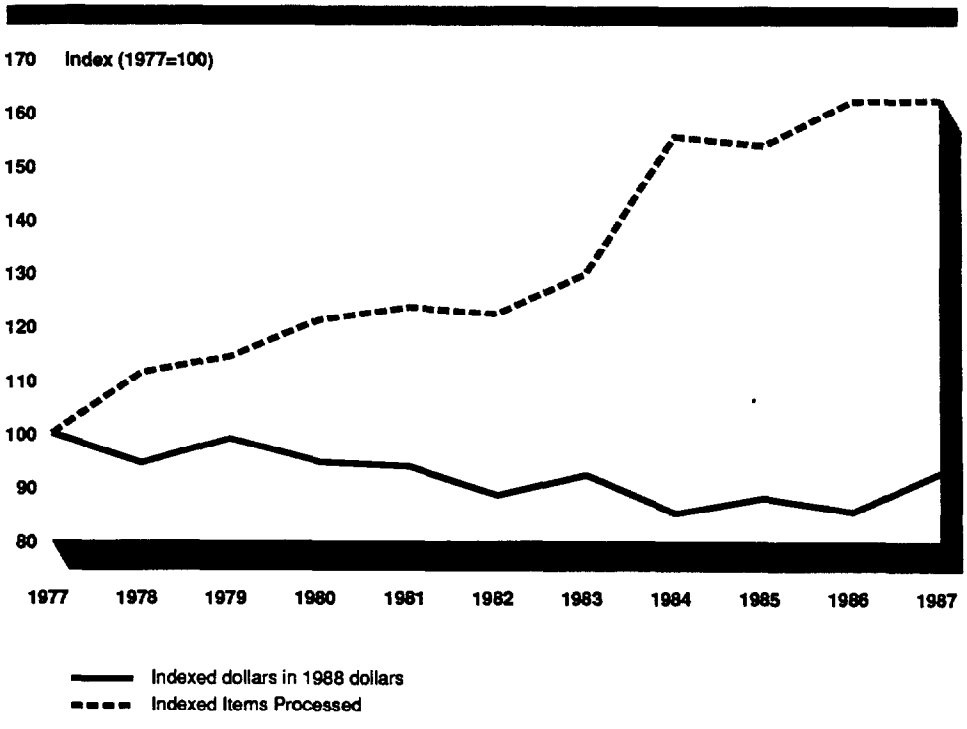
- Internationalization of production
- Intracompany trade
- Foreign trade zone activities
- Countertrade

Adequacy of Resources

The number of export and import documents handled by Customs has more than doubled over the past decade, reaching 15 million in 1987. However, according to Customs officials, the agency has no separate budget for collecting foreign trade statistics; the individual Customs districts apply their available funds to the statistical work load as they see fit. According to 1988 testimony by the Commissioner of U.S. Customs before the Subcommittee on Oversight, Committee on Ways and Means, U.S. House of Representatives, funding for trade statistics collection has not been inadequate in the 1980s; therefore, Customs has not requested increased appropriations for this purpose. Customs will be able to hire additional import specialists to improve verification of import documents this year.

Similarly, between 1977 and 1987, the number of transactions processed by Census increased 60 percent. Meanwhile, Census' budget for merchandise trade statistics, after peaking in real terms in 1977, posted a cumulative decline of 7.2 percent by 1987. (See fig. 2.15.) Census officials credited their ability to process the rising volume of imports and exports to increased automation.

Figure 2.15: Indexes of Census' Trade Document Workload and Budget for Foreign Trade Statistics (1977-87)



Source: Commerce Department.

Agency Initiatives

To cope with the rise in trade volume, Customs and Census have automated several collection and reporting processes. To streamline the collection of export data, Census introduced the Automated Export Reporting Program (AERP) in 1970. AERP allows qualified exporters to electronically transmit monthly summaries of export shipments directly to Census. Customs developed the Automated Brokers Interface (ABI) program in 1986 to allow brokers to electronically file import entries directly with Customs. Since late 1987, statistical data channeled through ABI have been transmitted from Customs' computer center in Franconia, Virginia, through the Census Interface program to Census' central computer in Suitland, Maryland.

To reduce import carryovers, Customs in 1986 initiated the Entry Simplification Procedures, which are designed to speed mailing of the statistical copies of import documents (Forms 7501) to Census. Also to reduce carryovers, since February 1987 Census has released the monthly trade statistics 45 days (rather than, as previously, 30 days) after the close of the month. This change has allowed Customs an additional 10 working days to collect and transmit the export and import documents.

Beginning with June 1987 statistics, Census took steps to improve the timeliness and accuracy of data on bilateral trade with Canada (which constitutes the largest bilateral trade relationship in the world). Based on Canada's import figures, Census now adjusts the official monthly export totals and trade balance to reflect the value of undocumented exports to Canada.

To examine the possibility of U.S. export undercounts with other countries and to explore corrective actions, since November 1988, Customs and Census have been conducting pilot audits of export operations at various Customs ports of exit.

