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Northeast Economic Data and Retrieval System

Henry Spelter
Sujata Ghosh

Abstract

To help foster rural economic development in 18 Northeastern states, an economic information system developed at the USDA Forest Service, Forest Products Laboratory was used to facilitate access to reference data on forest products industry activities. The Census and Survey of Manufactures were used as sources for information. This report explains the computerized system and provides instruction for users.

Keywords: Data base, census of manufactures, forest industry

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Northeast Economic Data and Retrieval System

Henry Spelter, Economist
Sujata Ghosh, Statistical Assistant
Forest Products Laboratory, Madison, Wisconsin

Introduction

In 1990, a steering committee consisting of northeast area state forestry economic development coordinators met with USDA Forest Service, Forest Products Laboratory (FPL) economists. The purpose of the meeting was to identify ways to foster rural economic development by focusing on forest products industries with the greatest potential for growth. To identify these growth areas, an economic information system developed at the FPL was proposed. The target audience for this effort included members of the forest products industry, namely strategic planners and business development executives, and economic development personnel at the local, state, and federal levels.

In response to this meeting, a project was begun in 1991 at FPL to facilitate access to U.S. Department of Commerce reference data on forest products industry activities. The data cover an 18-state area encompassing northeast United States. This report documents the resulting computerized system and provides user instructions.

The sources for the information contained in the retrieval system were the Census and Survey of Manufactures (U.S. Department of Commerce 1987,1990). In the case of the census, information was obtained for 4 years, namely 1972,1977,1982, and 1987. Data were obtained for 18 northeastern states for forest products industries that were broken down to the four-digit Standard Industrial Classification (SIC) level of detail. For each industry, four activity indicators were included: (1) value of shipments, (2) industry wages, (3) employment, and (4) number of establishments.

In the case of the survey, information was obtained for 1972 to 1990. Projections for 1991 were also added for some categories from the Industrial Outlook report (U.S. Department of Commerce 1993). The main difference between the two data sets is the lack of state-by-state detail for the survey.

The data were stored on computer files. To access the files and extract information, a program was developed. This program constitutes the heart of the system and enables easy retrieval and display of desired data. The program displays a series of screens containing menus from which users can make selections. Once these selections are made, the program reads the data files, sifts out items of interest, and displays the items in tabular form on the terminal screen. At the user's discretion, the displayed table can be stored in a user-defined data file for further processing or can be printed.

The rest of this report describes the procedures involved in running the system and accessing data.

User Instructions

Getting Started

The data and program files can be obtained from FPL on a floppy disk. Once received, the contents should be downloaded onto a hard disk for a faster response. The contents of the program disks should be transferred into a directory. Whichever disk the program is run on, a session begins when the user types the word DATA. This activates the program and causes the following screen to appear:

Which data base do you want?

- 1. Census by state**
- 2. Census/Survey by industry**

Select one of the above:

In this and following screens, the user responds to prompts. Selection of a given response results in the appearance of further screens asking the user to select from some alternatives. In this manner, the focus of interest is narrowed to the data set needed.

Census Data

By selecting 1 in the first screen, the Census of Manufactures data set is selected. This initiates the following menus:

Which state(s) do you want?

1. Maine
2. New Hampshire
3. Vermont
4. Massachusetts
5. Connecticut
6. New York
7. New Jersey
8. Maryland
9. Pennsylvania
10. West Virginia
11. Ohio
12. Indiana
13. Illinois
14. Michigan
15. Wisconsin
16. Minnesota
17. Iowa
18. Missouri
19. All states

Select leaving a space after each selection:

The user can select one or more states by entering the respective digits. Alternatively, all states can be accessed by selecting 19. Pressing the enter key activates the next screen, which contains the activity category alternatives:

If more than one state was selected from above, then select only one from the choices below; otherwise select as many as you want.

1. Establishments
2. Employment
3. Payroll
4. Value of shipments
5. All categories

enter your choice:

Only one choice may be made if multiple choices were made from the previous (states) screen. Should more than one choice be mistakenly entered, an error message will appear, followed by a repeat of the screen with the above choices.

