

# 1992 Census of Manufactures

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2741

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**Economics and Statistics Administration**  
**Everett M. Ehrlich**, Under Secretary  
for Economic Affairs

**BUREAU OF THE CENSUS**  
**Martha Farnsworth Riche**, Director

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Manufacturing and Construction Division prepared this report. **David W. Cartwright**, Assistant Chief for Census and Related Programs, was responsible for the overall planning, management, and coordination of the census of manufactures. Planning and implementation were under the direction of **Michael Zampogna**, Chief, Wood and Chemical Products Branch, assisted by **Allen Foreman**, Section Chief, with primary staff assistance by **Susan Sundermann**.

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**If you have any questions concerning the statistics in this report, call 301-457-4810.**



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# Introduction to the Economic Census

## PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

Policymaking agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.

Trade associations study trends in their own and competing industries and keep their members informed of market changes.

Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

## AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7. The 1992 Economic Census consists of the following eight censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Financial, Insurance, and Real Estate Industries
- Census of Transportation, Communications, and Utilities
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1992 Census of Agriculture and 1992 Census of Governments are conducted separately.) The next economic census is scheduled to be taken in 1998 covering the year 1997.

## AVAILABILITY OF THE DATA

The results of the economic census are available in printed reports for sale by the U.S. Government Printing Office and on compact discs for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Bureau of the Census, Washington, DC 20233-8300. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State data centers in every State as well as business and industry data centers in many States also supply economic census statistics.

## WHAT'S NEW IN 1992

The 1992 Economic Census covers more of the economy than any previous census. New for 1992 are data on communications, utilities, financial, insurance, and real estate, as well as coverage of more transportation industries. The economic, agriculture, and governments censuses now collectively cover nearly 98 percent of all economic activity.

Among other changes, new 1992 definitions affect the boundaries of about a third of all metropolitan areas. Also, the Survey of Women-Owned Businesses has now been expanded to include all corporations.

## HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1963, 1958, and 1954. Prior to that time, the individual subcomponents of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 Manufactures Census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 Economic Census was the first census to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic census, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The census of construction industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The census of transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks, but expanded in 1987 to cover business establishments in several transportation industries. For 1992, these statistics are incorporated into a broadened census of transportation, communications, and utilities. Also new for 1992 is the census of financial, insurance, and real estate industries. This is part of a gradual expansion in coverage of industries previously subjected to government regulation.

The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic census in 1972 along with the Survey of Women-Owned Businesses.

An economic census has also been taken in Puerto Rico since 1909, in the Virgin Islands of the United States and Guam since 1958, and in the Commonwealth of the Northern Mariana Islands since 1982.

Statistical reports from the 1987 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

## AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the census provides complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, with the results appearing in publication series such as Current Business Reports (retail and wholesale trade and service industries), the Annual Survey of Manufactures, Current Industrial Reports, and the Quarterly Financial Report. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the census. The County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

## SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1992 Economic Census and Related Statistics*. More information on the methodology, procedures, and history of the census will be published in the *History of the 1992 Economic Census*. Contact Customer Services for information on availability.

# Census of Manufactures

## GENERAL

This report, from the 1992 Census of Manufactures, is one of a series of 83 industry reports, each of which provides statistics for individual industries or groups of related industries. Additional separate reports will be issued for each State and the District of Columbia and for special subjects such as manufacturers' shipments to the federal government and concentration ratios in manufacturing.

The industry reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, capital expenditures, product shipments, etc.

State reports present similar statistics for each State and its important metropolitan areas (MA's), counties, and places. Selected statistical totals for "all manufacturing" have been shown in the State reports for MA's with 250 employees or more and for counties and places with 500 employees or more.

The *General Summary* report contains industry, product class, and geographic area statistics summarized in one report. The introduction to the *General Summary* discusses, at greater length, many of the subjects described in this introduction. For example, the *General Summary* text discusses the relationship of value added by manufacture to national income by industry of origin, the changes in statistical concepts over the history of the censuses, and the valuation problems arising from intracompany transfers between manufacturing plants of a company and between manufacturing plants and sales offices and sales branches of a company.

## SCOPE OF CENSUS AND DEFINITION OF MANUFACTURING

The 1992 Census of Manufactures covers all establishments with one paid employee or more primarily engaged in manufacturing as defined in the *1987 Standard Industrial Classification (SIC) Manual*<sup>1</sup>. This is the system of industrial classification developed by experts on classification in Government and private industry under the guidance of the Office of Information and Regulatory Affairs, Office of

<sup>1</sup>*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Management and Budget. This classification system is used by Government agencies as well as many organizations outside the Government.

The SIC Manual defines manufacturing as the mechanical or chemical transformation of substances or materials into new products. The assembly of component parts of products also is considered to be manufacturing if the resulting product is neither a structure nor other fixed improvement. These activities are usually carried on in plants, factories, or mills that characteristically use power-driven machines and materials-handling equipment.

Manufacturing production is usually carried on for the wholesale market, for transfers to other plants of the same company, or to the order of industrial users rather than for direct sale to the household consumer. Some manufacturers in a few industries sell chiefly at retail to household consumers through the mail, through house-to-house routes, or through salespersons. Some activities of a service nature (enameling, engraving, etc.) are included in manufacturing when they are performed primarily for trade. They are considered nonmanufacturing when they are performed primarily to the order of the household consumer.

## RELATIONSHIP BETWEEN ANNUAL SURVEY OF MANUFACTURES AND CENSUS OF MANUFACTURES

The Bureau of the Census conducts the annual survey of manufactures (ASM) in each of the 4 years between the censuses of manufactures. The ASM is a probability-based sample of approximately 62,000 establishments and collects the same industry statistics (employment, payroll, value of shipments, etc.) as the census of manufactures. In addition to collecting the information normally requested on the census form, the establishments in the ASM sample are requested to supply information on assets, capital expenditures, retirements, depreciation, rental payments, supplemental labor costs, costs of purchased services, and foreign content of materials consumed. Except for supplemental labor costs, the extra ASM items are collected only in census years.

## ESTABLISHMENT BASIS OF REPORTING

The census of manufactures is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each

location. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1992, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries. This report excludes information for separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company (see Auxiliaries).

## MANUFACTURING UNIVERSE AND CENSUS REPORT FORMS

The 1992 Census of Manufactures universe includes approximately 380,000 establishments. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures. The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. **Small single-establishment companies not sent a report form.** In the 1992 Census of Manufactures, approximately 143,000 small single-establishment companies were excused from filing reports. Selection of these small establishments was done on an industry-by-industry basis and was based on annual payroll and total shipments data as well as on the industry classification codes contained in the administrative records of Federal agencies. The cutoffs were selected so that these administrative-records cases would account for no more than 3 percent of the value of shipments for all manufacturing. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms.

Information on the physical location of the establishment, as well as information on payrolls, receipts (shipments), and industry classification, was obtained from the administrative records of other Federal agencies under special arrangements, which safeguarded their confidentiality. Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials

were not distributed among specific products and materials for these establishments but were included in the product and material "not specified by kind" (n.s.k.) categories.

The industry classification codes included in the administrative-records files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded at the four-digit SIC level. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes these administrative-records cases were only given a two- or three-digit SIC group. For the 1992 Census of Manufactures, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the four-digit SIC level. Establishments that did not return the classification form were coded later to those four-digit SIC industries identified as "not elsewhere classified" (n.e.c.) within the given two- or three-digit industry groups.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. **Establishments sent a report form.** The over 237,000 establishments covered in the mail canvass were divided into three groups:

- a. **ASM sample establishments.** This group consisted of approximately 62,000 establishments covering all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size (see Appendix B, Annual Survey of Manufactures).

In a census of manufactures year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply information on assets, capital expenditures, retirements, depreciation, rental payments, supplemental labor costs, and costs of purchased services. See appendix A, section 2, for an explanation of these items.



The census part of the report form is 1 of approximately 200 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of these many forms to canvass the 459 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to be performing. Respondents were requested to identify the products, the value of each product, and, in a large number of cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry, which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant material not identified on the form.

Finally, a wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

- b. **Large and medium establishments (non-ASM).** Approximately 112,000 establishments were included in this group. A variable cutoff, based on administrative-records payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the approximately 200 census of manufactures regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.
- c. **Small single-establishment companies (non-ASM).** This group consisted of approximately 63,000 establishments. For those industries where application of the variable cutoff for administrative-records cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or "short" form was used. These establishments received 1 of the approximately 80 versions of the short form, which requested summary product and

material data and totals but no details on employment, payrolls, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics; the same data were collected on the short form as on the long form. However, detailed information on materials consumed was not collected on the short form; thus its use would increase the value of the n.s.k. categories.

## AUXILIARIES

In this industry report, the data on employment and payroll are limited to operating manufacturing establishments. The census report form filed for auxiliaries (ES-9200) requested a description of the activity of the establishments serviced. However, the manufacturing auxiliaries were coded only to the two-digit major group of the establishments they served; whereas, the operating establishments were coded to a four-digit manufacturing industry. Data for the approximately 11,000 separately operated auxiliaries are included in the geographic area series and in a report issued as part of the 1992 Enterprise Statistics Survey.

Auxiliaries are establishments whose employees are primarily engaged in performing supporting services for other establishments of the same company, rather than for the general public or for other business firms. They can be at different locations from the establishments served or at the same location as one of those establishments but not operating as an integral part thereof and serving two establishments or more. Where auxiliary operations are conducted at the same location as the manufacturing operation and operate as an integral part thereof, they usually are included in the report for the operating manufacturing establishment.

Included in the broad category of auxiliaries are administrative offices. Employees in administrative offices are concerned with the general management of multiestablishment companies, i.e., with the general supervision and control of two units or more, such as manufacturing plants, mines, sales branches, or stores. The functions of these employees may include the following:

1. Program planning, including sales research and coordination of purchasing, production, and distribution
2. Company purchasing, including general contracts and purchasing methods
3. Company financial policy and accounting
4. General engineering, including design of product machinery and equipment, and direction of engineering effort conducted at the individual operation locations
5. Company personnel matters
6. Legal and patent matters

Other types of auxiliaries serving the plants or central management of the company include purchasing offices, sales promotion offices, research and development organizations, etc.

## INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the census was classified in 1 of 459 manufacturing industries in accordance with the industry definitions in the 1987 SIC Manual. The 1987 edition of this manual represents a major revision for manufacturing industries from the 1972 edition and its 1977 supplement. Appendix A of the 1987 Manual notes the revisions in the four-digit industry levels between 1972/77 and 1987.

An industry is generally defined as a group of establishments producing the same product or a closely related group of products. The product groupings from which industry classifications are derived are based on considerations such as similarity of manufacturing processes, types of materials used, types of customers, and the like. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees. The system operates in such a way that the definitions progressively become narrower with successive additions of numerical digits. For 1992, there are 20 major groups (two-digit SIC), 139 industry groups (three-digit SIC), and 459 industries (four-digit SIC). This represents an expansion of four-digit industries from 452 in 1972/77 and a reduction of three-digit groups from 143 in 1972/77. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. There are about 11,000 products identified by a seven-digit code. The seven-digit products are considered the primary products of the industry with the same four digits.

Accordingly, an establishment is usually classified in a particular industry on the basis of its major activity during a particular year, i.e., production of the products primary to that industry exceeds, in value, production of the products primary to any other single industry. In a few instances, however, the industry classification of an establishment is not only determined by the products it makes but also by the process employed in operations. Refining of nonferrous metals from ore or rolling and drawing of nonferrous metals (processes which involve heavy capitalization in specialized equipment) would be classified according to the process used during a census year. These establishments then would be "frozen" in that industry during the following ASM years.

In either a census or ASM year, establishments included in the ASM sample with certainty weight, other than those involved with heavily capitalized activities described above, are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year (see Appendix B, Annual Survey of Manufactures). However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that, at the aggregate level, some industries comprise different mixes of establishments between survey years and establishment data for such industry statistics as employment and payroll may be tabulated in different industries between survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the four-digit SIC level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-records cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

While some establishments produce only the primary products of the industry in which they are classified, all establishments of an industry rarely specialize to this extent. The industry statistics (employment, inventories, value added by manufacture, total value of shipments including resales and miscellaneous receipts, etc.) shown in tables 1a through 5a, therefore, reflect not only the primary activities of the establishments in that industry but also their secondary activities. The product statistics in table 6a represent the output of all establishments whether or not they are classified in the same industry as the product. For this reason, in relating the industry statistics, especially the value of shipments to the product statistics, the composition of the industry's output shown in table 5b should be considered.

The extent to which industry and product statistics may be matched with each other is measured by two ratios which are computed from the figures shown in table 5b. The first of these ratios, called the primary product specialization ratio, measures the proportion of product shipments (both primary and secondary) of the establishments classified in the industry represented by the primary products of those establishments. The second ratio, called the coverage ratio, is the proportion of primary products shipped by the establishments classified in the industry to total shipments of such products by all manufacturing establishments.

However, establishments making products falling into the same industry category may use a variety of processes and materials to produce them. Also, the same industry classification (based on end products) may include both establishments that are highly integrated and those that

put only the finishing touches on an already highly fabricated item. For example, the refrigeration equipment industry includes instances of almost complete integration (production of the compressor, condensing unit, electric motor, casting, stamping of the case, and final assembly) all carried on at one plant. On the other hand, the condensing unit, the motor, and the case may be purchased and only assembled into the finished product.

In some instances, separate industry categories have been established for integrated and nonintegrated establishments. For other industries, the census provides separate statistics on the production of intermediate commodities made and used in the producing plant. For some industries characterized by many plants of the same company, separate figures on interplant transfers of products usually are shown.

Differences in the integration of production processes, types of operations, and alternatives in types of materials used should be considered when relating the industry statistics (employment, payrolls, value added, etc.) to the product and material data.

### VALUE OF SHIPMENTS FOR THE INDUSTRY COMPARED WITH VALUE OF PRODUCT SHIPMENTS

This report shows value of shipments data for industries and products. In tables 1a through 5b, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in table 6a represents the total value of all products shipped that are classified as primary to an industry.

### CENSUS DISCLOSURE RULES

In accordance with Federal law governing census reports, no data are published that would disclose the data for an individual establishment or company. However, the number of establishments classified in a specific industry is not considered a disclosure, so this information may be released even though other information is withheld.

The disclosure analysis for the industry statistics in tables 1a through 5a of this report is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for new capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for new capital expenditures that can be suppressed even though value of shipments data are publishable.

### SPECIAL TABULATIONS

Special tabulations of data collected in the 1992 Census of Manufactures may be obtained on computer diskette or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233.

### ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

- Represents zero.
- (D) Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
- (NA) Not available.
- (NC) Not comparable.
- (S) Withheld because estimate did not meet publication standards.
- (X) Not applicable.
- (Z) Less than half the unit shown.
- n.e.c. Not elsewhere classified.
- n.s.k. Not specified by kind.
- pt. Part.
- r Revised.
- SIC Standard Industrial Classification.

Other abbreviations, such as lb, gal, yd, doz, bbl, and s tons, are used in the customary sense.

### CONTACTS FOR DATA USERS

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SIC's 357, 36-39	Bruce Goldhirsch	301-457-4817
Import/ export publications	Foreign Trade Division	301-457-3041
Industry analysis and forecasting	International Trade Administration	202-377-4356

# Users' Guide for Locating Statistics in This Report by Table Number

[For explanation of terms, see appendixes]

Item	Four-digit industry statistics							Five-digit product class and seven-digit product statistics			
	Historical	Operating ratios	By geographic area	Summary and supplemental	By employment size	By industry and product class specialization	Materials consumed by kind	Industry-product analysis	Product shipments	Product class by geographic area	Historical product class
Number of companies . . . . .	1a			3a					*6a		
Number of establishments. . . . .	1a		2	3a	4	5a					
Employment and payroll:											
Number of employees . . . . .	1a	1b	2	3a	4	5a					
Payroll . . . . .	1a	1b	2	3a	4	5a					
Supplemental labor costs . . . . .				3a							
Production workers . . . . .	1a	1b	2	3a	4	5a					
Production-worker hours . . . . .	1a	1b	2	3a	4	5a					
Production-worker wages . . . . .	1a	1b	2	3a	4	5a					
Shipments, cost of materials, and value added:											
Value of shipments (four-digit) . . . . .	1a	1b	2	3a	4	5a		5b			
Product class shipments (five-digit) . . . . .									6a	6b	6c
Product shipments (seven-digit) . . . . .									6a		
Value added by manufacture . . . . .	1a	1b	2	3a	4	5a					
Cost of materials . . . . .	1a	1b	2	3a	4	5a					
Fuels and electric energy . . . . .				3a							
Materials consumed by kind . . . . .							7				
Inventories:											
Total, end of year . . . . .	1a			3a	4						
By stage of fabrication . . . . .				3a							
Capital expenditures, assets, rental payments, and purchased services:											
New capital expenditures . . . . .	1a		2	3b	4	5a					
Used plant and equipment expenditures . . . . .				3b							
Gross assets . . . . .				3b							
Depreciation . . . . .				3b							
Retirements of buildings and machinery . . . . .				3b							
Rental payments . . . . .				3b							
Foreign content of materials consumed . . . . .				3c							
Purchased services . . . . .				3c							
Ratios:											
Specialization . . . . .	1a							5b			
Coverage . . . . .	1a							5b			

\*Number of companies with shipments of more than \$100 thousand.

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# Description of Industries and Summary of Findings

This report shows 1992 Census of Manufactures statistics for establishments classified in each of the following industries:

## SIC code and title

2711	Newspapers
2721	Periodicals
2731	Book Publishing
2732	Book Printing
2741	Miscellaneous Publishing

The industry statistics (employment, payroll, cost of materials, value of shipments, inventories, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments but also their activities in the manufacture of secondary products as well as their miscellaneous activities (contract work on materials owned by others, repair work, etc.). This fact should be taken into account in comparing industry statistics (tables 1 through 5a) with product statistics (table 6) showing shipments by all industries of the primary products of the specified industry. The extent of the "product mix" is indicated in table 5b, which shows the value of primary and secondary products shipped by establishments classified in the specified industry and the value of primary products of the industry shipped as secondary products by establishments classified in other industries.

Establishment data were tabulated based on industry definitions included in the *1987 Standard Industrial Classification (SIC) Manual*<sup>1</sup>. The 1987 edition represents a major revision for manufacturing industries from the 1972 edition and its 1977 supplement. In addition to the 1987 SIC revision, changes were made to the product class (five-digit) and product code (seven-digit) categories. The product class and product code comparability between the 1992 and 1987 censuses is shown in appendix C. This appendix presents, in tabular form, the linkage from 1992 to 1987, and 1987 to 1992.

All dollar figures included in this report are at prices current for the year specified and, therefore, unadjusted for changes in price levels. Consequently, when making comparisons to prior years, users should take into consideration the inflation that has occurred.

<sup>1</sup>*Standard Industrial Classification Manual: 1987*. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

## INDUSTRY 2711, NEWSPAPERS

This industry is made up of establishments primarily engaged in publishing newspapers, or in publishing and printing newspapers. These establishments carry on the various operations necessary for issuing newspapers, including the gathering of news and the preparation of editorials and advertisements, but may or may not perform their own printing. Commercial printing is frequently carried on by establishments engaged in publishing and printing newspapers, but, even though the commercial printing may be of major importance, such establishments are included in this industry. Establishments not engaged in publishing newspapers, but which print newspapers for publishers, are classified in industry group 275. News syndicates are classified in services, industry 7383. The term "newspaper" includes those publications issued at regular frequencies which contain news of interest to the general public whether or not they are published in the English language. Publications have been classified as periodicals (industry 2721) rather than as newspapers if their news and editorial presentations do not appear to be directed to the public at large. Among the types of publications sometimes considered newspapers, but treated in the census as periodicals, are the following: trade journals, house organs, local church or school papers, and like publications with very limited or specialized news treatment. Generally, publications issued by nonprofit organizations (educational, religious, charitable, labor, business, professional, etc.) are classified as periodicals, as are magazine and comic supplements for Sunday newspapers.

The 1992 definition of this industry is the same as that used in the 1987 Standard Industrial Classification (SIC) system. The SIC number and title also are the same.

In the 1992 Census of Manufactures, Industry 2711, Newspapers, had employment of 417.0 thousand. The employment figure was 4 percent below the 434.4 thousand reported in 1987. Compared with 1991, employment decreased 3 percent. The 1991 data are based on the Census Bureau's annual survey of manufactures (ASM), which is a sample survey conducted each year between censuses.

The leading States in employment in 1992 were California, New York, Florida, and Pennsylvania, accounting for approximately 31 percent of the industry's employment. This represents a shift from 1987 when California, New York, Texas, and Florida accounted for approximately 33 percent of the industry's employment.

The total receipts for establishments classified in this industry were \$34.1 billion.

Establishments in virtually all industries ship secondary products as well as products primary to the industry in which they are classified and have some miscellaneous receipts, such as resales and contract receipts. Industry 2711 shipped \$32.3 billion of products considered primary to the industry, \$1.4 billion of secondary products, and had \$492.6 million of miscellaneous receipts, resales, and contract work. Thus, the ratio of primary products to the total of both secondary and primary products shipped by establishments in this industry was 96 percent (specialization ratio). In 1987, the specialization ratio was 97 percent.

Establishments in this industry also accounted for 100 percent of products considered primary to the industry no matter where they were actually produced (coverage ratio). In 1987, the coverage ratio also was 100 percent.

The products primary to industry 2711, no matter in what industry they were produced, appear in table 6a and aggregate to \$32.3 billion. For further explanation of specialization and coverage ratios, see table 5b and the appendixes.

The total cost of materials, services, and fuels and energy used by establishments classified in the newspaper publishing industry amounted to \$6.9 billion. Data on specific materials consumed appear in table 7.

Single-establishment companies in this industry with less than 5 employees were excluded from the mail portion of the census. The data for these establishments (and a small number of larger establishments whose reports were not received at the time the data were tabulated) were obtained from administrative records of other agencies or developed from industry averages. These establishments accounted for 13 percent of the total value of shipments.

## INDUSTRY 2721, PERIODICALS

This industry is made up of establishments primarily engaged in publishing periodicals, or in publishing and printing periodicals. These establishments carry on the various operations necessary for issuing periodicals, but may or may not perform their own printing. Establishments not engaged in publishing periodicals, but which print periodicals for publishers, are classified in industry group 275. Data on the periodical publishing activities of non-profit organizations (religious, educational, social, charitable, etc.) have been included to the extent that the employees of such organizations are covered under the Social Security system. For the distinction between newspapers and periodicals for the census of manufactures, see the foregoing statements under industry 2711.

The 1992 definition of this industry is the same as that used in the 1987 Standard Industrial Classification (SIC) system. The SIC number and title also are the same.

In the 1992 Census of Manufactures, Industry 2721, Periodicals, had employment of 116.2 thousand. The employment figure was 6 percent above the 110.0 thousand reported in 1987. Compared with 1991, employment increased

5 percent. The 1991 data are based on the Census Bureau's annual survey of manufactures (ASM), which is a sample survey conducted each year between censuses.

The leading States in employment in 1992 were New York, Illinois, California, and Pennsylvania, accounting for approximately 53 percent of the industry's employment. These same States were the leaders in 1987 when they accounted for 56 percent of the industry's employment.

The total receipts for establishments classified in this industry were \$22.0 billion.

Establishments in virtually all industries ship secondary products as well as products primary to the industry in which they are classified and have some miscellaneous receipts, such as resales and contract receipts. Industry 2721 shipped \$19.8 billion of products considered primary to the industry, \$1.1 billion of secondary products, and had \$1.1 billion of miscellaneous receipts, resales, and contract work. Thus, the ratio of primary products to the total of both secondary and primary products shipped by establishments in this industry was 95 percent (specialization ratio). In 1987, the specialization ratio also was 95 percent.

Establishments in this industry also accounted for 95 percent of products considered primary to the industry no matter where they were actually produced (coverage ratio). In 1987, the coverage ratio was 96 percent.

The products primary to industry 2721, no matter in what industry they were produced, appear in table 6a and aggregate to \$20.9 billion. For further explanation of specialization and coverage ratios, see table 5b and the appendixes.

The total cost of materials, services, and fuels and energy used by establishments classified in the periodical publishing industry amounted to \$6.2 billion. Data on specific materials consumed appear in table 7.

Single-establishment companies in this industry with less than 5 employees were excluded from the mail portion of the census. The data for these establishments (and a small number of larger establishments whose reports were not received at the time the data were tabulated) were obtained from administrative records of other agencies or developed from industry averages. These establishments accounted for 21 percent of the total value of shipments.

## INDUSTRY 2731, BOOK PUBLISHING

This industry is made up of establishments primarily engaged in publishing or in publishing and printing books and pamphlets. Establishments primarily engaged in printing or printing and binding books and pamphlets for publishers, but not publishing themselves, are classified in industry 2732. Industry 2731 also includes data on book publishing activities obtained from nonprofit organizations whose employees are covered under the Social Security system and were able to report their book publishing operations as a separate establishment.

The 1992 definition of this industry is the same as that used in the 1987 Standard Industrial Classification (SIC) system. The SIC number and title also are the same.

In the 1992 Census of Manufactures, Industry 2731, Book Publishing, had employment of 79.6 thousand. The employment figure was 14 percent above the 70.1 thousand reported in 1987. Compared with 1991, employment increased 3 percent. The 1991 data are based on the Census Bureau's annual survey of manufactures (ASM), which is a sample survey conducted each year between censuses.

The leading States in employment in 1992 were New York, California, New Jersey, and Minnesota, accounting for approximately 50 percent of the industry's employment. This represents a shift from 1987 when New York, California, Illinois, and New Jersey accounted for approximately 54 percent of the industry's employment.

The total value of shipments for establishments classified in this industry was \$16.7 billion.

Establishments in virtually all industries ship secondary products as well as products primary to the industry in which they are classified and have some miscellaneous receipts, such as resales and contract receipts. Industry 2731 shipped \$14.1 billion of products considered primary to the industry, \$1.3 billion of secondary products, and had \$1.4 billion of miscellaneous receipts, resales, and contract work. Thus, the ratio of primary products to the total of both secondary and primary products shipped by establishments in this industry was 92 percent (specialization ratio). In 1987, the specialization ratio also was 92 percent.

Establishments in this industry also accounted for 95 percent of products considered primary to the industry no matter where they were actually produced (coverage ratio). In 1987, the coverage ratio also was 95 percent.

The products primary to industry 2731, no matter in what industry they were produced, appear in table 6a and aggregate to \$14.8 billion. For further explanation of specialization and coverage ratios, see table 5b and the appendixes.

The total cost of materials, services, and fuels and energy used by establishments classified in the book publishing industry amounted to \$5.3 billion. Data on specific materials consumed appear in table 7.