With the enactment of the Omnibus Trade and Competitiveness Act of 1988, the United States adopted the international Harmonized Commodity Description and Coding in January 1989. This system simplifies commodity codes and allows greater comparability between U.S. and foreign trade data.

Initiatives Taken by Customs and Census

- Increasing automation
- Automated Export Reporting Program
- Automated Brokers Interface
- Census Interface
- Entry Simplification Procedures
- U.S.-Canadian data reconciliation
- Pilot port audits on exports
- Harmonized system

Current Data Collection Process

Figure 2.16 shows the current data collection process.

Export Data

Under Census regulations, exporters provide shipment information to carriers, which are required to file shippers' export declarations (SED) and manifests with Customs ports as the cargoes leave the country. Customs ports collect SEDs and mail them to Census' Data Preparation Division (DPD) in Jeffersonville, Indiana. In addition, qualified exporters may electronically file monthly export summary reports directly to Census' Foreign Trade Division (FTD) at Census headquarters in Suitland, Maryland, via the AERP. In 1987, 15 percent of export transactions were electronically transmitted to Census.

Import Data

Under Customs' regulations, importers provide import data to brokers, who fill out Entry and Entry Summaries (Forms 7501) and submit them to Customs. Customs ports forward the statistical copies of Form 7501 to Census' DPD.

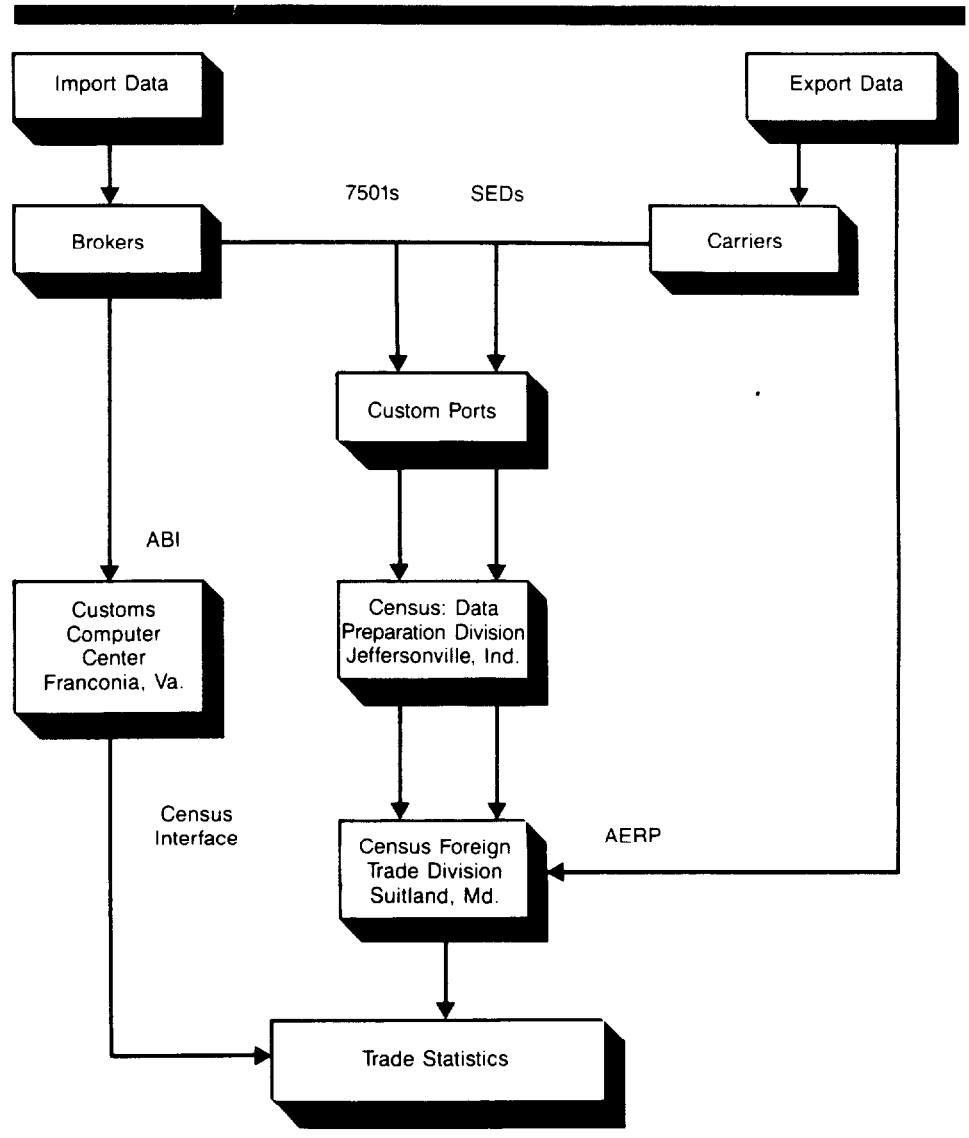
Alternatively, by using ABI, brokers can electronically transmit Entry and Entry Summaries to the Customs computer center in Franconia, Virginia. All major U.S. ports have ABI brokers who generally handle large volumes of transactions. Statistical data channeled through ABI are transmitted from the Customs computer in Franconia through the Census Interface to Census' FTD. In 1987, about 60 percent of the nation's import transactions were electronically transmitted to Customs.