The next screen provides industry selections. There are three main groups:

Please select only one from the choices given below

1. LUMBER AND WOOD PRODUCTS
2. FURNITURE AND FIXTURES
3. PAPER AND ALLIED PRODUCTS

enter your choice:

One industry selection leads to a screen with specific categories. For example, if choice 3 is entered, the following menu appears:

Do not choose more than one from the choices below if more than one was selected from the previous choices

PAPER AND ALLIED PRODUCTS

1. 2611-Pulpmills
2. 2621-Papermill, except building paper
3. 2631-Paperboard mills
4. 2661-Building paper and board mills
5. 2677-Envelopes
6. 2675-Die-cut paper and board
7. 2676-Sanitary paper products
8. 2678-Stationary paper products
9. 2679-Converted paper products
10. 2657-Folding paper products
11. 2652-Setup paperboard boxes
12. 2653-Corrugated and solid fiber boxes
13. All industries

enter your choice:

The final screen allows selection of years:

Select the years you want:

1. 1972
2. 1977
3. 1982
4. 1987
5. All years

enter selection:

With the information supplied from this screen, the program has all the instructions it needs. The program scans the census data base for the data that were specified and prints out a corresponding table. Several examples based upon different selections are shown in Appendix A.

They include (1) for a single state, the number of establishments for all industries; (2) for a single industry, the number of establishments for all states; and (3) for a single activity category, the payroll of an industry for all states.

To save the data, the program asks the user if the tables should be stored in a separate file. If the user responds yes (Y), then the program prompts for a filename. The program then creates an ASCII file and transfers the contents of the table into the file. The user can then access this file by way of an editing language, such as WordPerfect¹, or further transfer data to a spreadsheet program where other manipulations, such as percentages or growth rates, may be performed.

Survey of Manufactures

The Survey of Manufactures data are accessed in the same manner. The advantage of the survey compared with the census is the availability of the data by more years, but state-by-state detail is absent. The data base contains data from two sources; actual historical compilations were obtained from the annual Survey of Manufactures and the quinquennial Census of Manufactures. The most recent year of data available from these sources was 1990. A projection of 1991 activity was also obtained from forecasts made by the Industrial Outlook.

Like the census data routine, the survey routine begins when the user types **DATA** and selects data base 2:

Which data base do you want?

- 1. Census by state**
- 2. Census/Survey by industry**

Select one of the above:

This screen is followed by the category selection screen because there is no state-by-state detail. The number of establishments was also excluded because the Industrial Outlook report does not deal with that item.

Please enter your selection.

- 1. Employment**
- 2. Payroll**
- 3. Value of shipments**
- 4. All categories**

enter your choice:

The use of trade or firm names in this publication is for reader information and does not imply endorsement by the U.S. Department of Agriculture of any product or service.

The next screen asks for industry category:

Please select only one from the choices given below

- 1. LUMBER AND WOOD PRODUCTS**
- 2. FURNITURE AND FIXTURES**
- 3. PAPER AND ALLIED PRODUCTS**

enter your choice:

One industry selection results in a screen with more specific categories from which the final choice is made. For example, if choice 1 is entered, the following screen appears:

Do not choose more than one from the choices below if more than one was selected from the previous choices

LUMBER AND WOOD PRODUCTS

- 1. 2411-Logging**
- 2. 2421-Sawmills**
- 3. 2426-Hardwood dimension**
- 4. 2439-Special products**
- 5. 2431-Millwork**
- 6. 2434-Wood kitchen cabinets**
- 7. 2435-Hardwood veneer and plywood**
- 8. 2436-Softwood veneer and plywood**
- 9. 2439-Structural wood members**
- 10. 2441-Nailed wood boxes and shook**
- 11. 2448-Wood pallets and skids**
- 12. 2449-Wood containers**
- 13. 2491-Wood preserving**
- 14. 2493-Particleboard**
- 15. 2499-Wood products, n.e.c.**
- 16. 2451-Mobile homes**
- 17. 2452-Prefabricated wood buildings**
- 18. All industries**

enter your choice:

The final screen determines the time selection:

Select the years you want:

- 1. 1972**
- 2. 1977**
- 3. 1982**
- 4. 1987**
- 5. 1988**
- 6. 1989**

7. 1990
8. 1991
9. All years

enter selection:

As before, immediately after the enter key is pressed, a table containing the desired data appears. Several examples of such tables are presented at the end of this documentation in Appendix B.

Summary

The program described in this report is intended to facilitate the retrieval and display of data collected by the U.S. Census Department. Flexibility built into the data retrieval system enables rapid recovery of information and display of data in easy-to-read tables.

Although the data are supposed to represent the universe of firms in U.S. industry, the reality is that many small establishments are missed; this is especially true for many wood products industries where there is a high representation of small, family-owned businesses. The census covers large facilities well but tends to miss many smaller, less visible operations. For this reason, the data in this program may underrepresent industries in terms of establishments, payroll, and so on. Other data sources, such as those compiled by state economic development coordinators or by state foresters, should be consulted for more complete information on the status of an industry within a given state.

