## Average increase in U.S. pharma and biotech firms' earnings per share in 2012:

4.3\%

## Percent increase in chemical company capital spending in 2012 in U.S.:

in Europe:

## Percent increase in chemical company R\&D spending in 2012 in U.S.:

 4.8 in Europe: 7.6Nom
1.7
U.S. chemical shipments shrank slightly in 2012 ...

... while prices remained stable
Producer price index, 2002 $=100$


SOURCE: C\&EN calculations using Department of Commerce data

# NO GROWTH, NO PROBLEM 

Even in debt-plagued Europe, chemical firms kept a firm grip on their FINANCES

THE ABILITY OF CHEMICAL firms to persevere in the face of tepid economic growth was sorely tested in 2012, when shipments of chemicals slowed in the U.S. and Europe. Still, many companies were able to increase earnings compared with 2011. Moreover, most firms strengthened their balance sheets coming out of the recession and have used that money to invest in plants and equipment, a signal that they expect demand growth to return in the future.

Weak demand was most evident in the U.S. After increasing by $9.1 \%$ in 2011, chemical shipments declined by $1.5 \%$ in 2012. The two areas of growth were agricultural chemicals, thanks to high commodity prices, and coatings and adhesives, because of healthy demand for automobiles and other durable goods. In

Canada, a strong farm economy boosted chemical shipments in the agriculture sector by $4.1 \%$, but for all other sectors shipments were lower than in 2011.

In contrast, shipments of chemicals in Europe grew by 3.6\%, close to the $4.0 \%$ average for the decade. Individual country data show a wide range of growth rates, from a low $0.9 \%$ for Germany to $10.5 \%$ for Poland. Italy's chemical shipments shrank by $4.1 \%$ for the year.

One reason that the sluggish economy did not take a bigger bite out of chemical company earnings last year was that prices remained stable. In the U.S., the overall price index for chemicals increased $0.6 \%$. Paint materials posted a significant $13.2 \%$ increase compared with the previous year. That helped about half of U.S. chemical firms expand sales and earnings in 2012.

Average change in U.S. chemical firms' earnings per share in 2012:

## -2.7\%

Of chemical firms tracked by C\&EN, NewMarket paid the
U.S.'s highest dividend in 2012 at
$\$ 28.00$
Givaudan paid Europe's highest dividend in 2012 at


Change in pharma R\&D spending in 2012:
-2.4\%

Among them, Axiall (formerly Georgia Gulf), Cabot, Cytec Industries, and Westlake Chemical also saw profit margins increase significantly during the year.

Despite the often-discussed sovereign debt problems in Europe, chemical sales and earnings in the region held up remarkably well in 2012. Of the firms tracked by C\&EN, only AkzoNobel posted a loss for the year. Earnings grew at Air Liquide, Arkema, Clariant, Lanxess, Linde, and Syngenta. Some growth came through ac-quisitions-particularly at Solvay, which bought Rhodia in 2011-and overseas operations.

European chemical firms also pumped funds into their facilities and equipment. Combined, they boosted capital investments by more than $50 \%$, or a whopping $\$ 7.0$ billion, in 2012, significantly more than the previous year's $\$ 2.6$ billion increase. U.S. companies tracked by C\&EN increased capital spending by only $6.5 \%$, or $\$ 627$ million.

In Japan, Mitsui Chemicals, Sumitomo Chemical, and Teijin posted losses for the year, while most other firms had stable or increased earnings. The firms tracked by C\&EN increased capital spending by just over $4 \%$, less than their counterparts in Europe and the U.S.

## U.S. SHIPMENTS

Overall chemical shipments were down slightly, but shipments of agricultural and coatings chemicals increased

| \$BILLIONS | 2002 | 2010 | 2011 | 2012 | ANN |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 201112 | -12 |
| All chemicals | \$462.5 | \$701.2 | \$764.8 | \$753.0 | -1.5\% | 5.0\% |
| Chemicals, excluding pharmaceuticals | 319.5 | 515.5 | 585.1 | 585.7 | 0.1 | 6.2 |
| Agricultural chemicals | 19.3 | 31.2 | 35.3 | 37.9 | 7.3 | 7.0 |
| Coatings \& adhesives | 27.4 | 31.3 | 32.3 | 33.9 | 5.0 | 2.2 |
| All other chemicals | 272.8 | 453.0 | 517.5 | 513.9 | -0.7 | 6.5 |
| Pharmaceuticals | 143.0 | 185.8 | 179.7 | 167.3 | 6.9 | 1.6 |

SOURCE: C\&EN calculations using Department of Commerce data

| U.S. PRICE INDEX <br> Prices for paint soared, but generally, chemical product prices grew only slightly |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PRODUCER PRICE INDEX, $2002=100$ | 2002 | 2010 | 2011 | 2012 | annual | CHANGE 2002-12 |
| All commodities | 100.0 | 140.9 | 153.3 | 154.2 | 0.6\% | 4.4\% |
| Industrial commodities | 100.0 | 128.3 | 134.8 | 135.9 | 0.8 | 3.1 |
| Finished goods | 100.0 | 129.4 | 137.1 | 139.8 | 1.9 | 3.4 |
| Chemicals \& allied products | 100.0 | 162.3 | 181.1 | 182.2 | 0.6 | 6.2 |
| Industrial chemicals | 100.0 | 211.5 | 255.1 | 241.4 | -5.4 | 9.2 |
| Prepared paint | 100.0 | 142.1 | 148.7 | 162.0 | 9.0 | 4.9 |
| Paint materials | 100.0 | 134.8 | 157.4 | 178.1 | 13.2 | 5.9 |
| Drugs \& pharmaceuticals | 100.0 | 144.2 | 149.8 | 157.1 | 4.9 | 4.6 |
| Fats \& oils, inedible | 100.0 | 270.5 | 381.9 | 373.5 | 2.2 | 14.1 |
| Agricultural chemicals | 100.0 | 164.3 | 198.5 | 201.3 | 1.4 | 7.2 |
| Plastic resin \& materials | 100.0 | 160.7 | 175.7 | 180.6 | 2.8 | 6.1 |
| Other chemicals \& products | 100.0 | 125.7 | 131.4 | 135.1 | 2.9 | 3.1 |

Chemical shipments \% change in Canada:
-0.8
Pharmaceutical shipments \% change in Canada:
7.1

Value of European
chemical shipments
in 2012:

## $\$ 862.5$

billion
Value of U.S. chemical shipments in 2012:
> billion

Of chemical firms tracked by C\&EN,

## 12 of 25

U.S. companies increased earnings in 2012

## 9 of 16

European companies increased earnings in 2012

## 5 of 12

Japanese companies increased earnings in 2012

Percent increase in shipments of U.S. agricultural chemicals:
7.3

Percent increase in shipments of Canadian agricultural chemicals:
4.1

| CANADA SHIPMENTS <br> The Canadian chemical and pharmaceutical sectors both slipped in 2012 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | anNual | CHANGE |
| \$ BILLIONS | 2002 | 2010 | 2011 | 2012 | 2011-12 | 2002-12 |
| All chemicals | \$40.5 | \$44.4 | \$46.8 | \$45.9 | -1.9\% | 1.3\% |
| Chemicals, excluding pharmaceuticals | 32.9 | 33.6 | 38.3 | 38.0 | -0.8 | 1.5 |
| Agricultural chemicals | 2.6 | 3.9 | 4.9 | 5.1 | 4.1 | 7.0 |
| Paints \& coatings | 2.0 | 1.7 | 1.8 | 1.7 | -5.6 | -1.6 |
| All other chemicals | 28.3 | 28.0 | 31.6 | 31.2 | -1.3 | 1.0 |
| Pharmaceuticals | 7.6 | 10.8 | 8.5 | 7.9 | -7.1 | 0.4 |

NOTE: Monetary statistics for all years were converted at the 2012 average exchange rate of \$1.00 U.S. = \$0.9995 Canadian.
SOURCE: C\&EN calculations using Statistics Canada data

EUROPE SHIPMENTS
The Netherlands and Poland enjoyed Europe's strongest growth

| \$ BILLIONS | 2002 | 2010 | 2011 | $2012{ }^{\text {a }}$ | ANNUAL CHANGE |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 2011-12 | 2002-12 |
| Europe | \$582.5 | \$751.0 | \$832.6 | \$862.5 | 3.6\% | 4.0\% |
| European Union ${ }^{\text {b }}$ | 533.9 | 635.9 | 695.3 | 714.4 | 2.7 | 3.0 |
| Germany | 142.1 | 192.1 | 205.3 | 207.1 | 0.9 | 3.8 |
| France | 88.4 | 96.0 | 104.0 | 106.0 | 1.9 | 1.8 |
| Netherlands | 41.5 | 55.0 | 62.5 | 69.0 | 10.4 | 5.2 |
| Italy | 60.9 | 62.2 | 66.5 | 63.8 | -4.1 | 0.5 |
| U.K. | 67.9 | 54.0 | 60.0 | 63.1 | 5.2 | -0.7 |
| Spain | 35.6 | 45.2 | 49.3 | 50.7 | 2.8 | 3.6 |
| Belgium | 32.6 | 40.3 | 44.6 | 46.1 | 3.4 | 3.5 |
| Poland | 9.8 | 15.8 | 18.1 | 20.0 | 10.5 | 7.4 |
| Sweden | 9.4 | 10.5 | 10.9 | 11.6 | 6.4 | 2.1 |
| Ireland | 9.3 | 3.7 | 4.5 | 4.7 | 4.4 | -6.6 |

NOTE: Monetary statistics for all years were converted at the 2012 average exchange rate of \$1.00 U.S. = 0.7777 euros. a Data are provisional and could differ from final figures, scheduled to be released during the second half of the year. $\mathbf{b}$ Total for 27 countries that make up the EU. SOURCE: CEFIC

## EXPLANATION

## Column Headings In Tables Of Company Results

Year. Data are for the calendar year unless otherwise indicated. Data for earlier years are not restated to reflect subsequent acquisitions or divestitures.

Net sales. Gross sales less discounts, allowances, and returns; generally excludes excise taxes and other operating income or revenue.

Earnings. Net sales and other income less operating costs, nonoperating charges, depreciation, depletion, interest expense, deferred charges, minority interest in income, and taxes. Nonrecurring or extraordinary credits and charges may be included.

Profit margin. Earnings divided by net sales, expressed as a percentage.

Total assets. Sum at year's end of current assets, investments, prepaid expenses, net plant and equipment, and other tangible assets. Excludes insofar as possible intangible assets, including goodwill, value of patents, and the like.

Stockholders' equity. Equity at year's end of preferred and common stockholders, including value of capital stock, capital and earned surplus, and surplus reserves, as well as contingency and miscellaneous reserves for which no definite purpose is stated. Intangible
assets are deducted insofar as possible.

Return on equity. The amount of net income returned as a percentage of shareholders' equity.

Capital spending, \% of sales. The percentage of sales revenues spent on long-term assets such as property, plant, and equipment.

R\&D spending, \% of sales. The percentage of sales revenues spent on research.

Earnings per share. Earnings less preferred dividends, divided by the number of shares of common stock outstanding.

Dividend, \$ per share. Cash dividends paid (or declared) on each share of common stock; excludes the value of stock dividends and adjusted for stock splits.

## Dividend yield, \% of price.

Dividend per share divided by the average of the high and low prices of the common stock during the year.

Stock price range. High and low market prices of common stock during the year, adjusted for stock splits but not stock dividends.

## Price/earnings ratio.

Average of the high and low prices of the common stock during the year divided by earnings per share.

