

This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

Volume Title: The Output of Manufacturing Industries, 1899-1937

Volume Author/Editor: Solomon Fabricant, assisted by Julius Shiskin

Volume Publisher: NBER

Volume ISBN: 0-87014-038-8

Volume URL: <http://www.nber.org/books/fabr40-1>

Publication Date: 1940

Chapter Title: The Output of Individual Manufacturing Industries:
Printing and Publishing

Chapter Author: Solomon Fabricant

Chapter URL: <http://www.nber.org/chapters/c6415>

Chapter pages in book: (p. 213 - 218)

Printing and Publishing

THE printing and publishing group includes establishments engaged in printing, in publishing, in printing and publishing, and in allied activities such as bookbinding and engraving. In terms of value added, the group is much more important than paper products, and in this respect compares favorably with most other manufacturing groups as well. In 1937 the relative contribution of the printing and publishing group to total value added was exceeded only by foods, textiles, iron and steel products, machinery, and transportation equipment.

TRENDS IN THE PHYSICAL OUTPUT OF THE PRINTING AND PUBLISHING INDUSTRIES

The Group Total. A reasonably adequate measure of the physical output of the printing and publishing industries may be obtained only by recourse to data on paper consumption. Since these data relate to paper consumption in all printing and publishing industries combined, it is impossible to determine from them the trends in the physical output of the individual industries included in the group.¹ We have therefore regarded the available figures on paper consumption as rough indicators of change in the physical output of

¹The volume of paper consumption can be broken down by types of paper—newsprint, book paper, and fine paper. Each of these would seem to relate to a different kind of printing. In fact, however, a considerable volume of newsprint is consumed in the job printing of catalogues and circulars; and a large amount of book paper is used in magazine printing.

TABLE 37

PRINTING AND PUBLISHING

Physical Output: Index and Percentage Changes^a

<i>Printing and Publishing, Total^b</i>	
YEAR	INDEX OF PHYSICAL OUTPUT (1929:100)
1899	17
1904	26
1909	36
1914	47
1919	54
1921	52
1923	73
1925	82
1927	90
1929	100
1931	84
1933	72
1935	87
1937	102
PERIOD	NET PERCENTAGE CHANGE IN PHYSICAL OUTPUT
1899-1937	+494
1899-1909	+108
1909-1919	+52
1919-1929	+85
1929-1937	+2

^a The index has been constructed from basic data presented in Appendix B by methods described in the text.

The percentage changes are not always entirely consistent with the index given above because the changes were computed from the index in Appendix B, which is carried to one decimal place.

^b Indexes for individual industries are not available.

the entire printing and publishing group (Table 37 and Chart 15).²

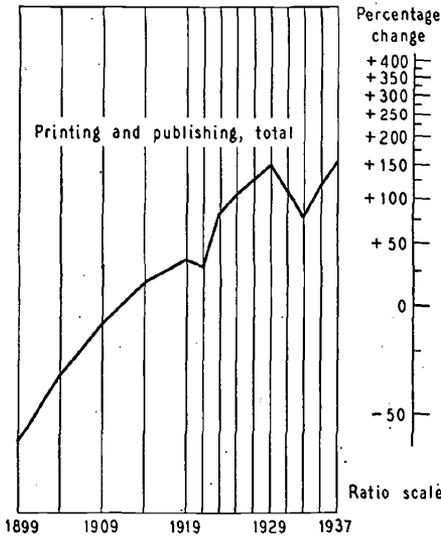
The physical output of the entire group was almost six times as large in 1937 as it had been in 1899. The greatest advance occurred in the first decade, when output more

² No attempt was made to weight one type of paper more than another. Any set of weights based on the meager materials available would be excessively arbitrary. Nor could changes in the relative space allotted to editorial and advertising matter be taken into account. Because of these shortcomings, the index is far from precise.

than doubled; in the period 1909–19 output rose 50 percent; in the next decade, 85 percent; and in 1929–37, barely 2 percent.

The growth over the long period surpassed the rise in total manufacturing and exceeded by far the increase in pop-

Chart 15
 PRINTING AND PUBLISHING
 Indexes of Physical Output



ulation. Only in the latest period, 1929–37, did the output of the group fail to rise more rapidly than either population or total manufacturing output.