Single-establishment companies in this industry with less than 5 employees were excluded from the mail portion of the census. The data for these establishments (and a small number of larger establishments whose reports were not received at the time the data were tabulated) were obtained from administrative records of other agencies or developed from industry averages. These establishments accounted for 13 percent of the total value of shipments.

## **INDUSTRY 2732, BOOK PRINTING**

This industry is made up of establishments primarily engaged in printing or in printing and binding books and pamphlets, but not engaged in publishing. Establishments primarily engaged in publishing, or in publishing and printing books and pamphlets are classified in industry 2731. Establishments engaged in both printing and binding books,

but primarily binding books printed elsewhere, are classified in industry 2789. Establishments classified in industry 2732 are similar in character to some establishments primarily engaged in commercial printing (industries 2752, 2754, and 2759). The distinction is that all the establishments classified in industry 2732 derive the greater part of their revenue from printing books and pamphlets, while such operations are secondary activities for establishments classified in industries 2752, 2754, and 2759.

The 1992 definition of this industry is the same as that used in the 1987 Standard Industrial Classification (SIC) system. The SIC number and title also are the same.

In the 1992 Census of Manufactures, Industry 2732, Book Printing, had employment of 50.9 thousand. The employment figure was 17 percent above the 43.5 thousand reported in 1987. Compared with 1991, employment increased 5 percent. The 1991 data are based on the Census Bureau's annual survey of manufactures (ASM), which is a sample survey conducted each year between censuses.

The leading States in employment in 1992 were Pennsylvania, Indiana, and Tennessee. This represents a shift from 1987 when Pennsylvania, Tennessee, and Massachusetts were the leading States.

The total value of shipments for establishments classified in this industry was \$4.7 billion.

Establishments in virtually all industries ship secondary products as well as products primary to the industry in which they are classified and have some miscellaneous receipts, such as resales and contract receipts. Industry 2732 shipped \$4.0 billion of products considered primary to the industry, \$514.1 million of secondary products, and had \$131.3 million of miscellaneous receipts, resales, and contract work. Thus, the ratio of primary products to the total of both secondary and primary products shipped by establishments in this industry was 89 percent (specialization ratio). In 1987, the specialization ratio also was 89 percent.

Establishments in this industry also accounted for 85 percent of products considered primary to the industry no matter where they were actually produced (coverage ratio). In 1987, the coverage ratio was 88 percent.

The products primary to industry 2732, no matter in what industry they were produced, appear in table 6a and aggregate to \$4.7 billion. For further explanation of specialization and coverage ratios, see table 5b and the appendixes.

The total cost of materials, services, and fuels and energy used by establishments classified in the book printing industry amounted to \$1.9 billion. Data on specific materials consumed appear in table 7.

Single-establishment companies in this industry with less than 10 employees were excluded from the mail portion of the census. The data for these establishments (and a small number of larger establishments whose reports were not received at the time the data were



tabulated) were obtained from administrative records of other agencies or developed from industry averages. These establishments accounted for 6 percent of the total value of shipments.

## **INDUSTRY 2741, MISCELLANEOUS PUBLISHING**

This industry is made up of establishments primarily engaged in miscellaneous publishing activities, not elsewhere classified, whether or not engaged in printing. Establishments primarily engaged in offering financial, credit, or other business services, and which may publish directories as part of this service, are classified in Division I, Services.

The 1992 definition of this industry is the same as that used in the 1987 Standard Industrial Classification (SIC) system. The SIC number and title also are the same.

In the 1992 Census of Manufactures, Industry 2741, Miscellaneous Publishing, had employment of 65.4 thousand. The employment figure was 6 percent below the 69.5 thousand reported in 1987.

The leading States in employment in 1992 were New York, California, Pennsylvania, and Illinois, accounting for approximately 38 percent of the industry's employment. This represents a shift from 1987 when New York, California, Michigan, and New Jersey accounted for approximately 38 percent of the industry's employment.

The total receipts for establishments classified in this industry were \$11.0 billion.

Establishments in virtually all industries ship secondary products as well as products primary to the industry in which they are classified and have some miscellaneous

receipts, such as resales and contract receipts. Industry 2741 shipped \$10.5 billion of miscellaneous publishing products considered primary to the industry, \$269.0 million of secondary products, and had \$232.8 million of miscellaneous receipts, resales, and contract work. Thus, the ratio of primary products to the total of both secondary and primary products shipped by establishments in this industry was 97 percent (specialization ratio). In 1987, the specialization ratio was 98 percent.

Establishments in this industry also accounted for 91 percent of products considered primary to the industry no matter where they were actually produced (coverage ratio). In 1987, the coverage ratio also was 91 percent.

The products primary to industry 2741, no matter in what industry they were produced, appear in table 6a and aggregate to \$11.6 billion. For further explanation of specialization and coverage ratios, see table 5b and the appendixes.

The total cost of materials, services, and fuels and energy used by establishments classified in the miscellaneous publishing industry amounted to \$2.5 billion. Data on specific materials consumed appear in table 7.

Single-establishment companies in this industry with less than 10 employees were excluded from the mail portion of the census. The data for these establishments (and a small number of larger establishments whose reports were not received at the time the data were tabulated) were obtained from administrative records of other agencies or developed from industry averages. These establishments accounted for 18 percent of the total value of shipments.



**Table 1a. Historical Statistics for the Industry: 1992 and Earlier Years—Con.**

[Excludes data for auxiliaries. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Year <sup>1</sup>	All establishments <sup>3</sup>			All employees		Production workers			Value added by manufacture <sup>4</sup> (million dollars)	Cost of materials <sup>5</sup> (million dollars)	Value of shipments (million dollars)	New capital expenditures <sup>6</sup> (million dollars)	End-of-year inventories <sup>4</sup> (million dollars)	Ratios	
	Companies <sup>2</sup> (no.)	Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)						Specialization <sup>7</sup> (percent)	Coverage <sup>8</sup> (percent)
<b>INDUSTRY 2741, MISCELLANEOUS PUBLISHING—Con.</b>															
1978 ASM-----	(NA)	(NA)	(NA)	42.4	525.4	16.4	27.7	162.8	1 310.9	565.2	1 894.6	65.8	139.9	(NA)	(NA)
1977 Census ---	2 277	2 352	335	42.1	503.0	15.4	27.1	150.3	1 290.7	569.9	1 850.9	39.1	139.1	95	89

<sup>1</sup>In annual survey of manufactures (ASM) years, data are estimates based on a representative sample of establishments canvassed annually and may differ from results of a complete canvass of all establishments. ASM publication shows percentage standard errors. Unless otherwise noted, for data prior to 1977, see 1977 Census of Manufactures, vol. II, table 1 of the industry chapter.

<sup>2</sup>For the Census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

<sup>3</sup>Includes establishments with payroll at any time during the year.

<sup>4</sup>Beginning in 1982, all respondents were requested to report their inventories at cost or market prior to adjustment to LIFO cost. This is a change from prior years when respondents were permitted to value their inventories using any generally accepted accounting method. Consequently, 1982 data for inventories and value added by manufacture are not comparable to prior-year data.

<sup>5</sup>Cost of materials is the sum of five components: the cost of (1) parts used in the manufacture of finished goods (materials, parts, containers, and supplies incorporated into products or otherwise directly consumed in the process); (2) purchased items later resold without further manufacture; (3) fuels; (4) electricity; and (5) commissions or fees to outside parties for contract manufacturing. A separate cost for each of the five components is shown in table 3a. Detailed data on materials consumed by type, are shown in table 7.

<sup>6</sup>Detailed data on new machinery and equipment expenditures are provided in table 3c.

<sup>7</sup>Represents ratio of primary product shipments to total product shipments (primary and secondary, excluding miscellaneous receipts) for establishments classified in the industry.

<sup>8</sup>Represents ratio of primary products shipped by establishments classified in industry to total shipments of such products by all manufacturing establishments, wherever classified.

**Table 1b. Selected Operating Ratios for the Industry: 1992 and Earlier Years**

[Excludes data for auxiliaries. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Year	Payroll per employee (dollars)	Production workers as percent of total employment (percent)	Annual hours of production workers (number)	Average hourly earnings of production workers (dollars)	Cost of materials as percent of value of shipments (percent)	Cost of materials and payroll as percent of value of shipments (percent)	Value added per employee (dollars)	Payroll as percent of value added (percent)	Value added per production worker hour (dollars)
<b>INDUSTRY 2711, NEWSPAPERS</b>									
1992 Census-----	25 195	32	1 743	12.89	20	51	65 341	39	115.55
1991 ASM-----	24 063	34	1 734	12.27	23	53	60 907	40	103.71
1990 ASM-----	23 471	34	1 697	12.37	23	53	59 900	39	104.90
1989 ASM-----	22 841	34	1 722	11.82	24	53	60 176	38	102.17
1988 ASM-----	21 621	34	1 793	11.42	24	53	57 567	38	94.83
1987 Census-----	20 768	34	1 768	11.38	24	52	55 965	37	92.65
1986 ASM-----	19 954	36	1 777	10.79	24	53	52 782	38	82.11
1985 ASM-----	19 233	37	1 757	10.64	24	54	49 699	39	76.82
1984 ASM-----	18 481	37	1 784	10.24	25	55	47 345	39	71.24
1983 ASM-----	17 469	37	1 757	9.86	26	56	42 807	41	65.62
1982 Census-----	16 326	37	1 762	9.20	28	59	38 046	43	58.91
1981 ASM-----	15 009	39	1 743	8.41	29	60	34 028	44	49.70
1980 ASM-----	13 917	39	1 713	8.11	29	61	30 941	45	45.88
1979 ASM-----	13 159	40	1 732	7.63	28	60	29 353	45	42.60
1978 ASM-----	13 123	42	1 724	7.49	28	61	28 789	46	40.24
1977 Census-----	12 306	42	1 715	7.15	27	60	27 205	45	37.70
<b>INDUSTRY 2721, PERIODICALS</b>									
1992 Census-----	35 065	17	1 940	13.40	28	47	136 256	26	405.97
1991 ASM-----	33 101	19	1 710	13.21	32	50	124 723	27	389.67
1990 ASM-----	31 758	19	1 639	13.09	32	50	120 206	26	391.18
1989 ASM-----	29 532	18	1 575	12.45	33	51	114 309	26	406.39
1988 ASM-----	28 295	17	1 770	11.99	33	50	111 666	25	368.04
1987 Census-----	27 115	17	1 770	11.06	34	51	104 110	26	353.46
1986 ASM-----	27 634	14	1 754	11.60	35	53	103 935	27	409.48
1985 ASM-----	26 665	17	1 753	9.59	37	53	101 024	26	340.78
1984 ASM-----	23 868	17	1 778	8.71	36	52	95 657	25	310.55
1983 ASM-----	22 202	19	1 844	8.03	37	54	84 249	26	246.67
1982 Census-----	21 129	19	1 833	7.62	40	57	73 520	29	216.64
1981 ASM-----	19 574	18	1 730	7.53	39	54	76 036	26	248.99
1980 ASM-----	18 351	17	1 707	7.19	38	54	71 977	25	246.69
1979 ASM-----	16 426	18	1 461	6.99	37	52	65 356	25	242.07
1978 ASM-----	15 639	16	1 843	5.96	39	55	59 234	26	198.69
1977 Census-----	14 589	15	1 934	5.64	38	55	53 830	27	183.55
<b>INDUSTRY 2731, BOOK PUBLISHING</b>									
1992 Census-----	33 614	23	1 909	12.49	32	48	144 402	23	323.79
1991 ASM-----	32 524	22	1 754	12.72	30	45	151 142	22	389.44
1990 ASM-----	31 291	24	1 803	11.68	29	44	148 565	21	349.98
1989 ASM-----	28 854	23	1 766	11.56	31	46	134 175	22	328.33
1988 ASM-----	28 630	24	1 842	10.76	29	44	140 340	20	324.08
1987 Census-----	26 531	23	1 805	10.67	29	44	129 967	20	317.45
1986 ASM-----	24 799	20	1 778	10.13	29	45	108 323	23	302.96
1985 ASM-----	23 584	22	1 833	9.78	30	46	104 313	23	258.59
1984 ASM-----	23 059	21	1 826	9.86	31	47	96 872	24	247.17
1983 ASM-----	21 283	25	1 930	8.42	32	49	84 038	25	176.48
1982 Census-----	19 781	23	2 026	7.70	31	48	78 860	25	171.80
1981 ASM-----	17 690	23	1 916	7.09	32	49	72 806	24	168.73
1980 ASM-----	16 053	22	1 882	6.54	33	50	64 322	25	153.09
1979 ASM-----	14 931	21	1 850	6.50	33	50	59 677	25	153.80
1978 ASM-----	14 339	21	1 815	6.36	32	49	58 882	24	152.61
1977 Census-----	13 953	22	1 872	5.63	32	50	54 822	25	131.00

**Table 1b. Selected Operating Ratios for the Industry: 1992 and Earlier Years—Con.**

[Excludes data for auxiliaries. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Year	Payroll per employee (dollars)	Production workers as percent of total employment (percent)	Annual hours of production workers (number)	Average hourly earnings of production workers (dollars)	Cost of materials as percent of value of shipments (percent)	Cost of materials and payroll as percent of value of shipments (percent)	Value added per employee (dollars)	Payroll as percent of value added (percent)	Value added per production worker hour (dollars)
<b>INDUSTRY 2732, BOOK PRINTING</b>									
1992 Census	26 733	76	1 964	12.12	40	69	55 670	48	37.19
1991 ASM	24 449	78	1 916	11.28	42	71	49 237	50	32.89
1990 ASM	23 875	77	1 992	10.67	42	70	49 300	48	32.14
1989 ASM	22 780	80	1 936	10.33	42	70	46 780	49	30.31
1988 ASM	24 365	80	1 898	11.33	44	75	44 541	55	29.50
1987 Census	22 101	79	1 968	9.98	39	69	45 897	48	29.49
1986 ASM	21 389	78	2 006	9.51	40	70	43 294	49	27.61
1985 ASM	20 431	78	1 962	9.29	40	71	40 675	50	26.55
1984 ASM	20 111	77	1 982	9.17	41	71	39 602	51	25.79
1983 ASM	18 626	76	1 946	8.60	40	72	35 218	53	23.70
1982 Census	17 058	77	1 875	8.39	40	72	31 989	53	22.10
1981 ASM	15 968	79	1 917	7.60	40	72	30 467	52	20.11
1980 ASM	14 427	78	1 907	6.94	40	71	27 929	52	18.72
1979 ASM	13 359	80	1 941	6.30	40	70	26 297	51	16.87
1978 ASM	12 521	80	1 949	5.77	39	71	23 690	53	15.11
1977 Census	11 689	80	1 931	5.57	39	72	21 945	53	14.18
<b>INDUSTRY 2741, MISCELLANEOUS PUBLISHING</b>									
1992 Census	26 495	36	1 827	10.80	23	38	130 350	20	196.88
1991 ASM	27 380	35	1 920	9.60	25	44	113 132	24	169.44
1990 ASM	26 193	34	1 803	9.40	26	45	102 089	26	165.58
1989 ASM	25 548	35	1 819	9.24	26	46	97 115	26	150.75
1988 ASM	22 777	36	1 755	8.74	24	43	91 614	25	145.30
1987 Census	21 771	34	1 819	8.30	23	42	86 662	25	139.10
1986 ASM	21 264	35	1 701	8.80	26	49	68 390	31	116.02
1985 ASM	20 142	33	1 725	8.11	27	51	62 781	32	110.66
1984 ASM	18 474	40	1 699	7.48	29	54	55 283	33	82.34
1983 ASM	15 897	41	1 625	7.08	31	55	46 996	34	70.41
1982 Census	15 583	40	1 631	7.06	32	56	43 227	36	67.06
1981 ASM	15 976	49	1 813	6.31	29	54	45 365	35	51.40
1980 ASM	13 578	47	1 766	5.39	29	55	37 825	36	45.74
1979 ASM	12 256	46	1 780	5.11	29	56	33 082	37	40.29
1978 ASM	12 392	39	1 689	5.88	30	58	30 917	40	47.32
1977 Census	11 948	37	1 760	5.55	31	58	30 658	39	47.63

Note: For qualifications of data, see footnotes on table 1a.

**Table 2. Industry Statistics for Selected States: 1992 and 1987**

[Excludes data for auxiliaries. States with 100 employees or more are shown. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Industry and geographic area	1992										1987			
	E1	All establishments		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures (million dollars)	All employees <sup>2</sup> (1,000)	Value added by manufacture (million dollars)
		Total (no.)	With 20 employees or more (no.)	Number <sup>2</sup> (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)						
<b>INDUSTRY 2711, NEWSPAPERS</b>														
<b>United States</b>	<b>E1</b>	<b>8 679</b>	<b>2 629</b>	<b>417.0</b>	<b>10 506.4</b>	<b>135.3</b>	<b>235.8</b>	<b>3 038.8</b>	<b>27 247.0</b>	<b>6 874.0</b>	<b>34 124.3</b>	<b>1 667.4</b>	<b>434.4</b>	<b>24 311.3</b>
Alabama	—	132	33	4.1	92.6	1.6	3.2	28.6	248.0	54.4	302.5	6.6	4.2	222.6
Alaska	E5	37	10	1.2	22.7	.3	.5	5.7	42.2	12.4	55.4	2.2	1.2	45.8
Arizona	E1	110	34	6.3	163.2	2.1	3.9	47.2	479.6	112.7	592.3	(D)	6.7	403.8
Arkansas	E1	117	43	3.5	58.3	1.4	2.5	20.2	146.3	42.4	188.7	7.0	3.7	118.0
California	E1	692	249	52.3	1 395.5	14.5	25.6	331.0	3 555.9	887.0	4 443.4	148.7	52.1	3 066.9
Colorado	—	150	42	6.8	159.1	2.2	3.6	47.7	365.3	116.7	482.0	70.4	7.2	322.3
Connecticut	—	91	35	7.2	186.0	1.7	2.7	38.7	437.3	88.4	525.7	13.4	8.2	455.8
Delaware	—	18	6	.9	22.6	.3	.5	5.7	75.8	19.0	94.8	(D)	F	(D)
District of Columbia	E1	33	11	H	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(D)
Florida	—	329	89	22.8	605.0	7.6	13.0	162.6	1 757.0	431.8	2 189.3	49.3	25.2	1 524.7
Georgia	—	233	56	10.2	234.2	3.1	5.8	59.6	550.8	144.6	695.6	49.3	8.9	505.9
Hawaii	—	23	8	1.5	49.6	.7	1.2	20.7	232.0	30.3	261.4	5.0	G	(D)
Idaho	E1	60	16	1.7	29.7	.6	1.0	10.1	80.2	17.1	97.3	2.2	1.7	63.5
Illinois	E2	430	125	19.7	492.7	6.4	11.0	145.8	1 443.8	344.9	1 788.3	66.7	19.4	1 187.3
Indiana	—	208	84	10.3	217.1	3.6	6.2	73.2	502.1	118.9	621.1	30.7	9.7	419.4
Iowa	E1	241	59	6.1	105.3	2.2	3.5	35.2	299.7	76.2	375.9	10.6	5.9	255.6
Kansas	E1	184	46	4.1	76.2	1.5	2.4	24.4	182.7	37.7	220.7	4.8	(NA)	(D)
Kentucky	—	156	44	4.4	99.8	1.4	2.6	27.3	258.0	62.7	320.9	9.9	4.5	223.4
Louisiana	—	107	38	4.3	100.2	1.5	2.7	31.7	261.0	81.4	342.5	12.8	4.7	258.1
Maine	—	68	18	2.4	56.2	.9	1.4	17.3	115.2	25.7	140.9	3.4	2.6	113.6
Maryland	E1	86	30	4.9	148.3	1.7	2.6	41.4	405.1	81.4	486.6	13.1	6.1	372.4
Massachusetts	—	188	69	14.8	441.0	4.4	7.7	114.1	978.8	211.4	1 191.2	32.6	16.1	1 030.6
Michigan	—	230	88	14.1	361.5	4.3	7.7	109.9	790.0	235.0	1 025.4	52.8	13.1	668.5
Minnesota	E1	287	63	8.5	209.1	2.8	4.6	63.8	483.9	112.8	596.6	15.1	8.2	432.5
Mississippi	—	105	28	2.6	47.5	.9	1.8	16.0	128.2	37.5	165.7	5.0	(NA)	(D)

See footnotes at end of table.

MANUFACTURES—INDUSTRY SERIES

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**Table 2. Industry Statistics for Selected States: 1992 and 1987—Con.**

[Excludes data for auxiliaries. States with 100 employees or more are shown. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Industry and geographic area	1992											1987		
	E <sup>1</sup>	All establishments		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures (million dollars)	All employees <sup>2</sup> (1,000)	Value added by manufacture (million dollars)
		Total (no.)	With 20 employees or more (no.)	Number <sup>2</sup> (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)						
<b>INDUSTRY 2731, BOOK PUBLISHING</b>														
<b>United States</b> .....	E1	2 644	500	79.6	2 675.7	18.6	35.5	443.3	11 494.4	5 337.7	16 731.1	326.7	70.1	9 110.7
Alabama .....	—	27	4	E (D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
Arizona .....	E5	44	5	E (D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	E (D)	(D)
Arkansas .....	—	10	1	E (D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	E (D)	(D)
California .....	E3	405	70	6.8	215.0	1.6	2.9	35.7	879.4	329.1	1 194.9	19.0	6.2	537.5
Colorado .....	E1	60	6	1.3	35.3	.6	1.0	14.9	121.5	17.3	137.0	3.5	1.0	83.0
Connecticut .....	—	63	14	1.3	34.8	.2	.4	6.6	170.6	74.3	241.5	(D)	2.3	99.2
Florida .....	—	90	11	1.4	42.3	.4	.7	8.2	177.8	42.5	226.2	1.6	.9	74.9
Georgia .....	E5	30	4	.3	7.5	.1	.2	2.5	24.6	7.9	32.2	.4	.6	51.7
Illinois .....	E1	157	40	5.5	200.6	.9	1.7	19.9	698.7	319.3	1 028.2	9.2	6.1	893.9
Indiana .....	—	36	6	F (D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	F (D)	(D)
Iowa .....	—	18	3	F (D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	E (D)	(D)
Kansas .....	E6	25	2	.1	1.9	(Z)	(Z)	.2	4.5	3.3	9.0	(D)	(NA)	(NA)
Kentucky .....	E4	20	7	.9	10.7	.6	.5	4.8	47.9	18.7	66.9	.7	(NA)	(D)
Louisiana .....	E3	15	2	.1	2.3	(Z)	(Z)	.5	6.6	2.4	8.4	(D)	(NA)	(NA)
Maine .....	E3	14	2	.1	3.2	(Z)	(Z)	.7	12.4	3.7	15.9	(D)	(NA)	(D)
Maryland .....	E4	64	10	.8	23.5	.2	.4	3.8	66.5	33.8	99.3	2.7	.8	45.8
Massachusetts .....	E1	103	27	4.8	172.6	.6	1.2	15.3	734.6	416.1	1 133.4	11.5	4.1	647.6
Michigan .....	—	58	16	1.5	40.0	.4	.7	8.8	231.7	77.0	295.3	3.7	1.0	72.6
Minnesota .....	E1	48	11	6.2	184.4	2.9	6.0	65.7	518.7	318.0	833.9	(D)	(NA)	(D)
Missouri .....	E1	53	11	G (D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	6.5	1.3
Nebraska .....	E1	11	3	C (D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
New Hampshire .....	E1	11	3	.2	4.4	(Z)	(Z)	.7	17.0	4.2	21.1	(D)	(NA)	(D)
New Jersey .....	—	116	36	6.3	206.8	.9	1.6	22.7	1 017.8	325.0	1 350.9	18.7	4.5	545.0
New Mexico .....	E4	24	3	C (D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
New York .....	—	383	95	20.4	838.4	3.1	6.0	75.8	4 244.0	2 089.7	6 272.3	96.1	21.0	4 195.2
North Carolina .....	E2	46	8	.5	13.4	.2	.3	2.1	72.0	35.6	106.3	1.0	E (D)	(D)
Ohio .....	E4	64	10	3.8	134.7	1.8	3.8	64.4	397.8	94.7	495.6	(D)	(NA)	(D)
Oklahoma .....	E2	22	2	.2	3.6	(Z)	(Z)	.5	14.7	8.1	23.1	(D)	(NA)	(NA)
Oregon .....	E1	53	5	.4	10.3	.1	.2	2.4	32.8	23.2	56.8	.7	.3	18.3
Pennsylvania .....	—	78	20	3.3	115.0	.6	1.1	17.5	610.7	232.9	835.8	7.4	1.8	134.6
South Carolina .....	E7	21	1	.1	1.9	(Z)	(Z)	.8	5.9	1.9	7.7	(D)	(NA)	(NA)
Tennessee .....	E6	67	15	1.5	39.1	.3	.6	6.4	130.7	90.7	222.6	3.6	2.5	191.9
Texas .....	E2	116	20	3.2	85.5	.5	.9	7.2	381.0	124.6	517.4	8.1	1.5	171.7
Utah .....	E5	28	1	.1	2.5	(Z)	(Z)	.3	7.1	4.7	12.0	.4	.2	31.1
Vermont .....	E6	25	4	E (D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
Virginia .....	—	52	3	G (D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	1.0	158.0
Washington .....	E4	61	7	E (D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.3	14.1
Wisconsin .....	—	39	6	1.1	33.5	.7	1.4	23.0	28.5	193.3	211.9	2.5	1.3	110.6
<b>INDUSTRY 2732, BOOK PRINTING</b>														
<b>United States</b> .....	—	623	293	50.9	1 360.7	38.8	76.2	923.9	2 833.6	1 868.4	4 687.9	198.2	43.5	1 996.5
California .....	E1	79	31	2.8	87.1	1.7	3.5	44.0	197.9	92.8	284.3	9.7	2.0	99.9
Colorado .....	—	13	7	.8	17.1	.5	1.0	9.6	31.6	21.8	53.0	4.6	.3	12.8
Florida .....	E1	26	9	.5	12.3	.3	.6	7.4	22.0	14.0	35.8	1.9	.2	9.8
Georgia .....	E4	14	4	.3	9.6	.3	.5	7.0	19.6	15.7	35.3	1.5	.4	15.2
Illinois .....	—	49	20	2.0	61.4	1.3	2.8	33.6	110.7	76.5	186.9	4.6	1.8	86.5
Indiana .....	—	12	7	H (D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(D)
Iowa .....	—	10	6	G (D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	E (D)	(D)
Kansas .....	—	3	3	G (D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	G (D)	(D)
Kentucky .....	—	9	6	1.4	40.2	1.0	2.0	27.2	79.4	49.0	128.7	3.4	G (D)	(D)
Maryland .....	E1	25	15	1.7	53.1	1.2	2.7	32.1	78.9	92.4	171.1	4.7	1.6	69.1
Massachusetts .....	E1	29	23	3.1	92.7	2.4	4.9	67.0	168.5	114.6	285.8	10.8	3.3	147.0
Michigan .....	E1	26	18	2.9	68.2	2.1	4.1	45.0	150.4	90.9	242.1	5.2	2.2	92.7
Minnesota .....	E2	8	6	.3	7.2	.2	.4	3.2	15.9	5.7	21.5	(D)	E (D)	(D)
Missouri .....	—	12	7	G (D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	3.1	1.7
Nebraska .....	E1	4	1	C (D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
New Jersey .....	E1	24	10	.7	28.7	.5	1.0	14.9	63.7	19.0	82.5	3.0	.7	34.1
New York .....	—	53	17	3.2	95.1	2.5	4.6	68.6	172.4	107.8	277.3	10.0	2.7	114.5
North Carolina .....	—	14	5	1.4	33.0	1.1	2.2	22.5	61.2	37.1	98.1	1.6	G (D)	(D)
Ohio .....	—	19	7	2.4	66.7	2.0	4.0	50.6	159.7	97.0	256.5	(D)	G (D)	(D)
Oregon .....	—	6	4	.3	9.3	.2	.4	5.1	29.0	14.4	43.3	4.5	(NA)	(NA)
Pennsylvania .....	—	33	21	5.2	128.4	4.2	8.3	96.1	289.8	156.4	444.3	23.5	5.0	227.6
South Carolina .....	—	5	3	.2	4.7	.1	.3	3.4	13.8	2.8	16.1	.3	(NA)	(NA)
Tennessee .....	—	11	7	3.9	94.4	3.2	6.4	74.4	210.7	113.1	323.8	3.9	3.5	157.7
Texas .....	—	27	11	2.2	56.0	1.5	3.0	35.3	93.2	72.9	167.0	10.9	1.8	81.0
Utah .....	—	10	7	.8	15.8	.6	1.2	10.3	38.1	39.7	79.3	4.8	.4	16.0
Vermont .....	E7	4	3	F (D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	F (D)	(D)
Virginia .....	E1	13	11	G (D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	1.9	82.6
Washington .....	—	8	4	E (D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
West Virginia .....	—	2	1	E (D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
Wisconsin .....	—	18	8	2.4	76.5	1.8	3.7	51.7	142.4	154.5	298.3	12.6	2.5	142.7

See footnotes at end of table.