## U.S. COMPANY RESULTS

Only half of U.S. chemical and drug firms tracked by C\&EN saw profits grow in 2012

(Monetary figures, except per-share amounts, are in millions of dollars)

## CHEMICALS

## AIR PRODUCTS \& CHEMICALS ${ }^{\text {a }}$

|  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| AIR PRODUCTS \& CHEMICALS | $\$ 9,612$ | $\$ 999$ | $10.4 \%$ | $\$ 14,582$ | $\$ 4,263$ | $23.4 \%$ | $15.8 \%$ | $1.3 \%$ | $\$ 5.53$ | $\$ 2.50$ | $3.0 \%$ |
| 2011 | 10,082 | 1,215 | 12.1 | 13,139 | 4,786 | 25.4 | 13.4 | 1.2 | 5.75 | 2.23 | 2.6 |
| 2010 | 9,026 | 1,029 | 11.4 | 12,306 | 4,498 | 22.9 | 14.4 | 1.3 | 4.85 | 1.92 | 2.6 |
| 2009 | 8,256 | 640 | 7.8 | 11,850 | 3,616 | 17.7 | 14.3 | 1.4 | 3.01 | 1.79 | 2.9 |


| ALBEMARLE | $\$ 2,745$ | $\$ 312$ | $11.4 \%$ | $\$ 3,066$ | $\$ 1,561$ | $20.0 \%$ | $10.2 \%$ | $2.9 \%$ | $\$ 3.49$ | $\$ 0.80$ | $1.3 \%$ | $\$ 68.51$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2012 | 2,869 | 464 | 16.2 | 2,800 | 1,275 | 36.4 | 6.7 | 2.7 | 4.82 | 0.67 | 1.2 | 71.79 |
| 2011 | 2,363 | 337 | 14.3 | 2,661 | 1,069 | 31.5 | 3.2 | 2.5 | 3.54 | 0.56 | 17.2 | 57.34 |
| 2010 | 2,005 | 178 | 8.9 | 2,328 | 762 | 23.4 | 5.0 | 3.4 | 11.4 |  |  |  |
| 2009 |  |  |  |  |  |  |  |  |  | 1.95 | 0.50 | 1.9 |


| ASHLAND $^{\text {b }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2012 | $\$ 8,206$ | $\$ 38$ | $0.5 \%$ | $\$ 7,246$ | $-\$ 1,249$ | $3.0 \%$ | $3.6 \%$ | $1.7 \%$ | $\$ 0.33$ | $\$ 0.80$ | $1.3 \%$ | $\$ 78.27$ |
| 2011 | 6,502 | 56 | 0.9 | 7,541 | $-1,290$ | -4.3 | 3.1 | 1.4 | 5.28 | 0.65 | 1.2 | 68.34 |
| 2010 | 5,741 | 88 | 1.5 | 6,190 | 462 | 19.0 | 3.6 | 1.5 | 1.82 | 0.45 | 0.9 | 63.28 |
| 2009 | 5,220 | -240 | -4.6 | 6,206 | 183 | -131.1 | 3.3 | 1.8 | -3.60 | 0.30 | 1.2 | 44.6 |


| AXIALL $^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2012 | $\$ 3,326$ | $\$ 121$ | $3.6 \%$ | $\$ 1,541$ | $\$ 344$ | $35.2 \%$ | $2.4 \%$ | ne | $\$ 3.47$ | $\$ 0.24$ | $0.7 \%$ | $\$ 47.17$ | $\$ 20.24$ |
| 2011 | 3,223 | 58 | 1.8 | 1,384 | 228 | 25.4 | 2.1 | ne | 1.66 | ne | ne | 40.59 | 12.19 |
| 2010 | 2,818 | 43 | 1.5 | 1,442 | 221 | 19.5 | 1.6 | ne | 1.22 | ne | ne | 24.75 | 11.11 |
| 2009 | 1,990 | 145 | 7.3 | 1,570 | 174 | 83.3 | 1.5 | ne | 9.19 | ne | ne | 50.7 |  |

a Fiscal year ends on Sept. 30. b Acquired International Specialty Products in 2011. c Formerly Georgia Gulf. def $=$ deficit. $\mathbf{n e}=$ nonexistent.

| YEAR | NET SALES | EARNINGS | PROFIT <br> MARGIN | TOTAL ASSETS | STOCK-HOLDERS' EQUITY | RETURN ON EQUITY | CAPITAL SPENDING, \% OF SALES | R\&D SPENDING, \% OF SALES | EARN INGS PER SHARE | DIVIDEND \$ PER SHARE | DIVIDEND YIELD, \% OF PRICE | $\begin{array}{r} \text { STOCK } \\ \text { RANGE, PE } \\ \hline \text { HIGH } \end{array}$ | PRICE <br> R SHAR <br> LOW | PRICE/ EARNINGS RATIO |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (Monetary figures, except per-share amounts, are in millions of dollars) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\mathrm{CABOT}^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$3,300 | \$388 | 11.8\% | \$3,589 | \$1,129 | 34.4\% | 8.5\% | 2.2\% | \$6.07 | \$0.76 | 2.3\% | \$44.97 | \$22.45 | 5.6 |
| 2011 | 3,102 | 236 | 7.6 | 3,081 | 1,576 | 15.0 | 7.4 | 2.1 | 3.62 | 0.72 | 2.0 | 48.77 | 23.75 | 10.0 |
| 2010 | 2,893 | 154 | 5.3 | 2,843 | 1,374 | 11.2 | 3.7 | 2.4 | 2.37 | 0.72 | 2.6 | 34.00 | 20.95 | 11.6 |
| 2009 | 2,243 | -77 | -3.4 | 2,637 | 1,095 | -7.0 | 4.7 | 3.2 | -1.23 | 0.72 | 3.6 | 32.00 | 7.97 | def |
| CELANESE |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$6,418 | \$605 | 9.4\% | \$8,058 | \$788 | 76.8\% | 5.6\% | 1.6\% | \$3.82 | \$0.27 | 0.6\% | \$52.59 | \$32.77 | 11.2 |
| 2011 | 6,763 | 607 | 9.0 | 7,561 | 384 | 158.1 | 5.2 | 1.4 | 3.89 | 0.22 | 0.5 | 58.68 | 29.43 | 11.3 |
| 2010 | 5,918 | 377 | 6.4 | 7,255 | -100 | -377.0 | 3.4 | 1.2 | 2.42 | 0.18 | 0.6 | 41.74 | 23.47 | 13.5 |
| 2009 | 5,082 | 484 | 9.5 | 7,318 | -508 | -95.3 | 3.5 | 1.5 | 3.30 | 0.16 | 0.8 | 33.41 | 7.44 | 6.2 |
| CF INDUSTRIES ${ }^{\text {d }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$6,104 | \$1,849 | 30.3\% | \$8,102 | \$4,217 | 43.8\% | 8.6\% | ne | \$28.94 | \$1.60 | 0.8\% | \$227.99 | \$149.58 | 6.5 |
| 2011 | 6,098 | 1,539 | 25.2 | 6,910 | 2,869 | 53.6 | 4.1 | ne | 22.18 | 1.00 | 0.6 | 192.70 | 115.34 | 6.9 |
| 2010 | 3,965 | 441 | 11.1 | 8,756 | 2,348 | 18.8 | 6.5 | ne | 5.40 | 0.40 | 0.3 | 138.74 | 92.41 | 21.4 |
| 2009 | 2,608 | 449 | 17.2 | 2,494 | 1,728 | 26.0 | 9.0 | ne | 7.54 | 0.40 | 0.6 | 95.13 | 42.30 | 9.1 |
| CYTEC INDUSTRIES |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$1,708 | \$188 | 11.0\% | \$3,213 | \$1,095 | 17.2\% | 8.5\% | 3.1\% | \$4.08 | \$0.50 | 0.9\% | \$70.86 | \$45.66 | 14.3 |
| 2011 | 3,073 | 208 | 6.8 | 2,558 | 708 | 29.4 | 3.8 | 2.8 | 4.29 | 0.50 | 1.1 | 59.19 | 32.49 | 10.7 |
| 2010 | 2,748 | 175 | 6.4 | 2,641 | 704 | 24.9 | 4.2 | 2.6 | 3.49 | 0.05 | 0.1 | 60.85 | 36.42 | 13.9 |
| 2009 | 2,790 | 123 | 4.4 | 2,458 | 462 | 26.6 | 7.0 | 2.7 | -0.05 | 0.16 | 0.6 | 39.20 | 10.58 | def |
| DOW CHEMICAL ${ }^{\text {e }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$56,786 | \$842 | 1.5\% | \$52,155 | \$4,417 | 19.0\% | 4.6\% | 3.0\% | \$0.71 | \$1.21 | 3.8\% | \$36.08 | \$27.45 | 44.7 |
| 2011 | 59,985 | 2,402 | 4.0 | 51,233 | 5,300 | 45.3 | 4.5 | 2.7 | 2.06 | 0.90 | 2.9 | 42.23 | 20.61 | 15.3 |
| 2010 | 53,674 | 1,970 | 3.7 | 51,091 | 4,145 | 47.5 | 4.0 | 3.1 | 1.75 | 0.60 | 2.1 | 34.50 | 22.42 | 16.3 |
| 2009 | 44,875 | 676 | 1.5 | 46,857 | 2,044 | 33.1 | 3.1 | 3.3 | 0.32 | 0.60 | 3.4 | 29.50 | 5.89 | 55.3 |
| DUPONT ${ }^{\text {f }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$34,812 | \$2,788 | 8.0\% | \$39,994 | \$437 | 638.0\% | 5.2\% | 5.9\% | \$2.98 | \$1.70 | 3.6\% | \$53.98 | \$41.67 | 16.0 |
| 2011 | 37,961 | 3,510 | 9.2 | 37,666 | -2,233 | -157.2 | 4.9 | 5.2 | 3.73 | 1.64 | 3.5 | 57.00 | 37.10 | 12.6 |
| 2010 | 31,505 | 3,054 | 9.7 | 35,089 | 3,957 | 77.2 | 4.8 | 5.2 | 3.32 | 1.64 | 4.0 | 50.17 | 31.88 | 12.4 |
| 2009 | 26,109 | 1,755 | 6.7 | 33,496 | 2,526 | 69.5 | 5.0 | 5.3 | 1.92 | 1.64 | 6.3 | 35.62 | 16.05 | 13.5 |
| EASTMAN CHEMICAL ${ }^{\text {g }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$8,102 | \$437 | 5.4\% | \$7,126 | -\$1,465 | -29.8\% | 5.7\% | 2.4\% | \$3.00 | \$1.08 | 2.0\% | \$68.22 | \$39.16 | 17.9 |
| 2011 | 7,178 | 696 | 9.7 | 5,778 | 1,464 | 47.5 | 6.4 | 2.2 | 4.98 | 0.99 | 2.3 | 55.36 | 32.45 | 8.8 |
| 2010 | 5,842 | 438 | 7.5 | 5,611 | 1,252 | 35.0 | 4.2 | 2.6 | 6.07 | 1.79 | 2.6 | 84.57 | 51.10 | 11.2 |
| 2009 | 5,047 | 136 | 2.7 | 5,200 | 1,198 | 11.4 | 6.1 | 2.7 | 1.85 | 1.76 | 4.4 | 61.95 | 17.76 | 21.5 |
| FMC CORP. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$3,748 | \$416 | 11.1\% | \$3,864 | \$1,045 | 39.8\% | 5.5\% | 3.1\% | \$3.01 | \$0.41 | 0.9\% | \$59.41 | \$42.93 | 17.0 |
| 2011 | 3,378 | 366 | 10.8 | 3,330 | 891 | 41.1 | 5.6 | 3.1 | 2.57 | 0.30 | 0.8 | 46.50 | 31.91 | 15.3 |
| 2010 | 3,117 | 173 | 5.6 | 3,126 | 995 | 17.4 | 4.6 | 3.2 | 1.19 | 0.25 | 0.8 | 41.02 | 25.38 | 27.9 |
| 2009 | 2,826 | 239 | 8.5 | 2,927 | 924 | 25.9 | 5.7 | 3.3 | 1.69 | 0.25 | 1.1 | 29.07 | 17.45 | 13.8 |
| H.B. FULLER ${ }^{\text {h }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$1,886 | \$126 | 6.7\% | \$1,299 | \$292 | 43.2\% | 1.9\% | 1.1\% | \$2.53 | \$0.33 | 1.2\% | \$34.52 | \$21.10 | 11.0 |
| 2011 | 1,558 | 89 | 5.7 | 986 | 464 | 19.2 | 2.3 | 1.3 | 1.82 | 0.30 | 1.4 | 25.41 | 16.92 | 11.6 |
| 2010 | 1,356 | 71 | 5.2 | 913 | 394 | 18.0 | 2.7 | 1.4 | 1.46 | 0.28 | 1.3 | 24.66 | 18.47 | 14.8 |
| 2009 | 1,235 | 84 | 6.8 | 856 | 346 | 24.3 | 1.9 | 1.4 | 1.70 | 0.27 | 1.6 | 23.06 | 9.70 | 9.6 |
| W.R. GRACE |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$3,156 | \$94 | 3.0\% | \$4,810 | \$38 | 247.4\% | 4.4\% | 2.1\% | \$1.26 | ne | ne | \$68.86 | \$45.39 | 45.3 |
| 2011 | 3,212 | 269 | 8.4 | 4,349 | 19 | 1,393.8 | 4.4 | 2.1 | 3.66 | ne | ne | 52.50 | 30.25 | 11.3 |
| 2010 | 2,675 | 207 | 7.7 | 4,146 | -194 | -106.7 | 4.2 | 2.2 | 2.85 | ne | ne | 36.27 | 19.63 | 9.8 |
| 2009 | 2,825 | 81 | 2.9 | 3,850 | -418 | -19.4 | 3.3 | 2.5 | 0.98 | ne | ne | 26.17 | 4.07 | 15.4 |