Data Processing

At Census' DPD export and import documents are manually checked for completeness and certain missing values are imputed. Export and import data are then keyed on a computer for transmittal to Census' FTD.

At FTD, all the data received, both from documents and from electronic submissions, are combined and subjected to a master edit to verify data accuracy. Data that pass the edits are tabulated and included in the monthly reports.

Figure 2.16: Foreign Trade Data Collection Process



Possible Areas for Improvement

Procedural Issues

Notwithstanding Customs' and Census' efforts to improve their procedures and controls, possible shortcomings remain and warrant further attention:

Because of their divided responsibilities, Customs and Census have yet to establish systematic procedures to ensure timely, accurate, and complete filings of documents by importers and exporters, either manually or electronically.

Controls over statistical documents are lacking. Neither Customs nor Census has systematic procedures to account for all the import and export documents received.

Although Census regulations require exporters to present SEDs to carriers before departure, the regulations also allow bonded carriers to present SEDs after merchandise has left the country. This policy makes the system vulnerable not only to possible violations of export control regulations but also to inaccurate and delayed statistics reporting.

Clerical data verification and imputation procedures are subject to errors, since clerks can randomly select within the edit range provided them the quantity and price for certain commodities. In addition, the editing and verification procedures can create problems when commodity prices are quite volatile. Commodity prices can fall below or rise above the edit ranges, and imputations based on the edit ranges can create errors.

Customs and Census have not fully addressed the causes of export underreporting. The possibility of such underreporting remains, notwithstanding the United States-Canadian data reconciliation procedures.

While Entry Simplification Procedures speed the forwarding of import documents to Census, they bypass verification by Customs import specialists who potentially could discover errors. In addition, under AERP, Census cannot verify the accuracy of the reported data because it does not monitor the actual shipments. Even in the case of controlled export items, Census does not validate the accuracy of the reported data since it does not routinely access export licenses on record with the Bureau of Export Administration.

Only 15 percent of reported export transactions are currently filed via AERP, showing little increase in exporters' participation in the automated filing procedures over the years.

Procedural Issues

- Division of responsibility
- Lack of administrative and statistical control
- Conflicting procedures
- Imputations subject to errors
- Lax enforcement of export reporting
- Verification of data not ensured
- Low participation in AERP

Data Sources Key to Quality

Further progress in improving trade statistics will depend largely on the broad-based efforts of the diverse institutions and individuals that form the system's backbone.

The statistics come from disparate sources, including numerous and rapidly growing numbers of importers, exporters, brokers, shippers, and their agents, as well as the military services.

Their major interest generally is to ship expeditiously goods out of the country to a final destination or to ship them into the country as imports. Filing accurate and timely documents is not necessarily a high priority for them, and they may not even be aware of the importance of economic indicators or their legal or other responsibility to provide the government with timely and accurate information on import/export transactions.

Filing is especially burdensome for small-volume exporters, importers, or agents. And large corporations, which are also reluctant to incur filing costs, may feel uneasy about disclosing business transactions for fear that information pertaining to those transactions may not remain confidential.

Meanwhile, except when resolving errors in documents, Customs and Census do not systematically coordinate or communicate with importers, exporters, or their agents. Yet these data sources directly determine the quality of trade statistics. Without their compliance, sound and timely data cannot be ensured.

Data Sources Key to Quality

Sources

- Importers/brokers
- Exporters/carriers
- Department of Defense (Army, Air Force, and Navy)

Compliance

- Timely filing
- Accurate reporting

Constraints

We recognize that collecting and disseminating timely, accurate, and comprehensive data meeting the vast and varying needs of users is a challenging task. The trade-off between timeliness and accuracy, the cost of collecting information from disparate sources, and the growing complexity of trade flows account for some of the difficulty.

Constraints

- Timeliness versus accuracy
- Cost effectiveness
- Dynamic system

Possible Areas for Improvement

Even in today's stringent budgetary environment, it appears possible to provide higher quality data in the near term by

- improving communication and coordination among all groups and individuals involved in the collection and reporting processes, assigning a higher priority to their efforts, and better ensuring that exporters and importers comply with existing requirements to file timely and accurate transaction statements;
- further automating data collection and reporting and tightening administrative and statistical controls; and
- examining the extent of underreporting of U.S. exports to other major trading partners and devising means to reconcile U.S. and foreign data.

Over the longer term, in deciding how the trade statistics system might better reflect the changing trade environment, the cost-effectiveness of alternative approaches, including who should bear the costs and who would benefit from the data, should be carefully evaluated before the system is changed.

Possible Areas for Improvement

- Closer coordination
- Tighter administrative and statistical controls
- Greater compliance

Determination of Alternative Approach Requires Analysis of

- Who pays the costs?
- Who benefits from the data?