MANUFACTURES—INDUSTRY SERIES

NEWSPAPERS, PERIOD., BOOKS, & MISC. PUB. 27A-11

**Table 2. Industry Statistics for Selected States: 1992 and 1987—Con.**

[Excludes data for auxiliaries. States with 100 employees or more are shown. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Industry and geographic area	1992											1987		
	All establishments		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures (million dollars)	All employees <sup>2</sup> (1,000)	Value added by manufacture (million dollars)	
	E <sup>1</sup>	Total (no.)	With 20 employees or more (no.)	Number <sup>2</sup> (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)							Wages (million dollars)
<b>INDUSTRY 2741, MISCELLANEOUS PUBLISHING</b>														
<b>United States -----</b>	<b>E1</b>	<b>3 390</b>	<b>570</b>	<b>65.4</b>	<b>1 732.9</b>	<b>23.7</b>	<b>43.3</b>	<b>467.8</b>	<b>8 524.9</b>	<b>2 476.7</b>	<b>10 977.1</b>	<b>190.4</b>	<b>69.5</b>	<b>6 023.0</b>
Alabama -----	E1	25	3	.4	7.6	.2	.5	3.9	22.5	8.2	30.3	.9		(D)
Arizona -----	-	41	6	F	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)		(D)
Arkansas -----	E5	18	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)		.8
California -----	E1	473	69	8.5	240.4	3.2	5.9	63.4	1 640.3	355.7	1 965.2	37.6	8.4	1 170.3
Colorado -----	E1	79	18	3.4	95.9	1.7	3.3	39.3	440.9	92.8	533.4	20.6	3.6	313.0
Connecticut -----	E2	60	10	1.1	30.3	.5	.8	8.7	84.5	27.8	112.6	1.7	1.9	104.2
District of Columbia -----	E2	26	5	.3	11.5	.1	.1	1.2	27.8	5.7	33.4	.6	.4	36.3
Florida -----	E4	199	25	2.9	59.0	1.0	1.8	16.2	171.1	54.5	225.6	4.4	3.2	120.5
Georgia -----	E5	65	9	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)		(D)
Hawaii -----	E7	12	3	.2	8.8	.1	.2	2.2	29.7	12.0	41.7	.6	(NA)	(D)
Idaho -----	-	20	5	.2	3.5	.1	.1	.8	11.5	2.7	14.1	.3	(NA)	(NA)
Illinois -----	E1	136	26	3.5	109.9	1.2	2.1	34.4	388.7	352.2	741.5	5.3	3.5	368.9
Indiana -----	E2	44	6	.6	12.5	.2	.4	4.1	41.6	13.0	54.8	(D)	1.5	79.3
Iowa -----	E3	51	11	1.0	17.4	.3	.6	4.5	57.6	15.5	73.2	.6	.7	27.4
Kansas -----	-	43	12	2.0	51.0	.5	1.1	10.9	386.6	57.1	443.3	4.1	1.4	277.0
Kentucky -----	-	33	6	.8	19.1	.4	.7	6.4	107.9	13.2	122.6	.6	F	(D)
Louisiana -----	E4	31	4	.2	3.5	.1	.1	.9	11.5	4.0	15.5	(D)	.2	29.2
Maine -----	E1	19	1	.2	4.9	.1	.1	1.0	15.8	2.5	18.7	.4	(NA)	(NA)
Maryland -----	E4	77	15	1.7	51.3	.4	.7	7.0	173.6	41.8	215.3	3.1	1.5	84.0
Massachusetts -----	-	96	14	2.5	76.4	.5	1.0	11.1	768.9	248.5	1 018.1	(D)	3.4	632.0
Michigan -----	-	100	19	3.1	95.2	1.1	2.1	26.0	993.3	121.6	1 112.8	10.4	5.1	297.6
Minnesota -----	-	75	14	1.0	26.1	.5	.8	8.6	129.2	39.0	167.8	(D)	1.5	107.6
Missouri -----	E6	46	9	F	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.9	46.2
Montana -----	E3	13	2	.1	1.6	(Z)	.1	.4	6.0	1.6	7.7	(D)	(NA)	(NA)
Nebraska -----	-	13	2	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	G	(D)
New Hampshire -----	E4	23	3	.2	3.6	.1	.1	1.0	10.8	4.1	14.9	.3	(NA)	(NA)
New Jersey -----	E3	118	16	2.5	86.7	.7	1.2	17.2	200.2	54.9	255.5	3.7	3.9	183.1
New Mexico -----	E4	14	3	.1	1.3	.1	.1	.4	3.1	1.0	4.1	(D)	(NA)	(NA)
New York -----	E3	382	75	9.0	258.3	2.6	4.3	57.6	832.4	296.5	1 127.7	15.1	9.4	882.0
North Carolina -----	E6	47	10	F	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	F	(D)
North Dakota -----	-	5	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
Ohio -----	E2	103	20	1.8	37.9	.7	1.2	10.4	128.6	36.0	163.3	(D)	2.6	138.6
Oklahoma -----	E6	26	6	.3	6.3	.1	.2	1.0	24.0	9.0	33.1	.2	.2	6.4
Oregon -----	-	51	4	.7	18.3	.3	.5	6.9	105.5	18.6	127.9	1.9	.6	66.3
Pennsylvania -----	E1	116	34	3.9	94.1	2.1	4.3	38.3	589.6	189.8	779.7	9.8	2.5	171.8
South Carolina -----	E2	33	1	.2	5.0	.1	.1	1.7	14.2	4.6	18.1	.2	(NA)	(NA)
Tennessee -----	E3	106	10	1.3	29.5	.8	1.8	16.8	85.1	57.3	143.8	1.9	.8	38.7
Texas -----	E4	196	29	2.4	63.9	.7	1.3	12.8	223.3	79.9	307.5	2.9	2.4	119.4
Utah -----	-	20	5	1.6	38.8	.4	.9	6.4	98.8	53.4	147.3	(D)	.3	16.0
Vermont -----	E2	16	2	.3	5.6	.2	.4	3.1	8.3	1.9	10.3	(D)	.3	7.8
Virginia -----	E2	86	16	1.0	28.2	.4	.7	6.5	84.8	24.0	109.1	1.3	1.1	71.3
Washington -----	E1	88	9	1.0	25.7	.4	.7	7.5	136.8	42.7	186.0	1.4	.4	102.4
Wisconsin -----	E1	92	26	1.6	23.0	.6	.8	7.0	53.1	21.1	73.8	1.4	1.2	35.6

Note: For qualifications of data, see footnotes on table 1a.

<sup>1</sup>Payroll and sales data for some small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other Government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate the items shown for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown for those States where estimated value of shipments data based on administrative-record data account for 10 percent or more of figure shown: E1—10 to 19 percent; E2—20 to 29 percent; E3—30 to 39 percent; E4—40 to 49 percent; E5—50 to 59 percent; E6—60 to 69 percent; E7—70 to 79 percent; E8—80 to 89 percent; E9—90 percent or more.

<sup>2</sup>Statistics for some producing States have been withheld to avoid disclosing data for individual companies. However, for States with 100 employees or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: C—100 to 249 employees; E—250 to 499 employees; F—500 to 999 employees; G—1,000 to 2,499 employees; H—2,500 to 4,999 employees; I—5,000 to 9,999 employees; J—10,000 to 24,999 employees; K—25,000 to 49,999 employees; L—50,000 to 99,999 employees; M—100,000 employees or more.

**Table 3a. Summary Statistics for the Industry: 1992**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Newspapers (SIC 2711)			Periodicals (SIC 2721)		
	Total	Daily (SIC 2711-11)	Weekly and others (SIC 2711-13)	Total	Publishing only (SIC 2721-11)	Publishing and printing (SIC 2721-13)
Companies ----- number ..	6 762	573	6 350	4 390	4 062	340
All establishments ----- number ..	8 679	1 526	7 153	4 699	4 336	363
With 1 to 19 employees ----- number ..	6 050	135	5 915	3 708	3 504	204
With 20 to 99 employees ----- number ..	1 863	749	1 114	790	673	117
With 100 employees or more ----- number ..	766	642	124	201	159	42
Employment and labor costs:						
Employees ----- 1,000 ..	417.0	317.2	99.8	116.2	94.4	21.8
Compensation, total ----- mil dol ..	12 938.0	10 742.8	2 195.2	4 860.3	4 066.2	794.1
Annual payroll ----- mil dol ..	10 506.4	8 683.6	1 822.8	4 074.5	3 418.6	655.9
Fringe benefits ----- mil dol ..	2 431.6	2 059.3	372.3	785.8	647.6	138.2
Social Security and other legally required payments ----- mil dol ..	1 009.2	844.8	164.4	316.4	267.3	49.1
Employer voluntary payments ----- mil dol ..	1 422.4	1 214.5	207.9	469.5	380.3	89.1

See footnotes at end of table.

**Table 3a. Summary Statistics for the Industry: 1992—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Newspapers (SIC 2711)			Periodicals (SIC 2721)			
	Total	Daily (SIC 2711-11)	Weekly and others (SIC 2711-13)	Total	Publishing only (SIC 2721-11)	Publishing and printing (SIC 2721-13)	
<b>Production workers:</b>							
Average for year -----1,000--	135.3	100.2	35.1	20.1	13.1	7.0	
March -----1,000--	136.1	100.1	36.0	20.4	13.4	7.0	
May -----1,000--	135.9	100.3	35.6	20.1	13.2	6.9	
August -----1,000--	135.6	100.2	35.4	20.2	13.2	7.0	
November -----1,000--	134.1	100.3	33.8	19.8	12.9	7.0	
Hours ----- millions--	235.8	175.5	60.3	39.0	25.5	13.5	
Wages ----- mil dol--	3 038.8	2 500.7	538.1	522.5	324.1	198.3	
<b>Cost of materials<sup>1</sup> ----- mil dol--</b>	6 874.0	5 455.3	1 418.7	6 200.9	5 620.0	580.9	
Materials, parts, containers, etc., consumed <sup>2</sup> ----- mil dol--	5 850.3	4 822.7	1 027.5	2 417.1	2 076.2	341.0	
Resales ----- mil dol--	96.4	43.6	52.9	168.3	134.4	33.9	
Fuels ----- mil dol--	51.3	40.5	10.8	10.4	8.5	1.9	
Purchased electricity ----- mil dol--	244.9	207.8	37.1	33.7	23.9	9.7	
Contract work ----- mil dol--	631.1	340.6	290.5	3 571.3	3 377.0	194.4	
<b>Quantity of electric energy used for heat and power:</b>							
Purchased ----- mil kWh--	3 652.5	3 078.8	573.8	423.9	291.6	132.3	
Generated less sold ----- mil kWh--	(D)	(D)	(D)	-	-	-	
<b>Total value of shipments ----- mil dol--</b>	34 124.3	28 212.2	5 912.1	22 033.9	19 477.0	2 556.9	
<b>Value added ----- mil dol--</b>	27 247.0	22 754.6	4 492.3	15 833.0	13 845.6	1 987.4	
<b>Inventories by stage of fabrication:</b>							
Beginning of 1992 ----- mil dol--	819.7	634.9	184.7	1 071.4	877.4	194.0	
Finished goods ----- mil dol--	24.4	12.4	12.0	445.3	358.1	87.1	
Work in process ----- mil dol--	8.7	4.7	4.1	187.7	143.0	44.7	
Materials and supplies ----- mil dol--	786.5	617.9	168.7	438.4	376.3	62.1	
End of 1992 ----- mil dol--	767.4	592.7	174.7	1 066.7	861.1	205.6	
Finished goods ----- mil dol--	22.3	11.5	10.8	431.6	344.1	87.5	
Work in process ----- mil dol--	7.5	3.2	4.3	201.3	145.6	55.7	
Materials and supplies ----- mil dol--	737.7	578.0	159.6	433.8	371.4	62.3	
Item	Book publishing (SIC 2731)			Book printing (SIC 2732)	Miscellaneous publishing (SIC 2741)		
	Total	Publishing only (SIC 2731-11)	Publishing and printing (SIC 2731-13)		Total	Publishing only (SIC 2741-11)	Publishing and printing (SIC 2741-13)
<b>Companies ----- number--</b>	2 504	2 335	178	575	3 159	3 011	161
<b>All establishments ----- number--</b>	2 644	2 464	180	623	3 390	3 219	171
With 1 to 19 employees ----- number--	2 144	2 032	112	330	2 820	2 749	71
With 20 to 99 employees ----- number--	364	322	42	191	437	375	62
With 100 employees or more ----- number--	136	110	26	102	133	95	38
<b>Employment and labor costs:</b>							
Employees -----1,000--	79.6	60.9	18.6	50.9	65.4	52.2	13.2
Compensation, total ----- mil dol--	3 245.4	2 541.5	703.8	1 670.5	2 074.7	1 672.5	402.2
Annual payroll ----- mil dol--	2 675.7	2 086.6	589.2	1 360.7	1 732.9	1 401.7	331.2
Fringe benefits ----- mil dol--	569.6	454.9	114.7	309.8	341.8	270.8	71.0
Social Security and other legally required payments ----- mil dol--	223.0	176.9	46.2	137.9	135.7	104.4	31.3
Employer voluntary payments ----- mil dol--	346.6	278.1	68.5	171.9	206.2	166.5	39.7
<b>Production workers:</b>							
Average for year -----1,000--	18.6	10.1	8.6	38.8	23.7	17.4	6.3
March -----1,000--	18.7	10.1	8.6	39.8	23.7	17.5	6.3
May -----1,000--	18.9	10.3	8.6	39.2	24.0	17.7	6.3
August -----1,000--	18.6	9.9	8.6	38.2	24.1	17.5	6.6
November -----1,000--	18.4	10.0	8.4	38.0	23.2	17.0	6.2
Hours ----- millions--	35.5	18.2	17.3	76.2	43.3	31.4	11.8
Wages ----- mil dol--	443.3	215.8	227.6	923.9	467.8	343.0	124.8
<b>Cost of materials<sup>1</sup> ----- mil dol--</b>	5 337.7	4 562.5	775.2	1 868.4	2 476.7	2 143.5	333.2
Materials, parts, containers, etc., consumed <sup>2</sup> ----- mil dol--	1 613.7	1 124.0	489.6	1 587.6	708.6	474.7	233.9
Resales ----- mil dol--	270.7	235.6	35.1	18.7	83.7	71.2	12.5
Fuels ----- mil dol--	8.9	7.1	1.8	13.0	6.8	4.7	2.1
Purchased electricity ----- mil dol--	29.9	18.4	11.5	49.5	23.9	16.4	7.5
Contract work ----- mil dol--	3 414.5	3 177.4	237.1	199.6	1 653.7	1 576.5	77.2
<b>Quantity of electric energy used for heat and power:</b>							
Purchased ----- mil kWh--	418.6	226.7	191.9	886.1	346.5	221.8	124.8
Generated less sold ----- mil kWh--	-	-	-	-	-	-	-
<b>Total value of shipments ----- mil dol--</b>	16 731.1	14 550.8	2 180.3	4 687.9	10 977.1	9 471.8	1 505.2
<b>Value added ----- mil dol--</b>	11 494.4	10 084.5	1 410.0	2 833.6	8 524.9	7 355.3	1 169.6
<b>Inventories by stage of fabrication:</b>							
Beginning of 1992 ----- mil dol--	2 840.4	2 522.9	317.5	405.2	874.7	785.3	89.4
Finished goods ----- mil dol--	2 262.3	2 067.5	194.8	52.9	508.9	477.1	31.8
Work in process ----- mil dol--	363.9	285.8	78.1	174.3	222.8	205.5	17.3
Materials and supplies ----- mil dol--	214.3	169.6	44.7	178.1	143.0	102.7	40.3
End of 1992 ----- mil dol--	2 944.1	2 620.6	323.5	419.1	902.4	818.7	83.7
Finished goods ----- mil dol--	2 342.5	2 146.3	196.1	57.8	524.9	489.4	35.5
Work in process ----- mil dol--	384.7	303.2	81.5	183.4	231.3	220.1	11.2
Materials and supplies ----- mil dol--	216.9	171.1	45.8	177.9	146.3	109.2	37.1

Note: For qualifications of data, see footnotes on table 1a.

<sup>1</sup>Data on purchased services for the repair of buildings and machinery and for communication services are not included in cost of materials, etc., but are shown in table 3c.

<sup>2</sup>Data on materials consumed by type are shown in table 7. Data on amount purchased or transferred from foreign sources are shown in table 3c.



**Table 3b. Gross Book Value of Depreciable Assets, Capital Expenditures, Retirements, Depreciation, and Rental Payments: 1992**

[Million dollars. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Newspapers (SIC 2711)	Periodicals (SIC 2721)	Book publishing (SIC 2731)	Book printing (SIC 2732)	Miscellaneous publishing (SIC 2741)
<b>Gross book value of depreciable assets:</b>					
<b>Total:</b>					
Beginning of year .....	18 824.9	2 621.7	2 228.9	2 194.6	1 083.8
New capital expenditures <sup>1</sup> .....	1 667.4	234.4	326.7	198.2	190.4
Used capital expenditures .....	71.1	20.6	9.6	24.8	10.5
Retirements .....	521.5	107.8	163.0	82.0	58.2
End of year .....	20 041.9	2 768.8	2 402.2	2 335.7	1 226.5
<b>Buildings and other structures:</b>					
Beginning of year .....	5 609.7	989.7	755.6	455.1	230.2
New capital expenditures .....	399.5	38.9	77.0	18.6	51.3
Used capital expenditures .....	19.8	9.6	3.5	7.2	2.3
Retirements .....	59.1	21.7	50.1	14.6	5.7
End of year .....	5 969.8	1 016.4	785.9	466.3	278.1
<b>Machinery and equipment:</b>					
Beginning of year .....	13 215.2	1 632.0	1 473.3	1 739.5	853.6
New capital expenditures <sup>1</sup> .....	1 267.9	195.5	249.7	179.6	139.1
Used capital expenditures .....	51.4	11.0	6.1	17.6	8.2
Retirements .....	462.4	86.0	112.9	67.4	52.5
End of year .....	14 072.0	1 752.5	1 616.3	1 869.4	948.5
<b>Depreciation charges during 1992:</b>					
Total .....	1 214.3	245.1	225.7	158.6	115.7
Buildings and other structures .....	226.0	51.6	42.1	19.5	14.2
Machinery and equipment .....	988.3	193.5	183.5	139.2	101.4
<b>Rental payments:</b>					
Total .....	344.4	485.1	240.3	53.7	155.6
Buildings and other structures .....	239.2	393.3	177.9	29.2	106.6
Machinery and equipment .....	105.2	91.8	62.4	24.5	49.1

<sup>1</sup>Data on new machinery and equipment expenditures by type are provided in table 3c.

**Table 3c. Supplemental Industry Statistics Based on Sample Estimates: 1992**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Newspapers (SIC 2711)		Periodicals (SIC 2721)		Book publishing (SIC 2731)		Book printing (SIC 2732)		Miscellaneous publishing (SIC 2741)	
	Amount (million dollars)	Relative standard error of estimate <sup>1</sup> (percent)	Amount (million dollars)	Relative standard error of estimate <sup>1</sup> (percent)	Amount (million dollars)	Relative standard error of estimate <sup>1</sup> (percent)	Amount (million dollars)	Relative standard error of estimate <sup>1</sup> (percent)	Amount (million dollars)	Relative standard error of estimate <sup>1</sup> (percent)
<b>Purchased services:</b>										
<b>Cost of purchased services for the repair of—</b>										
Buildings and other structures .....	83.8	(X)	17.0	(X)	10.7	(X)	11.7	(X)	9.7	(X)
Response coverage ratio (percent) <sup>2</sup> .....	85.7	(X)	71.6	(X)	66.8	(X)	88.6	(X)	74.0	(X)
Machinery .....	178.8	(X)	28.7	(X)	24.0	(X)	52.2	(X)	25.2	(X)
Response coverage ratio (percent) <sup>2</sup> .....	86.0	(X)	70.3	(X)	66.5	(X)	90.5	(X)	74.9	(X)
<b>Other purchased services:</b>										
Communications .....	204.0	(X)	99.3	(X)	81.5	(X)	13.1	(X)	40.7	(X)
Response coverage ratio (percent) <sup>2</sup> .....	84.7	(X)	69.9	(X)	64.1	(X)	86.8	(X)	72.2	(X)
Legal .....	78.1	(X)	46.0	(X)	19.9	(X)	7.1	(X)	19.5	(X)
Response coverage ratio (percent) <sup>2</sup> .....	86.1	(X)	71.1	(X)	68.0	(X)	90.2	(X)	74.7	(X)
Accounting and bookkeeping .....	46.0	(X)	15.1	(X)	8.9	(X)	4.3	(X)	8.0	(X)
Response coverage ratio (percent) <sup>2</sup> .....	83.6	(X)	64.5	(X)	67.5	(X)	90.5	(X)	73.6	(X)
Advertising .....	191.0	(X)	595.3	(X)	315.9	(X)	7.2	(X)	163.8	(X)
Response coverage ratio (percent) <sup>2</sup> .....	85.2	(X)	70.1	(X)	70.5	(X)	84.5	(X)	74.7	(X)
Software and other data processing .....	59.6	(X)	39.4	(X)	34.1	(X)	3.8	(X)	22.1	(X)
Response coverage ratio (percent) <sup>2</sup> .....	83.9	(X)	69.6	(X)	64.8	(X)	86.1	(X)	74.1	(X)
Refuse removal, including hazardous waste .....	17.2	(X)	1.3	(X)	2.3	(X)	5.5	(X)	1.4	(X)
Response coverage ratio (percent) <sup>2</sup> .....	84.5	(X)	67.9	(X)	65.3	(X)	89.5	(X)	71.5	(X)
<b>New machinery and equipment expenditures .....</b>										
Automobiles, trucks, etc., for highway use .....	1 267.9	(X)	195.5	(X)	249.7	(X)	179.6	(X)	139.1	(X)
Computers and peripheral data processing equipment .....	58.1	5	5.7	28	4.5	25	3.7	47	3.1	52
All other .....	271.9	3	106.2	4	134.0	2	16.7	7	50.0	11
Adjustment ratio <sup>3</sup> .....	938.0	1	83.5	5	111.3	3	159.2	2	86.1	8
Adjustment ratio <sup>3</sup> .....	1.1	(X)	1.4	(X)	1.1	(X)	1.4	(X)	1.1	(X)
<b>Cost of materials, components, parts, etc., used .....</b>										
Materials purchased or transferred from foreign sources <sup>4</sup> .....	5 850.3	(X)	2 417.1	(X)	1 613.7	(X)	1 587.6	(X)	708.6	(X)
Materials purchased or transferred from domestic sources .....	1 271.3	4	12.5	18	58.5	5	26.6	20	(S)	(X)
Adjustment ratio <sup>5</sup> .....	4 579.0	1	2 404.6	1	1 555.1	3	1 561.0	1	(S)	(X)
Adjustment ratio <sup>5</sup> .....	1.4	(X)	1.6	(X)	1.3	(X)	1.8	(X)	(S)	(X)

Note: The amounts shown for purchased services reflect only those services that establishments purchase from other companies. Amounts purchased by separate central administrative offices and services provided to establishments by central administrative offices are excluded.

<sup>1</sup>For description of relative standard error of estimate, see Qualifications of the Data in appendixes.

<sup>2</sup>A response coverage ratio is derived for this item by calculating the ratio of the weighted employment (establishment data multiplied by sample weight, see appendix B) for those ASM establishments that reported to the weighted total employment for all ASM establishments classified in the industry.

<sup>3</sup>Detail has been adjusted upwards to account for nonresponse. Inverse of the ratio shown represents a measure of the response of the inquiry. (See appendixes for further explanation.)

<sup>4</sup>Data may understate the true cost of imported parts, components, and supplies since some respondents do not know the origin of these materials. Includes cases where materials were purchased from secondary suppliers or where they were transferred from company-operated warehouses or other distribution points. Direct purchases from foreign suppliers and importers by domestic manufacturing establishments are believed to be reported accurately.