[^0]| YEAR | $\begin{gathered} \text { NET } \\ \text { SALES } \end{gathered}$ | EARNINGS | PROFIT MARGIN | $\begin{aligned} & \text { TOTAL } \\ & \text { ASSETS } \end{aligned}$ | STOCK-HOLDERS' EOUITY | RETURN ON EQUITY | CAPITAL SPENDING, \% OF SALES | R\&D SPENDING, \% OF SALES | EARNINGS PER SHARE | DIVIDEND, \$ PER SHARE | DIVIDEND YIELD, \% OF PRICE | $\begin{gathered} \begin{array}{r} \text { STOCK } \\ \text { RANGE, PE } \end{array} \\ \hline \text { HIGH } \end{gathered}$ | $\begin{aligned} & \text { PRRICE } \\ & \text { ER SHARE } \\ & \text { LOW } \end{aligned}$ | PRICE/ ARNINGS RATIO |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (Monetary figures, except per-share amounts, are in millions of dollars) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| HUNTSMAN CORP. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$10,964 | \$363 | 3.3\% | \$8,699 | \$1,711 | 21.2\% | 3.8\% | 1.4\% | \$1.53 | \$0.40 | 3.0\% | \$17.17 | \$9.75 | 8.8 |
| 2011 | 11,221 | 247 | 2.2 | 8,543 | 1,662 | 14.9 | 2.9 | 1.5 | 1.04 | 0.40 | 2.7 | 21.52 | 8.14 | 14.3 |
| 2010 | 9,250 | 27 | 0.3 | 8,620 | 1,756 | 1.5 | 2.6 | 1.6 | 0.11 | 0.40 | 3.2 | 16.89 | 8.17 | 113.9 |
| 2009 | 7,665 | 125 | 1.6 | 8,532 | 1,771 | 7.1 | 2.5 | 1.9 | 0.49 | 0.40 | 5.9 | 11.57 | 2.04 | 13.9 |
| INTERNATIONAL FLAVORS \& FRAGRANCES |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$2,821 | \$254 | 9.0\% | \$2,547 | \$550 | 46.2\% | 4.5\% | 8.3\% | \$3.11 | \$1.30 | 2.2\% | \$67.79 | \$52.05 | 19.3 |
| 2011 | 2,788 | 267 | 9.6 | 2,257 | 399 | 66.9 | 4.6 | 7.9 | 3.30 | 1.16 | 2.0 | 66.29 | 51.20 | 17.8 |
| 2010 | 2,623 | 264 | 10.1 | 2,158 | 289 | 91.3 | 4.0 | 8.3 | 3.29 | 1.04 | 2.2 | 56.10 | 39.28 | 14.5 |
| 2009 | 2,326 | 196 | 8.4 | 1,924 | 48 | 408.3 | 2.9 | 8.3 | 2.46 | 1.00 | 3.0 | 41.85 | 25.30 | 13.6 |
| NEWMARKET CORP. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$2,212 | \$240 | 10.8\% | \$1,227 | \$371 | 64.7\% | 1.8\% | 5.3\% | \$17.85 | \$28.00 | 1.2\% | \$283.48 | \$172.50 | 12.8 |
| 2011 | 2,138 | 207 | 9.7 | 1,153 | 512 | 40.4 | 2.5 | 4.9 | 15.10 | 2.39 | 1.5 | 204.92 | 118.83 | 10.7 |
| 2010 | 1,786 | 177 | 9.9 | 1,016 | 445 | 39.8 | 1.9 | 5.1 | 12.12 | 1.57 | 1.5 | 131.76 | 81.80 | 8.8 |
| 2009 | 1,530 | 162 | 10.6 | 1,025 | 275 | 58.9 | 2.5 | 5.6 | 10.65 | 1.08 | 1.5 | 121.13 | 27.82 | 7.0 |
| POLYONE |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$2,993 | \$72 | 2.4\% | \$1,382 | -\$115 | -62.6\% | 1.9\% | 1.4\% | \$0.81 | \$0.20 | 1.2\% | \$21.00 | \$11.58 | 20.1 |
| 2011 | 2,864 | 173 | 6.0 | 1,341 | -151 | -114.6 | 1.9 | 1.3 | 1.87 | 0.16 | 1.2 | 16.61 | 9.54 | 7.0 |
| 2010 | 2,622 | 163 | 6.2 | 1,440 | 284 | 57.4 | 1.5 | 1.3 | 1.75 | ne | ne | 13.99 | 6.93 | 6.0 |
| 2009 | 2,061 | 68 | 3.3 | 1,157 | 98 | 69.1 | 1.6 | 1.1 | 0.73 | ne | ne | 7.74 | 1.32 | 6.2 |
| PPG INDUSTRIES |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$15,200 | \$941 | 6.2\% | \$12,032 | \$476 | 197.7\% | 2.7\% | 3.0\% | \$6.13 | \$2.34 | 2.1\% | \$136.79 | \$83.27 | 17.9 |
| 2011 | 14,885 | 1,095 | 7.4 | 10,597 | -339 | -323.0 | 2.6 | 2.9 | 6.96 | 2.26 | 2.8 | 97.81 | 66.43 | 11.8 |
| 2010 | 13,423 | 769 | 5.7 | 10,988 | -154 | -499.4 | 2.5 | 3.0 | 4.67 | 2.18 | 3.1 | 84.59 | 56.96 | 15.2 |
| 2009 | 12,239 | 336 | 2.7 | 10,040 | -278 | -120.9 | 2.0 | 3.3 | 2.03 | 2.13 | 4.7 | 62.31 | 28.16 | 22.3 |
| PRAXAIR |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$11,224 | \$1,692 | 15.1\% | \$15,410 | \$3,741 | 45.2\% | 19.4\% | 0.9\% | \$5.67 | \$2.20 | 2.0\% | \$116.92 | \$101.93 | 19.3 |
| 2011 | 11,252 | 1,672 | 14.9 | 13,817 | 3,258 | 51.3 | 16.0 | 0.8 | 5.53 | 2.00 | 2.0 | 111.74 | 88.64 | 18.1 |
| 2010 | 10,116 | 1,195 | 11.8 | 13,076 | 3,594 | 33.2 | 13.7 | 0.8 | 3.90 | 1.80 | 2.1 | 96.34 | 73.13 | 21.7 |
| 2009 | 8,956 | 1,254 | 14.0 | 12,105 | 3,436 | 36.5 | 15.1 | 0.8 | 4.01 | 1.60 | 2.3 | 84.97 | 53.42 | 17.3 |
| QUAKER CHEMICAL |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$708 | \$47 | 6.6\% | \$445 | \$189 | 24.9\% | 1.8\% | 2.8\% | \$3.64 | \$0.97 | 2.2\% | \$54.00 | \$35.82 | 12.3 |
| 2011 | 683 | 44 | 6.4 | 416 | 166 | 26.5 | 1.8 | 2.8 | 3.52 | 0.93 | 2.7 | 46.02 | 24.11 | 10.0 |
| 2010 | 544 | 34 | 6.3 | 373 | 110 | 30.9 | 1.7 | 2.9 | 2.82 | 0.93 | 2.4 | 45.80 | 32.30 | 13.8 |
| 2009 | 451 | 17 | 3.8 | 346 | 104 | 16.3 | 3.1 | 3.3 | 1.47 | 0.92 | 6.5 | 23.82 | 4.65 | 9.7 |
| ROCKWOOD HOLDINGS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$3,507 | \$384 | 10.9\% | \$4,663 | \$599 | 64.1\% | 8.2\% | 1.8\% | \$4.94 | \$1.05 | 2.2\% | \$57.00 | \$39.36 | 9.8 |
| 2011 | 3,669 | 411 | 11.2 | 3,228 | 298 | 137.9 | 7.6 | 1.6 | 5.37 | ne | ne | 62.03 | 30.43 | 8.6 |
| 2010 | 3,192 | 239 | 7.5 | 3,259 | -151 | -158.3 | 5.6 | 1.5 | 3.19 | ne | ne | 42.24 | 20.20 | 9.8 |
| 2009 | 2,769 | 239 | 8.6 | 3,162 | -485 | -49.3 | 5.5 | 1.6 | 0.28 | ne | ne | 24.58 | 3.36 | 49.9 |
| SIGMA-ALDRICH |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$2,623 | \$460 | 17.5\% | \$2,847 | \$1,573 | 29.2\% | 4.3\% | 2.6\% | \$3.80 | \$0.80 | 1.2\% | \$74.94 | \$61.68 | 18.0 |
| 2011 | 2,505 | 457 | 18.2 | 2,656 | 1,574 | 29.0 | 4.2 | 2.9 | 3.78 | 0.64 | 1.0 | 76.16 | 56.18 | 17.5 |
| 2010 | 2,271 | 384 | 16.9 | 2,432 | 1,394 | 27.5 | 4.4 | 2.9 | 3.17 | 0.64 | 1.1 | 67.76 | 46.50 | 18.0 |
| 2009 | 2,148 | 347 | 16.2 | 2,184 | 1,156 | 30.0 | 5.6 | 2.9 | 2.80 | 0.58 | 1.3 | 56.29 | 31.45 | 15.7 |
| STEPAN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$1,804 | \$79 | 4.4\% | \$970 | \$465 | 17.0\% | 4.6\% | 1.6\% | \$3.71 | \$0.58 | 1.2\% | \$55.90 | \$38.05 | 12.7 |
| 2011 | 1,843 | 73 | 4.0 | 882 | 387 | 18.9 | 4.5 | 2.2 | 6.88 | 1.06 | 1.4 | 83.65 | 62.65 | 10.6 |
| 2010 | 1,431 | 65 | 4.5 | 799 | 338 | 19.2 | 5.2 | 2.7 | 6.36 | 0.98 | 1.6 | 79.75 | 45.99 | 9.9 |
| 2009 | 1,276 | 63 | 4.9 | 625 | 281 | 22.4 | 3.4 | 2.8 | 5.84 | 0.90 | 2.0 | 67.98 | 22.80 | 7.8 |


