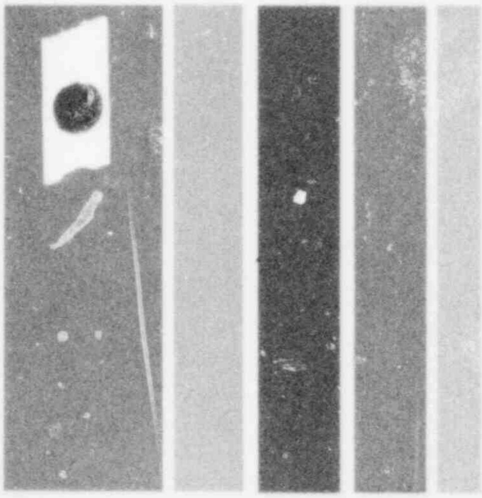


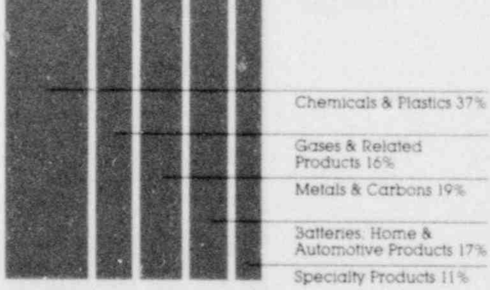
AS WE MOVE INTO THE 1980s, WE CAN POINT TO OPPORTUNITIES OR STRENGTHS IN EACH OF OUR FIVE INDUSTRY SEGMENTS: CHEMICALS & PLASTICS GASES & RELATED PRODUCTS METALS & CARBONS BATTERIES; HOME & AUTOMOTIVE PRODUCTS SPECIALTY PRODUCTS

With consolidated sales of more than $9 billion in 1979, Union Carbide Corporation ranked among the 25 largest industrial companies in the United States and among the 50 largest in the world. The Corporation's diversified portfolio of businesses included operations in five industry segments. International operations contributed about one-third of total sales. At year-end, Union Carbide's approximately 171,000 stockholders owned more than 66 million shares.

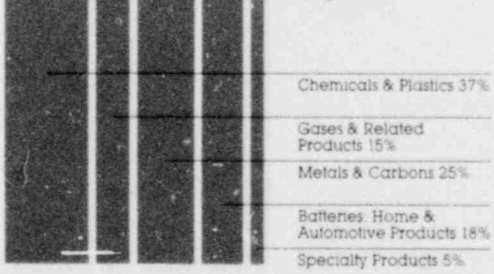
FINANCIAL HIGHLIGHTS

	Dollar amounts in millions (except per share figures)		
For the year	**1979**	1978	% Change
Sales	**$9,176.5**	$7,869.7	+ 17
Net income	**$ 556.2**	$ 394.3	+ 41
Net income per share	**$ 8.47**	$ 6.09	+ 39
Dividends	**$ 190.1**	$ 181.2	+ 5
Dividends per share	**$ 2.90**	$ 2.80	+ 4
Research and development expenses	**$ 160.8**	$ 155.9	+ 3
Capital expenditures	**$ 831.3**	$ 687.8	+ 21
At year-end			
Total assets	**$8,802.6**	$7,866.2	+ 12
UCC stockholders' equity	**$4,042.5**	$3,638.5	+ 11
UCC stockholders' equity per share	**$ 61.06**	$ 55.92	+ 9
Shares outstanding (millions)	**66.2**	65.1	+ 2
Number of stockholders	**171,093**	176,079	− 3
Number of employees	**115,763**	113,371	+ 2

Sales by Industry Segment



Operating Profit by Industry Segment



The year 1979 was an excellent one for Union Carbide. Sales and net income rose to the highest levels in our history.

□ Worldwide sales for the year were $9.18 billion, an increase of 17% over the $7.87 billion of 1978.

□ Net income of $556.2 million was the highest ever, exceeding the 1974 figure of $525.1 million, and marking a 41% increase over our 1978 earnings of $394.3 million.

□ Earnings per share of $8.47 were 39% higher than the $6.09 per share earned in 1978, despite a larger average number of shares outstanding, 65.7 million vs. 64.7 million in 1978.

Operations in 1979 The recession many had forecast for 1979 did not occur. Various economic indicators continued to show strength, even during the closing months of the year. The high level of economic activity spurred excellent operating performance throughout the Corporation. Four of our five industry segments contributed to earnings growth, both through increased volume of business and through improvements in price or through cost reductions.