**Table 4. Industry Statistics by Employment Size of Establishment: 1992**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Industry and employment size class	E <sup>1</sup>	All establishments (no.)	All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures (million dollars)	End-of-year inventories (million dollars)
			Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)					
<b>INDUSTRY 2711, NEWSPAPERS</b>												
<b>Total</b> .....	<b>E1</b>	<b>8 679</b>	<b>417.0</b>	<b>10 506.4</b>	<b>135.3</b>	<b>235.8</b>	<b>3 038.8</b>	<b>27 247.0</b>	<b>6 874.0</b>	<b>34 124.3</b>	<b>1 667.4</b>	<b>767.4</b>
Establishments with an average of—												
1 to 4 employees .....	E8	2 952	5.3	91.5	1.6	3.3	26.4	295.6	87.2	382.8	21.7	9.5
5 to 9 employees .....	E6	1 752	11.8	181.7	4.1	6.7	54.1	471.4	136.6	608.0	28.5	16.1
10 to 19 employees .....	E2	1 346	18.5	299.2	6.9	12.2	98.2	696.2	200.7	896.8	29.8	27.1
20 to 49 employees .....	E1	1 280	39.7	697.9	14.3	24.8	213.0	1 735.3	440.3	2 175.8	59.9	58.9
50 to 99 employees .....	E1	583	40.0	725.6	13.4	23.1	211.8	2 162.1	487.4	2 650.2	72.3	75.0
100 to 249 employees .....	E1	464	71.7	1 528.8	23.7	41.2	438.8	3 946.9	1 022.5	4 970.3	156.5	116.1
250 to 499 employees .....	E1	164	56.1	1 316.9	16.8	28.4	358.8	3 093.1	722.5	3 816.8	146.6	96.9
500 to 999 employees .....	E1	75	52.1	1 435.7	18.5	32.2	451.8	3 996.5	1 022.3	5 019.8	173.3	103.5
1,000 to 2,499 employees .....	E1	51	75.9	2 594.8	23.9	42.3	737.2	6 840.0	1 763.8	8 603.6	352.1	159.1
2,500 employees or more .....	E1	12	45.7	1 634.4	12.0	21.7	448.7	4 009.9	990.9	5 000.3	626.7	105.1
Covered by administrative records <sup>2</sup> .....	E9	4 313	18.0	240.5	6.0	10.3	69.7	652.4	190.4	842.8	49.7	21.0
<b>INDUSTRY 2721, PERIODICALS</b>												
<b>Total</b> .....	<b>E2</b>	<b>4 699</b>	<b>116.2</b>	<b>4 074.5</b>	<b>20.1</b>	<b>39.0</b>	<b>522.5</b>	<b>15 833.0</b>	<b>6 200.9</b>	<b>22 033.9</b>	<b>234.4</b>	<b>1 066.7</b>
Establishments with an average of—												
1 to 4 employees .....	E6	2 178	3.8	98.1	.7	2.0	20.7	382.2	180.7	564.6	5.2	26.8
5 to 9 employees .....	E3	866	5.7	143.9	1.5	2.9	28.5	459.8	196.5	657.1	5.8	31.7
10 to 19 employees .....	E2	664	9.0	259.7	2.3	4.3	48.3	824.6	335.6	1 159.6	9.6	57.8
20 to 49 employees .....	E2	586	18.1	561.4	3.8	6.9	85.0	1 873.7	739.1	2 603.5	26.3	124.8
50 to 99 employees .....	E2	204	14.0	442.9	3.2	6.3	72.0	1 560.3	584.2	2 145.6	28.0	90.0
100 to 249 employees .....	E2	134	20.9	741.1	3.9	7.1	94.9	2 806.9	1 106.9	3 927.0	37.8	215.1
250 to 499 employees .....	E1	40	13.2	492.8	2.6	5.6	70.3	2 133.2	868.5	3 001.4	35.1	140.6
500 to 999 employees .....	E4	16	11.3	486.4	.8	1.4	73.8	2 046.2	790.8	2 837.7	31.1	114.3
1,000 to 2,499 employees .....	E1	9	20.2	848.2	1.2	2.4	28.9	3 746.1	1 398.6	5 137.4	55.5	265.7
2,500 employees or more .....	E1	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Covered by administrative records <sup>2</sup> .....	E9	2 062	4.8	83.9	1.1	2.4	17.8	292.9	139.1	432.0	4.5	23.7
<b>INDUSTRY 2731, BOOK PUBLISHING</b>												
<b>Total</b> .....	<b>E1</b>	<b>2 644</b>	<b>79.6</b>	<b>2 675.7</b>	<b>18.6</b>	<b>35.5</b>	<b>443.3</b>	<b>11 494.4</b>	<b>5 337.7</b>	<b>16 731.1</b>	<b>326.7</b>	<b>2 944.1</b>
Establishments with an average of—												
1 to 4 employees .....	E7	1 442	2.4	54.5	.6	1.3	11.2	270.0	119.6	385.9	4.9	89.8
5 to 9 employees .....	E5	445	2.9	62.3	.8	1.5	12.1	255.4	115.3	368.5	4.2	74.7
10 to 19 employees .....	E2	257	3.5	90.8	.9	1.6	15.8	310.2	147.2	452.7	6.4	106.9
20 to 49 employees .....	E2	246	7.5	202.8	1.9	3.5	35.7	730.3	348.4	1 070.4	11.8	225.0
50 to 99 employees .....	E2	118	8.3	258.3	1.7	3.4	40.9	990.8	417.1	1 389.9	15.9	306.2
100 to 249 employees .....	E1	74	11.1	375.4	2.5	4.7	59.3	2 130.1	837.5	2 913.9	38.4	627.2
250 to 499 employees .....	E1	32	11.4	416.5	1.5	2.7	40.2	2 131.7	929.5	3 096.8	36.0	479.4
500 to 999 employees .....	E1	16	10.6	363.1	2.7	4.7	63.4	1 339.4	828.3	2 150.9	31.9	369.4
1,000 to 2,499 employees .....	E1	13	21.9	852.0	5.9	12.0	164.7	3 336.7	1 594.8	4 901.9	177.3	665.4
2,500 employees or more .....	E1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Covered by administrative records <sup>2</sup> .....	E9	1 507	3.7	64.8	1.1	2.1	14.6	259.7	109.1	368.8	5.1	67.8
<b>INDUSTRY 2732, BOOK PRINTING</b>												
<b>Total</b> .....	<b>E1</b>	<b>623</b>	<b>50.9</b>	<b>1 360.7</b>	<b>38.8</b>	<b>76.2</b>	<b>923.9</b>	<b>2 833.6</b>	<b>1 868.4</b>	<b>4 687.9</b>	<b>198.2</b>	<b>419.1</b>
Establishments with an average of—												
1 to 4 employees .....	E8	127	.2	5.1	.2	.4	3.6	11.1	8.1	19.2	1.1	1.8
5 to 9 employees .....	E6	100	.7	15.0	.5	1.0	10.1	32.1	23.2	54.9	2.7	6.8
10 to 19 employees .....	E3	103	1.4	36.3	1.0	2.1	22.0	70.3	44.4	116.4	5.1	9.5
20 to 49 employees .....	E1	128	4.1	114.4	2.9	6.1	67.8	246.2	132.8	378.2	13.6	26.1
50 to 99 employees .....	E1	63	4.6	137.5	3.2	6.7	83.9	284.4	186.2	469.2	15.9	33.4
100 to 249 employees .....	E1	48	7.5	211.4	5.5	11.2	134.7	420.4	325.7	746.9	27.8	56.0
250 to 499 employees .....	E1	33	11.8	314.6	9.0	17.5	222.3	656.1	519.4	1 170.6	52.0	120.8
500 to 999 employees .....	E1	15	10.0	253.9	7.7	14.8	172.5	560.0	276.0	831.5	80.1	76.9
1,000 to 2,499 employees .....	E1	5	10.5	272.5	8.7	16.3	207.0	553.0	352.8	900.9	(D)	87.8
2,500 employees or more .....	E1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Covered by administrative records <sup>2</sup> .....	E9	218	1.1	21.1	.9	1.7	14.9	38.6	30.1	68.7	4.0	6.3
<b>INDUSTRY 2741, MISCELLANEOUS PUBLISHING</b>												
<b>Total</b> .....	<b>E1</b>	<b>3 390</b>	<b>65.4</b>	<b>1 732.9</b>	<b>23.7</b>	<b>43.3</b>	<b>467.8</b>	<b>8 524.9</b>	<b>2 476.7</b>	<b>10 977.1</b>	<b>190.4</b>	<b>902.4</b>
Establishments with an average of—												
1 to 4 employees .....	E7	1 829	3.0	67.1	.9	1.9	17.1	248.7	88.9	337.1	5.1	27.6
5 to 9 employees .....	E3	584	3.9	85.4	1.4	2.4	21.8	242.0	86.3	328.7	4.5	26.0
10 to 19 employees .....	E2	407	5.5	126.7	2.0	3.4	31.9	381.4	146.4	524.0	7.3	51.9
20 to 49 employees .....	E2	317	9.6	212.1	3.1	4.9	46.6	602.6	210.8	812.7	12.4	71.5
50 to 99 employees .....	E3	120	7.9	207.6	2.6	4.9	45.7	646.7	218.0	864.1	14.2	62.4
100 to 249 employees .....	E2	87	13.3	357.8	5.3	9.7	105.8	1 564.4	676.1	2 248.8	24.0	114.0
250 to 499 employees .....	E1	32	11.0	321.0	4.5	8.5	114.1	1 973.9	373.0	2 351.7	26.2	97.5
500 to 999 employees .....	E1	12	11.2	355.2	3.8	7.6	84.8	2 865.2	677.3	3 510.0	96.7	451.6
1,000 to 2,499 employees .....	E1	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Covered by administrative records <sup>2</sup> .....	E9	1 664	3.7	63.6	1.2	2.1	15.0	224.2	78.9	303.1	5.0	23.0

See footnotes at end of table.

**Table 4. Industry Statistics by Employment Size of Establishment: 1992—Con.**

Note: For qualifications of data, see footnotes on table 1a. Data shown as (D) are included in underscored figures above.

<sup>1</sup>Payroll and sales data for some small single-establishment manufacturing companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other Government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate the items shown for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown for those employment-size classes where estimated data based on administrative-record data account for 10 percent or more of figures shown: E1—10 to 19 percent; E2—20 to 29 percent; E3—30 to 39 percent; E4—40 to 49 percent; E5—50 to 59 percent; E6—60 to 69 percent; E7—70 to 79 percent; E8—80 to 89 percent; E9—90 percent or more.

<sup>2</sup>Report forms were not mailed to small single-establishment companies with up to 20 employees (cutoff varied by industry). Payroll and sales data for 1992 were obtained from administrative records supplied by other agencies of the Federal Government. Those data were then used in conjunction with industry averages to estimate the items shown. Data are also included in respective employment-size classes shown.

**Table 5a. Industry Statistics by Industry and Primary Product Class Specialization: 1992**

[Table presents selected statistics for establishments according to their degree of specialization in products primary to their industry. Measures of plant specialization shown are (1) industry specialization: ratio of primary product shipments to total product shipments (primary plus secondary, excluding miscellaneous receipts) for the establishment; and (2) product class specialization: ratio of largest primary product class shipments to total product shipments (primary plus secondary, excluding miscellaneous receipts) for the establishment. See appendix for method of computing ratios. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Industry or product class code	Industry or primary product class	All establishments (number)	All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures (million dollars)
			Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)				
<b>2711</b>	<b>Newspapers:</b> All establishments in industry -----	8 679	417.0	10 506.4	135.3	235.8	3 038.8	27 247.0	6 874.0	34 124.3	1 667.4
	Establishments with this product class primary:										
27111	Daily and Sunday newspapers: receipts from subscriptions and sales -----	49	7.9	237.7	2.0	3.4	43.2	495.1	227.2	723.4	13.5
27112	Daily and Sunday newspapers: receipts from advertising -----	1 440	306.4	8 335.5	97.5	170.5	2 435.3	22 210.7	5 202.5	27 415.6	1 444.7
27113	Weekly and other newspapers: receipts from subscriptions and sales -----	99	2.3	60.1	.7	1.3	12.0	280.8	89.8	371.3	3.6
27114	Weekly and other newspapers: receipts from advertising -----	1 670	46.9	890.3	17.5	29.9	266.0	1 907.9	620.1	2 527.8	48.8
<b>2721</b>	<b>Periodicals:</b> All establishments in industry -----	4 699	116.2	4 074.5	20.1	39.0	522.5	15 833.0	6 200.9	22 033.9	234.4
	Establishments with this product class primary:										
27211	Farm periodicals: receipts from subscriptions, sales, and advertising -----	54	1.3	38.3	.4	.8	7.4	127.8	45.2	172.8	1.7
27213	Specialized business and professional periodicals: receipts from subscriptions and single copy sales ---	285	16.2	599.2	3.2	6.2	76.6	1 775.4	497.6	2 271.6	42.3
27214	Specialized business and professional periodicals: receipts from advertising -----	637	25.8	931.5	3.5	6.9	127.8	3 168.3	1 035.2	4 207.3	39.3
2721A	General and consumer periodicals: receipts from subscriptions -----	163	10.4	314.2	1.4	2.7	41.5	1 745.3	726.5	2 452.4	31.9
2721B	General and consumer periodicals: receipts from single copy sales -----	91	4.5	170.9	1.2	2.2	33.7	691.4	399.9	1 089.2	8.4
2721C	General and consumer periodicals: receipts from advertising -----	370	25.2	1 129.7	3.0	5.7	85.8	5 444.8	2 167.5	7 627.5	63.5
2721D	Other periodicals, except shopping news, catalogs, or directories, n.e.c. -----	159	8.4	226.4	2.1	4.1	43.2	578.5	194.4	776.8	11.5
<b>2731</b>	<b>Book publishing:</b> All establishments in industry -----	2 644	79.6	2 675.7	18.6	35.5	443.3	11 494.4	5 337.7	16 731.1	326.7
	Establishments with this product class primary:										
27311	Textbooks, including teachers' editions -----	130	18.0	647.1	2.7	5.3	72.7	2 966.0	1 349.5	4 338.7	51.9
27313	Technical, scientific, and professional books -----	156	18.8	636.1	7.5	14.9	204.1	2 129.7	673.9	2 769.5	147.6
27314	Religious books -----	63	4.7	114.7	1.4	2.1	23.1	438.8	278.5	731.6	8.0
2731A	Mass market paperback books, rack-size -----	12	2.9	121.9	(Z)	.1	1.0	786.0	457.6	1 245.4	12.0
2731B	Book club books -----	6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2731C	Mail order books -----	34	4.7	213.9	.4	.7	7.1	1 266.7	628.0	1 887.7	(D)
2731D	Adult trade and juvenile books -----	134	9.2	350.0	1.3	2.2	31.4	1 620.8	820.8	2 379.4	28.3
2731E	General reference books -----	28	2.6	98.5	.2	.4	6.8	264.8	168.1	439.5	7.5
2731F	Other books, excluding pamphlets -----	87	3.4	96.2	.6	1.2	14.1	311.4	130.6	432.2	5.7
2731G	Pamphlets (5 through 48 pages) -----	19	1.0	28.4	.2	.4	4.6	79.1	24.0	102.5	1.9
2731H	Audio books (books recorded on audio cassettes), publishing -----	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
<b>2732</b>	<b>Book printing:</b> All establishments in industry -----	623	50.9	1 360.7	38.8	76.2	923.9	2 833.6	1 868.4	4 687.9	198.2
	Establishments with this product class primary:										
27323	Textbooks, printing and binding -----	41	4.9	143.0	3.9	7.8	100.6	313.1	273.2	582.7	22.3
27324	Technical, scientific, and professional books, printing and binding -----	89	12.6	335.3	9.7	19.1	231.5	686.5	512.0	1 198.0	69.5
27325	Religious books, printing and binding -----	14	1.0	26.9	.6	1.2	15.2	48.5	34.2	84.0	2.9
27326	General books (trade, etc.), printing and binding -----	47	14.8	386.2	12.1	23.6	295.4	819.5	518.1	1 336.5	41.7
2732A	Other books, n.e.c., printing and binding -----	40	7.8	200.6	5.8	11.0	124.3	436.6	220.3	650.9	28.1
2732B	Books, printing only, not bound -----	21	1.2	33.0	.9	1.8	20.6	73.9	39.8	114.3	3.5
2732C	Pamphlets, printing only or printing and binding (excluding advertising pamphlets) -----	51	1.7	51.2	1.2	2.4	30.1	95.0	58.0	152.9	4.2
<b>2741</b>	<b>Miscellaneous publishing:</b> All establishments in industry -----	3 390	65.4	1 732.9	23.7	43.3	467.8	8 524.9	2 476.7	10 977.1	190.4
	Establishments with this product class primary:										
27416	Telephone directories, publishing -----	143	11.4	370.9	2.3	4.4	55.2	3 853.2	993.2	4 826.3	69.9
27417	Catalogs and directories, except telephone directories, publishing -----	125	4.5	149.7	1.4	2.5	29.1	388.4	149.2	537.4	9.6
27418	Business service publications, publishing -----	167	5.7	193.5	1.8	3.5	61.3	492.9	90.2	584.5	9.1
27419	Patterns, including clothing patterns -----	14	1.3	34.2	.8	1.5	19.6	192.4	34.0	226.0	(D)
2741A	Shopping news, publishing -----	350	12.9	224.3	5.0	7.6	66.3	550.0	180.8	732.3	12.2
2741B	Other miscellaneous publishing -----	246	14.0	383.5	7.0	14.3	148.4	1 675.5	557.5	2 232.3	57.8

Note: For qualifications of data, see footnotes on table 1a.

**Table 5b. Industry–Product Analysis—Value of Industry and Primary Product Shipments; Specialization and Coverage Ratios: 1992 and Earlier Census Years**

[Million dollars. An establishment is assigned to an industry based on shipment values of products representing largest amount considered primary to an industry. Frequently, establishment shipments comprise mixtures of products assigned to an industry (primary), those considered primary to other industries (secondary), and receipts for activities such as merchandising or contract work (total miscellaneous receipts). Subtotals for total value of shipments show this product pattern for an industry. Primary products specialization ratio is the primary products value of shipments divided by the sum of primary products value of shipments plus secondary products value of shipments. The extent of which an industry's primary products are shipped by establishments classified both in and out of an industry is the coverage ratio and is calculated by dividing the primary products value of shipments by the value of primary products shipments made in all industries. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Industry	1992	1987	1982
<b>INDUSTRY 2711, NEWSPAPERS</b>			
Total value of shipments .....	34 124.3	31 850.1	21 276.3
Primary products value of shipments .....	32 261.5	30 494.7	20 313.7
Secondary products value of shipments .....	1 370.3	1 037.0	798.4
Total miscellaneous receipts .....	492.6	318.4	164.2
Value of resales .....	109.4	61.4	27.4
Contract receipts .....	( <sup>1</sup> )	(D)	4.9
Other miscellaneous receipts .....	383.1	(D)	131.9
Sales of scrap and refuse .....	18.7	(NA)	14.4
Other miscellaneous receipts .....	1354.4	(NA)	105.0
Other miscellaneous receipts, n.s.k. ....	10.1	(NA)	12.5
Primary products specialization ratio .....	96	97	96
Value of primary products shipments made in all industries .....	32 261.5	30 494.7	20 313.7
Value of primary products shipments made in this industry .....	32 261.5	30 494.7	20 313.7
Value of primary products shipments made in other industries .....	—	—	—
Coverage ratio .....	100	100	100
<b>INDUSTRY 2721, PERIODICALS</b>			
Total value of shipments .....	22 033.9	17 329.2	11 478.0
Primary products value of shipments .....	19 821.5	15 793.1	10 278.6
Secondary products value of shipments .....	1 115.1	769.2	786.4
Total miscellaneous receipts .....	1 097.4	766.8	413.0
Value of resales .....	326.8	196.4	186.6
Contract receipts .....	( <sup>1</sup> )	51.6	29.1
Other miscellaneous receipts .....	770.6	518.8	197.3
Receipts for publishing prepackaged computer software .....	3.9	(NA)	(NA)
Other miscellaneous receipts .....	1673.0	(NA)	194.4
Other miscellaneous receipts, n.s.k. ....	93.8	(NA)	2.9
Primary products specialization ratio .....	95	95	93
Value of primary products shipments made in all industries .....	20 890.3	16 492.1	10 625.8
Value of primary products shipments made in this industry .....	19 821.5	15 793.1	10 278.6
Value of primary products shipments made in other industries .....	1 068.9	698.9	347.1
Coverage ratio .....	95	96	97
<b>INDUSTRY 2731, BOOK PUBLISHING</b>			
Total value of shipments .....	16 731.1	12 619.5	7 740.0
Primary products value of shipments .....	14 097.0	11 010.8	7 077.4
Secondary products value of shipments .....	1 281.5	1 011.6	443.5
Total miscellaneous receipts .....	1 352.6	597.2	219.0
Value of resales .....	605.3	277.2	70.9
Contract receipts .....	( <sup>1</sup> )	17.2	53.9
Other miscellaneous receipts .....	747.3	302.8	94.2
Receipts for publishing prepackaged computer software .....	21.8	(NA)	(NA)
Other miscellaneous receipts .....	1649.0	(NA)	92.5
Other miscellaneous receipts, n.s.k. ....	76.6	(NA)	1.7
Primary products specialization ratio .....	92	92	94
Value of primary products shipments made in all industries .....	14 785.6	11 629.9	7 812.6
Value of primary products shipments made in this industry .....	14 097.0	11 010.8	7 077.4
Value of primary products shipments made in other industries .....	688.7	619.2	735.2
Coverage ratio .....	95	95	91
<b>INDUSTRY 2732, BOOK PRINTING</b>			
Total value of shipments .....	4 687.9	3 256.3	2 392.4
Primary products value of shipments .....	4 042.6	2 866.8	2 092.3
Secondary products value of shipments .....	514.1	354.0	256.5
Total miscellaneous receipts .....	131.3	35.5	43.6
Value of resales .....	34.7	21.5	10.0
Contract receipts .....	( <sup>1</sup> )	(D)	2.3
Other miscellaneous receipts .....	96.6	(D)	31.3
Receipts for photocopying and duplicating .....	10.8	(NA)	(NA)
Sales of scrap and refuse .....	17.7	(NA)	7.2
Receipts for services as print broker .....	.9	(NA)	(NA)
Other miscellaneous receipts .....	166.5	(NA)	23.8
Other miscellaneous receipts, n.s.k. ....	.8	(NA)	.3
Primary products specialization ratio .....	89	89	89
Value of primary products shipments made in all industries .....	4 736.1	3 240.9	2 501.9
Value of primary products shipments made in this industry .....	4 042.6	2 866.8	2 092.3
Value of primary products shipments made in other industries .....	693.5	374.1	409.5
Coverage ratio .....	85	88	84

**Table 5b. Industry-Product Analysis-Value of Industry and Primary Product Shipments; Specialization and Coverage Ratios: 1992 and Earlier Census Years-Con.**

[Million dollars. An establishment is assigned to an industry based on shipment values of products representing largest amount considered primary to an industry. Frequently, establishment shipments comprise mixtures of products assigned to an industry (primary), those considered primary to other industries (secondary), and receipts for activities such as merchandising or contract work (total miscellaneous receipts). Subtotals for total value of shipments show this product pattern for an industry. Primary products specialization ratio is the primary products value of shipments divided by the sum of primary products value of shipments plus secondary products value of shipments. The extent of which an industry's primary products are shipped by establishments classified both in and out of an industry is the coverage ratio and is calculated by dividing the primary products value of shipments by the value of primary products shipments made in all industries. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Industry	1992	1987	1982
<b>INDUSTRY 2741, MISCELLANEOUS PUBLISHING</b>			
Total value of shipments .....	10 977.1	7 809.5	2 871.3
Primary products value of shipments .....	10 475.3	7 419.0	2 662.9
Secondary products value of shipments .....	269.0	147.3	127.9
Total miscellaneous receipts .....	232.8	243.3	80.5
Value of resales .....	135.3	54.7	57.8
Contract receipts .....	( <sup>1</sup> )	1.8	3.9
Other miscellaneous receipts .....	97.4	186.9	18.8
Receipts for publishing prepackaged computer software .....	9.4	(NA)	(NA)
Other miscellaneous receipts .....	178.0	(NA)	18.0
Other miscellaneous receipts, n.s.k. ....	10.1	(NA)	.8
Primary products specialization ratio .....	97	98	95
Value of primary products shipments made in all industries .....	11 567.1	8 176.6	3 096.6
Value of primary products shipments made in this industry .....	10 475.3	7 419.0	2 662.9
Value of primary products shipments made in other industries .....	1 091.8	757.6	433.7
Coverage ratio .....	91	91	86

Note: For qualifications of data, see footnotes on table 1a.

<sup>1</sup>For 1992, contract receipts are included in "other miscellaneous receipts."