| YEAR | $\begin{gathered} \text { NET } \\ \text { SALES } \end{gathered}$ | EARNINGS | PROFIT MARGIN | TOTAL ASSETS |  | RETURN ON EQUITY | CAPITAL SPENDING, \% OF SALES | $\begin{gathered} \text { R\&D } \\ \text { SPEND- } \\ \text { ING, \% OF } \\ \text { SALES } \\ \hline \end{gathered}$ | EARNINGS PER SHARE | $\begin{aligned} & \text { DIVIDEND, } \\ & \text { \$ PER } \\ & \text { SHARE } \end{aligned}$ | DIVIDEND YIELD, \% OF PRICE | STOCK HIGH | PRICE R SHAR LOW | PRICE/ EARNINGS RATIO |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (Monetary figures, except per-share amounts, are in millions of dollars) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| WESTLAKE CHEMICAL |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$3,571 | \$386 | 10.8\% | \$3,412 | \$1,872 | 20.6\% | 10.8\% | ne | \$5.78 | \$4.27 | 7.1\% | \$80.09 | \$40.86 | 10.5 |
| 2011 | 3,620 | 259 | 7.2 | 3,266 | 1,756 | 14.7 | 4.9 | ne | 3.89 | 0.27 | 0.5 | 66.18 | 32.31 | 12.7 |
| 2010 | 3,171 | 221 | 7.0 | 2,954 | 1,505 | 14.7 | 2.6 | ne | 3.35 | 0.24 | 0.8 | 43.59 | 17.56 | 9.1 |
| 2009 | 2,326 | 53 | 2.3 | 2,446 | 1,285 | 4.1 | 4.3 | ne | 0.80 | 0.22 | 1.1 | 28.18 | 10.40 | 24.1 |

PHARMACEUTICALS \& BIOPHARMACEUTICALS

## ABBOTT LABORATORIES

| 2012 | \$39,874 | \$5,963 | 15.0\% | \$51,461 | \$11,039 | 54.0\% | 4.5\% | 10.8\% | \$3.76 | \$1.67 | 2.6\% | \$72.47 | \$53.96 | 16.8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2011 | 38,851 | 4,728 | 12.2 | 44,571 | 8,820 | 53.6 | 3.8 | 10.6 | 3.03 | 1.92 | 3.8 | 56.44 | 45.07 | 16.8 |
| 2010 | 35,166 | 4,626 | 13.2 | 44,643 | 6,546 | 70.7 | 2.9 | 10.6 | 2.98 | 1.76 | 3.2 | 56.79 | 52.86 | 18.4 |
| 2009 | 30,765 | 5,746 | 18.7 | 32,924 | 3,407 | 168.7 | 3.5 | 8.9 | 3.69 | 1.60 | 3.2 | 57.39 | 41.27 | 13.4 |
| AMGEN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$16,639 | \$4,345 | 26.1\% | \$41,636 | \$6,398 | 67.9\% | 4.1\% | 20.3\% | \$5.61 | \$1.44 | 1.9\% | \$90.17 | \$63.76 | 13.7 |
| 2011 | 15,295 | 3,683 | 24.1 | 37,121 | 7,279 | 50.6 | 3.7 | 20.7 | 4.07 | 0.92 | 1.6 | 64.74 | 48.27 | 13.9 |
| 2010 | 14,660 | 4,627 | 31.6 | 29,922 | 10,380 | 44.6 | 4.0 | 19.7 | 4.82 | ne | ne | 61.14 | 50.36 | 11.6 |
| 2009 | 14,351 | 4,605 | 32.1 | 25,727 | 11,332 | 40.6 | 3.7 | 20.0 | 4.51 | ne | ne | 64.41 | 45.11 | 12.1 |
| BIOGEN IDEC |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$4,166 | \$1,380 | 33.1\% | \$8,929 | \$5,762 | 24.0\% | 6.1\% | 32.0\% | \$5.80 | ne | ne | \$157.18 | \$111.44 | 23.2 |
| 2011 | 3,836 | 1,267 | 33.0 | 7,903 | 5,281 | 24.0 | 5.4 | 31.8 | 5.09 | ne | ne | 120.66 | 64.28 | 18.2 |
| 2010 | 3,470 | 1,005 | 29.0 | 5,173 | 2,477 | 40.6 | 5.0 | 36.0 | 3.98 | ne | ne | 68.60 | 45.96 | 14.4 |
| 2009 | 3,153 | 977 | 31.0 | 7,413 | 5,123 | 19.1 | 5.3 | 40.7 | 3.35 | ne | ne | 54.00 | 41.75 | 14.3 |
| BRISTOL-MYERS SQUIBB |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$17,621 | \$1,960 | 11.1\% | \$28,262 | \$6,003 | 32.7\% | 3.1\% | 22.2\% | \$1.17 | \$1.37 | 4.1\% | \$36.09 | \$30.81 | 28.6 |
| 2011 | 21,244 | 3,709 | 17.5 | 27,384 | 10,281 | 36.1 | 1.7 | 18.1 | 2.18 | 1.33 | 4.4 | 35.29 | 24.97 | 13.8 |
| 2010 | 19,484 | 3,102 | 15.9 | 25,843 | 10,480 | 29.6 | 2.2 | 18.3 | 1.80 | 1.28 | 5.1 | 27.93 | 22.44 | 14.0 |
| 2009 | 18,808 | 3,239 | 17.2 | 22,925 | 6,702 | 48.3 | 3.9 | 19.4 | 1.63 | 1.25 | 5.8 | 25.56 | 17.51 | 13.2 |

## ELI LILLY \& CO.

| 2012 | \$22,603 | \$4,089 | 18.1\% | \$34,399 | \$14,774 | 27.7\% | 4.0\% | 23.4\% | \$3.67 | \$1.96 | 3.9\% | \$53.81 | \$45.91 | 13.6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2011 | 24,287 | 4,348 | 17.9 | 28,592 | 8,408 | 51.7 | 2.8 | 20.7 | 3.90 | 1.96 | 5.2 | 41.75 | 33.63 | 9.7 |
| 2010 | 23,076 | 5,069 | 22.0 | 26,182 | 7,594 | 66.8 | 3.0 | 21.2 | 4.58 | 1.96 | 5.6 | 37.35 | 32.25 | 7.6 |
| 2009 | 21,836 | 4,329 | 19.8 | 25,540 | 7,604 | 56.9 | 3.5 | 19.8 | 3.94 | 1.96 | 5.8 | 40.57 | 27.47 | 8.6 |
| JOHNSON \& JOHNSON |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$67,224 | \$10,853 | 16.1\% | \$98,923 | \$42,402 | 25.6\% | 4.4\% | 11.4\% | \$3.94 | \$2.40 | 3.6\% | \$72.74 | \$61.71 | 17.1 |
| 2011 | 65,030 | 9,672 | 14.9 | 97,506 | 40,942 | 23.6 | 4.4 | 11.6 | 3.54 | 2.25 | 3.6 | 68.05 | 57.50 | 17.7 |
| 2010 | 61,587 | 13,334 | 21.7 | 87,614 | 24,569 | 54.3 | 3.9 | 11.1 | 4.85 | 2.11 | 3.4 | 65.99 | 57.02 | 12.7 |
| 2009 | 61,897 | 12,266 | 19.8 | 63,497 | 19,403 | 63.2 | 3.8 | 11.3 | 4.40 | 1.93 | 3.5 | 65.41 | 46.25 | 12.7 |
| MERCK \& CO. ${ }^{\text {i }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$47,267 | \$6,168 | 13.0\% | \$93,998 | \$43,329 | 14.2\% | 4.1\% | 17.3\% | \$2.03 | \$1.68 | 4.0\% | \$48.00 | \$36.91 | 20.9 |
| 2011 | 48,047 | 6,272 | 13.1 | 92,973 | 42,788 | 14.7 | 3.6 | 17.6 | 2.04 | 1.52 | 4.5 | 37.90 | 29.47 | 16.5 |
| 2010 | 45,987 | 982 | 2.1 | 53,947 | 41,998 | 2.3 | 3.6 | 23.9 | 0.28 | 1.52 | 4.2 | 41.56 | 30.70 | 129.0 |
| 2009 | 27,428 | 13,024 | 47.5 | 52,512 | 49,569 | 26.3 | 5.3 | 21.3 | 5.65 | 0.26 | 0.9 | 38.42 | 16.32 | 4.8 |
| PFIZER ${ }^{\text {j }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$58,986 | \$14,570 | 24.7\% | \$141,126 | \$37,096 | 39.3\% | 2.2\% | 13.3\% | \$1.26 | \$0.88 | 3.7\% | \$26.04 | \$21.03 | 18.7 |
| 2011 | 67,425 | 10,009 | 14.8 | 142,935 | 37,554 | 26.7 | 2.5 | 13.5 | 1.27 | 0.80 | 4.2 | 21.90 | 16.63 | 15.2 |
| 2010 | 67,809 | 8,257 | 12.2 | 93,509 | 44,318 | 18.6 | 2.2 | 13.9 | 1.03 | 0.72 | 4.2 | 20.36 | 14.00 | 16.7 |
| 2009 | 50,009 | 8,635 | 17.3 | 102,558 | 48,070 | 18.0 | 2.4 | 15.7 | 1.23 | 0.80 | 5.2 | 18.99 | 11.62 | 12.4 |

[^1]
## EUROPE COMPANY RESULTS

## Despite the sluggish European economy, revenues increased for most firms

|  | N |  | PROFIT | TOTAL | STOCK-HOLDERS' | $\begin{aligned} & \text { RETURN } \\ & \text { ON } \end{aligned}$ |  | R\&D SPENDING, \% OF | EARNINGS PER | DIVIDEND \$ PER | DIVIDEND YIELD, \% | $\begin{array}{r} \text { STOCK } \mathrm{P} \\ \quad \mathrm{PER} \\ \hline \end{array}$ | RANGE, RE | PRICE/ EARNINGS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | SALES | EARNINGS | MARGIN | ASSETS | EQUITY | EQUITY | SALES | SALES | SHARE | SHARE | OFPRICE | HIGH | LOW | RATIO |