Other federal data banks may also be worthwhile sources of information, especially since they have become accessible via compact discs (CDs). The National Trade Data Bank, for example, contains a wealth of trade information available in the latest CD technology. Updates are available monthly, and each disc contains the complete data bank with software programs to simplify access and retrieval of the text, which is similar to the program described in this report.

References

Annual Survey of Manufactures. 1990. U.S. Department of Commerce, Washington, DC.

Census of Manufactures. 1987. U.S. Department of Commerce, Bureau of the Census, Washington, DC.

Industrial Outlook. 1993. U.S. Department of Commerce, Bureau of Industrial Economics, Washington, DC.

Appendix A-Census of Manufactures

Example tables were obtained as follows:

Example 1	Screen	Response	Screen description
	1	1	Census or survey
	2	5	State
	3	1	Activity category
	4	1	Main industry group
	5	18	Specific industry choice
	6	5	Time period

Example 1

	1972	1977	1982	1987
Connecticut				
Establishments				
2411-Logging	0	0	0	0
2421-Sawmills	0	24	27	24
2426-Hardwood dimen	7	10	0	0
2429-Sp. sawmills	0	0	0	0
2431-Millwork	34	34	39	53
2434-Wd.kitch.cabs	31	44	45	63
2435-Hard. plywood	0	0	0	0
2436-Soft. plywood	0	0	0	0
2439-Struc. wd. nec	0	0	0	6
2441-Wood boxes	0	0	0	0
2448-Wood pallets	0	14	22	13
2449-Wd.containers	0	0	0	0
2491-Wd.preserve	0	0	0	0
2493-Particleboard	0	0	0	0
2499-Wood, n.e.c.	29	35	34	42
2451-Mobile homes	0	0	3	1
2452-Prefab.bldgs.	3	0	0	0

Do you want another table?
Please enter "y" or "n".

Example 2	Screen	Response	Screen description
	1	1	Census or survey
	2	19	State
	3	1	Activity category
	4	1	Main industry group
	5	1	Specific industry choice
	6	5	Time period

Example 3	Screen	Response	Screen description
	1	1	Census or survey
	2	19	State
	3	2	Activity category
	4	2	Main industry group
	5	1	Specific industry choice
	6	5	Time period

Example 2

	1972	1977	1982	1987
Establishments				
2511-Wd.furniture				
Maine	12	25	22	19
New Hampshire	18	31	28	23
Vermont	20	24	23	31
Massachusetts	91	101	92	98
Connecticut	23	34	28	37
New York	259	279	208	248
New Jersey	70	81	64	63
Maryland	16	22	23	39
Pennsylvania	107	114	96	126
West Virginia	4	0	0	10
Ohio	52	55	46	73
Indiana	75	75	62	68
Illinois	81	84	60	76
Michigan	62	74	55	69
Wisconsin	26	38	55	65
Minnesota	18	32	29	39
Iowa	10	0	0	11
Missouri	33	45	28	38

Do you want another table?
Please enter "y" or "n".

Example 3

	1972	1977	1982	1987
Employment (Th.)				
2511-Wd.furniture				
Maine	0.4	0.8	0.7	0.7
New Hampshire	1.4	1.1	0.9	0.8
Vermont	1.7	2.3	1.7	1.7
Massachusetts	3.4	2.7	2.5	2.4
Connecticut	0.6	0.6	0.7	0.7
New York	5.5	5.7	4.5	6.3
New Jersey	1.2	0.8	0.9	1.0
Maryland	0.6	0.5	0.6	1.7
Pennsylvania	4.5	3.6	3.3	3.9
West Virginia	0.2	0	0	0.2
Ohio	2.3	2.5	1.9	2.4
Indiana	5.6	2.5	3.8	3.7
Illinois	2.4	1.9	1.7	1.4
Michigan	3.5	3.0	2.6	2.5
Wisconsin	2.4	2.8	2.2	3.5
Minnesota	0.4	0.5	0.3	0.7
Iowa	0.3	0	0	0.2
Missouri	1.6	1.2	1.5	3.2

Do you want another table?
Please enter "y" or "n".