**Table 6a. Product and Product Classes-Quantity Sold and Value of Receipts of All Producers: 1992 and 1987**

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of Shipments in appendixes. For meaning of abbreviations and symbols, see introductory text]

Product code	Product	1992			1987		
		Number of companies with receipts of \$100,000 or more	Aggregate average circulation per issue <sup>1 2 3</sup> (1,000)	Total receipts <sup>1</sup> (million dollars)	Number of companies with receipts of \$100,000 or more	Aggregate average circulation per issue <sup>1 2 3</sup> (1,000)	Total receipts <sup>1</sup> (million dollars)
<b>2711--</b>	<b>NEWSPAPERS</b>						
	<b>Total .....</b>	<b>(NA)</b>	<b>(X)</b>	<b>32 261.5</b>	<b>(NA)</b>	<b>(X)</b>	<b>30 494.7</b>
27111	Daily and Sunday newspapers: receipts from subscriptions and sales ..	(NA)	(X)	6 541.6	(NA)	(X)	5 212.0
27111 01	Morning (no Sunday editions) .....	121	*5 047.6	462.4	87	8 330.5	511.0
27111 11	Evening (no Sunday editions) .....	212	(S)	278.1	247	*7 729.5	437.0
27111 22	Morning and Sunday combinations .....	143	(X)	3 533.5	117	(X)	2 105.0
27111 24	Morning editions .....	(NA)	36 508.4	(X)	(NA)	25 464.1	(X)
27111 26	Sunday editions .....	(NA)	42 065.3	(X)	(NA)	31 761.6	(X)
27111 32	Evening and Sunday combinations .....	130	(X)	554.7	134	(X)	474.5
27111 34	Evening editions .....	(NA)	6 557.4	(X)	(NA)	7 543.9	(X)
27111 36	Sunday editions .....	(NA)	7 370.0	(X)	(NA)	9 492.3	(X)
27111 42	Morning and evening combinations (no Sunday editions).....	15	(X)	15.8	22	(X)	91.0
27111 44	Morning editions .....	(NA)	277.4	(X)	(NA)	*1 065.2	(X)
27111 46	Evening editions .....	(NA)	177.4	(X)	(NA)	*948.7	(X)
27111 52	Morning, evening, and Sunday combinations .....	46	(X)	1 091.1	74	(X)	1 155.2
27111 54	Morning editions .....	(NA)	6 651.1	(X)	(NA)	8 574.0	(X)
27111 56	Evening editions .....	(NA)	4 021.2	(X)	(NA)	5 586.2	(X)
27111 58	Sunday editions .....	(NA)	12 619.7	(X)	(NA)	13 638.2	(X)
27111 00	Daily and Sunday newspapers: receipts from subscriptions and sales, n.s.k. ....	(NA)	(X)	605.1	(NA)	(X)	438.2
27112	Daily and Sunday newspapers: receipts from advertising .....	(NA)	(X)	20 123.8	(NA)	(X)	20 176.2
27112 01	Morning (no Sunday editions) .....	140	(X)	907.9	110	(X)	1 044.2
27112 11	Evening (no Sunday editions) .....	219	(X)	792.5	261	(X)	1 329.2
27112 22	Morning and Sunday combinations .....	145	(X)	11 845.7	119	(X)	9 404.2
27112 32	Evening and Sunday combinations .....	129	(X)	1 585.8	137	(X)	1 929.5
27112 42	Morning and evening combinations (no Sunday editions).....	15	(X)	35.1	23	(X)	199.6
27112 52	Morning, evening, and Sunday combinations .....	47	(X)	3 462.6	77	(X)	5 004.0
27112 00	Daily and Sunday newspapers: receipts from advertising, n.s.k. ....	(NA)	(X)	1 494.1	(NA)	(X)	1 265.6
27113	Weekly and other newspapers: receipts from subscriptions and sales ..	(NA)	(X)	645.5	(NA)	(X)	573.0
27113 62	Weekly newspapers, including those issued on Sunday only .....	410	*55 388.6	512.1	315	*46 257.4	474.0
27113 98	Other newspapers (those issued 2 or 3 times a week or less than once a week) .....	196	**10 139.1	114.3	128	(S)	74.3
27113 00	Weekly and other newspapers: receipts from subscriptions and sales, n.s.k. ....	(NA)	(X)	19.1	(NA)	(X)	24.8
27114	Weekly and other newspapers: receipts from advertising .....	(NA)	(X)	2 108.3	(NA)	(X)	1 687.5
27114 62	Weekly newspapers, including those issued on Sunday only .....	977	(X)	1 496.4	824	(X)	1 114.8
27114 98	Other newspapers (those issued 2 or 3 times a week or less than once a week) .....	367	(X)	462.3	293	(X)	449.8
27114 00	Weekly and other newspapers: receipts from advertising, n.s.k. ....	(NA)	(X)	149.7	(NA)	(X)	122.9
27110	Newspapers, n.s.k. ....	(NA)	(X)	2 842.4	(NA)	(X)	2 845.9
27110 00	Newspapers, n.s.k. <sup>4</sup> .....	(NA)	(X)	1 999.5	(NA)	(X)	1 969.4
27110 02	Newspapers, n.s.k. <sup>5</sup> .....	(NA)	(X)	842.8	(NA)	(X)	876.5

See footnotes at end of table.

**27A-18 NEWSPAPERS, PERIOD., BOOKS, & MISC. PUB.**

**MANUFACTURES-INDUSTRY SERIES**

**Table 6a. Product and Product Classes—Quantity Sold and Value of Receipts of All Producers: 1992 and 1987—Con.**

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of Shipments in appendixes. For meaning of abbreviations and symbols, see introductory text]

Product code	Product	1992		1987	
		Number of companies with shipments of \$100,000 or more	Value of product shipments <sup>1</sup> (million dollars)	Number of companies with shipments of \$100,000 or more	Value of product shipments <sup>1</sup> (million dollars)
<b>2721--</b>	<b>PERIODICAL PUBLISHING</b>				
	<b>Total</b> .....	<b>(NA)</b>	<b>20 890.3</b>	<b>(NA)</b>	<b>16 492.1</b>
27211	Farm periodicals: receipts from subscriptions, sales, and advertising ..	(NA)	199.9	(NA)	183.5
27211 12	Subscriptions and single copy sales .....	37	54.6	(NA)	170.7
27211 14	Advertising .....	57	145.3	(NA)	
27211 00	Farm periodicals: receipts from subscriptions, sales, and advertising, n.s.k. ....	(NA)	(Z)	(NA)	12.8
27213	Specialized business and professional periodicals: receipts from subscriptions and single copy sales .....	(NA)	2 527.3	(NA)	1 427.1
	Business publications:				
	Paid circulation, single copy and subscriptions:				
27213 24	Manufacturing (excluding electronics) .....	16	31.0	11	65.8
27213 25	Wholesale and retail trade, including merchandising .....	30	59.6	18	25.3
27213 27	Medical and health care .....	52	247.4	33	119.0
27213 28	Electronics/data management .....	23	66.8	13	68.9
27213 30	Services (excluding data management) .....	29	416.4	20	29.5
27213 32	Business publications, n.e.c. ....	198	894.2	114	530.1
	Controlled circulation, single copy and subscriptions:				
27213 34	Manufacturing (excluding electronics) .....	12	28.3	6	2.8
27213 35	Wholesale and retail trade, including merchandising .....	10	6.1	7	9.3
27213 37	Medical and health care .....	23	40.6	20	27.8
27213 38	Electronics/data management .....	7	5.5	10	16.2
27213 40	Services (excluding data management) .....	7	7.1	5	3.5
27213 42	Business publications, n.e.c. ....	48	54.0	29	38.4
	Professional journals, subscriptions and single copy sales:				
27213 44	Scholarly journals .....	67	183.6	36	110.2
27213 46	Other professional journals .....	57	336.5	54	141.1
27213 00	Specialized business and professional periodicals: receipts from subscriptions and single copy sales, n.s.k. ....	(NA)	150.3	(NA)	239.3
27214	Specialized business and professional periodicals: receipts from advertising .....	(NA)	3 717.4	(NA)	2 614.5
	Business publications:				
	Paid circulation, advertising:				
27214 24	Manufacturing (excluding electronics) .....	13	16.9	13	64.4
27214 25	Wholesale and retail trade, including merchandising .....	40	159.5	25	138.9
27214 27	Medical and health care .....	41	104.7	23	163.0
27214 28	Electronics/data management .....	20	187.8	7	104.7
27214 30	Services (excluding data management) .....	28	64.8	12	17.3
27214 32	Business publications, n.e.c. ....	179	772.0	87	405.5
	Controlled circulation, advertising:				
27214 34	Manufacturing (excluding electronics) .....	36	126.0	26	186.1
27214 35	Wholesale and retail trade, including merchandising .....	65	195.5	43	199.5
27214 37	Medical and health care .....	58	268.0	28	133.6
27214 38	Electronics/data management .....	27	72.7	18	207.6
27214 40	Services (excluding data management) .....	36	119.6	20	171.5
27214 42	Business publications, n.e.c. ....	165	864.5	99	365.9
	Professional journals, advertising:				
27214 44	Scholarly journals .....	20	57.3	11	8.0
27214 46	Other professional journals .....	52	64.6	42	121.3
27214 00	Specialized business and professional periodicals: receipts from advertising, n.s.k. ....	(NA)	643.3	(NA)	327.3
2721A	General and consumer periodicals: receipts from subscriptions ..	(NA)	3 621.0	(NA)	2 749.2
2721A 20	Women's, home, and fashion publications, including domestic science, child care, housekeeping, health, gardening, etc. ....	35	620.5	25	510.5
2721A 50	General news, including weeklies and biweeklies with news of interest to the general public .....	18	414.6	16	383.8
2721A 60	Business news, concerning business and industry, directed to a broader readership than those in business for a living .....	17	166.2	21	141.0
2721A 70	Regional, metropolitan, and city magazines .....	31	73.1	36	33.5
2721A 80	Special interest publications: hobby, sports, entertainment, art, photography, science, automotive, aviation, etc. ....	222	1 239.3	142	769.7
2721A 90	General interest publications: general articles, pictures, fiction, literature, geography, travel, history, humor, etc. ....	56	977.7	44	704.3
2721A 00	General and consumer periodicals: receipts from subscriptions, n.s.k. ....	(NA)	129.5	(NA)	206.4
2721B	General and consumer periodicals: receipts from single copy sales ..	(NA)	1 860.5	(NA)	1 365.0
2721B 10	Comics (subscriptions and single copy sales) .....	14	213.3	5	(D)
2721B 20	Women's, home, and fashion publications, including domestic science, child care, housekeeping, health, gardening, etc. ....	32	384.8	23	342.6
2721B 50	General news, including weeklies and biweeklies with news of interest to the general public .....	14	122.5	13	51.6
2721B 60	Business news concerning business and industry, directed to a broader readership than those in business for a living .....	5	18.6	9	13.5
2721B 70	Regional, metropolitan, and city magazines .....	14	6.8	15	(D)
2721B 80	Special interest publications: hobby, sports, entertainment, art, photography, science, automotive, aviation, etc. ....	159	688.5	104	512.8
2721B 90	General interest publications: general articles, pictures, fiction, literature, geography, travel, history, humor, etc. ....	36	316.4	35	216.7
2721B 00	General and consumer periodicals: receipts from single copy sales, n.s.k. ....	(NA)	109.6	(NA)	156.3
2721C	General and consumer periodicals: receipts from advertising .....	(NA)	5 133.5	(NA)	4 298.5
2721C 10	Comics .....	6	7.6	3	2.2
2721C 20	Women's, home, and fashion publications, including domestic science, child care, housekeeping, health, gardening, etc. ....	48	1 472.4	33	1 110.4
2721C 50	General news, including weeklies and biweeklies with news of interest to the general public .....	55	626.6	38	608.5
2721C 60	Business news, concerning business and industry, directed to a broader readership than those in business for a living .....	23	408.2	19	353.6
2721C 70	Regional, metropolitan, and city magazines .....	74	126.2	50	146.8

See footnotes at end of table.

**Table 6a. Product and Product Classes—Quantity Sold and Value of Receipts of All Producers: 1992 and 1987—Con.**

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of Shipments in appendixes. For meaning of abbreviations and symbols, see introductory text]

Product code	Product	1992		1987			
		Number of companies with shipments of \$100,000 or more	Value of product shipments <sup>1</sup> (million dollars)	Number of companies with shipments of \$100,000 or more	Value of product shipments <sup>1</sup> (million dollars)		
<b>2721--</b>	<b>PERIODICAL PUBLISHING—Con.</b>						
2721C	General and consumer periodicals: receipts from advertising—Con.						
2721C 80	Special interest publications: hobby, sports, entertainment, art, photography, science, automotive, aviation, etc.-----	268	1 511.3	153	1 034.1		
2721C 90	General interest publications: general articles, pictures, fiction, literature, geography, travel, history, humor, etc.-----	70	732.2	50	617.7		
2721C 00	General and consumer periodicals: receipts from advertising, n.s.k. -	(NA)	249.1	(NA)	425.3		
2721D	Other periodicals, except shopping news, catalogs, or directories, n.e.c.-----	(NA)	689.1	(NA)	671.8		
	Religious: religion, theology, church bulletins, local church papers, etc.-----						
2721D 10	Receipts from subscriptions and single copy sales -----	53	242.2	41	207.9		
2721D 15	Receipts from advertising -----	32	51.1	26	41.0		
2721D 24	Magazine and comic supplements for Sunday newspapers: Receipts from sales and advertising -----	4	1.6	3	(D)		
2721D 31	Periodicals, n.e.c., except shopping news, catalogs, or directories: Receipts from subscriptions -----	47	169.8	39	142.1		
2721D 33	Receipts from single copy sales -----	18	37.0	17	27.3		
2721D 35	Receipts from advertising -----	64	108.3	43	106.9		
2721D 00	Other periodicals, except shopping news, catalogs, or directories, n.e.c., n.s.k.-----	(NA)	79.0	(NA)	(D)		
27210	Periodical publishing, n.s.k.-----	(NA)	3 141.8	(NA)	3 182.4		
27210 00	Periodical publishing, n.s.k. <sup>4</sup> -----	(NA)	2 709.7	(NA)	2 509.2		
27210 02	Periodical publishing, n.s.k. <sup>5</sup> -----	(NA)	432.0	(NA)	673.2		
Product code	Product	1992		1987			
		Number of companies with shipments of \$100,000 or more	Product shipments <sup>1</sup>		Number of companies with shipments of \$100,000 or more	Product shipments <sup>1</sup>	
			Quantity <sup>2</sup>	Value (million dollars)		Quantity <sup>2</sup>	Value (million dollars)
<b>2731--</b>	<b>BOOK PUBLISHING</b>						
	<b>Total -----</b>	<b>(NA)</b>	<b>(X)</b>	<b>14 785.6</b>	<b>(NA)</b>	<b>(X)</b>	<b>11 629.9</b>
27311	Textbooks, including teachers' editions <sup>6</sup> -----	(NA)	(X)	3 873.7	(NA)	(X)	2 953.5
	Elementary textbooks (grades K through 8):						
27311 11	Hardbound, including teachers' editions ----- mil units..	29	53.3	656.8	24	(S)	512.4
27311 12	Paperbound, including teachers' editions ----- mil units..	27	27.1	206.5	28	*35.8	171.4
	High school textbooks (grades 9 through 12):						
27311 13	Hardbound, including teachers' editions ----- mil units..	18	*18.9	428.8	18	**19.8	318.7
27311 14	Paperbound, including teachers' editions ----- mil units..	25	*14.7	178.0	18	(S)	55.0
	College textbooks, grade 13 and up, for post high school level courses:						
27311 15	Hardbound ----- mil units..	47	**49.9	1 117.5	43	(S)	734.5
27311 16	Paperbound ----- mil units..	56	(S)	383.0	37	*16.8	213.9
	Workbooks, textbook-related objective tests, manuals, etc., paperbound:						
27311 21	Elementary (grades K through 8) ----- mil units..	38	**46.9	279.5	36	*62.7	231.6
27311 23	High school (grades 9 through 12) ----- mil units..	19	*9.3	84.1	17	**10.8	63.3
27311 25	College ----- mil units..	23	(S)	141.6	22	*6.2	44.9
27311 31	Standardized tests, including both tests and answer sheets, paperbound ----- mil units..	17	**14.0	211.0	15	(S)	104.0
27311 00	Textbooks, including teachers' editions, n.s.k.-----	(NA)	(X)	187.1	(NA)	(X)	503.9
27313	Technical, scientific, and professional books <sup>6</sup> -----	(NA)	(X)	2 487.9	(NA)	(X)	1 827.5
	Law books, including supplements (designed for the profession):						
27313 15	Hardbound ----- mil units..	36	*14.0	837.5	21	*13.8	565.6
27313 17	Paperbound ----- mil units..	25	*10.3	269.9	15	5.5	149.2
	Medical books, including dental subjects (designed for the profession):						
27313 25	Hardbound ----- mil units..	34	**10.8	373.3	32	(S)	229.6
27313 27	Paperbound ----- mil units..	21	**3.6	89.2	16	(S)	24.7
	Business books (nonfiction for readers in the profession):						
27313 35	Hardbound ----- mil units..	26	(S)	99.6	30	(S)	158.0
27313 37	Paperbound ----- mil units..	30	(S)	179.1	24	*9.2	86.4
	Other technical, scientific, and professional books:						
27313 45	Hardbound ----- mil units..	68	(S)	326.8	53	(S)	233.6
27313 47	Paperbound ----- mil units..	72	(S)	185.6	59	40.9	162.1
27313 00	Technical, scientific, and professional books, n.s.k.-----	(NA)	(X)	126.9	(NA)	(X)	218.3
27314	Religious books <sup>6</sup> -----	(NA)	(X)	730.2	(NA)	(X)	492.1
	Bibles and testaments:						
27314 11	Hardbound, including flexible covers ----- mil units..	19	(S)	82.1	18	*8.1	62.4
27314 13	Paperbound ----- mil units..	15	*6.0	18.7	14	10.5	34.6
27314 23	Hymnals and devotionals, including prayer books and missals, hardbound and paperbound ----- mil units..	15	(S)	22.6	18	(S)	21.9
	Other religious books, including subscription reference books:						
27314 26	Hardbound ----- mil units..	36	**23.5	141.7	37	(S)	198.0
27314 28	Paperbound ----- mil units..	56	(S)	122.4	48	**44.7	107.9
27314 00	Religious books, n.s.k.-----	(NA)	(X)	342.7	(NA)	(X)	67.2
2731A	Mass market paperback books, rack-size <sup>6</sup> -----	(NA)	(X)	916.8	(NA)	(X)	836.6
2731A 00	Mass market paperback books, rack-size ----- mil units..	19	(S)	916.8	19	**411.9	836.6

See footnotes at end of table.

**27A-20 NEWSPAPERS, PERIOD., BOOKS, & MISC. PUB.**

**MANUFACTURES—INDUSTRY SERIES**

**Table 6a. Product and Product Classes—Quantity Sold and Value of Receipts of All Producers: 1992 and 1987—Con.**

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of Shipments in appendixes. For meaning of abbreviations and symbols, see introductory text]

Product code	Product	1992			1987		
		Number of companies with shipments of \$100,000 or more	Product shipments <sup>1</sup>		Number of companies with shipments of \$100,000 or more	Product shipments <sup>1</sup>	
			Quantity <sup>2</sup>	Value (million dollars)		Quantity <sup>2</sup>	Value (million dollars)
<b>2731—</b>	<b>BOOK PUBLISHING—Con.</b>						
2731B	Book club books <sup>6</sup> .....	(NA)	(X)	745.8	(NA)	(X)	650.2
2731B 15	Hardbound ..... mil units..	14					
2731B 17	Paperbound ..... mil units..	11	(X)	745.8	(NA)	(X)	650.2
2731B 00	Book club books, n.s.k. ....	(NA)					
2731C	Mail order books <sup>6</sup> .....	(NA)	(X)	711.2	(NA)	(X)	698.1
2731C 73	Hardbound ..... mil units..	30	(S)	642.3	17	**52.8	582.6
2731C 75	Paperbound ..... mil units..	42	**6.3	59.7	25	(S)	36.8
2731C 00	Mail order books, n.s.k. ....	(NA)	(X)	9.2	(NA)	(X)	78.7
2731D	Adult trade and juvenile books <sup>6</sup> .....	(NA)	(X)	2 647.3	(NA)	(X)	1 939.4
2731D 41	Adult trade books whether published by trade or mass market publishers:						
2731D 47	Hardbound ..... mil units..	98	**162.2	1 202.7	75	(S)	866.9
2731D 47	Paperbound (excluding mass market rack-size)..... mil units..	104	(S)	531.8	80	(S)	466.7
2731D 51	Juvenile books, fiction and nonfiction, excluding toy and coloring books:						
2731D 53	Hardbound ..... mil units..	39	**78.5	369.7	25	*50.7	313.2
2731D 00	Paperbound ..... mil units..	27	*46.4	108.6	21	(S)	106.1
2731D 00	Adult trade and juvenile books, n.s.k. ....	(NA)	(X)	434.5	(NA)	(X)	186.5
2731E	General reference books <sup>6</sup> .....	(NA)	(X)	490.9	(NA)	(X)	510.8
2731E 21	Encyclopedias ..... 1,000 sets..	10	(S)	162.3	8	(D)	(D)
2731E 41	Dictionaries and thesauruses..... mil units..	10	**6.8	56.9	10	5.1	53.2
2731E 57	Other ..... mil units..	33	**37.0	239.2	41	(D)	(D)
2731E 00	General reference books, n.s.k. ....	(NA)	(X)	32.5	(NA)	(X)	20.0
2731F	Other books, excluding pamphlets <sup>6</sup> .....	(NA)	(X)	390.4	(NA)	(X)	7166.8
2731F 13	University press books:						
2731F 15	Hardbound ..... mil units..	55	*4.4	109.5	7	.8	17.4
2731F 16	Paperbound ..... mil units..	45	7.6	79.7	5	*.7	5.7
2731F 16	Music books, hardbound and paperbound ..... mil units..	19	**19.6	94.7	19	**16.2	60.8
2731F 17	Other books, n.e.c.: .....						
2731F 19	Hardbound ..... mil units..	15	(S)	58.8	15	(S)	30.0
2731F 00	Paperbound ..... mil units..	22	(S)	35.4	29	(S)	40.9
2731F 00	Other books, excluding pamphlets, n.s.k. ....	(NA)	(X)	12.3	(NA)	(X)	12.0
2731G	Pamphlets (5 through 48 pages) <sup>6</sup> .....	(NA)	(X)	134.8	(NA)	(X)	140.7
2731G 43	Music ..... mil units..	9	*20.9	31.3	13	(S)	67.0
2731G 59	Other, including religious and text ..... mil units..	31		102.6	25	*99.4	73.7
2731G 00	Pamphlets (5 through 48 pages), n.s.k. ....	(NA)	(X)	1.0	(NA)	(X)	—
2731H	Audio books (books recorded on audio cassettes), publishing <sup>6</sup> .....	(NA)	(X)	36.1	(NA)	(X)	( <sup>6</sup> )
2731H 00	Audio books (books recorded on audio cassettes), publishing ..... mil units..	16	(S)	36.1	(NA)	(NA)	( <sup>6</sup> )
27310	Book publishing, n.s.k. ....	(NA)	(X)	1 620.5	(NA)	(X)	1 414.3
27310 00	Book publishing, n.s.k. <sup>4</sup> .....	(NA)	(X)	1 251.7	(NA)	(X)	1 083.3
27310 02	Book publishing, n.s.k. <sup>5</sup> .....	(NA)	(X)	368.8	(NA)	(X)	331.0
<b>2732—</b>	<b>BOOK PRINTING</b>						
	<b>Total .....</b>	<b>(NA)</b>	<b>(X)</b>	<b>4 736.1</b>	<b>(NA)</b>	<b>(X)</b>	<b>3 240.9</b>
27323	Textbooks, printing and binding .....	(NA)	(X)	678.7	(NA)	(X)	515.7
27323 10	Elementary and high school textbooks (grades K through 12):						
27323 12	Hardbound, including teachers' editions ..... mil units..	21	(S)	162.3	18	(NA)	123.4
27323 12	Paperbound, including teachers' editions ..... mil units..	57	(S)	168.1	33	(NA)	123.5
27323 14	College textbooks (grade 13 and up, for any post high school level courses):						
27323 16	Hardbound ..... mil units..	24	(S)	140.3	27	(NA)	108.7
27323 18	Paperbound ..... mil units..	62	(S)	150.7	41	(NA)	86.4
27323 00	Workbooks and standardized tests, all grade levels..... mil units..	30	**131.7	47.3	24	(NA)	59.5
27323 00	Textbooks, printing and binding, n.s.k. ....	(NA)	(X)	10.0	(NA)	(X)	14.3
27324	Technical, scientific, and professional books, printing and binding .....	(NA)	(X)	1 003.1	(NA)	(X)	589.5
27324 22	Hardbound ..... mil units..	45	**64.7	152.8	50	(NA)	192.2
27324 25	Paperbound ..... mil units..	261	(S)	798.9	152	(NA)	376.0
27324 00	Technical, scientific, and professional books, printing and binding, n.s.k. ....	(NA)	(X)	51.5	(NA)	(X)	21.3
27325	Religious books, printing and binding.....	(NA)	(X)	207.0	(NA)	(X)	141.4
27325 32	Hardbound, including flexible covers ..... mil units..	25	(S)	76.8	26	(NA)	75.2
27325 35	Paperbound ..... mil units..	69	(S)	89.1	51	(NA)	65.4
27325 00	Religious books, printing and binding, n.s.k. ....	(NA)	(X)	41.1	(NA)	(X)	.9
27326	General books (trade, etc.), printing and binding .....	(NA)	(X)	1 126.2	(NA)	(X)	709.8
27326 42	Book club and mail order books:						
27326 43	Hardbound ..... mil units..	13	(S)	128.5	16	(NA)	110.6
27326 44	Paperbound ..... mil units..	38	304.8	81.2	17	(NA)	32.0
27326 45	Mass market paperback books, rack-size, distributed predominantly to mass market outlets..... mil units..	28	755.5	132.2	18	(NA)	149.4
27326 45	Adult trade books, sold primarily through retail or wholesale book sellers:						
27326 46	Hardbound ..... mil units..	36	(S)	364.8	26	(NA)	191.1
27326 46	Paperbound ..... mil units..	62	(S)	280.1	35	(NA)	126.8
27326 47	Juvenile books, fiction and nonfiction, including toy and coloring books:						
27326 48	Hardbound ..... mil units..	12	**48.8	44.7	11	(NA)	45.7
27326 00	Paperbound ..... mil units..	33	*133.5	47.9	23	(NA)	40.6
27326 00	General books (trade, etc.), printing and binding, n.s.k. ....	(NA)	(X)	46.8	(NA)	(X)	13.8

See footnotes at end of table.