## CHEMICALS

| BELGIUM |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Solvay |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | $\$ 15,989$ | $\$ 751$ | $4.7 \%$ | $\$ 20,073$ | $\$ 4,988$ | $15.1 \%$ | $6.3 \%$ | $2.1 \%$ | $\$ 9.08$ | $\$ 4.11$ | $3.7 \%$ |
| 2011 | 10,427 | 318 | 3.0 | 19,459 | 3,020 | 10.5 | 7.4 | 1.9 | 3.90 | 2.96 | 2.7 |
| 2010 | 7,662 | 2,284 | 29.8 | 17,415 | 8,395 | 27.2 | 4.8 | 2.1 | 28.03 | 2.96 | 3.1 |
| 2009 | 10,910 | 663 | 6.1 | 15,826 | 6,329 | 10.5 | 5.4 | 6.5 | 8.08 | 2.83 | 3.7 |


| FINLAND |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Kemira $^{\text {b }}$ |  | $\$ 2,882$ | $\$ 22$ | $0.7 \%$ | $\$ 2,529$ | $\$ 1,019$ | $2.1 \%$ | $6.0 \%$ | $1.9 \%$ | $\$ 0.14$ | $\$ 0.68$ | $5.3 \%$ | $€ 12.00$ |
| 2012 | 2,838 | 174 | 6.1 | 2,576 | 897 | 19.4 | 4.5 | 1.8 | 1.14 | 0.68 | 5.2 | 12.67 | 7.80 |
| 2011 | 2,779 | 143 | 5.1 | 2,393 | 878 | 16.2 | 3.5 | 1.9 | 0.94 | 0.62 | 4.9 | 13.5 |  |
| 2010 | 3,215 | 104 | 3.2 | 2,644 | 654 | 15.9 | 3.2 | 1.9 | 0.78 | 0.35 | 3.5 | 11.63 | 3.89 |
| 2009 |  |  |  |  |  |  |  |  |  |  | 14.8 |  |  |


| FRANCE |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Air Liquide |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$19,707 | \$2,069 | 10.5\% | \$25,551 | \$6,830 | 30.3\% | 13.1\% | 1.7\% | \$6.65 | \$3.21 | 2.7\% | €99.52 | €84.12 | 17.8 |
| 2011 | 18,589 | 1,974 | 10.6 | 24,337 | 6,171 | 32.0 | 12.1 | 1.3 | 6.96 | 3.21 | 2.8 | 100.65 | 80.90 | 16.8 |
| 2010 | 17,343 | 1,805 | 10.4 | 22,472 | 5,210 | 34.6 | 10.7 | 1.3 | 6.39 | 3.02 | 2.7 | 99.15 | 75.42 | 17.6 |
| 2009 | 15,399 | 1,582 | 10.3 | 20,505 | 3,951 | 40.0 | 11.8 | 1.3 | 6.04 | 2.89 | 3.2 | 84.40 | 55.03 | 14.8 |


| Arkema |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2012 | $\$ 8,223$ | $\$ 283$ | $3.4 \%$ | $\$ 6,263$ | $\$ 2,110$ | $13.4 \%$ | $6.8 \%$ | $2.3 \%$ | $\$ 4.55$ | $\$ 2.31$ | $2.8 \%$ | $€ 84.26$ | $€ 46.60$ |
| 18.5 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2011 | 7,586 | -19 | -0.3 | 5,857 | 1,852 | -1.0 | 7.2 | 2.2 | -0.40 | 1.67 | 2.2 | 78.50 | 37.40 |
| 2010 | 7,593 | 446 | 5.9 | 5,560 | 2,245 | 19.9 | 5.3 | 2.4 | 7.29 | 1.29 | 2.5 | 55.30 | 23.71 |
| 2009 | 5,714 | -221 | -3.9 | 4,454 | 1,713 | -12.9 | 6.8 | 3.1 | -3.66 | 0.77 | 3.0 | 29.94 | 9.94 |


| GERMANY |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| BASF $^{c}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | $\$ 92,747$ | $\$ 6,196$ | $6.7 \%$ | $\$ 64,916$ | $\$ 17,205$ | $36.0 \%$ | $5.6 \%$ | $2.4 \%$ | $\$ 6.75$ | $\$ 3.34$ | $4.2 \%$ | $€ 73.09$ | $€ 51.89$ | 11.9 |
| 2011 | 94,506 | 7,957 | 8.4 | 63,335 | 17,315 | 46.0 | 4.6 | 2.2 | 8.65 | 3.21 | 4.4 | 69.40 | 43.66 | 8.4 |
| 2010 | 82,131 | 5,860 | 7.1 | 60,625 | 13,388 | 43.8 | 4.0 | 2.3 | 6.38 | 2.83 | 4.3 | 61.73 | 39.43 | 10.2 |
| 2009 | 65,183 | 1,813 | 2.8 | 52,487 | 10,492 | 17.3 | 4.9 | 2.8 | 1.98 | 2.19 | 5.3 | 43.95 | 20.71 | 21.0 |


| Bayer | $\$ 51,125$ | $\$ 3,145$ | $6.2 \%$ | $\$ 54,061$ | $\$ 11,927$ | $26.4 \%$ | $5.1 \%$ | $7.6 \%$ | $\$ 3.81$ | $\$ 2.44$ | $3.1 \%$ | $€ 72.95$ | $€ 47.97$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2012 | 4,969 | 20.4 |  |  |  |  |  |  |  |  |  |  |  |
| 2011 | 46,969 | 3,176 | 6.8 | 56,069 | 13,001 | 24.4 | 4.4 | 8.0 | 3.84 | 2.12 | 3.4 | 59.35 | 36.82 |
| 26.1 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2010 | 45,118 | 1,673 | 3.7 | 54,653 | 12,722 | 13.1 | 4.3 | 8.7 | 2.02 | 1.93 | 2.9 | 58.62 | 44.12 |
| 2009 | 40,077 | 1,747 | 4.4 | 54,440 | 13,176 | 13.3 | 5.1 | 8.8 | 2.19 | 1.80 | 3.1 | 56.45 | 32.69 |


| Lanxess |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2062 | $\$ 11,693$ | $\$ 661$ | $5.7 \%$ | $\$ 9,167$ | $\$ 2,496$ | $26.5 \%$ | $7.7 \%$ | $2.1 \%$ | $\$ 7.95$ | $\$ 1.29$ | $1.8 \%$ | $€ 68.90$ | $€ 40.17$ |
| 2011 | 11,283 | 651 | 5.8 | 8,364 | 2,187 | 29.7 | 7.7 | 1.6 | 7.82 | 1.09 | 1.8 | 64.08 | 31.34 |
| 2010 | 9,155 | 487 | 5.3 | 6,995 | 1,974 | 24.7 | 7.0 | 1.6 | 5.86 | 0.90 | 1.6 | 59.49 | 25.89 |
| 20.4 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2009 | 6,503 | 51 | 0.8 | 6,265 | 1,606 | 3.2 | 5.4 | 2.0 | 0.62 | 0.64 | 2.6 | 27.64 | 11.06 |


| Linde |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2012 | \$19,648 | \$1,607 | 8.2\% | \$29,388 | \$3,904 | 41.2\% | 12.8\% | 0.7\% | \$10.15 | \$3.47 | 2.2\% | €136.15 | €114.20 | 15.9 |
| 2011 | 17,728 | 1,510 | 8.5 | 22,820 | 1,255 | 120.3 | 9.9 | 0.7 | 8.77 | 3.21 | 2.3 | 125.80 | 96.16 | 16.3 |
| 2010 | 16,546 | 1,292 | 7.8 | 20,037 |  | 1,763.2 | 10.1 | 0.7 | 7.54 | 2.83 | 2.3 | 115.30 | 76.70 | 16.4 |
| 2009 | 14,416 | 760 | 5.3 | 17,701 | -1,836 | -41.4 | 10.1 | 0.8 | 4.47 | 2.31 | 2.6 | 87.95 | 49.66 | 19.8 |

NOTE: Monetary statistics, except stock prices, for all years were converted at the 2012 average exchange rate of $\$ 1.00$ U.S. $=0.7777$ euros, 0.9377 Swiss francs, and 0.6308 pounds sterling. a Sold its pharmaceuticals unit and changed its accounting procedures in 2010; bought Rhodia in 2011. b Spun off Tikkurila in 2010. c Acquired Ciba in 2009. def = deficit.

|  | NET |  | PROFIT | TOTAL | STOCK-HOLDERS' | $\begin{aligned} & \text { RETURN } \\ & \text { ON } \end{aligned}$ | CAPITAL SPENDING, | R\&D SPENDING, \% OF | EARNNGS PER | DIVIDEND \$ PER | DIVIDEND YIELD, \% | STOCK PRIC PER S | E RANGE, HARE | PRICE/ EARNINGS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | SALES | EARNINGS | MARGIN | ASSETS | EQUITY | EQUITY | SALES | SALES | SHARE | SHARE | OF PRICE | HIGH | LOW | RATIO |
| (Monetary figures, except per-share amounts, are in millions of dollars) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Merck ${ }^{\text {d }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$13,811 | \$729 | 5.3\% | \$13,757 | -\$681 | -107.0\% | 3.1\% | 14.1\% | \$3.36 | \$2.19 | 1.9\% | €106.55 | €72.37 | 34.3 |
| 2011 | 12,737 | 794 | 6.2 | 13,316 | -1,634 | -48.6 | 3.7 | 15.3 | 3.65 | 1.93 | 2.2 | 78.47 | 56.82 | 23.8 |
| 2010 | 11,481 | 813 | 7.1 | 12,735 | -2,716 | -29.9 | 4.4 | 15.6 | 3.74 | 1.61 | 1.9 | 72.28 | 57.62 | 22.3 |
| 2009 | 9,487 | 471 | 5.0 | 11,719 | 2,463 | 19.1 | 6.3 | 18.2 | 2.16 | 1.29 | 1.5 | 74.37 | 57.24 | 39.2 |
| Wacker |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$5,960 | \$137 | 2.3\% | \$8,106 | \$3,333 | 4.1\% | 20.3\% | 3.8\% | \$2.92 | \$0.77 | 0.9\% | €91.00 | €40.87 | 29.0 |
| 2011 | 6,313 | 453 | 7.2 | 7,981 | 3,343 | 13.6 | 15.9 | 3.5 | 9.13 | 2.83 | 1.9 | 172.80 | 57.49 | 16.2 |
| 2010 | 6,106 | 631 | 10.3 | 7,031 | 3,104 | 20.3 | 13.0 | 3.5 | 12.70 | 4.11 | 2.7 | 149.65 | 87.47 | 12.0 |
| 2009 | 4,782 | -91 | -1.9 | 5,812 | 2,469 | -3.7 | 20.7 | 4.4 | -1.84 | 1.54 | 1.4 | 122.60 | 46.60 | def |
| NETHERLANDS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AkzoNobel |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$19,789 | -\$2,789 | -14.1\% | \$17,370 | \$3,733 | -74.7\% | 5.4\% | 2.5\% | -\$9.39 | \$1.86 | 3.4\% | €49.98 | €34.85 | -5.8 |
| 2011 | 20,184 | 613 | 3.0 | 16,043 | 3,023 | 20.3 | 4.5 | 2.2 | 2.60 | 1.86 | 3.5 | 53.74 | 29.25 | 20.5 |
| 2010 | 18,825 | 970 | 5.2 | 16,441 | 2,830 | 34.3 | 3.6 | 2.3 | 4.13 | 1.80 | 3.3 | 47.70 | 37.18 | 13.2 |
| 2009 | 17,864 | 366 | 2.1 | 14,777 | 1,102 | 33.3 | 3.8 | 2.4 | 1.56 | 1.74 | 3.7 | 46.52 | 26.01 | 30.0 |
| DSM |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$11,741 | \$370 | 3.2\% | \$11,795 | \$3,962 | 9.3\% | 7.8\% | 4.2\% | \$3.57 | \$1.93 | 3.6\% | €46.29 | €36.33 | 14.9 |
| 2011 | 11,821 | 1,047 | 8.9 | 12,050 | 5,385 | 19.4 | 4.6 | 4.1 | 6.20 | 1.86 | 3.7 | 46.82 | 30.54 | 8.0 |
| 2010 | 11,637 | 652 | 5.6 | 12,100 | 5,795 | 11.2 | 4.1 | 3.7 | 3.87 | 1.74 | 3.7 | 42.85 | 30.43 | 12.2 |
| 2009 | 10,701 | 433 | 4.0 | 11,008 | 5,089 | 8.5 | 4.6 | 3.7 | 2.58 | 1.54 | 4.6 | 34.84 | 16.93 | 12.9 |
| SWITZERLAND |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clariant ${ }^{\text {e }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$6,439 | \$254 | 3.9\% | \$8,469 | \$1,553 | 16.3\% | 5.2\% | 2.9\% | \$0.75 | \$0.35 | 3.0\% | CHF 13.48 | CHF 8.62 | 15.8 |
| 2011 | 7,860 | 242 | 3.1 | 7,805 | 1,348 | 18.0 | 5.0 | 2.4 | 0.84 | 0.32 | 223.8 | 19.93 | 6.88 | 17.0 |
| 2010 | 7,593 | 192 | 2.5 | 6,028 | 1,639 | 11.7 | 3.1 | 1.9 | 0.78 | ne | ne | 19.73 | 10.85 | 20.9 |
| 2009 | 7,053 | -220 | -3.1 | 6,183 | 1,708 | -12.9 | 2.0 | 2.3 | -0.97 | ne | ne | 12.22 | 3.71 | def |
| Givaudan |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$4,540 | \$438 | 9.7\% | \$4,154 | \$1,306 | 33.6\% | 5.4\% | 9.5\% | \$48.15 | \$38.39 | 4.0\% | CHF 975.00 | HF 834.00 | 20.0 |
| 2011 | 4,175 | 269 | 6.4 | 4,429 | 994 | 27.0 | 4.8 | 7.5 | 29.38 | 23.46 | 2.6 | 1,016.00 | 703.50 | 31.2 |
| 2010 | 4,521 | 363 | 8.0 | 4,498 | 790 | 45.9 | 2.8 | 7.9 | 40.13 | 22.93 | 2.3 | 1,062.00 | 821.50 | 25.0 |
| 2009 | 4,222 | 212 | 5.0 | 4,339 | -215 | -98.5 | 2.4 | 8.2 | 26.63 | 21.97 | 2.9 | 878.50 | 567.00 | 28.9 |
| Lonza ${ }^{\text {f }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$4,186 | \$194 | 4.6\% | \$6,346 | \$1,341 | 14.5\% | 7.9\% | 3.0\% | \$3.73 | \$2.29 | 4.7\% | CHF 58.87 | CHF 32.81 | 13.1 |
| 2011 | 2,871 | 164 | 5.7 | 5,287 | 314 | 52.4 | 9.2 | 3.5 | 3.17 | 2.29 | 3.3 | 81.70 | 46.89 | 21.6 |
| 2010 | 2,858 | 310 | 10.9 | 4,398 | 1,848 | 16.8 | 10.6 | 3.7 | 5.90 | 2.29 | 2.7 | 90.85 | 66.00 | 14.2 |
| 2009 | 2,869 | 173 | 6.0 | 4,505 | 1,780 | 9.7 | 18.8 | 3.8 | 3.38 | 1.87 | 1.8 | 120.10 | 71.50 | 30.2 |
| Syngenta |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$14,202 | \$1,872 | 13.2\% | \$15,900 | \$5,244 | 35.7\% | 3.6\% | 8.8\% | \$20.32 | \$9.95 | 2.7\% | CHF 376.50 | снғ 275.00 | 17.1 |
| 2011 | 13,268 | 1,599 | 12.1 | 14,372 | 4,634 | 34.5 | 3.6 | 8.5 | 17.31 | 7.90 | 2.6 | 324.30 | 211.10 | 16.5 |
| 2010 | 11,641 | 1,397 | 12.0 | 14,198 | 4,362 | 32.0 | 3.4 | 8.9 | 14.99 | 6.77 | 2.3 | 305.50 | 222.00 | 18.8 |
| 2009 | 10,992 | 1,371 | 12.5 | 13,594 | 4,053 | 33.8 | 5.9 | 8.7 | 14.62 | 6.77 | 2.4 | 292.10 | 211.00 | 18.3 |

