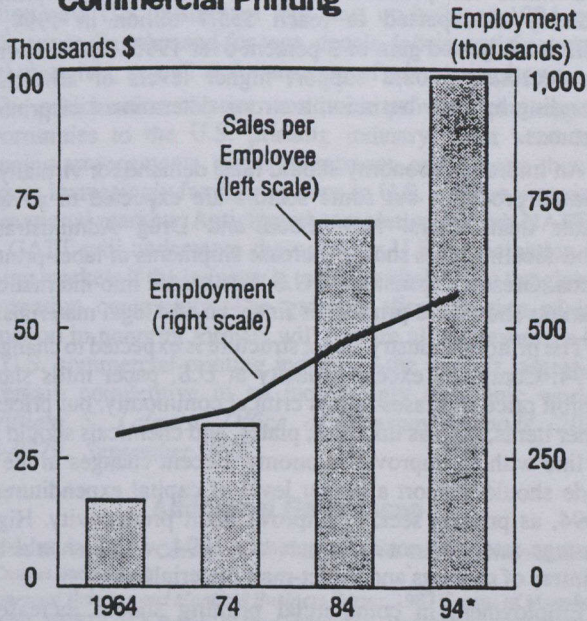


Figure 24-3
Productivity Gains In Commercial Printing



* Estimate by International Trade Administration.

SOURCE: U.S. Department of Commerce, Bureau of the Census.

out of every five employees is represented by organized labor. Printing managers are seeking persons with broader skills, but to date have had limited success in attracting qualified candidates from the nation's vocational schools.

Growth in U.S. demand for non-print media, including electronic databases, CD-ROM disks, and audio and video cassettes, influences the capital investment decisions of U.S. printers. Printed products designed for mass audiences, such as catalogs, directories, and direct mail, are increasingly replaced by products targeted to less populous markets. This requires printing machinery and equipment with efficient, high-volume output levels, yet with minimal paper waste and short turnaround intervals between jobs. Capital expenditure levels increased in 1993 to an estimated \$2.2 billion, slightly higher than the recessionary level of 1991-92.

Diversity of Printed Products and Markets

The commercial printing industry uses a variety of processes—lithography (offset), letterpress, gravure, flexography, and screen printing—to reach local, regional, national, and international markets. Product shipments of the nation's 37,000 printers totaled an estimated \$52.5 billion in 1993, a 2 percent increase over 1992 in constant dollars. Printing by the lithographic method is by far the dominant process, accounting for 79 percent of the industry's shipments. Most U.S. printing establishments are small (80 percent have fewer than 20 employees) and serve primarily local or regional markets.

Demand for printed products is a function of general economic activity, personal consumption expenditures, business formations and transactions, and advertising expenditures. Print advertising takes many forms—direct mail, posters,

newspaper inserts, shopping news—but combined shipments of \$21 billion in 1993 represented 40 percent of the total U.S. market for printed products. This product sector experienced virtually no growth over the 1991-92 recession, but rose by 2 percent in 1993 as the economy recovered. More than 90 percent of print advertising materials are manufactured by the lithographic process.

Revenues from magazine printing totaled \$7.4 billion in 1993, an increase of slightly less than 2 percent from 1992. A downturn in the number of advertising pages placed in U.S. magazines over the 1991-92 period was matched by a decline in printing receipts from this sector. Magazine printing accounts for 14 percent of total printing shipments, with all but the largest publications printed by the lithographic process. Gravure printers, with presses geared to print runs exceeding 1 million copies per issue, have contracts to print virtually all U.S. comic books and about one-half of the 20 largest U.S. consumer publications.

Shipments of printed catalogs and directories were marginally affected by the 1991-92 recession, but surged 3 percent in 1993 to \$6.3 billion. The gradual disappearance of large, mass-audience catalogs has not had a significantly adverse effect. Such publications have been replaced by multi-mailings of more sharply focused catalogs, targeted to receptive, niche markets. Catalog and directory printing represents 12 percent of total industry shipments, with all but the largest publications printed by lithography.

Markets for label and wrapper printing have surged over the past decade, primarily the result of U.S. business demand for printed bar codes to control inventory. Shipments of label and wrapper printing in 1993 reached \$4.2 billion, a gain of 3 percent over 1992. This sector is dominated by the production of pressure-sensitive labels printed by flexography. Label and wrapper printing proved generally resistant to the recession and accounted for 8 percent of total printing shipments in 1993.

Printers of financial and legal documents were battered by the stock market downturn in 1987 and the paucity of debt/equity offerings in 1991, but shipments in 1993 totaled \$2.1 billion, an increase of more than 3 percent from 1992. This sector caters to banks, insurance firms, and brokerage houses, with receipts tied primarily to stock market activity. Significant consolidation of financial and legal printing firms occurred in the late 1980's, with profitability in the 1990's dependent on serving national and international clients from geographically dispersed printing locations.

A diversity of printed products is included in the category "all other printing," such as art prints, maps, lottery tickets, decals,

Table 2: Top 10 U.S. Commercial Printers, 1992

Company	Sales (million \$)
R.R. Donnelly and Sons Company	\$3,650
Deluxe Corporation	1,375
Quebecor Printing (USA) Corporation	925
World Color Press, Inc.	838
Ringier America, Inc.	610
Banta Corporation	595
Quad/Graphics, Inc.	565
Treasure Chest Advertising Company, Inc.	536
Sullivan Graphics, Inc.	500
Valassis Communications, Inc.	488

SOURCE: Trade & Technology Press.