**Table 6a. Product and Product Classes—Quantity Sold and Value of Receipts of All Producers: 1992 and 1987—Con.**

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of Shipments in appendixes. For meaning of abbreviations and symbols, see introductory text]

Product code	Product	1992			1987		
		Number of companies with shipments of \$100,000 or more	Product shipments <sup>1</sup>		Number of companies with shipments of \$100,000 or more	Product shipments <sup>1</sup>	
			Quantity <sup>2</sup>	Value (million dollars)		Quantity <sup>2</sup>	Value (million dollars)
<b>2732--</b>	<b>BOOK PRINTING--Con.</b>						
2732A	Other books, n.e.c., printing and binding-----	(NA)	(X)	732.1	(NA)	(X)	642.6
2732A 52	Encyclopedias ----- 1,000 sets--	3	5.4	49.2	5	(NA)	112.1
2732A 54	Other reference books (including dictionaries, thesauruses, etc.):						
2732A 55	Hardbound ----- mil units--	10	(S)	44.5	17	(NA)	62.0
2732A 55	Paperbound ----- mil units--	42	(S)	64.3	34	(NA)	54.1
2732A 56	All other books, n.e.c. (including music books, university press books, etc.):						
2732A 56	Hardbound ----- mil units--	37	(S)	313.1	32	(NA)	290.2
2732A 57	Paperbound ----- mil units--	98	(S)	255.0	79	(NA)	103.2
2732A 00	Other books, n.e.c., printing and binding, n.s.k.-----	(NA)	(X)	6.0	(NA)	(X)	21.1
2732B	Books, printing only, not bound-----	(NA)	(X)	137.2	(NA)	(X)	120.9
2732B 00	Books, printing only, not bound----- mil units--	94	**240.0	137.2	61	(NA)	120.9
2732C	Pamphlets, printing only or printing and binding (excluding advertising pamphlets)-----	(NA)	(X)	313.7	(NA)	(X)	132.3
2732C 00	Pamphlets, printing only or printing and binding (excluding advertising pamphlets)-----	340	(X)	313.7	146	(X)	132.3
27320	Book printing, n.s.k.-----	(NA)	(X)	537.9	(NA)	(X)	388.8
27320 00	Book printing, n.s.k. <sup>9</sup> -----	(NA)	(X)	469.1	(NA)	(X)	312.2
27320 02	Book printing, n.s.k. <sup>10</sup> -----	(NA)	(X)	68.8	(NA)	(X)	76.7
Product code	Product	1992			1987		
		Number of companies with shipments of \$100,000 or more	Value of product shipments <sup>1</sup> (million dollars)		Number of companies with shipments of \$100,000 or more	Value of product shipments <sup>1</sup> (million dollars)	
<b>2741--</b>	<b>MISCELLANEOUS PUBLISHING</b>						
	<b>Total -----</b>	<b>(NA)</b>		<b>11 567.1</b>	<b>(NA)</b>		<b>8 176.6</b>
27416	Telephone directories, publishing <sup>6</sup> -----	(NA)		4 807.5	(NA)		3 042.9
27416 00	Telephone directories -----	111		4 807.5	72		3 042.9
27417	Catalogs and directories, except telephone directories, publishing <sup>6</sup> -----	(NA)		613.4	(NA)		606.4
27417 13	Directories (except telephone directories), including business reference services -----	143		492.6	105		481.5
27417 16	Catalogs -----	62		110.4	(NA)		122.3
27417 00	Catalogs and directories, except telephone directories, publishing, n.s.k. -----	(NA)		10.5	(NA)		2.7
27418	Business service publications, publishing <sup>6</sup> -----	(NA)		897.6	(NA)		932.0
27418 13	Business service newsletters, excluding publications which are cumulated in looseleaf index form -----	104		406.9	52		96.5
27418 15	Other business service publications, looseleaf and hardbound, including tax, credit, regulations, indexes, etc. -----	83		445.3	59		715.0
27418 00	Business service publications, publishing, n.s.k. -----	(NA)		45.4	(NA)		120.4
27419	Patterns, including clothing patterns <sup>6</sup> -----	(NA)		214.4	(NA)		173.3
27419 00	Patterns, including clothing patterns -----	21		214.4	11		173.3
2741A	Shopping news, publishing <sup>6</sup> -----	(NA)		990.6	(NA)		774.4
2741A 00	Shopping news -----	463		990.6	411		774.4
2741B	Other miscellaneous publishing <sup>6</sup> -----	(NA)		2 216.9	(NA)		863.5
2741B 13	Cards, other than greeting cards, including picture postcards, souvenir cards, etc. -----	27		810.4	14		23.5
2741B 14	Sheet music (less than 5 pages), except music in book or pamphlet form -----	12		23.1	10		14.9
2741B 15	Calendars -----	58		286.8	42		98.1
2741B 17	Multimedia kits -----	29		67.8	25		61.7
2741B 18	Maps, hydrographic charts, and globe covers -----	30		169.2	28		144.8
2741B 20	Atlases and gazetteers -----	16		79.2	16		109.4
2741B 23	Micropublishing (publishing in microfilm or microfiche format) -----	18		232.6	16		39.1
2741B 25	Travel guides, in brochure or pamphlet form -----	28		59.7	16		45.6
2741B 27	Posters -----	30		51.3	14		
2741B 29	Yearbooks -----	8		78.6			
2741B 71	Other miscellaneous publications, including almanacs, racing forms, etc. -----	128		285.1	(NA)		320.5
2741B 00	Other miscellaneous publishing, n.s.k. -----	(NA)		73.2	(NA)		6.1
27410	Miscellaneous publishing, n.s.k. -----	(NA)		1 826.8	(NA)		1 784.1
27410 00	Miscellaneous publishing, n.s.k. <sup>9</sup> -----	(NA)		1 523.6	(NA)		1 620.2
27410 02	Miscellaneous publishing, n.s.k. <sup>10</sup> -----	(NA)		303.2	(NA)		163.9

<sup>1</sup>Data reported by all producers, not just those with receipts of \$100,000 or more.

<sup>2</sup>For some establishments, data have been estimated from central unit values which are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: \*10 to 19 percent estimated; \*\*20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by (S).

<sup>3</sup>Includes paid, free, bulk, etc. Issue is the sum of all editions published on a given day in the case of establishments publishing newspapers on a combined frequency-of-issue basis (morning and Sunday, evening and Sunday, etc.). Separate average circulation figures were computed for morning editions, evening editions, and Sunday editions.

<sup>4</sup>Typically for establishments with 5 employees or more.

<sup>5</sup>Typically for establishments with less than 5 employees.

<sup>6</sup>Data for this product class represent value of receipts rather than value of shipments.

<sup>7</sup>For 1987, data for 2731H 00 were included.

<sup>8</sup>For 1987, data were included in product class 2731F.

Table 6a. **Product and Product Classes—Quantity Sold and Value of Receipts of All Producers: 1992 and 1987—Con.**

<sup>9</sup>Typically for establishments with 10 employees or more.  
<sup>10</sup>Typically for establishments with less than 10 employees.

Table 6b. **Product Classes—Value of Shipments by All Producers for Specified States: 1992 and 1987**

[Million dollars. Product classes shown are those where the data are geographically dispersed, provided dispersion is not approximated by data in table 2. Also, product classes are not shown if they are miscellaneous or "not specified by kind" classes. Statistics for some States are withheld because they are either less than \$2 million in product class shipments or they disclose data for individual companies in 1992. For meaning of abbreviations and symbols, see introductory text]

Product class and geographic area	1992 value of product shipments	1987 value of product shipments	Product class and geographic area	1992 value of product shipments	1987 value of product shipments
<b>27111, DAILY AND SUNDAY NEWSPAPERS: RECEIPTS FROM SUBSCRIPTIONS AND SALES</b>			<b>27112, DAILY AND SUNDAY NEWSPAPERS: RECEIPTS FROM ADVERTISING—Con.</b>		
<b>United States</b> .....	<b>6 541.6</b>	<b>5 212.0</b>	Louisiana .....	208.1	225.4
Alabama .....	58.7	47.9	Maine .....	66.3	77.5
Alaska .....	4.4	5.1	Maryland .....	251.8	298.3
Arizona .....	119.6	72.9	Massachusetts .....	634.9	803.9
Arkansas .....	33.8	22.1	Michigan .....	576.2	572.2
California .....	730.3	546.2	Minnesota .....	283.5	289.9
Colorado .....	76.3	58.4	Mississippi .....	83.0	76.3
Connecticut .....	108.3	102.9	Missouri .....	340.3	333.0
Florida .....	325.7	235.1	Montana .....	42.7	42.3
Georgia .....	130.8	91.8	Nebraska .....	112.2	98.8
Idaho .....	20.8	15.9	New Hampshire .....	57.6	67.5
Illinois .....	373.7	287.5	New Jersey .....	636.2	737.9
Indiana .....	140.2	112.0	New Mexico .....	71.1	87.0
Iowa .....	94.3	77.3	New York .....	1 892.4	2 261.7
Kansas .....	41.6	32.7	North Carolina .....	412.8	391.2
Kentucky .....	71.2	38.7	North Dakota .....	38.4	35.5
Louisiana .....	63.9	52.2	Ohio .....	813.2	781.5
Maine .....	35.8	26.8	Oklahoma .....	191.1	185.3
Maryland .....	94.5	70.8	Oregon .....	206.3	174.5
Massachusetts .....	249.6	210.8	Pennsylvania .....	985.9	987.0
Michigan .....	216.8	170.8	South Carolina .....	172.7	173.1
Minnesota .....	112.4	92.0	South Dakota .....	32.5	26.2
Mississippi .....	31.8	22.7	Tennessee .....	267.3	298.3
Missouri .....	145.6	99.7	Texas .....	1 327.5	1 292.9
Montana .....	23.1	17.6	Utah .....	102.8	33.4
Nebraska .....	38.4	28.7	Vermont .....	29.8	31.5
New Hampshire .....	22.0	15.8	Virginia .....	544.7	473.2
New Jersey .....	182.0	137.6	Washington .....	448.6	383.0
New Mexico .....	31.8	23.9	West Virginia .....	73.9	78.1
New York .....	687.7	637.6	Wisconsin .....	295.0	273.2
North Carolina .....	117.9	84.0	Wyoming .....	18.3	18.2
North Dakota .....	20.3	14.1	<b>27113, WEEKLY AND OTHER NEWSPAPERS: RECEIPTS FROM SUBSCRIPTIONS AND SALES</b>		
Ohio .....	294.6	250.6	<b>United States</b> .....	<b>645.5</b>	<b>573.0</b>
Oklahoma .....	59.1	43.6	Alabama .....	3.0	2.4
Oregon .....	76.7	54.7	Arizona .....	3.1	3.3
Pennsylvania .....	396.4	315.3	California .....	25.9	29.7
South Carolina .....	51.3	37.4	Colorado .....	2.8	2.6
South Dakota .....	17.0	12.1	Connecticut .....	7.8	17.9
Tennessee .....	103.5	93.9	District of Columbia .....	14.5	9.4
Texas .....	285.5	238.2	Georgia .....	5.6	2.1
Utah .....	37.9	10.4	Illinois .....	21.1	19.3
Vermont .....	15.3	12.8	Indiana .....	5.7	8.5
Virginia .....	300.8	229.1	Iowa .....	6.8	3.0
Washington .....	125.6	101.4	Kansas .....	8.0	2.1
West Virginia .....	30.6	25.8	Kentucky .....	6.5	17.9
Wisconsin .....	140.1	115.0	Louisiana .....	4.0	(NA)
Wyoming .....	6.8	5.5	Maine .....	4.5	3.7
<b>27112, DAILY AND SUNDAY NEWSPAPERS: RECEIPTS FROM ADVERTISING</b>			Maryland .....	3.4	3.5
<b>United States</b> .....	<b>20 123.8</b>	<b>20 176.2</b>	Massachusetts .....	24.7	18.9
Alabama .....	178.9	182.3	Michigan .....	21.3	7.7
Alaska .....	14.4	19.1	Minnesota .....	9.7	6.2
Arizona .....	366.6	366.3	Mississippi .....	2.7	(NA)
Arkansas .....	92.1	90.6	Missouri .....	8.0	3.3
California .....	2 975.1	2 790.6	New Jersey .....	16.5	27.2
Colorado .....	323.4	311.3	New York .....	136.3	132.6
Connecticut .....	289.4	346.5	North Carolina .....	7.6	7.9
Florida .....	1 438.4	1 387.1	Ohio .....	13.7	12.9
Georgia .....	404.7	438.7	Oklahoma .....	3.8	(NA)
Idaho .....	53.7	40.6	Oregon .....	8.2	6.3
Illinois .....	1 010.6	945.3	Pennsylvania .....	13.5	21.1
Indiana .....	350.3	333.9	Rhode Island .....	2.4	(NA)
Iowa .....	172.4	157.6	South Carolina .....	4.4	3.1
Kansas .....	106.7	98.9	Tennessee .....	9.5	4.3
Kentucky .....	158.0	145.7	Texas .....	21.2	26.2
			Virginia .....	31.3	15.9
			Washington .....	8.2	9.9
			Wisconsin .....	11.6	13.0

See footnotes at end of table.

**Table 6b. Product Classes—Value of Shipments by All Producers for Specified States: 1992 and 1987—Con.**

[Million dollars. Product classes shown are those where the data are geographically dispersed, provided dispersion is not approximated by data in table 2. Also, product classes are not shown if they are miscellaneous or "not specified by kind" classes. Statistics for some States are withheld because they are either less than \$2 million in product class shipments or they disclose data for individual companies in 1992. For meaning of abbreviations and symbols, see introductory text]

Product class and geographic area	1992 value of product shipments	1987 value of product shipments	Product class and geographic area	1992 value of product shipments	1987 value of product shipments
<b>27114, WEEKLY AND OTHER NEWSPAPERS: RECEIPTS FROM ADVERTISING</b>			<b>27213, SPECIALIZED BUSINESS AND PROFESSIONAL PERIODICALS: RECEIPTS FROM SUBSCRIPTIONS AND SINGLE COPY SALES—Con.</b>		
<b>United States</b> .....	<b>2 108.3</b>	<b>1 687.5</b>	New Jersey .....	132.4	62.0
Alabama .....	19.4	11.6	New York .....	829.2	357.6
Arizona .....	48.8	17.9	North Carolina .....	12.1	4.9
Arkansas .....	11.7	8.0	Ohio .....	30.7	20.3
California .....	221.9	201.4	Oregon .....	2.4	(NA)
Colorado .....	20.1	22.8	Pennsylvania .....	153.3	100.8
Connecticut .....	56.3	40.9	Tennessee .....	7.6	(NA)
Delaware .....	5.1	(NA)	Texas .....	52.8	31.5
District of Columbia .....	20.1	13.4	Vermont .....	6.8	(NA)
Florida .....	88.1	78.2	Virginia .....	43.4	22.1
Georgia .....	44.1	42.2	Washington .....	4.9	(NA)
Idaho .....	5.8	2.7	Wisconsin .....	7.1	7.0
Illinois .....	127.0	112.9	<b>27214, SPECIALIZED BUSINESS AND PROFESSIONAL PERIODICALS: RECEIPTS FROM ADVERTISING</b>		
Indiana .....	25.4	20.6	<b>United States</b> .....	<b>3 717.4</b>	<b>2 614.5</b>
Iowa .....	28.1	13.1	Alabama .....	5.3	(NA)
Kansas .....	13.3	9.1	Arizona .....	11.6	6.0
Kentucky .....	24.7	26.5	California .....	312.6	247.9
Louisiana .....	12.7	15.4	Colorado .....	33.4	11.4
Maine .....	13.0	9.3	Connecticut .....	104.7	59.1
Maryland .....	54.6	49.3	District of Columbia .....	69.3	24.5
Massachusetts .....	84.2	72.8	Florida .....	53.9	26.2
Michigan .....	91.5	60.4	Georgia .....	42.9	43.9
Minnesota .....	53.3	24.5	Illinois .....	338.2	286.4
Mississippi .....	17.9	13.0	Indiana .....	22.6	5.9
Missouri .....	44.9	64.8	Kansas .....	52.0	33.6
Nebraska .....	10.6	9.4	Maine .....	9.1	(NA)
Nevada .....	6.6	(NA)	Maryland .....	25.0	9.1
New Hampshire .....	12.3	19.8	Massachusetts .....	160.0	129.8
New Jersey .....	102.9	88.7	Michigan .....	77.2	15.4
New Mexico .....	7.7	2.5	Minnesota .....	93.5	(NA)
New York .....	240.2	187.4	Missouri .....	29.6	22.9
North Carolina .....	36.1	39.9	New Hampshire .....	53.6	44.5
North Dakota .....	5.0	(NA)	New Jersey .....	357.0	196.8
Ohio .....	68.9	50.9	New York .....	1 233.4	912.3
Oklahoma .....	9.9	7.8	North Carolina .....	13.7	15.9
Oregon .....	29.1	21.4	Ohio .....	206.0	139.4
Pennsylvania .....	94.1	78.4	Oregon .....	21.9	(NA)
Rhode Island .....	8.2	6.2	Pennsylvania .....	122.6	118.8
South Carolina .....	25.0	13.9	Tennessee .....	22.2	6.5
South Dakota .....	3.5	(NA)	Texas .....	48.8	42.1
Tennessee .....	41.5	23.9	Virginia .....	34.3	10.2
Texas .....	77.8	53.8	Washington .....	17.6	2.6
Utah .....	4.5	4.5	Wisconsin .....	30.5	13.3
Vermont .....	6.9	5.8	<b>2721A, GENERAL AND CONSUMER PERIODICALS: RECEIPTS FROM SUBSCRIPTIONS</b>		
Virginia .....	71.5	56.7	<b>United States</b> .....	<b>3 621.0</b>	<b>2 749.2</b>
Washington .....	45.9	22.6	California .....	193.5	125.5
West Virginia .....	5.7	2.6	Colorado .....	9.9	4.0
Wisconsin .....	42.5	38.5	Connecticut .....	45.5	34.9
<b>27211, FARM PERIODICALS: RECEIPTS FROM SUBSCRIPTIONS, SALES, AND ADVERTISING</b>			Florida .....	32.7	17.5
<b>United States</b> .....	<b>199.9</b>	<b>183.5</b>	Georgia .....	7.5	(NA)
California .....	2.9	7.6	Illinois .....	168.5	106.6
Florida .....	2.5	(NA)	Kansas .....	5.5	(NA)
Iowa .....	18.4	18.5	Maryland .....	5.1	(NA)
Kansas .....	20.3	(NA)	Massachusetts .....	34.4	24.3
Minnesota .....	8.1	(NA)	Minnesota .....	10.3	(NA)
Missouri .....	5.7	5.2	New Hampshire .....	16.1	(NA)
New York .....	12.8	(NA)	New Jersey .....	13.0	9.4
Texas .....	3.0	2.4	New York .....	1 874.3	1 502.1
Wisconsin .....	33.4	30.3	North Carolina .....	22.7	(NA)
<b>27213, SPECIALIZED BUSINESS AND PROFESSIONAL PERIODICALS: RECEIPTS FROM SUBSCRIPTIONS AND SINGLE COPY SALES</b>			Ohio .....	16.8	13.2
<b>United States</b> .....	<b>2 527.3</b>	<b>1 427.1</b>	Texas .....	37.4	18.3
Arizona .....	8.8	3.4	Virginia .....	19.8	2.3
California .....	168.2	63.6	Wisconsin .....	94.4	10.5
Colorado .....	11.9	4.3	<b>2721B, GENERAL AND CONSUMER PERIODICALS: RECEIPTS FROM SINGLE COPY SALES</b>		
Connecticut .....	45.8	10.3	<b>United States</b> .....	<b>1 860.5</b>	<b>1 365.0</b>
District of Columbia .....	396.2	126.4	Arizona .....	3.3	(NA)
Florida .....	6.9	20.2	California .....	166.9	125.4
Georgia .....	66.0	25.6	Colorado .....	4.2	3.6
Illinois .....	227.1	(NA)	Connecticut .....	22.0	(NA)
Indiana .....	7.5	(NA)	District of Columbia .....	8.5	8.4
Kansas .....	6.3	3.6	Florida .....	61.7	(NA)
Maryland .....	60.2	40.4	Illinois .....	81.0	65.9
Massachusetts .....	83.1	84.5	Maryland .....	4.6	(NA)
Michigan .....	30.3	3.4	Massachusetts .....	10.1	10.5
Minnesota .....	33.8	17.0	Michigan .....	3.7	2.1
Missouri .....	35.0	(NA)			

See footnotes at end of table.

**27A-24 NEWSPAPERS, PERIOD., BOOKS, & MISC. PUB.**

**MANUFACTURES—INDUSTRY SERIES**

**Table 6b. Product Classes—Value of Shipments by All Producers for Specified States: 1992 and 1987—Con.**

[Million dollars. Product classes shown are those where the data are geographically dispersed, provided dispersion is not approximated by data in table 2. Also, product classes are not shown if they are miscellaneous or "not specified by kind" classes. Statistics for some States are withheld because they are either less than \$2 million in product class shipments or they disclose data for individual companies in 1992. For meaning of abbreviations and symbols, see introductory text]

Product class and geographic area	1992 value of product shipments	1987 value of product shipments	Product class and geographic area	1992 value of product shipments	1987 value of product shipments
<b>2721B, GENERAL AND CONSUMER PERIODICALS: RECEIPTS FROM SINGLE COPY SALES—Con.</b>			<b>27313, TECHNICAL, SCIENTIFIC, AND PROFESSIONAL BOOKS</b>		
Minnesota .....	4.5	(NA)	United States .....	2 487.9	1 827.5
Missouri .....	6.4	(NA)	Arizona .....	3.0	(NA)
New Jersey .....	29.3	(NA)	California .....	154.6	110.5
New York .....	1 058.6	853.4	Connecticut .....	43.8	54.5
North Carolina .....	3.4	(NA)	District of Columbia .....	7.6	5.4
Ohio .....	2.8	(NA)	Florida .....	39.5	20.0
Tennessee .....	6.0	(NA)	Illinois .....	38.7	113.4
Virginia .....	17.7	(NA)	Maryland .....	69.8	24.4
Washington .....	5.6	(NA)	Massachusetts .....	115.3	94.1
Wisconsin .....	15.3	4.5	Michigan .....	11.7	(NA)
			New Jersey .....	176.3	184.5
<b>2721C, GENERAL AND CONSUMER PERIODICALS: RECEIPTS FROM ADVERTISING</b>			New York .....	768.9	559.4
United States .....	5 133.5	4 298.5	Ohio .....	80.7	76.3
Arizona .....	8.8	4.9	Pennsylvania .....	236.5	148.0
Arkansas .....	2.0	3.1	Texas .....	12.6	5.6
California .....	489.0	327.3	Washington .....	5.7	3.2
Colorado .....	14.9	5.4	Wisconsin .....	6.2	(NA)
Connecticut .....	108.5	60.8			
Florida .....	64.8	18.5	<b>27314, RELIGIOUS BOOKS</b>		
Georgia .....	48.6	31.1	United States .....	730.2	492.1
Hawaii .....	15.8	13.1	Illinois .....	54.8	36.8
Illinois .....	145.6	156.0	Indiana .....	9.1	5.5
Indiana .....	3.5	(NA)	Missouri .....	20.3	21.3
Kansas .....	4.2	2.8	New Jersey .....	43.6	28.8
Maryland .....	13.1	6.3	New York .....	46.2	69.9
Massachusetts .....	42.2	31.7	Oregon .....	30.3	13.2
Michigan .....	19.9	35.0	Pennsylvania .....	12.1	28.4
Minnesota .....	16.9	7.7			
Missouri .....	16.9	17.7	<b>2731A, MASS MARKET PAPERBOUND BOOKS, RACK-SIZE</b>		
New Hampshire .....	12.5	(NA)	United States .....	916.8	836.6
New Jersey .....	39.7	16.3	New York .....	902.7	829.5
New Mexico .....	3.4	(NA)			
New York .....	3 209.1	2 895.8	<b>2731B, BOOK CLUB BOOKS</b>		
North Carolina .....	32.2	14.4	United States .....	745.8	650.2
Ohio .....	25.3	25.0	California .....	8.5	(NA)
Oklahoma .....	2.8	(NA)	New York .....	643.9	(NA)
Oregon .....	9.0	2.9			
Tennessee .....	3.0	(NA)	<b>2731C, MAIL ORDER BOOKS</b>		
Texas .....	29.6	27.4	United States .....	711.2	698.1
Vermont .....	11.9	(NA)	California .....	18.9	16.8
Virginia .....	13.9	3.5	Connecticut .....	6.0	(NA)
Washington .....	6.8	5.7	Illinois .....	8.6	(NA)
Wisconsin .....	38.7	10.9			
<b>2721D, OTHER PERIODICALS, EXCEPT SHOPPING NEWS, CATALOGS, OR DIRECTORIES, N.E.C.</b>			<b>2731D, ADULT TRADE AND JUVENILE BOOKS</b>		
United States .....	689.1	671.8	United States .....	2 647.3	1 939.4
California .....	80.2	15.5	California .....	177.3	119.3
District of Columbia .....	2.5	(NA)	Colorado .....	5.2	(NA)
Florida .....	17.8	26.0	Connecticut .....	31.3	3.6
Illinois .....	64.6	69.1	Illinois .....	131.4	26.4
Kentucky .....	3.4	(NA)	Massachusetts .....	163.2	94.3
Maryland .....	38.0	(NA)	New Jersey .....	119.6	45.9
Massachusetts .....	24.7	(NA)	New York .....	1 699.6	1 396.2
Michigan .....	7.3	6.4	Pennsylvania .....	45.4	11.1
Minnesota .....	16.0	(NA)	Texas .....	11.4	2.3
Missouri .....	40.5	33.4	Vermont .....	6.7	(NA)
New Jersey .....	13.6	10.3	Wisconsin .....	29.9	(NA)
New York .....	70.9	193.3			
Ohio .....	71.5	66.4	<b>2731E, GENERAL REFERENCE BOOKS</b>		
Oregon .....	2.2	(NA)	United States .....	490.9	510.8
Pennsylvania .....	7.5	26.8	New York .....	71.0	35.3
Tennessee .....	100.5	84.0	Texas .....	5.6	(NA)
Texas .....	14.3	4.3			
Virginia .....	4.5	4.1	<b>2731F, OTHER BOOKS, EXCLUDING PAMPHLETS</b>		
Wisconsin .....	5.7	(NA)	United States .....	390.4	(NA)
<b>27311, TEXTBOOKS, INCLUDING TEACHERS' EDITIONS</b>			California .....	13.7	(NA)
United States .....	3 873.7	2 953.5	Connecticut .....	34.3	(NA)
California .....	344.4	218.9	Illinois .....	30.3	(NA)
Illinois .....	391.4	435.6	Michigan .....	7.5	(NA)
Massachusetts .....	618.6	504.6	New Jersey .....	29.5	(NA)
Minnesota .....	114.6	(NA)	New York .....	100.2	(NA)
New York .....	677.9	946.2	North Carolina .....	3.5	(NA)
North Carolina .....	13.9	(NA)	Pennsylvania .....	4.2	(NA)
Ohio .....	265.2	234.3	Texas .....	5.7	(NA)
Tennessee .....	7.9	(NA)	Wisconsin .....	4.8	(NA)
Texas .....	228.6	144.7			

See footnotes at end of table.

