

ECONOMIC PERSPECTIVE

Discussion of Recent Economic Developments
Publication 329

Volume XVIII, Number 2
May 2012

This issue of *Economic Perspective* examines taxable purchase by businesses. While households pay the majority of sales and use taxes, businesses pay a large share on the goods they purchase for their own use. In this issue we will consider what California businesses buy.

Taxable Purchases by Businesses Large, Technology-Driven

Business purchases are hard to estimate precisely, but our research indicates that they pay close to one-third of all sales and use tax.

- U.S. businesses spent about \$1.1 trillion on equipment and software in 2011, about seven percent of gross domestic product.
- Information processing accounted for 54 percent of U.S. equipment and software in 2010, over twice as much as any other major type of spending.
- Software spending accounted for 25 percent of all equipment and software spending by U.S. businesses in 2010.
- Manufacturing spent more on equipment and software than any other industry, accounting for about 20 percent of all equipment and software spending.
- Utilities spent more than any other industry on equipment and software per employee in 2010, \$93,225.

Business Share of Sales and Use Tax

California business purchases of taxable goods are difficult, if not impossible, to accurately estimate. For example, suppose an office supply store sells a computer. The purchaser may be either an individual or a business. Board of Equalization sales and use tax reporting forms do not specify a breakout of the number of computers sold by retailers to businesses and the number sold to individuals. Consequently, we do not know proportions of business and personal purchases made from retailers who may sell products to both groups.

An approximation of sales and use tax paid by businesses is found in the Board of Equalization's Taxable Sales in California (Sales and Use Tax) report. The reports show taxable sales for two categories: (1) Retail and Food Services and (2) All Other Outlets. Sales made by All Other Outlets are likely made to businesses. In 2010 such nonretail sales accounted for about 32 percent of all taxable sales. However, businesses may make additional purchases from retail stores, which are impossible for us to accurately estimate.

What do Businesses Buy?

Available data indicate that the overwhelming majority of business purchases are for structures, equipment, or software. Structures and related materials that become structural components are generally purchased indirectly through the construction industry. However, equipment and software are purchased from many different industries, including retailers. This article will focus on equipment and software because the federal government statistical agencies report more information about these items.

Equipment and Software Spending

The U.S. Bureau of Economic Analysis (BEA) tabulates data on equipment and software (combined as a single category) as a part of their gross domestic product data collection efforts. In 2011, businesses spent about \$1.1 trillion on equipment and software, a little over seven percent of gross domestic product.

The BEA also provides data on kinds of equipment U.S. businesses purchase. The largest broad category of equipment spending reported by the BEA is information processing equipment. Such spending includes computers and related office equipment such as printers and copiers, software, communications equipment, and medical equipment.

Board Members

Betty T. Yee
First District
San Francisco

Sen. George Runner (Ret.)
Second District
Lancaster

Michelle Steel
Third District
Rolling Hills Estates

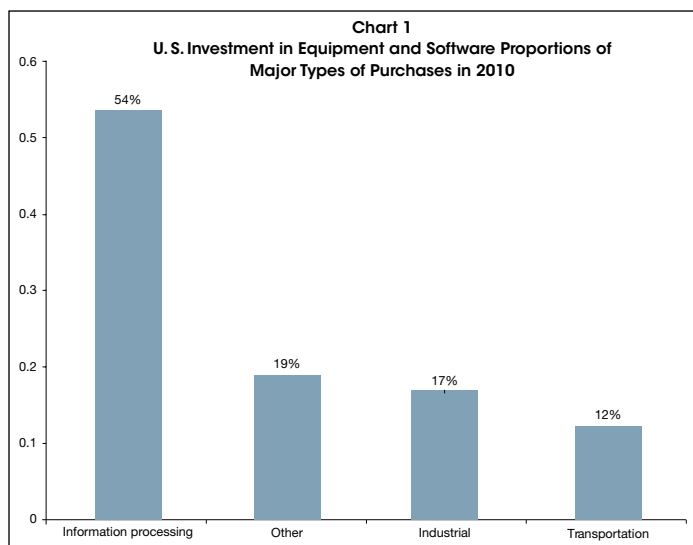
Jerome E. Horton
Fourth District
Los Angeles

John Chiang
State Controller

Kristine Cazadd
Executive Director

Information Processing a Large Share

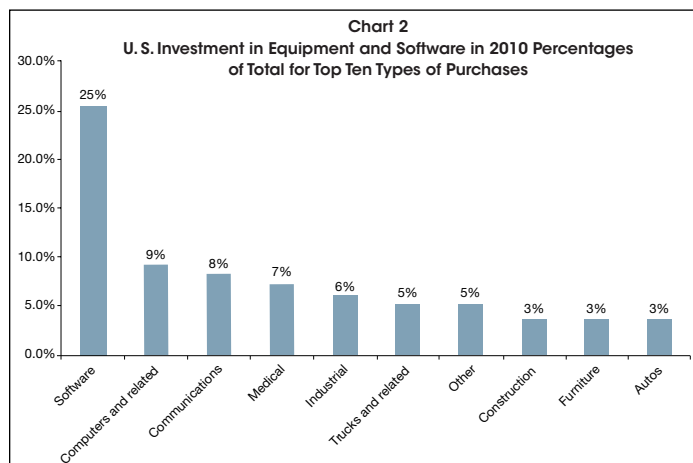
As shown in Chart 1, information processing accounted for 54 percent of all equipment and software spending in 2010, by far the largest category. The rest of business equipment and software spending was split among other equipment, industrial equipment, and transportation equipment. Other equipment includes such dissimilar items as furniture, machinery, tractors, and electrical equipment.



