

Business Statistics and the National Economy: Electronic Records of the Department of Commerce in the National Archives and Records Administration

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Business historians research the development of individual businesses and industries. Historians interested in charting change necessarily need to understand fluctuations in the national and international economy to provide a contextual framework for their research. Macroeconomic data often provide the context for business historians to understand how the overall economy developed and to better understand the changes undergone by the subject of their particular research.

In the United States, one of the primary activities of the U.S. Department of Commerce is to collect information about fluctuations in the national economy. The mission of the Department of Commerce is to encourage, serve, and promote the Nation's international trade, economic growth, and technological advancement [National Archives and Records Administration, 1996, p. 150]. One of the ways the Department accomplishes this mission is through the provision of social and economic statistics and analyses for business and government planners. Two bureaus in particular collect and provide these statistics and analyses: the Bureau of the Census and the Bureau of Economic Analysis.

The mission of the National Archives and Records Administration (NARA) is to ensure, for the citizen and the public servant, for the president and the congress and the courts, ready access to essential evidence [NARA, 1997a, p. 5]. The stated missions of the Department of Commerce and NARA are not as far apart as they might seem at first glance. Publication by the Department of Commerce of statistics on employment, financial status, trade partners, and other aspects of the economy inherently involves the creation of federal records. NARA is interested in the appropriate disposition of the records created by the Department of Commerce and the preservation both of records

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documenting how and why the Department of Commerce collected the records in the first place, and how the information in those records might be useful to researchers far into the future.

Therefore, it is natural that NARA has in its custody a number of electronic records files documenting historical changes in the U.S. economy, originally collected and published by the Department of Commerce. This paper provides a brief overview of the historical macroeconomic summary data available from NARA in an electronic form.

Electronic Records

For over 30 years, NARA has been involved in the identification, preservation, and provision of access to records created in an electronic form. Of all the records created by federal agencies in that form, only about 3-5% are identified as permanent records, destined for transfer to NARA. NARA's holdings currently number approximately 100,000 electronic records files from over 100 federal agencies in all three branches of the government. Copies of electronic records files in NARA are available for a cost recovery fee on 9-track tape, 3480-class tape cartridge, or on CD-ROM. Further information about the holdings and services of the unit of NARA responsible for these activities, the Center for Electronic Records, can be found via the NARA homepage at <http://www.nara.gov/nara/electronic> [Hull, 1997, pp. 147, 160].

Statistics documenting the national economy are among those electronic records designated as "permanent" and worthy of long-term preservation in the nation's archives. The statistical files of the Department of Commerce, documenting general aspects of the Nation's economy, fall into three categories: 1) General Summary Statistics, 2) Detailed Statistics on Specific Sectors of the Economy, and 3) Trade Data. NARA also has in its holdings numerous electronic records files from other federal agencies documenting various aspects of the macroeconomy. These include electronic records from the Economic Research Service of the U.S. Department of Agriculture, Bureau of Labor Statistics of the Department of Labor, Bureau of Transportation Statistics of the Department of Transportation, and the Health Resources and Services Administration of the Department of Health and Human Services [National Archives and Records Administration, 1997b]. Researchers interested in records available from these other agencies should contact NARA's Center for Electronic Records for further information.

General Summary Statistics

The Bureau of the Census has published for the last fifty years the County and City Data Book. The printed publications, and electronic versions of those publications, include summary statistics from historical economic censuses and surveys reported primarily at the county and city level. In NARA are the individual County and City Data Book files for 1952, 1956, 1962, 1967,

1972, 1977, and 1983, and Cumulative County and City Data Book files with data for Cities, 1944-1977 and Counties 1947-1977.

The County and City Data Book files contain a wealth of data on a variety of subjects. For example, the 1956 County and City Data Book contains statistics on area, population, dwelling units, telephones, electric bills, births, deaths, marriages, retail, wholesale, and service trades, business units, manufactures, agriculture, bank deposits, city finances, employment, school systems, hospitals, and climate. Geographic areas covered include counties, cities, standard metropolitan areas, smaller urban places, congressional districts, Census regions, Census divisions, and states [Documentation relating to the County and City Data Book, 1956]. The 1956 County and City Data Book also contains data on manufacturing establishments reported for the 1954 Census of Manufactures. These statistics include the total number of establishments, a breakdown of number of establishments by employment class, average annual employment and wages, annual average number of production workers, and wages, value added, and value of new capital expenditures. The files also include revised 1947 figures for average annual number of employees in manufacturing establishments and value added.