Table 6b. **Product Classes—Value of Shipments by All Producers for Specified States: 1992 and 1987—Con.**

[Million dollars. Product classes shown are those where the data are geographically dispersed, provided dispersion is not approximated by data in table 2. Also, product classes are not shown if they are miscellaneous or "not specified by kind" classes. Statistics for some States are withheld because they are either less than \$2 million in product class shipments or they disclose data for individual companies in 1992. For meaning of abbreviations and symbols, see introductory text]

Product class and geographic area	1992 value of product shipments	1987 value of product shipments	Product class and geographic area	1992 value of product shipments	1987 value of product shipments
<b>2731G, PAMPHLETS (5 THROUGH 48 PAGES)</b>			<b>2732A, OTHER BOOKS, N.E.C., PRINTING AND BINDING</b>		
<b>United States</b> .....	<b>134.8</b>	<b>140.7</b>	<b>United States</b> .....	<b>732.1</b>	<b>642.6</b>
California .....	56.4	(NA)	Alabama .....	3.2	(NA)
Illinois .....	3.0	(NA)	California .....	6.1	(NA)
Missouri .....	2.6	(NA)	Colorado .....	3.3	(NA)
Texas .....	6.5	(NA)	Florida .....	6.9	(NA)
<b>2731H, AUDIO BOOKS (BOOKS RECORDED ON AUDIO CASSETTES), PUBLISHING</b>			Illinois .....	12.7	6.5
<b>United States</b> .....	<b>36.1</b>	<b>(NA)</b>	Indiana .....	58.6	(NA)
<b>27323, TEXTBOOKS, PRINTING AND BINDING</b>			Iowa .....	13.2	(NA)
<b>United States</b> .....	<b>678.7</b>	<b>515.7</b>	Massachusetts .....	60.5	(NA)
California .....	20.1	12.4	Minnesota .....	2.8	3.2
Colorado .....	3.0	(NA)	New York .....	9.1	14.7
Illinois .....	22.6	11.9	Ohio .....	23.7	(NA)
Maryland .....	6.3	17.3	Pennsylvania .....	85.7	79.2
Massachusetts .....	38.2	(NA)	Rhode Island .....	11.3	(NA)
Michigan .....	36.0	52.8	Virginia .....	5.6	(NA)
New York .....	34.3	27.6	Wisconsin .....	13.4	(NA)
North Carolina .....	3.3	(NA)	<b>2732B, BOOKS, PRINTING ONLY, NOT BOUND</b>		
Ohio .....	76.0	57.5	<b>United States</b> .....	<b>137.2</b>	<b>120.9</b>
Oklahoma .....	3.1	(NA)	California .....	8.5	3.2
Pennsylvania .....	10.1	10.8	Illinois .....	9.1	5.5
Texas .....	23.6	(NA)	Iowa .....	4.3	(NA)
Wisconsin .....	110.1	101.1	Maryland .....	2.7	10.8
<b>27324, TECHNICAL, SCIENTIFIC, AND PROFESSIONAL BOOKS, PRINTING AND BINDING</b>			Michigan .....	2.1	(NA)
<b>United States</b> .....	<b>1 003.1</b>	<b>589.5</b>	Minnesota .....	2.5	(NA)
Arizona .....	4.0	(NA)	New York .....	4.0	7.1
Arkansas .....	3.5	(NA)	Ohio .....	2.3	6.6
California .....	80.0	47.9	Pennsylvania .....	19.9	(NA)
Colorado .....	18.3	(NA)	Texas .....	2.4	(NA)
Connecticut .....	2.3	(NA)	Virginia .....	3.7	(NA)
District of Columbia .....	3.9	(NA)	Washington .....	2.1	(NA)
Florida .....	8.7	(NA)	<b>2732C, PAMPHLETS, PRINTING ONLY OR PRINTING AND BINDING (EXCLUDING ADVERTISING PAMPHLETS)</b>		
Illinois .....	12.2	26.0	<b>United States</b> .....	<b>313.7</b>	<b>132.3</b>
Iowa .....	11.5	(NA)	Alabama .....	2.3	(NA)
Kansas .....	2.1	(NA)	California .....	27.9	4.4
Maryland .....	29.7	45.8	Colorado .....	2.6	(NA)
Massachusetts .....	105.8	51.6	Connecticut .....	3.1	(NA)
Michigan .....	87.8	43.0	District of Columbia .....	3.0	(NA)
Minnesota .....	8.0	10.0	Florida .....	7.2	(NA)
Missouri .....	17.3	25.0	Georgia .....	2.8	(NA)
New Jersey .....	9.5	3.4	Illinois .....	42.7	5.5
New York .....	28.8	36.6	Indiana .....	13.1	(NA)
Ohio .....	36.3	19.8	Iowa .....	2.1	(NA)
Oregon .....	114.3	(NA)	Kansas .....	3.0	(NA)
Pennsylvania .....	91.3	59.9	Maryland .....	20.2	5.5
Texas .....	40.1	9.9	Massachusetts .....	11.0	4.9
Utah .....	22.9	18.9	Michigan .....	6.3	5.3
Virginia .....	38.6	24.3	Minnesota .....	12.2	7.3
Wisconsin .....	14.2	(NA)	Missouri .....	9.8	(NA)
<b>27325, RELIGIOUS BOOKS, PRINTING AND BINDING</b>			New Jersey .....	12.3	21.4
<b>United States</b> .....	<b>207.0</b>	<b>141.4</b>	New York .....	29.4	15.0
California .....	5.3	(NA)	North Carolina .....	8.0	5.4
Illinois .....	12.0	7.3	Ohio .....	9.0	2.8
Maryland .....	3.5	(NA)	Pennsylvania .....	7.1	10.5
Michigan .....	21.5	13.4	South Carolina .....	3.2	(NA)
Minnesota .....	6.9	(NA)	Tennessee .....	5.6	(NA)
Missouri .....	2.8	(NA)	Texas .....	10.7	5.2
New Jersey .....	2.3	(NA)	Utah .....	16.2	(NA)
New York .....	3.3	4.5	Virginia .....	8.0	6.4
Wisconsin .....	7.7	(NA)	Wisconsin .....	9.5	(NA)
<b>27326, GENERAL BOOKS (TRADE, ETC.), PRINTING AND BINDING</b>			<b>27416, TELEPHONE DIRECTORIES, PUBLISHING</b>		
<b>United States</b> .....	<b>1 126.2</b>	<b>709.8</b>	<b>United States</b> .....	<b>4 807.5</b>	<b>3 042.9</b>
California .....	62.2	12.8	Florida .....	18.9	6.3
Colorado .....	3.6	(NA)	New Jersey .....	8.5	(NA)
Illinois .....	6.4	29.0	New York .....	86.1	43.4
Maryland .....	27.6	(NA)	Ohio .....	54.7	(NA)
Massachusetts .....	9.6	28.5	South Carolina .....	4.8	(NA)
Michigan .....	66.8	9.1	Texas .....	30.4	7.9
New York .....	75.7	68.8			
Oregon .....	5.1	(NA)			
Pennsylvania .....	134.1	121.3			
Texas .....	8.4	4.1			
Wisconsin .....	102.0	(NA)			

See footnotes at end of table.

**Table 6b. Product Classes—Value of Shipments by All Producers for Specified States: 1992 and 1987—Con.**

[Million dollars. Product classes shown are those where the data are geographically dispersed, provided dispersion is not approximated by data in table 2. Also, product classes are not shown if they are miscellaneous or "not specified by kind" classes. Statistics for some States are withheld because they are either less than \$2 million in product class shipments or they disclose data for individual companies in 1992. For meaning of abbreviations and symbols, see introductory text]

Product class and geographic area	1992 value of product shipments	1987 value of product shipments	Product class and geographic area	1992 value of product shipments	1987 value of product shipments
<b>27417, CATALOGS AND DIRECTORIES, EXCEPT TELEPHONE DIRECTORIES, PUBLISHING</b>			<b>2741A, SHOPPING NEWS, PUBLISHING—Con.</b>		
<b>United States</b> .....	<b>613.4</b>	<b>606.4</b>	Florida .....	83.4	72.2
California .....	67.6	32.2	Georgia .....	6.6	10.4
Colorado .....	3.7	(NA)	Idaho .....	3.9	(NA)
Connecticut .....	4.1	5.1	Illinois .....	37.3	39.3
District of Columbia .....	4.6	4.2	Indiana .....	7.3	12.5
Florida .....	9.9	12.5	Iowa .....	17.9	33.6
Georgia .....	4.0	6.8	Kansas .....	6.3	6.0
Illinois .....	23.0	19.6	Kentucky .....	10.1	8.0
Kansas .....	33.7	36.4	Louisiana .....	5.6	9.1
Maryland .....	2.5	(NA)	Maine .....	3.4	(NA)
Michigan .....	14.6	25.0	Maryland .....	18.1	8.3
Missouri .....	4.3	(NA)	Massachusetts .....	14.7	12.5
New York .....	254.7	291.4	Michigan .....	34.9	31.4
Ohio .....	21.0	24.6	Minnesota .....	27.2	22.6
Pennsylvania .....	21.7	13.8	Missouri .....	13.8	7.9
Tennessee .....	3.0	(NA)	Montana .....	4.2	(NA)
Texas .....	22.4	(NA)	Nebraska .....	5.6	2.7
Virginia .....	7.0	(NA)	New Hampshire .....	2.1	(NA)
Washington .....	2.8	(NA)	New Jersey .....	30.0	15.8
Wisconsin .....	2.0	2.6	New York .....	158.8	106.8
			North Carolina .....	23.6	18.9
<b>27418, BUSINESS SERVICE PUBLICATIONS, PUBLISHING</b>			North Dakota .....	3.6	(NA)
<b>United States</b> .....	<b>897.6</b>	<b>932.0</b>	Ohio .....	41.5	13.4
California .....	59.2	101.1	Oregon .....	11.3	19.9
Connecticut .....	15.3	(NA)	Pennsylvania .....	23.3	25.2
District of Columbia .....	19.6	27.9	South Carolina .....	2.9	4.3
Florida .....	32.9	18.5	Tennessee .....	18.9	9.5
Illinois .....	56.8	26.1	Texas .....	60.1	25.6
Maryland .....	29.8	10.9	Virginia .....	8.3	4.1
Massachusetts .....	16.8	28.9	Washington .....	28.8	10.6
Michigan .....	3.7	(NA)	West Virginia .....	4.4	5.2
New Jersey .....	27.7	90.0	Wisconsin .....	58.2	28.2
New York .....	552.2	458.9	<b>2741B, OTHER MISCELLANEOUS PUBLISHING</b>		
Ohio .....	5.5	13.2	<b>United States</b> .....	<b>2 216.9</b>	<b>863.5</b>
Pennsylvania .....	21.6	(NA)	California .....	392.4	97.1
Texas .....	10.9	(NA)	Colorado .....	201.8	53.6
Virginia .....	12.1	(NA)	Connecticut .....	35.4	21.3
Washington .....	2.7	(NA)	Florida .....	25.3	30.8
Wisconsin .....	2.1	(NA)	Georgia .....	3.7	(NA)
			Illinois .....	84.7	145.2
<b>27419, PATTERNS, INCLUDING CLOTHING PATTERNS</b>			Indiana .....	8.9	3.3
<b>United States</b> .....	<b>214.4</b>	<b>173.3</b>	Massachusetts .....	44.4	30.7
Alabama .....	3.2	2.7	Michigan .....	124.3	68.8
Arizona .....	13.2	9.4	Minnesota .....	25.0	23.9
Arkansas .....	2.7	4.7	Missouri .....	36.3	26.4
California .....	104.2	146.2	New Jersey .....	37.4	(NA)
Colorado .....	6.0	2.8	New York .....	121.9	59.2
Connecticut .....	29.7	6.6	North Carolina .....	9.6	6.7
			Ohio .....	45.9	7.9
			Tennessee .....	48.4	(NA)
			Texas .....	110.3	51.7
			Virginia .....	28.0	6.4
			Washington .....	4.6	(NA)
			Wisconsin .....	28.4	(NA)

Note: For qualifications of data, see footnotes on table 6a.

**Table 6c. Historical Statistics for Product Classes—Value Shipped by All Producers: 1992 and Earlier Years**

[Million dollars. For meaning of abbreviations and symbols, see introductory text]

Product code	Product class	1992	1991 <sup>1</sup>	1990 <sup>1</sup>	1989 <sup>1</sup>	1988 <sup>1</sup>	1987	1982	1977
<b>2711-</b>	<b>Newspapers</b> .....	<b>32 261.5</b>	<b>31 860.0</b>	<b>32 817.6</b>	<b>32 457.0</b>	<b>31 461.0</b>	<b>30 494.7</b>	<b>20 313.7</b>	<b>12 468.1</b>
27111	Daily and Sunday newspapers: receipts from subscriptions and sales .....	6 541.6	6 316.3	5 928.6	5 704.5	5 458.3	5 212.0	3 922.5	2 561.1
27112	Daily and Sunday newspapers: receipts from advertising .....	20 123.8	20 221.1	21 591.1	21 583.7	20 806.1	20 176.2	13 233.2	8 140.5
27113	Weekly and other newspapers: receipts from subscriptions and sales .....	645.5	738.2	656.2	640.1	587.4	573.0	429.6	240.6
27114	Weekly and other newspapers: receipts from advertising .....	2 108.3	1 783.8	1 887.5	1 832.2	1 745.1	1 687.5	1 106.9	734.5
27110	Newspapers, n.s.k. ....	2 842.4	2 800.6	2 754.3	2 696.6	2 864.2	2 845.9	1 621.5	791.4

See footnotes at end of table.

MANUFACTURES—INDUSTRY SERIES

NEWSPAPERS, PERIOD., BOOKS, & MISC. PUB. 27A–27

**Table 6c. Historical Statistics for Product Classes—Value Shipped by All Producers: 1992 and Earlier Years—Con.**

[Million dollars. For meaning of abbreviations and symbols, see introductory text]

Product code	Product class	1992	1991 <sup>1</sup>	1990 <sup>1</sup>	1989 <sup>1</sup>	1988 <sup>1</sup>	1987	1982	1977
<b>2721-</b>	<b>Periodical publishing</b>	<b>20 890.3</b>	<b>19 424.0</b>	<b>19 255.5</b>	<b>18 747.9</b>	<b>17 663.5</b>	<b>16 492.1</b>	<b>10 625.8</b>	<b>5 528.8</b>
27211	Farm periodicals: receipts from subscriptions, sales, and advertising	199.9	237.8	228.8	204.1	184.4	183.5	246.9	107.5
27213	Specialized business and professional periodicals: receipts from subscriptions and single copy sales	2 527.3	2 154.2	2 147.6	2 036.0	1 585.2	1 427.1	952.8	464.2
27214	Specialized business and professional periodicals: receipts from advertising	3 717.4	3 215.0	3 035.5	2 882.8	2 853.3	2 614.5	1 647.5	850.2
2721A	General and consumer periodicals: receipts from subscriptions	3 621.0	3 216.1	3 188.1	2 998.8	2 806.3	2 749.2	1 596.6	1 685.7
2721B	General and consumer periodicals: receipts from single copy sales	1 860.5	1 472.0	1 464.6	1 575.3	1 407.8	1 365.0	963.8	1 595.5
2721C	General and consumer periodicals: receipts from advertising	5 133.5	4 895.4	4 971.7	4 906.0	4 688.6	4 298.5	3 161.8	250.7
2721D	Other periodicals, except shopping news, catalogs, or directories, n.e.c.	689.1	644.3	714.7	698.0	713.6	671.8	509.8	575.0
27210	Periodical publishing, n.s.k.	3 141.8	3 589.3	3 504.5	3 446.8	3 424.3	3 182.4	1 546.6	5 007.7
<b>2731-</b>	<b>Book publishing</b>	<b>14 785.6</b>	<b>15 214.5</b>	<b>14 266.9</b>	<b>12 980.6</b>	<b>12 156.3</b>	<b>11 629.9</b>	<b>7 812.6</b>	<b>5 007.7</b>
27311	Textbooks, including teachers' editions	3 873.7	3 814.9	3 655.1	3 361.4	3 036.6	2 953.5	2 167.9	1 408.7
27313	Technical, scientific, and professional books	2 487.9	2 622.7	2 445.5	2 259.0	2 044.7	1 827.5	1 359.6	684.1
27314	Religious books	730.2	836.6	668.4	617.6	512.9	492.1	322.1	241.6
2731A	Mass market paperback books, rack-size	916.8	1 112.8	1 007.8	1 061.3	916.3	836.6	553.4	1 895.6
2731B	Book club books	745.8	692.6	709.8	623.3	644.0	650.2	417.9	1 895.6
2731C	Mail order books	711.2	797.7	752.2	697.6	725.1	698.1	508.6	1 895.6
2731D	Adult trade and juvenile books	2 647.3	2 697.5	2 344.4	2 015.8	1 970.4	1 939.4	1 111.4	300.1
2731E	General reference books	490.9	699.9	689.3	637.5	519.1	510.8	299.0	2 110.4
2731F	Other books, excluding pamphlets <sup>2</sup>	390.4	246.4	237.2	2196.7	2180.3	2166.8	2218.5	49.1
2731G	Pamphlets (5 through 48 pages)	134.8	118.5	111.4	131.8	151.6	140.7	75.4	318.1
2731H	Audio books (books recorded on audio cassettes), publishing <sup>2</sup>	36.1	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
27310	Book publishing, n.s.k.	1 620.5	1 572.8	1 505.9	1 378.5	1 455.4	1 414.3	778.7	1 830.6
<b>2732-</b>	<b>Book printing</b>	<b>4 736.1</b>	<b>4 048.1</b>	<b>4 007.7</b>	<b>3 804.2</b>	<b>3 605.8</b>	<b>3 240.9</b>	<b>2 501.9</b>	<b>1 830.6</b>
27323	Textbooks, printing and binding	678.7	708.3	695.2	591.3	561.9	515.7	335.1	1 670.1
27324	Technical, scientific, and professional books, printing and binding	1 003.1	869.3	833.7	825.9	663.1	589.5	289.5	1 670.1
27325	Religious books, printing and binding	207.0	138.8	129.6	134.0	152.7	141.4	107.3	1 670.1
27326	General books (trade, etc.), printing and binding	1 126.2	1 057.3	1 107.8	1 032.5	859.0	709.8	615.4	1 670.1
2732A	Other books, n.e.c., printing and binding	732.1	665.4	662.7	615.5	685.7	642.6	383.6	1 670.1
2732B	Books, printing only, not bound	137.2	127.2	119.5	112.3	135.3	120.9	111.8	1 670.1
2732C	Pamphlets, printing only or printing and binding (excluding advertising pamphlets)	313.7	133.4	129.1	119.2	140.7	132.3	200.8	160.5
27320	Book printing, n.s.k.	537.9	348.4	330.2	373.4	407.4	388.8	458.4	1 935.1
<b>2741-</b>	<b>Miscellaneous publishing</b>	<b>11 567.1</b>	<b>10 137.5</b>	<b>9 483.8</b>	<b>8 488.3</b>	<b>8 839.1</b>	<b>8 176.6</b>	<b>3 096.6</b>	<b>1 935.1</b>
27416	Telephone directories, publishing	4 807.5	3 822.7	3 573.3	3 183.5	3 282.2	3 042.9	882.7	456.9
27417	Catalogs and directories, except telephone directories, publishing	613.4	634.2	607.6	570.4	603.9	606.4	882.7	456.9
27418	Business service publications, publishing	897.6	927.4	865.2	822.9	976.0	932.0	535.5	416.7
27419	Patterns, including clothing patterns	214.4	186.8	178.9	173.2	176.5	173.3	181.8	( <sup>3</sup> )
2741A	Shopping news, publishing	990.6	838.9	889.2	850.1	793.4	774.4	1 010.5	3727.0
2741B	Other miscellaneous publishing	2 216.9	1 945.6	1 642.7	1 224.9	1 143.8	863.5	486.0	334.5
27410	Miscellaneous publishing, n.s.k.	1 826.8	1 782.0	1 726.9	1 663.3	1 863.3	1 784.1	486.0	334.5

<sup>1</sup>Figures are estimates derived from a representative sample of manufacturing establishments. Standard errors associated with estimates are published in annual survey of manufactures publications for this period.

<sup>2</sup>Prior to 1992, audio books were included in "other books, excluding pamphlets."

<sup>3</sup>For 1977, product classes 27419, 2741A, and 2741B were combined.

**Table 7. Materials Consumed by Kind: 1992 and 1987**

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For further explanation, see Cost of Materials in appendixes. For meaning of abbreviations and symbols, see introductory text]

Material code	Material	1992		1987	
		Quantity <sup>1</sup>	Delivered cost (million dollars)	Quantity <sup>1</sup>	Delivered cost (million dollars)
	<b>INDUSTRY 2711, NEWSPAPERS</b>				
	<b>Materials, ingredients, containers, and supplies</b>	<b>(X)</b>	<b>5 850.3</b>	<b>(X)</b>	<b>6 570.6</b>
	Newsprint:				
262113	Basis wt 30 lb 1,000 metric tons	6 914.4	3 202.2	(S)	4 175.5
262115	Other basis wt 1,000 metric tons	1 384.9	629.5	*914.4	435.3
262131	Coated paper	(X)	37.9	(X)	33.5
262101	All other paper, except light sensitive	(X)	43.9	(X)	39.3
	Printing inks:				
289311	Letterpress, including news	(X)	33.7	(X)	59.5
289323	Lithographic (offset)	(X)	114.9	(X)	126.9
289305	Other, including gravure, flexographic, and screen process	(X)	24.3	(X)	9.4
	Printing plates:				
	Exposed, prepared for printing:				
279615	Lithographic (offset)	(X)	23.7	(X)	( <sup>2</sup> )
279635	Letterpress	(X)	17.1	(X)	( <sup>3</sup> )
279636	Other	(X)	11.0	(X)	( <sup>4</sup> )
	Unexposed photosensitive plates:				
386102	Lithographic (offset)	(X)	33.1	(X)	251.2
386103	Letterpress	(X)	18.7	(X)	330.6
386107	Other	(X)	3.5	(X)	( <sup>4</sup> )
386155	Light sensitive films	(X)	52.5	(X)	58.6
386166	Light sensitive papers (including photographic paper and diffusion transfer paper)	(X)	18.9	(X)	27.1
970099	All other materials and components, parts, containers, and supplies	(X)	472.5	(X)	4381.9
971000	Materials, ingredients, containers, and supplies, n.s.k. <sup>5</sup>	(X)	1 112.8	(X)	1 141.8

See footnotes at end of table.

**27A-28 NEWSPAPERS, PERIOD., BOOKS, & MISC. PUB.**

**MANUFACTURES—INDUSTRY SERIES**

**Table 7. Materials Consumed by Kind: 1992 and 1987—Con.**

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For further explanation, see Cost of Materials in appendixes. For meaning of abbreviations and symbols, see introductory text]

Material code	Material	1992 delivered cost (million dollars)	1987 delivered cost (million dollars)
<b>INDUSTRY 2721, PERIODICALS</b>			
<b>Materials, ingredients, containers, and supplies -----</b>		<b>2 417.1</b>	<b>2 225.7</b>
262111	Newsprint -----	66.3	155.6
262131	Coated paper -----	986.1	627.4
262140	Uncoated paper -----	185.2	178.9
289301	Printing inks (complete formulations) -----	220.8	58.9
970099	All other materials and components, parts, containers, and supplies -----	165.9	278.2
971000	Materials, ingredients, containers, and supplies, n.s.k. <sup>5</sup> -----	792.8	926.7
<b>INDUSTRY 2731, BOOK PUBLISHING</b>			
<b>Materials, ingredients, containers, and supplies -----</b>		<b>1 613.7</b>	<b>1 234.2</b>
262111	Newsprint -----	76.9	38.9
262131	Coated paper -----	192.2	147.2
262140	Uncoated paper -----	305.6	228.7
289301	Printing inks (complete formulations) -----	45.9	5.2
970099	All other materials and components, parts, containers, and supplies -----	549.1	295.8
971000	Materials, ingredients, containers, and supplies, n.s.k. <sup>5</sup> -----	444.1	518.4
<b>INDUSTRY 2732, BOOK PRINTING</b>			
<b>Materials, ingredients, containers, and supplies -----</b>		<b>1 587.6</b>	<b>1 090.1</b>
262112	Newsprint -----	35.7	28.9
Uncoated paper:			
262121	Sheets -----	116.7	115.1
262122	Rolls -----	314.5	236.9
Coated paper:			
262123	Sheets -----	148.1	79.8
262124	Rolls -----	194.9	95.0
267231	Pressure-sensitive base stock, self-adhesive, including paper, film, foil, etc. -	14.5	(D)
220011	Cloth and nonwoven fabrics for hardbound book covers -----	56.1	39.8
289101	Glues and adhesives -----	29.3	19.7
289301	Printing inks (complete formulations) -----	64.7	(D)
386101	Light sensitive films and papers -----	29.7	24.4
386100	Unexposed photosensitive printing plates -----	23.6	(4)
279600	Printing plates, prepared for printing -----	33.9	(4)
265001	Paperboard containers, boxes, and corrugated paperboard -----	60.4	(4)
970099	All other materials and components, parts, containers, and supplies -----	274.7	4233.9
971000	Materials, ingredients, containers, and supplies, n.s.k. <sup>5</sup> -----	190.7	165.7
<b>INDUSTRY 2741, MISCELLANEOUS PUBLISHING</b>			
<b>Materials, ingredients, containers, and supplies -----</b>		<b>708.6</b>	<b>609.2</b>
262111	Newsprint -----	43.5	70.8
262131	Coated paper -----	75.2	21.2
262140	Uncoated paper -----	103.8	120.5
289301	Printing inks (complete formulations) -----	4.3	5.6
970099	All other materials and components, parts, containers, and supplies -----	219.6	74.5
971000	Materials, ingredients, containers, and supplies, n.s.k. <sup>5</sup> -----	262.2	316.6

<sup>1</sup>For some establishments, data have been estimated from central unit values which are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: \*10 to 19 percent estimated; \*\*20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by (S).

<sup>2</sup>For 1987, 279615 and 386102 were published as 386153, unexposed diazo lithographic plates, and 279610, other lithographic plates, exposed and unexposed.

<sup>3</sup>For 1987, 279635 and 386103 were published as 279631, photopolymer (plastics) plates used for letterpress printing.

<sup>4</sup>Included in 970099.

<sup>5</sup>Total cost of materials of establishments that did not report detailed materials data, including establishments that were not mailed a form.



## Appendix A. Explanation of Terms

This appendix is in two sections. Section 1 includes items requested of all establishments mailed census of manufactures forms including annual survey of manufactures (ASM) forms. Note that this section also includes several items (number of establishments and companies, value added, classes of products, and specialization and coverage ratios) not included on the report forms but derived from information collected on the forms. Section 2 covers supplementary items requested only from establishments included in the ASM sample. Results of the supplementary ASM inquiries are included in table 3c of this report.

### SECTION 1. ITEMS COLLECTED OR DERIVED BASED ON ALL CENSUS OF MANUFACTURES (INCLUDING ASM) REPORT FORMS

**Number of establishments and companies.** A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

In this report, data are shown for establishments in operation at any time during the year. A comparison with the number of establishments in operation at the end of the year will be provided in the Introduction of the *General Summary* subject report.

**Employment and related items.** The report forms requested separate information on production workers for a specific payroll period within each quarter of the year and on other employees as of the payroll period which included the 12th of March.

**All employees.** This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave,

paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

**Production workers.** This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

**All other employees.** This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver salespersons), sales delivery (highway truckdrivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office function, executive, purchasing, financing, legal, personnel (including cafeteria, medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations to the plant and utilized as a separate work force.

In addition to reports sent to operating manufacturing establishments, information on employment during the payroll period which included March 12 and annual payrolls also was requested of auxiliary units (e.g., administrative offices, warehouses, and research and development

laboratories) of multiestablishment companies. However, these figures are not included in the totals for individual industries shown in this report. They are included in the *General Summary* and geographic area reports as a separate category.