The BEA equipment and software data include detailed spending by type of product. In 2010, the top ten types of equipment and software products accounted for 76 percent of all equipment and software spending.

Software Largest Spending Category

As shown in Chart 2, in 2010 software was, by a large margin, the most prevalent type of spending. Software accounted for 25 percent of all equipment and software spending by businesses in 2010. Businesses spent about \$258 billion on software in 2010, close to their 2008 spending.



Components of Software Spending

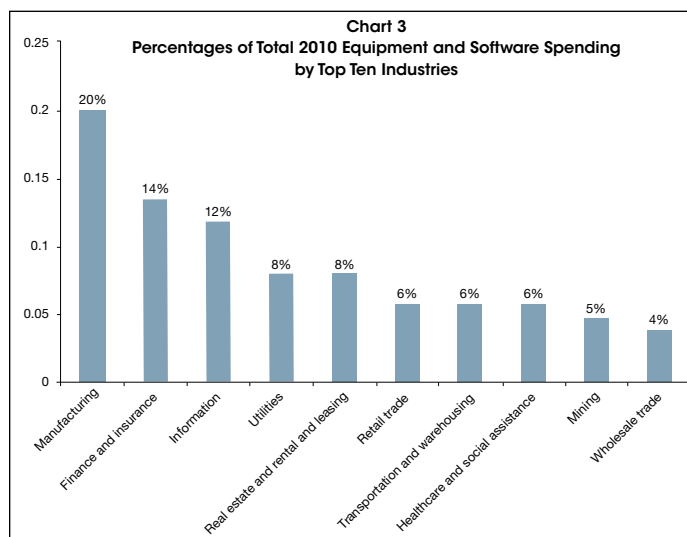
BEA data also show that large portions of software are not purchased in market transactions. According to BEA data, in 2010 about 37 percent of business software was “own account” software, that is, the businesses created the software internally. As for the remaining software (which was purchased), the BEA data also show that 28 percent of business software was prepackaged and 34 percent was custom.

Which Industries Buy The Most Equipment and Software?

The U.S. Census Bureau surveys businesses annually, and provides data on equipment and software purchases by major industries. The Census Bureau reports equipment and software spending by industry using the North American Industry Classification System (NAICS). These data indicate that the top ten industries accounted for 86 percent of equipment and software spending in 2010.

Manufacturing Largest Purchasing Industry

As shown in Chart 3, manufacturing had the largest share of equipment and software spending in 2010, accounting for 20 percent of the total. The next largest industries were finance and insurance (14 percent) and information (12 percent).



Spending per Employee

Another way to view equipment and software spending is to calculate it per employee for each industry. Table 1 shows 2010 equipment and software spending per employee by industry, sorted from the highest to lowest industries.

Utilities Spend the Most per Employee

As shown in Table 1, there is a great deal of variation among industries in equipment and software spending per employee. In 2010 equipment and software spending averaged \$5,968 per employee. Utilities spent the most per employee, \$93,225. Accommodations and food services were at the other end of the spectrum, averaging equipment and software spending of \$914 per employee.

Many Industries Well Above Average per Employee

In addition to utilities, many other industries spent well above the average per employee on equipment and software. For example, the information industry spent \$27,895 per employee, over four times the average for all industries. The real estate and rental and leasing industry spent \$25,235 per employee. The finance and insurance industry spent \$11,338 per employee.

Table 1
2010 U.S. Equipment Spending per Employee, Sorted by Industry

Utilities	\$93,225
Mining	\$42,945
Information	\$27,895
Real estate and rental and leasing	\$25,235
Finance and insurance	\$11,338
Manufacturing	\$11,108
Transportation and warehousing	\$8,524
<i>Average for all industries</i>	\$5,968
Wholesale trade	\$4,457
Professional, scientific, and technical services	\$3,162
Construction	\$2,755
Retail trade	\$2,573
Arts, entertainment, and recreation	\$2,310
Health care and social assistance	\$2,171
Educational services	\$1,808
Administrative and support and waste management	\$1,807
Management of companies and enterprises	\$1,606
Other services (except public administration)	\$1,370
Accommodation and food services	\$914

Contact Us

Please contact us if you would like to be added to our mailing list, or have questions or comments.

Joe Fitz, Chief Economist, MIC:67
State Board of Equalization
PO Box 942879
Sacramento, CA 94279-0067
916-323-3802
research@boe.ca.gov

Current and past issues of this publication are on our website:

www.boe.ca.gov/news/epcont.htm

Taxpayers' Rights Advocate: 888-324-2798

To contact your Board Member, see

www.boe.ca.gov/members/board.htm

Online Resources

For more information about topics covered in this publication and previous issues, please visit any of the following websites:

California Department of Finance

www.dof.ca.gov

California Employment Development Department (EDD),
Labor Market Conditions in California

www.labormarketinfo.edd.ca.gov

Federal Reserve Bank of Philadelphia, *Survey of Professional Forecasters*

www.phil.frb.org/econ/spf/index.html

National Association for Business Economists

www.nabe.com

U.S. Bureau of Economic Analysis

www.bea.gov

U.S. Bureau of Labor Statistics

www.bls.gov/cpi

U.S. Census Bureau

www.census.gov