Finally, the 1956 County and City Data Book electronic records file also includes a breakout for 1954 of the number of manufacturing establishments with 20 or more employees by major industry group. There are a total of 20 major industry groups for manufacturing. Major industry groups provide one means of classifying establishments to produce summary statistics. For example, these groups include: Food and Kindred Products (Group 20); Furniture and Fixtures (Group 25); Chemicals and Products (Group 28); Primary Metals Products (Group 33); and Transportation Equipment (Group 37). These groups are reflective of a classification system, known as the Standard Industrial Classification (SIC) system, used until very recently to report economic statistics at a variety of levels of aggregation.

Detailed Statistics on Specific Sectors of the Economy

The Department of Commerce releases numerous series of electronic records files with data indexed by the SIC code, the statistical classification standard underlying all establishment-based Federal economic statistics classified by industry. The SIC is used to promote the comparability of establishment data describing various facets of the U.S. economy. The classification covers the entire field of economic activities and defines industries in accordance with the composition and structure of the economy.

The SIC separates economic activities into divisions (manufacturing, mining, retail trade, etc.), then into major industry groups (i.e. "two-digit"), somewhat more disaggregate industry groups (i.e. "three-digit"), and at the most disaggregated industry code level (i.e. "four-digit"). Table 1 provides an example of this layering of possible data for the first three industry groups in Food and Kindred Products (Major Industry Group 20) in the manufacturing division. Major Industry Group 20 is defined as including establishments

manufacturing or processing foods and beverages for human consumption, and certain related products, such as manufactured ice, chewing gum, vegetable and animal fats and oils, and prepared feeds for animals and fowls [Office of Management and Budget, 1987, p. 69]. Definitions of the more detailed three-digit and four-digit codes are available in the SIC manual.

Table 1: *Example of the Standard Industrial Classification Codes for the Manufacturing Division, Major Group 20: Food and Kindred Products*

Major Group 20: – Food And Kindred Products

Major Group Structure

Industry Group 201: Meat Products

2011 Meat Packing Plants

2013 Sausages And Other Prepared Meat Products

2015 Poultry Slaughtering And Processing

Industry Group 202: Dairy Products

2021 Creamery Butter

2022 Natural, Processed, And Imitation Cheese

2023 Dry, Condensed, And Evaporated Dairy Products

2024 Ice Cream And Frozen Desserts

2026 Fluid Milk

Industry Group 203: Canned, Frozen, And Preserved Fruits, Vegetables

2032 Canned Specialties

2033 Canned Fruits, Vegetables, Preserves, Jams, And Jellies

2034 Dried And Dehydrated Fruits, Vegetables, And Soup Mixes

2035 Pickled Fruits And Vegetables, Vegetable Sauces And Seasonings

2037 Frozen Fruits, Fruit Juices, And Vegetables

2038 Frozen Specialties, Not Elsewhere Classified

Source: Office of Management and Budget (1987), pp. 69, 74.

Beginning with the 1998 Economic Censuses, the SIC system is being replaced with the North American Industrial Classification System (NAICS) to promote interchange of economic statistics between the United States, Canada, and Mexico. Cross reference tables for the SIC and NAICS will be provided to enable researchers to conduct historical analyses of changes in industry over time.

Electronic records files in the Records of the Bureau of the Census containing statistical data indexed by SIC codes include County Business Patterns, 1974-1993, and the 1972 quinquennial Censuses of Manufactures, Merchandise Line Sales, Mineral Industries, Retail Trade, Selected Services, and Wholesale Trade. Electronic records files in the Records of the Bureau of Economic Analysis containing statistical data indexed by SIC codes include the Gross State Product by Industry, Master, Public File, 1963-1988, Input/Output Work Files, 1963-1977 Benchmarks, and the periodic releases of the Regional Economic Information System Time Series from 1988 and 1994. Therefore, present and future researchers interested in charting changes in industry employment, interindustry transactions, income, and earnings, all indexed by SIC code will find those data preserved at NARA.

Trade and Transportation Data

Numerous records in NARA, transferred from the Bureau of the Census, concern aspects of the foreign trade of the United States. These include U.S. Import (IA 245) and Export (EA 622) Annual Data, 1964-1995, and the Export Non Con Data Bank, 1981-1992 (EA 694 & 695) [Annual Trade Summaries Between the U.S. and U.S. Possessions]. Therefore, the history of U.S. foreign trade for a period of 32 years is currently documented in the electronic records holdings of NARA.