**Payroll.** This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year 1992. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' Social Security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' supplemental labor costs, both those required by Federal and State laws and those incurred voluntarily or as part of collective bargaining agreements. (Supplemental labor costs are explained later in this appendix.)

As in the case of employment figures, the payrolls of separate auxiliary units of multiestablishment companies are not included in the totals for individual industries or industry groups.

**Production-worker hours.** This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

**Cost of materials.** This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

The important components of this cost item are (1) all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year, (2) electric energy purchased, (3) fuels consumed for heat, power, or the generation of electricity, (4) work done by

others on materials or parts furnished by manufacturing establishments (contract work), and (5) products bought and resold in the same condition. (See discussion of duplication of data below.)

**Specific materials consumed.** In addition to the total cost of materials, which every establishment was required to report, information also was collected for most manufacturing industries on the consumption of major materials used in manufacturing. The inquiries were restricted to those materials which were important parts of the cost of production in a particular industry and for which cost information was available from manufacturers' records. Information on the establishments consuming less than a specified amount (usually \$25,000) of a specific material were not requested to report consumption of that material separately. Also, the cost of materials for the small establishments for which either administrative records or short forms were used was imputed as "not specified by kind." (See Census of Manufactures for the importance of administrative records in the industry.)

**Value of shipments.** This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and resold without further processing. Included are all items made by or for the establishments from materials owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of "all other costs" (including company overhead) and profit. (See discussion of duplication of data below.)

**Individual products.** As in previous censuses, data were collected for most industries on the quantity and value of individual products shipped. In the 1992 census program, information was collected on the output of almost 11,000 individual product items. The term "product," as used in the census of manufactures, represents the finest level of detail for which output information was requested. Consequently, it is not necessarily synonymous with the term "product" as used in the marketing sense. In some cases, it may be much more detailed and, in other cases, it is more aggregative. For example, "pharmaceutical preparations" was distributed into over 100 terms; whereas, "motor gasoline" was reported as a single item.

Approximately 6,300 of the product items were listed separately on the 1992 census report forms. Data for

about 4,500 products were obtained in the monthly, quarterly, or annual surveys comprising the Current Industrial Reports series of the Census Bureau. Totals for the year 1992 for these items, as derived from the commodity surveys, are shown in the "products shipped" table.

The list of products for which separate information was collected was prepared after consultation with industry and government representatives. Comparability with previous figures was given considerable weight in the selection of product categories so that comparable 1987 information is presented for most products.

Typically, both quantity and value of shipments information were collected. However, if quantity was not significant or could not be reported by manufacturers, only value of shipments was collected.

Shipments include both commercial shipments and transfers of products to other plants of the same company. For industries in which a considerable portion of the total shipments is transferred to other plants of the same company, separate information on interplant transfers also was collected. Moreover, for products that are used to a large degree within the same establishment as materials or components in the fabrication of other products, total production and often consumption of the item within the plant was collected. Typically, the information on production also was collected for products for which there are significant differences between total production and shipments in a given year because of wide fluctuations in finished goods inventories. Other measures of output of products with long production cycles were used as appropriate and feasible.

**Classes of products.** To summarize the product information, the separate products were aggregated into classes of products that, in turn, were grouped into all primary products of each industry. The code structure used is a seven-digit number for the individual product, a five-digit number for the class of product, and a four-digit number for the total primary products in an industry. (See Census of Manufactures, Industry Classification of Establishments, for application of the coding structure to the assignment of SIC codes for establishments.)

In the 1992 census, the 11,000 products were grouped into approximately 1,500 separate classes on the basis of general similarity of manufacturing processes, types of materials used, etc. However, the grouping of products was affected by the economic significance of the class and, in some cases, dissimilar products were grouped because the products were not sufficiently significant to warrant separate classes.

**Duplication in cost of materials and value of shipments.** The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages

in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

**Value added by manufacture.** This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments (see footnote in table 1a), value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

"Value added" avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

**New and used capital expenditures.** For establishments in operation and any known plants under construction, manufacturers were asked to report their new expenditures for (1) permanent additions and major alterations to

manufacturing establishments, and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

The totals for new expenditures include expenditures leased from nonmanufacturing concerns through capital leases. New facilities owned by the Federal Government but operated under contract by private companies, and plant and equipment furnished to the manufacturer by communities and nonprofit organizations are excluded. Also excluded are expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expenses.

Manufacturers also were requested to report the value of all used buildings and equipment purchased during the year at the purchase price. For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. Furthermore, if the establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported under used capital expenditures.

Total expenditures for used plant and equipment is a universe figure; it is collected on all census forms. However, the breakdown of this figure between expenditures for used buildings and other structures and expenditures for used machinery and equipment is collected only on the ASM form. The data for total new capital expenditures, new building expenditures, and new machinery expenditures, as well as the data for total used expenditures, are shown in table 3b.

**End-of-year inventories.** Respondents were asked to report their 1991 and 1992 end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). In 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

## SECTION 2. ITEMS COLLECTED ONLY ON ASM REPORT FORMS

The following items were collected only from establishments included in the ASM sample:

**Supplemental labor costs.** Supplemental labor costs are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they

Because of this change in reporting instructions, the 1982 through 1992 data for inventories and value added by manufacture included in the tables of this report are not comparable to the prior-year data shown in table 1a of this report and in historical census of manufactures and annual survey of manufactures publications.

In using inventory data by stage of fabrication for "all industries" and at the two-digit industry level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by another establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for individual industries, industry groups, and "all manufacturing", which are aggregates of figures reported by establishments in specified industries.

**Specialization and coverage ratios.** These items are not collected on the report forms but are derived from the data shown in table 5b. An establishment is classified in a particular industry if its shipments of primary products of that industry exceed in value its shipments of the products of any other single industry.

An establishment's shipments include those products assigned to an industry (primary products), those considered primary to other industries (secondary products), and receipts for miscellaneous activities (merchandising, contract work, resales, etc.). Specialization and coverage ratios have been developed to measure the relationship of primary product shipments to the data on shipments for the industry shown in tables 1a through 5a and data on product shipments shown in tables 6a through 6c.

Specialization ratio represents the ratio of primary product shipments to total product shipments (primary and secondary, excluding miscellaneous receipts) for the establishments classified in the industry.

Coverage ratio represents the ratio of primary products shipped by the establishments classified in the industry to the total shipments of such products that are shipped by all manufacturing establishments wherever classified.

were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

While the excluded items do benefit employees and all or part of their cost generally is similar to the items covered in the ASM labor costs statistics, accounting records generally do not provide reliable figures on net employee benefits of these types.

**Retirements of depreciable assets.** Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during 1992. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

**Depreciation charges for fixed assets.** This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

**Rental payments.** Total rental payments is collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets, and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

**Depreciable assets.** Total value of gross depreciable assets is collected on all census forms. However, the detail for depreciable assets is collected only on the ASM forms. The data encompass all fixed depreciable assets on the books of establishments at the beginning and end of the year. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all

buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets, including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year, rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress. In addition, respondents were requested to make certain that assets at the beginning of the year plus new and used capital expenditures, less retirements, equalled assets at the end of the year.

**New and used capital expenditures.** The data for total new capital expenditures, new building expenditures, new machinery expenditures, and total used capital expenditures are collected on all census forms. However, the breakdown between expenditures for used buildings and other structures and expenditures for used machinery and equipment is collected only on the ASM form. (See further explanation on capital expenditures in section 1.)

**Quantity of electric energy consumed for heat and power.** Data on the cost of purchased electric energy are collected on all census forms. However, data on the quantity of purchased electric energy are collected only on the ASM forms. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

**Breakdown of new capital expenditures for machinery and equipment.** ASM establishments were requested to separate their capital expenditures for new machinery and equipment into (1) automobiles, trucks, etc., for highway use, (2) computers and peripheral data processing equipment, and (3) all other.

The category "automobiles, trucks, etc., for highway use" is intended to measure expenditures for vehicles designed for highway use that were acquired through a purchase or lease-purchase agreement. Vehicles normally operating off public highways (vehicles specifically designed to transport materials, property, or equipment on mining, construction, logging, and petroleum development projects) are excluded from this item.

**Foreign content of cost of materials.** Establishments included in the ASM sample panel were requested to provide information on foreign-made materials purchased or transferred from foreign sources. This includes materials acquired from a central warehouse or other domestic establishment of the same company but made in an operation outside of the 50 States, District of Columbia, Puerto Rico, or U.S. territories.

**Cost of purchased services.** ASM establishments were requested to provide information on the cost of purchased services for the repair of buildings and other structures, the repair of machinery, communication services, legal services, accounting and bookkeeping services, advertising, software and other data processing services, and refuse removal. Each of these items reflect the costs paid directly by the establishment, and exclude salaries paid to employees of the establishment for these services.

Included in the cost of purchased services for the repair of buildings and machinery are payments made for all maintenance and repair work on buildings and equipment, such as painting, roof repairs, replacing parts, and overhauling equipment. Such payments made to other establishments of the same company and for repair and maintenance of any leased property also are included. Extensive repairs or reconstruction that were capitalized are considered capital expenditures for used buildings and machinery and are, therefore, excluded from this item. Repair and maintenance costs provided by an owner as part of a rental contract or incurred directly by an establishment in using its own work force also are excluded.

Included in the cost of purchased advertising services are payments for printing, media coverage, and other advertising services and materials.

Included in the cost of purchased software and other data processing services are all purchases by the establishment from other companies. Excluded are services provided by other establishments of the same company (such as by a separate data processing unit).

Included in the cost of purchased refuse removal services are all costs of refuse removal services paid by the establishment, including costs for hazardous waste removal or treatment. Excluded are all costs included in rental payments or as capital expenditures.

Three basic approaches were utilized to produce these statistics.

1. For items 1 through 6, data were estimated (imputed) for all non-ASM establishments using the available data in the establishment record and industry-based parameters. The statistics were then generated by simply tabulating all census records including the imputed value for non-ASM establishments and the unweighted value for ASM establishments. Separate imputation rates were developed and are shown in the table. For quantity of purchased electricity for heat and power (item 7), a similar procedure was used; however, the imputation parameters were geographically-based instead of industry-based. For quantities of generated less sold electricity, no imputation was performed for non-ASM establishments. The estimates for these items are simply tabulations of unweighted ASM values.

Since the published statistics for these items were developed from the complete census universe and not just the ASM establishments, there are no sampling variances associated with these statistics. However, there is an unknown level of bias for each of the items due to the imputation of the non-ASM establishments. This bias is felt to be small due to the strong correlation between the items being imputed and the collected items that were used to generate the impute values.

2. For items 8 and 9, the estimates were developed using a ratio estimation methodology. For item 8, an estimate of the breakout of new capital expenditures for machinery and equipment into the three categories was made from ASM establishments reporting these categories. The estimated proportions were then applied to the corresponding census value for new capital expenditures for machinery and equipment to produce the estimates.

The estimates for item 9, foreign content of cost of materials, were developed in a similar manner based on costs of parts, supplies, and components (item 5a) as the control total for the three categories.

For items 8 and 9, an adjustment ratio of the following form was computed:

$$R_j = \frac{NMc}{TMEasm}$$

where:

NMc = the census value of new capital expenditures for machinery and equipment

TMEasm = the weighted ASM value of new capital expenditures for machinery and equipment from reporters of the detailed breakout data

3. For item 10, cost of purchased services, the estimates were made by simply tabulating weighted data for all the ASM records that reported the item. A response coverage ratio (a measure of the extent to which respondents reported for each item) is shown in table 3c for the types of services. It is derived for each item by calculating the ratio of the weighted employment (establishment data multiplied by sample weight, see appendix B) for those ASM establishments that reported the specific inquiry to the weighted total employment for all ASM establishments classified in the industry.

## Appendix B.

# Annual Survey of Manufactures Sampling and Estimating Methodologies

### DESCRIPTION OF SURVEY SAMPLE

The annual survey of manufactures (ASM) contains two components. The mail portion of the survey is a probability sample of about 64,000 manufacturing establishments selected from a total of about 216,000 establishments. These 216,000 establishments represent all manufacturing establishments of multiunit companies and all single-establishment companies mailed schedules in the 1987 Census of Manufactures. This mail portion is supplemented annually by a Social Security Administration list of new manufacturing establishments opened after 1987 and a list of new multiunit manufacturing establishments identified from the Census Bureau's Company Organization Survey.

For the current panel, all establishments of companies with 1987 shipments in manufacturing in excess of \$500 million were included in the survey panel with certainty. There are approximately 500 such companies collectively accounting for approximately 18,000 establishments. For the remaining portion of the mail survey, the establishment was defined as the sampling unit. For this portion, all establishments with 250 employees or more and establishments with a very large value of shipments also were included in the survey panel with certainty. A total of 12,100 establishments were selected from this portion of the universe with certainty. Therefore, of the 64,000 manufacturing establishments included in the ASM panel, approximately 31,000 are selected with certainty. These certainty establishments collectively account for approximately 80 percent of the total value of shipments in the 1987 census.

Smaller establishments in the remaining portion of the mail survey were sampled with probabilities ranging from 0.999 to 0.005 in accordance with mathematical theory for optimum allocation of a sample. The probabilities of selection assigned to the smaller establishments were proportional to measures of size determined for each establishment. The measures of size depend directly upon each establishment's 1987 product class values and the historic variability of the year-to-year shipments of each product class. Product classes displaying more volatile year-to-year change in shipments at the establishment level were sampled at a heavier rate.

This method of assigning measures of size was used in order to maximize the precision (that is, minimize the variance of estimates of the year-to-year change) in the value of product class shipments. Implicitly, it also gave weight differences in employment, value added, and other

general statistics, since these are highly correlated with value of shipments. Individual sample selection probabilities were obtained by multiplying each establishment's final measure of size by an overall sampling fraction coefficient calculated to yield a total expected sample size.

The sample selection procedure gave each establishment in the sampling frame an independent chance of selection. This method of independent selection permits the rotation of small establishments out of a given sample panel without introducing a bias into the survey estimates.

The nonmail portion of the survey includes all single-establishment companies that were tabulated as administrative records in the 1987 Census of Manufactures. Although this portion contained approximately 134,000 establishments, it accounted for less than 2 percent of the estimate for total value of shipments at the total manufacturing level. This portion was not sampled; rather, the data for every establishment in this group were estimated based on selected information obtained annually from the administrative records of the Internal Revenue Service and the Social Security Administration. This administrative-records information, which includes payroll, total employment, industry classification, and physical location of the establishment, was obtained under conditions which safeguard the confidentiality of both tax and census records. Estimates of data other than payroll and employment for these small establishments were developed from industry averages.

The corresponding estimates for the mail and nonmail establishments were added together, along with the base-year differences, as defined in the Description of Estimating Procedure section, to produce the figures shown in this publication.

### DESCRIPTION OF ESTIMATING PROCEDURES

Most of the ASM estimates for the years 1988-1991 were computed using a difference estimation procedure. For each item, a base-year difference was developed. This base-year difference is equal to the difference between the 1987 census published number for an item total and the linear ASM estimate of the total for 1987. The ASM linear estimate was obtained by multiplying each sample establishment's data by its sample weight (the reciprocal of its probability of selection) and summing the weighted values.

These base-year differences were then added to the corresponding current-year linear estimates, which include the sum of the estimates for the mail and nonmail

establishments, to produce the estimates for the years 1983-1991. Estimates developed by this procedure usually are far more reliable than comparable linear estimates developed from the current sample data alone.

However, the 1992 sample estimates for the purchased service items, shown in table 3c, are strictly ASM linear estimates developed only from ASM establishments that reported the specific item.

The remaining estimates in table 3c, showing the breakdown of expenditures for new machinery and equipment and costs of parts (separated into purchases from foreign sources and purchases from domestic sources), were computed as ratio estimates. To do this, linear estimates of the new machinery detail items were developed from the ASM establishments and were ratio adjusted to the corresponding census total for new machinery. In a similar fashion, the ASM linear estimates of the detailed purchased materials items were ratio adjusted to the corresponding census total for cost of parts.

### QUALIFICATIONS OF THE DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sampled lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the differences between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of the estimates.

The particular sample selected for the ASM is one of a large number of similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretical, comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected statistics in this report. They are presented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

1. From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.
2. From two standard errors below to two standard errors above the derived estimate for about 19 of 20 of all possible samples.
3. From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown as 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected in the course of the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or only moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown.

The concept of complete coverage under the conditions prevailing for the ASM is not identical to the complete coverage of the census of manufactures, as the censuses have been conducted. Nearly all types of operational errors that affect the ASM also occur in the censuses. The ASM and the censuses, are conducted under quite different conditions, and operational errors can be better controlled in the ASM than in the censuses. As a result, for many of the census figures, the errors are of the same order of size as the total errors of the corresponding annual survey estimates. The differences between the census and ASM operating conditions also disturb, to some degree, the comparability of the ASM and census data.

Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be of limited reliability. However, the figure may be combined with higher-level totals, creating a broader aggregate, which then may be of acceptable reliability.



# Appendix C. Product Code Reference Tables

## Part 1. Comparability of Product Classes and Product Codes That Changed: 1992 to 1987

1992	1987	1992	1987	1992	1987	1992	1987
27111 24	27111 22	27523 18	27523 13	2759B 26	27597 26	27617 63	27617 00
27111 26	27111 22			2759B 28	27597 28	27617 65	27617 00
27111 34	27111 32	27525 45	27525 51	2759B 30	27597 24	27617 73	27617 00
27111 36	27111 32	27525 45	27525 53	2759B 30	27597 30	27617 75	27617 00
27111 44	27111 42	27525 52	27525 51				
27111 46	27111 42	27525 54	27525 53	2759C	27597	27824 41	27824 00
27111 54	27111 52			2759C 29	27597 38	27824 45	27824 00
27111 56	27111 52	27526 77	27526 76	2759C 31	27597 12	27824 51	27824 00
27111 58	27111 91	27526 77	27526 78	2759C 32	27597 32		
		27526 84	27526 98	2759C 34	27597 34	27825 01	27825 00
		27526 97	27526 98	2759C 36	27597 36	27825 03	27825 00
27211 12	27211 11			2759C 38	27597 38	27825 06	27825 00
27211 12	27211 61					27825 08	27825 00
27211 14	27211 15	27592 12	27592 11			27825 11	27825 00
27211 14	27211 61	27592 12	27592 15	27612 11	27612 00	27825 22	27825 00
		27592 14	27592 13	27612 13	27612 00		
2731H	2731F	27592 14	27592 15	27612 15	27612 00		
2731H 00	2731F 00	27592 16	27592 15	27612 53	27612 00		
		27592 16	27592 17	27612 55	27612 00	27910 32	27910 11
		27592 18	27592 15	27612 61	27612 00	27910 34	27910 15
27417 16	27417 15						
27417 16	27417 17			27613 11	27613 00	27961 11	27961 13
		27596 16	27596 25	27613 13	27613 00	27961 17	27961 17
2741B 18	2741B 19	27596 27	27596 25			27961 31	27961 23
2741B 20	2741B 19			27615 31	27615 00	27961 31	27961 29
2741B 29	2741B 91			27615 35	27615 00		
2741B 71	2741B 21	27599 33	27599 32	27615 41	27615 00	27963 30	27963 15
2741B 71	2741B 91	27599 35	27599 32	27615 43	27615 00	27963 30	27963 35
		2759B	27597	27615 45	27615 00	27963 52	27963 72
27522 11	27522 15	2759B 00	27597 00	27615 55	27615 00	27963 69	27963 61
27522 11	27522 16	2759B 14	27597 14	27615 61	27615 00	27963 69	27963 63
27522 13	27522 16	2759B 16	27597 16	27615 63	27615 00	27963 69	27963 65
27522 13	27522 19	2759B 18	27597 18	27615 65	27615 00	27963 70	27963 40
27522 17	27522 16	2759B 20	27597 20			27963 70	27963 67
27522 17	27522 18	2759B 22	27597 22	27617 61	27617 00	27963 70	27963 71

## Part 2. Comparability of Product Classes and Product Codes That Changed: 1987 to 1992

1987	1992	1987	1992	1987	1992	1987	1992
27111 22	27111 22	27522 15	27522 11	27597 00	2759B 00	27615 00	27615 55
27111 22	27111 24	27522 16	27522 11	27597 12	2759C 31	27615 00	27615 61
27111 22	27111 26	27522 16	27522 13	27597 14	2759B 14	27615 00	27615 63
27111 32	27111 32	27522 16	27522 17	27597 16	2759B 16	27615 00	27615 65
27111 32	27111 34	27522 18	27522 17	27597 18	2759B 18		
27111 32	27111 36	27522 19	27522 13	27597 20	2759B 20	27617 00	27617 61
27111 42	27111 42			27597 22	2759B 22	27617 00	27617 63
27111 42	27111 44			27597 24	2759B 30	27617 00	27617 65
27111 42	27111 46	27523 13	27523 18	27597 26	2759B 26	27617 00	27617 73
27111 52	27111 52			27597 28	2759B 28	27617 00	27617 75
27111 52	27111 54			27597 30	2759B 30		
27111 52	27111 56	27525 51	27525 45			27824 00	27824 41
27111 91	27111 58	27525 51	27525 52			27824 00	27824 45
		27525 53	27525 45	27597 32	2759C 32	27824 00	27824 51
		27525 53	27525 54	27597 34	2759C 34		
27211 11	27211 12			27597 36	2759C 36	27825 00	27825 01
27211 15	27211 14			27597 38	2759C 29	27825 00	27825 03
27211 61	27211 12	27526 76	27526 77	27597 38	2759C 38	27825 00	27825 06
27211 61	27211 14	27526 78	27526 77			27825 00	27825 08
		27526 98	27526 84			27825 00	27825 11
		27526 98	27526 97	27599 32	27599 33	27825 00	27825 22
				27599 32	27599 35		
2731F	2731F					27910 11	27910 32
		27592 11	27592 12			27910 15	27910 34
2731F	2731H	27592 13	27592 14	27612 00	27612 11		
		27592 15	27592 12	27612 00	27612 13		
		27592 15	27592 14	27612 00	27612 15	27961 13	27961 11
2731F 00	2731F 00	27592 15	27592 16	27612 00	27612 53	27961 17	27961 31
2731F 00	2731H 00	27592 15	27592 18	27612 00	27612 55	27961 23	27961 31
		27592 17	27592 16	27612 00	27612 61	27961 29	27961 31
		27592 19	27592 18				
27417 15	27417 16					27963 15	27963 30
27417 17	27417 16			27613 00	27613 11	27963 35	27963 30
		27596 25	27596 16	27613 00	27613 13	27963 40	27963 70
		27596 25	27596 27			27963 61	27963 69
2741B 19	2741B 18			27615 00	27615 31	27963 63	27963 69
2741B 19	2741B 20			27615 00	27615 35	27963 65	27963 69
2741B 21	2741B 71	27597	2759B	27615 00	27615 41	27963 67	27963 70
2741B 91	2741B 29			27615 00	27615 43	27963 71	27963 70
2741B 91	2741B 71	27597	2759C	27615 00	27615 45	27963 72	27963 52

### Part 3. Current Industrial Reports by Product Code

[Not applicable for this report]

# Publication Program

## 1992 CENSUS OF MANUFACTURES

Publications of the 1992 Census of Manufactures, containing preliminary and final data on manufacturing establishments in the United States, are described below. Publications order forms for the specific reports may be obtained from any Department of Commerce district office or from Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233-8300.

### Preliminary Reports

#### Industry series—83 reports (MC92-I-20A(P) to -39D(P))

Preliminary industry data are issued in 83 separate reports covering 459 industries. Preliminary summary data for the United States and States are released in one report.

### Final Reports

#### Industry series—83 reports (MC92-1-20A to -39D)

Each of the 83 reports provides information for a group of related industries ("dairy products" includes industries for butter, cheese, milk, etc.). Final figures for the United States are shown for each of the 459 manufacturing industries on quantity and value of products shipped and materials consumed, cost of fuels and electric energy, capital expenditures, assets, rents, inventories, employment, payroll, payroll supplements, hours worked, value added by manufacture, number of establishments, and number of companies. Comparative statistics for earlier years are provided where available.

For each industry, data on value of shipments, value added by manufacture, capital expenditures, employment, and payroll are shown by employment-size class of establishment, State, and degree of primary product specialization.

#### Geographic area series—51 reports (MC92-A-1 to -51)

A separate report is being published for each State and the District of Columbia. Each report presents data for industry groups and industries on value of shipments, cost of materials, value added by manufacture, employment, payroll, hours worked, new capital expenditures, and number of manufacturing establishments for the State, MA's, counties, and selected places. Comparative statistics for earlier census years are shown for the State and large MA's. Manufacturing totals are presented for each county and for places with significant manufacturing activity. Detailed statistics (including inventories, assets, rents, and energy costs) are presented only in statewide totals.

#### Subject series—3 reports (MC92-S-1 to -3)

Each of the three reports contains detailed statistics for an individual subject, such as concentration ratios in manufacturing, manufacturers' shipments to the Federal Government, and a general national-level summary.

#### Reference series—1 report (MC92-R-1)

The *Numerical List of Manufactured and Mineral Products* includes a description of the principal products and services published in the 1992 Censuses of Manufactures and Mineral Industries.

#### Location of Manufacturing Plants—1 report (MC92-LM)

This report includes data for number of establishments by four-digit SIC industry and by employment-size class for counties, incorporated places of 2,500 inhabitants or more, and Zip Codes for each State. This report is available only on compact disc-read only memory (CD-ROM).

#### Analytical Reports—2 reports (AR92-1 and -2)

##### Exports From Manufacturing Establishments (AR92-1)

This report presents data on exports by two- and three-digit SIC industry groups for the United States and States. Information is presented on value of direct report shipments and estimates of the employment required to manufacture these products. Included are estimates of employment in manufacturing and nonmanufacturing establishments that supply parts, materials, and services for production of manufactured exports.

##### Selected Characteristics of Manufacturing Establishments That Export (AR92-2)

This report presents data on the number of manufacturing companies and establishments that export by major group, State, employment size, and ratios of exports to shipments.

### Electronic Media

All data included in the printed reports are available on CD-ROM. The CD-ROM's provide the same information found in the reports as well as additional information not published in the final reports, such as location of manufacturing plants. Electronic media products are available for users who wish to summarize, rearrange, or process large amounts of data. These products, with corresponding technical documentation, are sold by Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233-8300.

## OTHER ECONOMIC CENSUSES REPORTS

Data on retail trade, wholesale trade, financial, insurance, real estate, service industries, construction industries, mineral industries, transportation, communications, utilities, enterprise statistics, minority-owned businesses, and women-owned businesses also are available from the 1992 Economic Census. A separate series of reports covers the census of outlying areas—Puerto Rico, Virgin Islands of the United States, Guam, and the Commonwealth of the Northern Mariana Islands. Separate announcements describing these reports are available free of charge from Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233-8300.