Predicting the Markets: Chapter 3 Charts: Predicting Technology & Productivity

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thinking outside the box
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Predicting Technology

Figure 1.

S&P 500 INFORMATION TECHNOLOGY: EARNINGS & MARKET-CAP SHARES

(Percent)

- Capitalization Share (26.9)
- Earnings Share* (24.3)

* Using S&P 500 12-month forward consensus expected operating earnings.
Source: Thomson Reuters I/B/E/S.

Figure 2.

FORWARD P/E RATIOS FOR S&P 500*

- S&P 500 (21.9)
- S&P 500 Technology (24.2)

* S&P 500 stock price index divided by S&P 500 12-month forward consensus expected operating earnings per share.
Source: Thomson Reuters I/B/E/S.
Figure 3.

IT EQUIPMENT, SOFTWARE, AND RESEARCH & DEVELOPMENT SPENDING
(as a percent of total capital spending in nominal GDP)

Percent of Total Capital Spending
- IT Equipment, Software, and R&D
- IT Equipment & Software

Source: Bureau of Economic Analysis.

Figure 4.

IT CAPITAL SPENDING IMPLICIT PRICE DEFLATORS
(2012=100, ratio scale)

Implicit Price Deflators
- Information Processing Equipment
- Software

Source: Bureau of Economic Analysis.
Figure 5.
PRIVATE NONRESIDENTIAL FIXED INVESTMENT IN REAL GDP: IT EQUIPMENT & SOFTWARE
(billion 2012 dollars, saar, ratio scale)

Information Processing Equipment
Plus Software

Source: Bureau of Economic Analysis.

Figure 6.
PRIVATE NONRESIDENTIAL FIXED INVESTMENT IN REAL GDP: IT EQUIPMENT & SOFTWARE
(billion 2012 dollars, saar, ratio scale)

Software
Information Processing Equipment

Source: Bureau of Economic Analysis.
Figure 7.
PRIVATE NONRESIDENTIAL FIXED INVESTMENT IN REAL GDP: COMPUTERS & PERIPHERAL EQUIPMENT
(billion dollars, saar, ratio scale)
Computers & Peripheral Equipment
Source: Bureau of Economic Analysis.

Figure 8.
PRIVATE NONRESIDENTIAL FIXED INVESTMENT IN REAL GDP: OTHER INFORMATION PROCESSING EQUIPMENT
(billion 2012 dollars, saar, ratio scale)
Other Information Processing Equipment
Source: Bureau of Economic Analysis.
Figure 9.

RETAIL SALES: IN-STORE GAFO* & ONLINE
(billion dollars, saar)

* GAFO (general merchandise, apparel and accessories, furniture, and other sales) includes retailers that specialize in department-store types of merchandise such as furniture & home furnishings, electronics & appliances, clothing & accessories, sporting goods, hobby, book, and music, general merchandise, office supply, stationery, and gift stores.

** Electronic shopping and mail order houses.

Source: Census Bureau and Haver Analytics.

Figure 10.

RETAIL SALES: ONLINE SHOPPING
(as a percent of In-Store GAFO* + Online**)
Figure 11.

PERSONAL CONSUMPTION EXPENDITURES IN NOMINAL GDP
(billion dollars, saar, ratio scale)

Computers & Peripheral Equipment Plus
Computer Software & Accessories

Source: Bureau of Economic Analysis.

Figure 12.

PERSONAL CONSUMPTION EXPENDITURES IN NOMINAL GDP
(billion dollars, saar, ratio scale)

Nominal Consumer Spending on IT

Source: Bureau of Economic Analysis.
Figure 13.

PERSONAL CONSUMPTION EXPENDITURES IN REAL GDP
(billion 2012 dollars, saar, ratio scale)

Computers & Peripheral Equipment Plus
Computer Software & Accessories

Source: Bureau of Economic Analysis.

Figure 14.

PERSONAL CONSUMPTION EXPENDITURES IN REAL GDP
(billion 2012 dollars, saar, ratio scale)

Real Consumer Spending on IT

- Computers & Peripheral Equipment
- Computer Software & Accessories

Source: Bureau of Economic Analysis.
Figure 15.
COMPUTERS AND PERIPHERAL EQUIPMENT IN NOMINAL GDP
(billion dollars, saar, ratio scale)

Source: Bureau of Economic Analysis.

Figure 16.
COMPUTERS AND PERIPHERAL EQUIPMENT IN REAL GDP
(billion 2012 dollars, saar, ratio scale)

Source: Bureau of Economic Analysis.
Figure 17.
SOFTWARE IN NOMINAL GDP
(billion dollars, saar, ratio scale)

Source: Bureau of Economic Analysis.

Figure 18.
SOFTWARE IN REAL GDP
(billion 2012 dollars, saar, ratio scale)

Source: Bureau of Economic Analysis.
**Figure 19.**

AGE COMPOSITION OF LABOR FORCE* (percent)

Percent of Labor Force
- 35-65 Years & Older
- 16-34 Year Olds

* Oldest and youngest Baby Boomers turned 16 in 1962 and 1980, respectively.

**Figure 20.**

NONFARM BUSINESS PRODUCTIVITY & REAL HOURLY COMPENSATION (20-quarter percent change, annual rate)

Productivity
Real Hourly Compensation (using NFB deflator)

PRODUCTIVITY MEASURES
(20-quarter percent change, annual rate)

Productivity Cycle
- Nonfarm Business
- Manufacturing
- Nonfinancial Corporations

Note: Shaded areas denote recessions according to the National Bureau of Economic Research.

PRODUCTIVITY: MANUFACTURING

Manufacturing Productivity Proxy*
(60-month percent change, annual rate)

Note: Shaded areas denote recessions according to the National Bureau of Economic Research.
Source: Bureau of Labor Statistics and Federal Reserve Board.

* Manufacturing industrial production divided by payroll employment in manufacturing.
Figure 23.

MANUFACTURING PRODUCTION & CAPACITY
(2012=100, ratio scale)

Note: C = China joined WTO on December 11, 2001. Shaded areas denote recessions according to the National Bureau of Economic Research.
Source: Federal Reserve Board.

Figure 24.

MANUFACTURING PRODUCTIVITY & CAPACITY
(ratio scale)

Note: C = China joined WTO on December 11, 2001. Shaded areas denote recessions according to the National Bureau of Economic Research.
Source: Bureau of Labor Statistics and Federal Reserve Board.
Figure 25.

C = China joined WTO on December 11, 2001.
Note: Shaded areas denote recessions according to the National Bureau of Economic Research.
Source: Federal Reserve Board.

Figure 26.

* Manufacturing industrial production divided by payroll employment in manufacturing.
Source: Federal Reserve Board and Bureau of Labor Statistics.
US CRUDE OIL FIELD PRODUCTION
(million barrels per day, weekly, nsa)

Source: US Department of Energy and Haver Analytics.

FARM & MANUFACTURING EMPLOYMENT SHARES

Figure 29.

SERVICE-PRODUCING PAYROLL EMPLOYMENT
(as a percent of civilian total nonfarm payrolls)


Figure 30.

PAYROLL EMPLOYMENT: INFORMATION INDUSTRIES*
(millions, sa)

* Publishing; Motion Picture & Sound Recording; Broadcast; Telecommunications; Data Processing, Hosting, and Related Services, Computer &
Electronic Products Manufacturing, and Other Information Services.

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