## PHARMACEUTICALS

| FRANCE |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sanofi |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$44,936 | \$6,387 | 14.2\% | \$80,152 | \$24,944 | 25.6\% | 3.9\% | 14.1\% | \$4.81 | \$3.56 | 4.4\% | €72.38 | €53.20 | 16.8 |
| 2011 | 42,933 | 7,320 | 17.1 | 128,797 | 72,507 | 10.1 | 5.3 | 14.4 | 5.52 | 3.41 | 5.3 | 56.82 | 42.85 | 11.6 |
| 2010 | 39,069 | 7,030 | 18.0 | 109,636 | 68,520 | 10.3 | 5.2 | 14.5 | 5.37 | 3.21 | 4.9 | 58.90 | 44.01 | 12.3 |
| 2009 | 37,683 | 6,770 | 18.0 | 102,930 | 62,294 | 10.9 | 6.1 | 15.6 | 5.18 | 3.09 | 5.0 | 56.78 | 38.43 | 11.8 |

[^2]|  | NET |  | OFIT | TOTAL | STOCK-HOLDERS' | RETURN ON |  | R\&D SPENDING, \% OF | EARNINGS PER | DIVIDEND | DIVIDEND YIELD, \% | STOCK PRI PER S | E RANGE, ARE | PRICE/ <br> EARNINGS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | SALES | EARNINGS | MARGIN | ASSETS | EQUITY | EQUITY | SALES | SALES | SHARE | SHARE | OF PRICE | HIGH | LOW | RATIO |
| (Monetary figures, except per-share amounts, are in millions of dollars) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| SWITZERLAND |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Novartis |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$56,673 | \$9,618 | 17.0\% | \$93,126 | \$38,129 | 25.2\% | 4.8\% | 16.5\% | \$3.93 | \$2.45 | 4.0\% | CHF 59.00 | CHF 48.80 | 14.6 |
| 2011 | 58,566 | 9,113 | 15.6 | 117,496 | 65,940 | 13.8 | 3.7 | 16.4 | 3.78 | 2.40 | 4.4 | 55.80 | 39.99 | 13.5 |
| 2010 | 50,624 | 9,794 | 19.3 | 123,318 | 69,769 | 14.0 | 3.3 | 17.9 | 4.26 | 2.35 | 3.7 | 60.25 | 50.55 | 13.9 |
| 2009 | 44,267 | 8,400 | 19.0 | 95,505 | 57,462 | 14.6 | 4.3 | 16.9 | 3.69 | 2.24 | 4.1 | 56.90 | 39.64 | 14.0 |
| Roche |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$48,522 | \$10,173 | 21.0\% | \$61,134 | \$9,862 | 103.1\% | 4.8\% | 18.6\% | \$11.90 | \$7.84 | 4.2\% | CHF 191.70 | CHF 157.10 | 15.6 |
| 2011 | 45,357 | 9,964 | 22.0 | 65,667 | 15,444 | 64.5 | 4.6 | 19.6 | 11.71 | 7.25 | 4.7 | 167.00 | 123.80 | 13.2 |
| 2010 | 50,627 | 9,242 | 18.3 | 65,074 | 12,437 | 74.3 | 5.6 | 21.1 | 10.78 | 7.04 | 4.0 | 191.70 | 134.30 | 16.1 |
| 2009 | 52,310 | 8,301 | 15.9 | 79,519 | 10,039 | 82.7 | 6.1 | 20.1 | 9.62 | 6.40 | 3.8 | 182.10 | 130.30 | 17.3 |
| UNITED KINGDOM |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AstraZeneca |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$27,973 | \$6,297 | 22.5\% | \$43,636 | \$14,054 | 44.8\% | 2.4\% | 18.7\% | \$4.98 | \$4.44 | 3.9\% | $£ 49.33$ | £41.07 | 14.4 |
| 2011 | 33,591 | 9,983 | 29.7 | 52,830 | 23,472 | 42.5 | 2.5 | 16.4 | 7.30 | 2.79 | 3.9 | 31.94 | 25.44 | 6.2 |
| 2010 | 33,269 | 8,053 | 24.2 | 56,127 | 23,410 | 34.4 | 2.4 | 16.0 | 5.57 | 2.56 | 3.3 | 33.85 | 27.32 | 8.7 |
| 2009 | 32,804 | 7,521 | 22.9 | 54,920 | 20,821 | 36.1 | 2.9 | 13.4 | 5.19 | 2.24 | 3.5 | 29.47 | 21.47 | 7.8 |
| GlaxoSmithKline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$41,901 | \$7,237 | 17.3\% | \$58,840 | \$3,786 | 191.2\% | 4.0\% | 15.0\% | \$1.44 | \$1.17 | 5.2\% | $£ 15.08$ | $£ 13.18$ | 15.5 |
| 2011 | 43,416 | 9,098 | 21.0 | 65,124 | 13,993 | 65.0 | 3.4 | 14.3 | 1.63 | 1.19 | 5.8 | 14.74 | 11.28 | 12.6 |
| 2010 | 45,010 | 4,347 | 9.7 | 66,947 | 15,449 | 28.1 | 3.6 | 14.0 | 0.51 | 1.03 | 5.3 | 13.40 | 10.95 | 38.0 |
| 2009 | 44,971 | 9,742 | 21.7 | 67,949 | 17,029 | 57.2 | 5.0 | 13.9 | 1.71 | 0.97 | 5.3 | 13.34 | 9.87 | 10.7 |



## JAPAN COMPANY RESULTS

## Sumitomo and Teijin reported large losses in their latest fiscal year


(Monetary figures, except per-share amounts, are in millions of dollars)

| ASAHI KASEI |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2012 | $\$ 20,880$ | $\$ 673$ | $3.2 \%$ | $\$ 22,553$ | $\$ 9,195$ | $7.3 \%$ | $6.2 \%$ | $4.3 \%$ | $\$ 0.48$ | $\$ 0.18$ | $2.7 \%$ | $¥ 637$ |
| 2011 | 19,710 | 699 | 3.5 | 17,672 | 8,730 | 8.0 | 4.9 | 4.2 | 0.50 | 0.18 | 2.8 | 565 |
| 2010 | 20,025 | 755 | 3.8 | 17,864 | 8,261 | 9.1 | 4.1 | 3.9 | 0.54 | 0.14 | 2.2 | 590 |
| 2009 | 17,960 | 317 | 1.8 | 17,150 | 7,678 | 4.1 | 5.9 | 4.4 | 0.23 | 0.13 | 2.3 | 513 |


| DIC $^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2012 | \$8,817 | \$239 | 2.7\% | \$8,682 | \$3,101 | 7.7\% | 3.7\% | 1.2\% | \$0.26 | \$0.08 | 3.5\% | $\ddagger 213$ | $¥ 127$ | 8.2 |
| 2011 | 9,199 | 227 | 2.5 | 8,457 | 2,922 | 7.8 | 3.6 | 1.2 | 0.25 | 0.05 | 2.5 | 207 | 118 | 8.2 |
| 2010 | 9,759 | 197 | 2.0 | 8,817 | 2,740 | 7.2 | 2.7 | 1.5 | 0.22 | 0.05 | 2.2 | 222 | 135 | 10.1 |
| 2009 | 9,494 | 32 | 0.3 | 9,394 | 1,539 | 2.1 | 3.1 | 1.6 | 0.04 | 0.05 | 2.5 | 205 | 118 | 50.3 |
| JSR CORP. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$4,654 | \$379 | 8.2\% | \$6,050 | \$3,766 | 10.1\% | 7.4\% | 5.3\% | \$1.58 | \$0.43 | 2.2\% | $¥ 1,912$ | $¥ 1,240$ | 12.5 |
| 2011 | 4,384 | 331 | 7.5 | 5,396 | 3,562 | 9.3 | 5.6 | 5.0 | 1.37 | 0.40 | 2.2 | 1,734 | 1,231 | 13.5 |
| 2010 | 4,268 | 345 | 8.1 | 4,893 | 3,327 | 10.4 | 3.5 | 5.0 | 1.42 | 0.40 | 2.0 | 1,975 | 1,208 | 14.1 |
| 2009 | 3,886 | 171 | 4.4 | 4,680 | 3,134 | 5.5 | 5.7 | 5.9 | 0.70 | 0.33 | 1.7 | 1,966 | 1,145 | 27.8 |