Appendix B-Survey of Manufactures

Example tables were obtained as follows:

Example 4	Screen	Response	Screen description
	1	2	Census or survey
	2	2	Activity category
	3	1	Main industry group
	4	18	Specific industry choice
	5	9	Time period

Example 4

	1972	1977	1982	1987	1988	1989	1990	1991
Payroll (Mil \$)								
2411-Logging	523.9	1009.0	1207.9	1517.6	591.4	1595.6	1647.3	D
2421-Sawmills	1274.4	1943.0	2020.2	2823.5	3007.9	2936.9	2913.1	D
2426-Hardwood	173.9	225.0	252.6	440.8	454.9	471.7	475.0	D
2429-Sp.sawmills	40.0	60.3	33.1	2.6	34.0	36.1	40.6	D
2431-Millwork	524.5	742.2	895.4	1809.2	2013.7	1976.7	1960.9	D
2434-Wd.kit.cbnt	286.6	481.1	606.9	1185.0	1214.0	1196.7	1217.4	D
2435-H. plywood	165.2	211.5	241.0	340.1	347.5	356.2	334.5	D
2436-S. plywood	403.6	634.6	667.3	889.1	900.4	887.5	880.6	D
2439-Str.wd.nec	94.4	147.0	185.5	434.7	446.1	449.3	429.4	D
2441-Wd. boxes	61.1	68.6	76.5	84.7	88.4	94.5	97.5	D
2448-Wd. pallets	77.7	163.8	230.4	328.0	362.7	394.6	416.6	D
2449-Wd.contnrs.	65.0	67.2	84.0	70.4	73.6	110.5	121.9	D
2491-Wd.preserve	74.5	126.1	159.4	207.7	214.3	223.4	245.8	D
2493-Particlebd.	D	D	D	504.5	532.0	546.6	554.3	D
2499-Wood,n.e.c.	D	D	D	824.2	817.4	872.6	944.8	D
2451-Mob.homes	547.3	527.6	622.4	741.2	772.5	768.7	769.1	D
2452-Prefab.bldg	198.1	330.6	257.8	473.4	478.7	441.9	448.0	D

Note: D = data withheld.
Do you want another table?
Please enter "y" or "n".

Example 5 Screen Response Screen description

1	2	Census or survey
2	3	Activity category
3	1	Main industry group
4	18	Specific industry choice
5	9	Time period

Example 5

	1972	1977	1982	1987	1988	1989	1990	1991
Value-ship(Mil\$)								
2411-Logging	2529.5	6230.1	874.0	10938.2	11663.8	12017.4	12229.0	11635.0
2421-Sawmills	6484.5	10866.7	10065.2	17357.1	18260.4	18479.1	17923.0	17814.0
2426-Hardwood	579.0	850.0	912.6	1714.0	1740.0	1787.1	1800.5	D
2429-Sp.sawmills	180.8	252.6	154.6	149.2	143.2	175.2	211.3	D
2431-Millwork	2426.8	3928.1	4248.3	9326.9	9385.2	9654.3	9524.7	9709.0
2434-Wd.kit.cbnt	897.2	1590.8	2060.7	4378.2	4484.0	4393.2	4610.0	D
2435-H. plywood	911.8	1272.3	1304.4	2060.5	2100.3	2184.6	2051.7	2252.0
2436-S. plywood	2011.5	3804.8	3221.5	4919.6	4848.4	5310.0	5030.4	5285.0
2439-Str.wd.nec	456.0	807.7	847.9	1928.8	2040.7	2134.9	2028.4	D
2441-Wd. boxes	237.9	263.3	306.8	325.0	378.0	392.9	431.3	D
2448-Wd. pallets	295.4	698.0	1012.3	1496.1	1644.1	1843.7	1948.6	1949.0
2449-Wd.contnrs.	240.2	255.8	315.8	248.3	272.3	380.5	470.2	D
2491-Wd.preserve	475.8	962.6	1360.2	2169.6	2265.0	2366.2	2642.7	2485.0
2493-Particlebd	D	D	D	2864.9	2917.3	3198.8	3042.6	2862.0
2499-Wood,n.e.c	D	D	D	3295.5	3241.5	3585.5	3871.8	D
2451-Mob.homes	3242.9	3199.3	3606.4	4102.4	4222.4	4127.8	4202.5	3930.0
2452-Prefab.bldg	1046.1	1948.6	1349.0	2472.2	2404.8	2297.2	2268.5	D

Note: D = data withheld.
Do you want another table?
Please enter "y" or "n".

Example 6 Screen Response Screen description

1	2	Census or survey
2	4	Activity category
3	1	Main industry group
4	11	Specific industry choice
5	9	Time period

Example 6

	1972	1977	1982	1987	1988	1989	1990	1991
2448-Wd. pallets								
Employment (Th.)	14.3	20.3	22.1	25.7	26.9	29.1	28.3	29.3
Payroll (Mil \$)	7.7	163.8	230.4	328.0	362.7	394.6	416.6	D
Value-ship(Mil\$)	295.4	698.0	1012.3	1496.1	1644.1	1843.7	1948.6	1949.0

Note: D = data withheld.
Do you want another table?
Please enter "y" or "n".