In general, annual import and export trade data are reported by commodity, country of origin or destination, and the weight and value of items imported or exported by vessel and air transportation. Export data also includes the district of exportation and quantity and value of exports by all methods of transportation. Import data include the districts of entry and unloading and the quantity and value of general imports and imports for immediate consumption. The Export Non Con Data Bank contains statistics similar to those reported in the export annual data, reporting shipments of merchandise between the U.S. and Puerto Rico and shipments from the U.S. to the Virgin Islands.

Figure 1 is a page from the technical documentation for the Annual Import Data Bank (IA 245) electronic records files for the years 1977-1983. This figure illustrates the type of information researchers need to interpret the contents of electronic records files. Technical documentation is necessary to understand and use electronic records files. Figure 1 is an example of a "record layout," which lists the various data elements found in each record and in what positions in the record those data elements can be found. To process these data, the researcher needs to instruct the computer, using some software package, on where to find any particular piece of information and how to interpret any particular coded field.

For example, the first field in each record is the "Commodities, TSUSA" code. This is a seven-digit code assigned to a specific commodity for the purpose of compiling aggregate statistics. Instead of including in the file a narrative description of any specific commodity, such as "Sausages And Other Prepared Meat Products," a numeric code is assigned to indicate that particular commodity. Therefore, a researcher using these data and interested in exports and imports of "Sausages And Other Prepared Meat Products" would need to know both where in the records the "Commodities, TSUSA" code appears and the seven-digit code used for that particular commodity. Without those two pieces of information, the records are unusable. Therefore, NARA is concerned not only for the long-term physical preservation of the electronic records files, but preservation of the technical documentation necessary to interpret the information in those records.

Figure 1: Example of a Record Layout for use with Electronic Records Files: the Annual Imports Data Bank (IA 245), 1977-1983

INPUT, OUTPUT, MASTER DEFINITION (Excluding Reports)							1. PAGE 1 of 2	
2. NAME ANNUAL IMPORT DATA BANK (IA 245) RECORD LAYOUT 17-B 1977-1983				3. TYPE OF RECORD ☒ INPUT ☐ OUTPUT ☐ MASTER		4. RECORD SIZE 300		5. DATE PREPARED 2/11/85
6. SYSTEM						7. PREPARED BY Charles E. Scheme1		

8. DEFINITION									
LINE NO.	DATA ELEMENT	FIELD LOCATION	CLASS A/N	SIGN (if applicable)	SIZE	TYPE OF DATA (T AND A/D)	REFERENCE		NOTE
							PAGE	LINE NO.	
a	b	c	d	e	f	g	h	i	j
1.	Commodities, TSUSA	1-7	N		7				
2.	Country	8-11	N		4				
3.	Country Sub-code	12	N		1				
4.	District of Entry	13-14	N		2				
5.	District of Unloading	15-16	N		2				
6.	Rate Provision Code	17-18	N		2				
7.	Type	19	N		1				
8.	Economic Class Code	20	N		1				
	Not Used	21-22	N		2				
9.	Year	23-24	N		2				
10.	Consumption - 1st unit of quantity	25-36	N		12				
11.	Consumption - customs value	37-48	N		12				
12.	General - 1st unit of quantity	49-60	N		12				
13.	General - Customs value	61-72	N		12				
14.	Vessel - Customs value	73-84	N		12				
15.	Vessel - Shipping weight	85-96	N		12				
16.	Air - Customs value	97-108	N		12				
17.	Air - Shipping weight	109-120	N		12				
18.	Consumption - FAS value	121-132	N		12				
19.	Consumption - CIF value	133-144	N		12				
20.	Consumption - Charges	145-156	N		12				
21.	General - FAS Value	157-168	N		12				

GENERAL SERVICES ADMINISTRATION GSA Form 2575B (7-70)

Source: Documentation relating to the Annual Imports Data Bank (IA 245), 1974-1984.

Conclusions

The electronic records holdings of NARA reflect not only the various missions of the creating agencies, but information collected by those agencies as documentation of the national experience. The permanently valuable electronic records of the Department of Commerce specifically outlined in this

paper document various aspects of the U.S. economy. General historical statistics at the county and city level for major industry groups, detailed statistics for industries, and foreign trade statistics are three general areas of interest.

Business historians work to document not only the historical development of individual businesses, but to also document the development of industries. Macroeconomic statistics are an important part of that documentation. They provide the context for historians to understand the growth and decline of industries and areas, the influence of foreign trade on that change, and how the economy functioned overall. The electronic records preserved in and available from NARA provide business historians with valuable contextual information to understand the growth and change of individual businesses and industries. They are available now and will remain so long into the foreseeable future.

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