| KANEKA |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2012 | $\$ 5,969$ | $\$ 117$ | $2.0 \%$ | $\$ 6,069$ | $\$ 3,236$ | $3.6 \%$ | $6.3 \%$ | $4.5 \%$ | $\$ 0.35$ | $\$ 0.20$ | $3.4 \%$ |
| 2011 | 5,879 | 68 | 1.2 | 5,852 | 3,191 | 2.1 | 7.1 | 4.3 | 0.20 | 0.20 | 3.2 |
| 2010 | 5,686 | 146 | 2.6 | 5,702 | 3,202 | 4.5 | 6.4 | 4.0 | 0.43 | 0.20 | 3.0 |
| 2009 | 5,168 | 105 | 2.0 | 5,423 | 3,126 | 3.4 | 5.9 | 3.9 | 0.31 | 0.20 | 2.7 |


| MITSUBISHI CHEMICAL HOLDINGS |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2012 | $\$ 38,694$ | $\$ 233$ | $0.6 \%$ | $\$ 41,440$ | $\$ 10,217$ | $2.3 \%$ | $4.3 \%$ | $4.4 \%$ | $\$ 0.16$ | $\$ 0.15$ | $3.2 \%$ | $\neq 476$ |
| 2011 | 40,193 | 445 | 1.1 | 39,764 | 9,656 | 4.6 | 3.6 | 4.3 | 0.30 | 0.13 | 1.9 | 612 |
| 2010 | 39,674 | 1,047 | 2.6 | 41,268 | 9,499 | 11.0 | 3.7 | 4.1 | 0.74 | 0.13 | 1.9 | 641 |
| 2009 | 31,509 | 161 | 0.5 | 42,033 | 8,439 | 1.9 | 4.7 | 5.4 | 0.12 | 0.10 | 2.1 | 481 |


| MITSUI CHEMICALS |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2012 | $\$ 17,617$ | $-\$ 102$ | def | $\$ 16,763$ | $\$ 4,790$ | def | $4.0 \%$ | $2.3 \%$ | $-\$ 0.10$ | $\$ 0.08$ | $3.1 \%$ | $\neq 243$ |
| 2011 | 18,216 | -13 | def | 15,739 | 4,967 | def | 3.1 | 2.3 | -0.01 | 0.08 | 2.3 | 306 |
| 2010 | 17,436 | 311 | $1.8 \%$ | 16,232 | 5,056 | $6.2 \%$ | 3.2 | 2.6 | 0.31 | 0.08 | 2.2 | 332 |
| 2009 | 15,131 | -351 | def | 15,511 | 4,821 | def | 4.1 | 3.2 | -0.41 | 0.04 | 1.0 | 382 |


| SHIN-ETSU CHEMICAL |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2012 | $\$ 12,847$ | $\$ 1,324$ | $10.3 \%$ | $\$ 24,065$ | $\$ 19,746$ | $6.7 \%$ | $8.1 \%$ | $3.7 \%$ | $\$ 3.12$ | $\$ 1.25$ | $1.9 \%$ | $¥ 6,430$ |
| $¥ 3,960$ | 20.9 |  |  |  |  |  |  |  |  |  |  |  |
| 2011 | 13,126 | 1,261 | 9.6 | 22,674 | 18,208 | 6.9 | 8.3 | 3.4 | 2.97 | 1.25 | 2.4 | 4,870 |
| 2010 | 13,258 | 1,254 | 9.5 | 22,352 | 17,875 | 7.0 | 10.8 | 3.495 | 2.95 | 1.25 | 2.2 | 5,700 |
| 2009 | 11,486 | 1,051 | 9.1 | 22,164 | 17,930 | 5.9 | 13.2 | 3.7 | 2.47 | 1.25 | 2.0 | 6,000 |


| SHOWA DENKO |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2012 | \$9,268 | \$117 | 1.3\% | \$11,691 | \$3,205 | 3.7\% | 5.7\% | 2.8\% | \$0.08 | \$0.04 | 2.0\% | $¥ 187$ | $¥ 113$ | 24.0 |
| 2011 | 10,701 | 213 | 2.0 | 11,793 | 3,151 | 6.8 | 4.5 | 2.5 | 0.14 | 0.04 | 1.8 | 193 | 139 | 14.6 |
| 2010 | 9,987 | 159 | 1.6 | 11,582 | 3,001 | 5.3 | 7.3 | 2.6 | 0.11 | 0.04 | 1.8 | 208 | 132 | 20.0 |
| 2009 | 8,497 | -476 | def | 12,006 | 3,592 | def | 5.7 | 3.1 | -0.37 | 0.04 | 1.8 | 217 | 109 | def |


| SUMITOMO CHEMICAL |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2012 | \$24,461 | -\$640 | def | \$30,971 | \$9,365 | def | 5.9\% | 6.4\% | -\$0.39 | \$0.08 | 2.3\% | $¥ 338$ | ¥191 | def |
| 2011 | 24,403 | 70 | 0.3\% | 29,278 | 9,032 | 0.8\% | 8.0 | 6.3 | 0.04 | 0.11 | 2.6 | 437 | 261 | 102.0 |
| 2010 | 24,836 | 306 | 1.2 | 29,658 | 9,507 | 3.2 | 5.0 | 7.0 | 0.19 | 0.11 | 2.2 | 483 | 332 | 27.4 |
| 2009 | 20,307 | 184 | 0.9 | 29,866 | 10,291 | 1.8 | 6.4 | 7.2 | 0.11 | 0.08 | 1.5 | 484 | 325 | 45.3 |

NOTE: Monetary statistics, except share prices, for all years were converted at the 2012 average exchange rate of $\$ 1.00$ U.S. $=79.82$ yen. Statistics were prepared on the basis of consolidated results. The fiscal year ends on March 31 of the following calendar year, except for Showa Denko's, which ends on Dec. 31. a Formerly Dainippon Ink \& Chemicals. b Holding firm made up of Mitsubishi Chemical, Mitsubishi Rayon, Mitsubishi Tanabe Pharma, and Mitsubishi Plastics. def = deficit.

|  | NET |  | PROFIT | TOTAL | STOCK-HOLDERS' | RETURN ON | CAPITAL SPENDING, \% OF | R\&D SPENDING, \% OF | EARNINGS PER | DIVIDEND, \$ PER | DIVIDEND YIELD, \% | STOCK RANGE, PER | RICE SHARE | PRICE/ ARNINGS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | SALES | EARNINGS | MARGIN | ASSETS | EQUITY | EQUITY | SALES | SALES | SHARE | SHARE | OF PRICE | HIGH | LOW | RATIO |
| (Monetary figures, except per-share amounts, are in millions of dollars) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| TEIJIN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$9,342 | -\$365 | def | \$9,551 | \$3,411 | def | 4.7\% | 4.5\% | -\$0.37 | \$0.05 | 1.8\% | ¥273 | $¥ 165$ | def |
| 2011 | 10,704 | 150 | 1.4\% | 9,548 | 3,659 | 4.1\% | 3.6 | 3.7 | 0.15 | 0.08 | 2.0 | 399 | 216 | 25.3 |
| 2010 | 10,219 | 315 | 3.1 | 9,541 | 3,561 | 8.9 | 3.6 | 3.9 | 0.32 | 0.06 | 1.5 | 423 | 254 | 13.2 |
| 2009 | 9,595 | -447 | def | 10,312 | 3,399 | def | 4.7 | 4.4 | -0.45 | 0.03 | 0.7 | 335 | 213 | def |
| TORAY INDUSTRIES |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$19,948 | \$607 | 3.0\% | \$21,697 | \$9,083 | 6.7\% | 6.2\% | 3.3\% | \$0.37 | \$0.13 | 1.9\% | $¥ 636$ | $\ddagger 426$ | 17.8 |
| 2011 | 19,897 | 805 | 4.0 | 19,813 | 7,857 | 10.2 | 6.2 | 3.2 | 0.49 | 0.13 | 1.7 | 630 | 513 | 14.5 |
| 2010 | 19,290 | 726 | 3.8 | 19,638 | 7,428 | 9.8 | 3.6 | 3.4 | 0.46 | 0.09 | 1.4 | 633 | 423 | 14.5 |
| 2009 | 17,034 | -177 | def | 19,504 | 5,902 | def | 4.2 | 3.4 | -0.13 | 0.06 | 1.0 | 568 | 395 | def |
| TOSOH |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | \$8,375 | \$211 | 2.5\% | \$9,209 | \$2,365 | 8.9\% | 3.9\% | 1.8\% | \$0.35 | \$0.08 | 2.3\% | $¥ 285$ | $\ddagger 230$ | 9.1 |
| 2011 | 8,609 | 118 | 1.4 | 8,879 | 2,143 | 5.5 | 2.8 | 1.9 | 0.20 | 0.08 | 2.2 | 350 | 205 | 17.7 |
| 2010 | 8,574 | 125 | 1.5 | 9,094 | 2,064 | 6.1 | 3.6 | 2.0 | 0.21 | 0.08 | 2.3 | 304 | 210 | 15.4 |
| 2009 | 7,877 | 86 | 1.1 | 9,267 | 2,036 | 4.2 | 4.8 | 2.2 | 0.14 | 0.08 | 2.4 | 316 | 186 | 21.8 |

NOTE: Monetary statistics, except share prices, for all years were converted at the 2012 exchange rate of $\$ 1.00$ U.S. $=79.82$ yen. Statistics were prepared on the basis of consolidated results. The fiscal year ends on March 31 of the following calendar year, except for Showa Denko's, which ends on Dec. 31 . def = deficit.

## U.S. CAPITAL SPENDING

Company investments grew in 2012, but at a slower pace than in 2011

| \$ MILLIONS | 2002 | 2010 | 2011 | 2012 |
| :---: | :---: | :---: | :---: | :---: |
| Air Products \& Chemicals ${ }^{\text {a }}$ | \$628 | \$1,298 | \$1,352 | \$1,521 |
| Albemarle | 38 | 76 | 191 | 281 |
| Cabot ${ }^{\text {a }}$ | 146 | 108 | 230 | 281 |
| Cytec Industries | 62 | 116 | 117 | 145 |
| Dow Chemical ${ }^{\text {b }}$ | 1,623 | 2,130 | 2,687 | 2,614 |
| DuPont ${ }^{\text {c }}$ | 1,280 | 1,501 | 1,843 | 1,793 |
| Eastman Chemical ${ }^{\text {d }}$ | 427 | 243 | 457 | 465 |
| FMC Corp. | 84 | 142 | 190 | 207 |
| H.B. Fullere | 36 | 36 | 36 | 36 |
| W.R. Grace | 91 | 113 | 142 | 139 |
| NewMarket Corp. | 13 | 34 | 54 | 39 |
| PPG Industries | 238 | 341 | 390 | 411 |
| Praxair | 498 | 1,388 | 1,797 | 2,180 |
| Quaker Chemical | 11 | 9 | 12 | 13 |
| Stepan | 36 | 74 | 83 | 83 |
| TOTAL $^{\text {f }}$ | \$5,211 | \$7,609 | \$9,581 | \$10,208 |

NOTE: Prior years are not restated to reflect company revisions. a Fiscal year ends on Sept 30. b Acquired Rohm and Haas in 2009. c Acquired Danisco in 2011. d Acquired Solutia in 2012. e Fiscal year ends on Dec. 1. $\mathbf{f}$ For companies reporting.