Individual Industries. Some information on the trends in the output of individual printing and publishing industries is provided by the data on value added (Table 38). The two major printing industries, the first embracing book, music and job printing, and the second periodical printing, increased their pecuniary output by approximately the same percentage in the years 1899–1937, and at about the same

rate as the group as a whole. Bookbinding and blankbook manufacture declined about 25 percent in relation to the group. Steel, copper, wood and other engraving industries

TABLE 38

PRINTING AND PUBLISHING

Changes in Value Added, 1899-1937^a

Industry	Percentage Change in the Ratio of Value Added to Total Value Added by the Group	
	Percentage Change in Value Added	Percentage Change in the Ratio of Value Added to Total Value Added by the Group
Printing and publishing, book, music, and job	+570	+3
Printing and publishing, periodical	+538	-3
Bookbinding and blankbook making	+412	-25
Engraving, steel, copper, wood	+391	-29
Engraving, other	+438	-21
Photo-engraving, not elsewhere done	+1,751	+217
Sterotyping, not elsewhere done	+780	+41
TOTAL ^b	+552	0

^a Basic data are given in Appendix C.

^b Industries for which there are no adequate data include: engravers' materials; lithographing; printing materials, not elsewhere classified; and type founding. These industries are covered by the total.

fell. Photo-engraving and stereotyping rose.

Some indication of changes in the character of the products of the printing and publishing industries is provided by the following tabulation, available beginning with 1909:

	Value of Products (million dollars)			
	1909	1919	1929	1937
Newspapers				
Subscriptions and sales	84	193	276	288
Advertising	149	374	797	574
Periodicals other than newspapers				
Subscriptions and sales	51	85	184	172
Advertising	54	155	323	236
Books and pamphlets	63	133	199	168
Commercial printing ^a			738	555

^a Not given separately in 1909 and 1919. Excludes printing of periodicals, books, pamphlets, etc. for publication by others.

The most interesting development revealed by these data is the growing importance of advertising. In 1929 receipts from advertising constituted almost three quarters of the total revenue of newspapers, and two thirds of the revenue of other periodicals. Advertising receipts rose more rapidly than subscriptions and sales, from 1909 to 1929, and fell more rapidly from 1929 to 1937. Books and pamphlets lagged behind periodicals throughout the rise that characterized the industry in the period 1909-29.

CHANGES IN THE INDUSTRIAL PATTERN OF PRINTING AND PUBLISHING

No statistical data are available on the composition, or the changes in the composition, of the physical output of the printing and publishing group. A rough notion of the internal composition of the group's output may be obtained from the data on value added, which are brought together in Table 39.

The most important industry in the group, the periodical printing and publishing industry, accounted for over half the value added by the group. Next in order is the book and job printing and publishing industry, with a contribution averaging over 30 percent. Together, these industries were responsible for about 85 percent of the pecuniary output of the entire group. This percentage remained stable throughout the 38 years from 1899 to 1937. The other industries in the group are all small, and therefore no significant changes occurred in their contributions to the group as a whole. Among the minor industries, photo-engraving achieved a noteworthy gain, raising its contribution from 1.2 to 3.6 percent of the value added by the entire group of printing and publishing industries.

TABLE 39

PRINTING AND PUBLISHING

Relative Contributions of Component Industries to the Value Added by the Entire Group^a.

Industry	Percentage Distribution				
	1899	1909	1919	1929	1937
Printing and publishing, book and job	27.6	31.2	32.7	30.4	29.1
Printing and publishing, music	0.5	0.7	0.9	0.5	
Printing and publishing, periodical	56.9	54.8	52.2	55.6	55.5
Bookbinding and blankbook making	4.6	3.8	4.0	3.2	3.7
Engravers' materials	*	0.1	0.1	0.1	^b
Engraving, steel and copper	1.4	1.4	1.6	1.6	1.2
Engraving, wood	0.2	0.1	0.1	*	
Engraving, other	0.5	0.4	0.4	0.4	0.3
Lithographing	5.1	4.2	4.2	3.7	5.1 ^e
Photo-engraving, n.e.d. ^d	1.2	1.8	2.3	3.0	3.6
Printing materials, n.e.c. ^e	0.2	0.2	0.3	0.3	^b
Type founding	0.7	0.3	0.1	0.1	^b
Stereotyping, n.e.d. ^d	1.0	0.9	1.1	1.3	1.5
TOTAL ^f	100.0	100.0	100.0	100.0	100.0

* Less than half of one percent.

^a Basic data are given in Appendix C.^b Included in foundry and machine-shop products (classified in the machinery group).^c Includes some establishments formerly classified in labels and tags (paper products group).^d N.e.d. denotes not elsewhere done.^e N.e.c. denotes not elsewhere classified.^f The columns do not add up to 100.0 in every instance because they contain rounded percentages.