Increase in capital spending by European firms in 2012: \$6,999 million

EUROPE CAPITAL SPENDING
Spending surged despite the recession

| \$ MILLIONS | 2002 | 2010 | 2011 | 2012 |
| :---: | :---: | :---: | :---: | :---: |
| Air Liquide (France) | \$1,170 | \$1,450 | \$1,755 | \$2,582 |
| AkzoNobel (Netherlands) ${ }^{\text {a }}$ | 886 | 534 | 708 | 1,062 |
| Arkema (France) ${ }^{\text {b }}$ | ne | 315 | 424 | 563 |
| BASF (Germany) ${ }^{\text {c }}$ | 3,442 | 2,548 | 3,410 | 5,163 |
| Bayer (Germany) | 3,064 | 1,514 | 1,615 | 2,587 |
| Clariant (Switzerland) ${ }^{\text {d }}$ | 362 | 224 | 370 | 332 |
| DSM (Netherlands) | 647 | 370 | 423 | 919 |
| Givaudan (Switzerland) | 98 | 120 | 187 | 243 |
| Kemira (Finland) ${ }^{\text {e }}$ | 312 | 75 | 98 | 172 |
| Lanxess (Germany) ${ }^{\dagger}$ | ne | 501 | 679 | 895 |
| Linde (Germany) | 1,115 | 1,302 | 1,367 | 2,510 |
| Lonza (Switzerland) ${ }^{\text {g }}$ | 371 | 285 | 248 | 331 |
| Merck (Germany) ${ }^{\text {h }}$ | 485 | 396 | 366 | 423 |
| Solvay (Belgium) ${ }^{\text {i }}$ | 804 | 286 | 602 | 1,009 |
| Syngenta (Switzerland) | 165 | 396 | 479 | 508 |
| Wacker (Germany) | ne | 617 | 781 | 1,212 |
|  |  |  |  |  |
| TOTAL ${ }^{\text {k }}$ | \$12,921 | \$10,934 | \$13,513 | \$20,512 |

NOTE: Monetary statistics for all years were converted at the 2012 average exchange rate of $\$ 1.00$ U.S. $=0.7777$ euros and 0.9377 Swiss francs. a Divested pharmaceuticals in 2007 and purchased ICI in 2008. b Spun off from Total in 2006 c Purchased Ciba in 2009. d Purchased Süd-Chemie in 2011. e Spun off Tikkurila in 2010. f Spun off from Bayer in January 2005. g Purchased Arch Chemicals in 2011. h Purchased Millipore in 2010. i Sold its pharmaceuticals unit and changed its accounting procedures in 2010; bought Rhodia in 2011. j Became a publicly traded company in 2005. $\mathbf{k}$ For companies reporting. ne $=$ nonexistent.

## JAPAN CAPITAL SPENDING

Postrecession capital investment grew for the third straight year

| $\mathbf{\$ ~ M I L L I O N S ~}$ | $\mathbf{2 0 0 2}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ |
| :--- | ---: | ---: | ---: | ---: |
| Asahi Kasei | $\$ 1,177$ | $\$ 827$ | $\$ 972$ | $\$ 1,299$ |
| DIC $^{\text {a }}$ | 540 | 261 | 333 | 328 |
| JSR Corp. | 201 | 148 | 247 | 346 |
| Kaneka | 223 | 366 | 415 | 375 |
| Mitsubishi Chemical Holdings |  |  |  |  |
| Mitsui Chemicals | 1,069 | 1,476 | 1,455 | 1,656 |
| Shin-Etsu Chemical | 862 | 565 | 561 | 710 |
| Showa Denko | 821 | 1,427 | 1,092 | 1,040 |
| Sumitomo Chemical | 356 | 727 | 486 | 532 |
| Teijin | 1,904 | 1,237 | 1,943 | 1,455 |
| Toray | 879 | 366 | 385 | 438 |
| Tosoh | 717 | 701 | 1,233 | 1,242 |
|  | 152 | 310 | 242 | 328 |
| TOTAL ${ }^{\text {c }}$ |  |  |  |  |

NOTE: Monetary statistics for all years were converted at the 2012 average exchange rate of $\$ 1.00$ U.S. = 79.82 yen. Fiscal year ends on March 31 of the following calendar year, except Showa Denko's, which ends on Dec. 31. a Formerly Dainippon Ink \& Chemicals. b Holding firm made up of Mitsubishi Chemical, Mitsubishi Rayon, Mitsubishi Tanabe Pharma, and Mitsubishi Plastics. c For companies reporting.

## U.S. R\&D SPENDING

Chemical firms raised spending on research, but in pharma, Merck \& Co. and Pfizer continued cuts

## CHEMICALS

| \$ MILLIONS | 2002 | 2010 | 2011 | 2012 |
| :---: | :---: | :---: | :---: | :---: |
| Air Products \& Chemicals ${ }^{\text {a }}$ | \$121 | \$115 | \$119 | \$126 |
| Albemarle | 17 | 58 | 77 | 79 |
| Cabot ${ }^{\text {a }}$ | 48 | 70 | 66 | 73 |
| Cytec Industries | 34 | 73 | 85 | 53 |
| Dow Chemical ${ }^{\text {b }}$ | 1,066 | 1,660 | 1,646 | 1,708 |
| DuPont ${ }^{\text {c }}$ | 1,264 | 1,651 | 1,956 | 2,067 |
| Eastman Chemical ${ }^{\text {d }}$ | 159 | 152 | 158 | 198 |
| FMC Corp. | 82 | 101 | 105 | 118 |
| H.B. Fullere | 18 | 19 | 21 | 21 |
| W.R. Grace | 52 | 60 | 69 | 65 |
| NewMarket Corp. | 30 | 91 | 105 | 118 |
| PPG Industries | 289 | 408 | 430 | 455 |
| Praxair | 69 | 79 | 90 | 98 |
| Quaker Chemical | 9 | 16 | 19 | 20 |
| Stepan | 15 | 38 | 41 | 28 |
| TOTAL ${ }^{\text {f }}$ | \$3,273 | \$4,591 | \$4,987 | \$5,227 |

## PHARMACEUTICALS

| $\mathbf{\$ ~ M I L L I O N S}$ | $\mathbf{2 0 0 2}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ |
| :--- | ---: | ---: | ---: | ---: |
| Abbott Laboratories | $\$ 1,562$ | $\$ 3,724$ | $\$ 4,129$ | $\$ 4,322$ |
| Bristol-Myers Squibb | 2,218 | 3,566 | 3,839 | 3,904 |
| Eli Lilly \& Co. | 2,235 | 4,884 | 5,021 | 5,278 |
| Johnson \& Johnson | 2,957 | 6,844 | 7,548 | 7,665 |
| Merck \& Co.g | 2,677 | 10,991 | 8,467 | 8,168 |
| Pfizer $^{h}$ | 5,176 | 9,413 | 9,112 | 7,870 |
| TOTAL $^{\text {f }}$ |  |  |  |  |

NOTE: Prior years are not restated to reflect company revisions. a Fiscal year ends on Sept. 30. b Acquired Rohm and Haas in 2009. c Acquired Danisco in 2011. d Acquired Solutia in 2012. e Fiscal year ends on Dec. 1. f For companies reporting. g Acquired Schering-Plough in 2009. h Purchased Pharmacia in 2003 and Wyeth in 2009.

## EUROPE R\&D SPENDING

Investments edged up at most firms in 2012

| \$ MILLIONS | 2002 | 2010 | 2011 | 2012 |
| :---: | :---: | :---: | :---: | :---: |
| Air Liquide (France) | \$118 | \$224 | \$239 | \$330 |
| AkzoNobel (Netherlands) ${ }^{\text {a }}$ | 1,159 | 429 | 458 | 498 |
| Arkema (France) ${ }^{\text {b }}$ | ne | 179 | 170 | 189 |
| BASF (Germany) ${ }^{\text {c }}$ | 1,459 | 1,918 | 2,064 | 2,227 |
| Bayer (Germany) | 3,314 | 3,926 | 3,770 | 3,874 |
| Clariant (Switzerland) ${ }^{\text {d }}$ | 375 | 144 | 188 | 187 |
| DSM (Netherlands) | 348 | 435 | 490 | 490 |
| Givaudan (Switzerland) | 220 | 358 | 314 | 431 |
| Kemira (Finland) ${ }^{\text {e }}$ | 59 | 54 | 51 | 54 |
| Lanxess (Germany) ${ }^{\dagger}$ | ne | 149 | 185 | 247 |
| Linde (Germany) | 220 | 121 | 126 | 130 |
| Lonza (Switzerland) ${ }^{\text {g }}$ | 109 | 106 | 100 | 124 |
| Merck (Germany) ${ }^{\text {h }}$ | 782 | 1,796 | 1,951 | 1,947 |
| Solvay (Belgium) ${ }^{\text {i }}$ | 510 | 161 | 201 | 336 |
| Syngenta (Switzerland) | 697 | 1,032 | 1,127 | 1,253 |
| Wacker (Germany) | ne | 212 | 222 | 224 |
|  |  |  |  |  |
| TOTAL ${ }^{\text {k }}$ | \$9,371 | \$11,244 | \$11,655 | \$12,540 |

NOTE: Monetary statistics for all years were converted at the 2012 average exchange rate of $\$ 1.00$ U.S. $=0.7777$ euros and 0.9377 Swiss francs. a Divested pharmaceuticals in 2007 and purchased ICI in 2008. b Spun off from Total in 2006 c Purchased Ciba in 2009. d Purchased Süd-Chemie in 2011. e Spun off Tikkurila in 2010. f Spun off from Bayer in January 2005. g Purchased Arch Chemicals in 2011. h Purchased Millipore in 2010. i Sold its pharmaceuticals unit and changed its accounting procedures in 2010; bought Rhodia in 2011. j Became a publicly traded company in 2005. k For companies reporting. ne = nonexistent.

## JAPAN R\&D SPENDING

Overall, expenditures have remained stable for past three years

| \$ MILLIONS | $\mathbf{2 0 0 2}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ |
| :--- | ---: | ---: | ---: | ---: |
| Asahi Kasei | $\$ 618$ | $\$ 781$ | $\$ 831$ | $\$ 891$ |
| DIC $^{\text {a }}$ | 162 | 148 | 114 | 110 |
| JSR Corp. | 176 | 215 | 220 | 247 |
| Kaneka | 175 | 229 | 251 | 268 |
| Mitsubishi Chemical Holdings |  |  |  |  |
| Mitsui Chemicals | 1,141 | 1,639 | 1,736 | 1,688 |
| Shin-Etsu Chemical | 465 | 454 | 416 | 401 |
| Showa Denko | 342 | 468 | 447 | 472 |
| Sumitomo Chemical | 193 | 258 | 271 | 258 |
| Teijin | 912 | 1,730 | 1,532 | 1,566 |
| Toray | 374 | 395 | 398 | 416 |
| Tosoh | 447 | 651 | 645 | 668 |
|  | 130 | 168 | 162 | 153 |
| TOTALc |  |  |  |  |

NOTE: Monetary statistics for all years were converted at the 2012 average exchange rate of $\$ 1.00$ U.S. $=79.82$ yen. Fiscal year ends on March 31 of the following calendar year, except Showa Denko's, which ends on Dec. 31. a Formerly Dainippon Ink \& Chemicals. b Holding firm made up of Mitsubishi Chemical, Mitsubishi Rayon, Mitsubishi Tanabe Pharma, and Mitsubishi Plastics. c For, companies reporting.

## Increase in spending at <br> Japan's chemical firms since 2002 in research and development: <br> 39\%


[^0]:    a Fiscal year ends on Sept. 30. d Acquired Terra Industries in 2010. e Acquired Rohm and Haas in 2009. f Acquired Danisco in 2011. g Acquired Solutia in 2012. h Fiscal year ends on Dec. 1 . def $=$ deficit. ne $=$ nonexistent.

[^1]:    i Acquired Schering-Plough in 2009. j Acquired Wyeth in 2009 and Icagen in October 2011. ne = nonexistent.

[^2]:    NOTE: Monetary statistics, except stock prices, for all years were converted at the 2012 average exchange rate of $\$ 1.00$ U.S. $=0.7777$ euros, 0.9377 Swiss francs, and 0.6308 pounds sterling. d Purchased Millipore in 2008. e Purchased Süd-Chemie in 2011. f Purchased Arch Chemicals in 2011. def $=$ deficit. ne $=$ nonexistent.