□ Strong worldwide demand for graphite electrodes increased sales in our Metals & Carbons segment. Steelmaking by the electric arc furnace method, which uses the electrodes, set a production record in the United States and grew internationally as well. Segment operating profit rose 61%.

□ Despite rising feedstock costs, our Chemicals & Plastics segment achieved a 28% gain in operating profit. Exceptional export demand and acceptance of price increases at home and abroad contributed to the good results.

□ Increased sales of *Eveready* and *Ucar* batteries, and the sales gains achieved by *Prestone* antifreeze/summer coolant, contributed to good results in the Batteries; Home & Automotive segment. The gain in operating profit was 10%.

□ Operating profit in the Specialty Products segment rose 17%. Agricultural Products & Services, Food Processing & Packaging Materials, and Electronics Components & Materials performed well.

□ Worldwide sales were up in the Gases and Related Products segment. But currency and inflationary effects significantly reduced U. S. dollar-reported earnings from Brazil. The net result was a drop in segment operating profit of 5%.

□ Export sales, which are included in domestic sales, reached an all-time high, increasing more than 50% over 1978 levels. International sales also reached new highs.

Consolidated Performance Our gross margin as a percent of sales in 1979 was 29.3%, a slight improvement over the margin of 29.1% in 1978, though below the 34.3% in 1974.

Compared with five years ago, the 1979 gross margin reflects the fact that, on the whole, market conditions have kept the prices of our products from rising as quickly as raw material and production costs have risen.

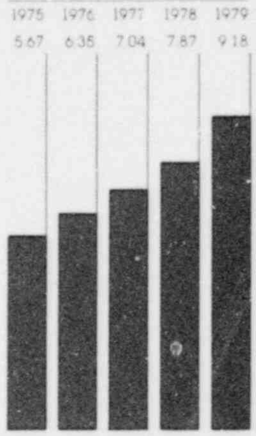
Our efforts to control overhead costs continued to show good results in 1979. Selling expenses increased proportionally less than the increase in sales. Administrative and other expenses increased at a slower pace than the general rate of inflation. Sales per employee rose.

We have benefited from a number of cost reduction and productivity improvement programs—plant modernization in our Industrial Gases business, for example, and improvements in our Chemicals & Plastics catalyst technology, as well as various energy conservation projects. Our new *Unipol* polyethylene process also improves productivity.

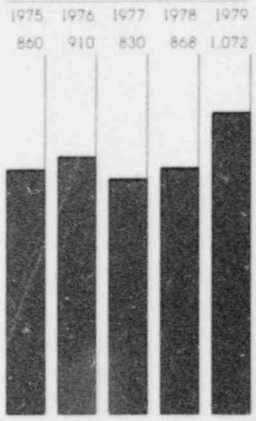
Union Carbide was in compliance during the first program year of the President's voluntary wage/price program administered by the Council on Wage and Price Stability.

Earnings in 1979 were adversely affected by foreign currency transla-

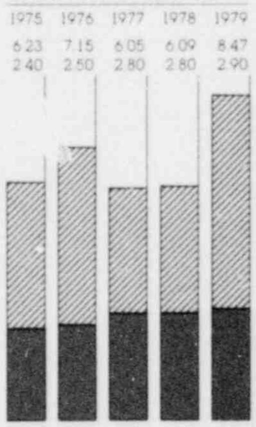
Sales ($ Billions)



Operating Profit ($ Millions)



Net Income/Share ($)
Dividends/Share ($)



tion and exchange adjustments, though not as much as last year. In 1979 the adjustments amounted to an after-tax loss of $29.3 million, or 45 cents per share, compared with a loss in 1978 of $59.1 million, or 91 cents per share.

Our share of income from companies 20%-to-50%-owned increased by $28 million, reaching an all-time high.

Net income increased 41% in 1979, compared with a 17% sales increase.

Financial Developments During the year we made a successful offering of debentures and notes, using the proceeds from the sale to reduce short-term debt. We issued $200 million of 9.35% Debentures due 2009, and $100 million of 9.125% Notes due 1986 (effective rate of 9.22%).

With the September 1, 1979 dividend payment, our dividend on common stock increased from an annual rate of $2.80 to a rate of $3.00 per share. Our goal is to provide investors an increasing total return on their investment through a combination of capital appreciation of their stock and a continuing flow of dividends. In keeping with that policy, we plan to raise the quarterly dividend from time to time, but only to levels we believe to be sustainable while funding our planned growth.

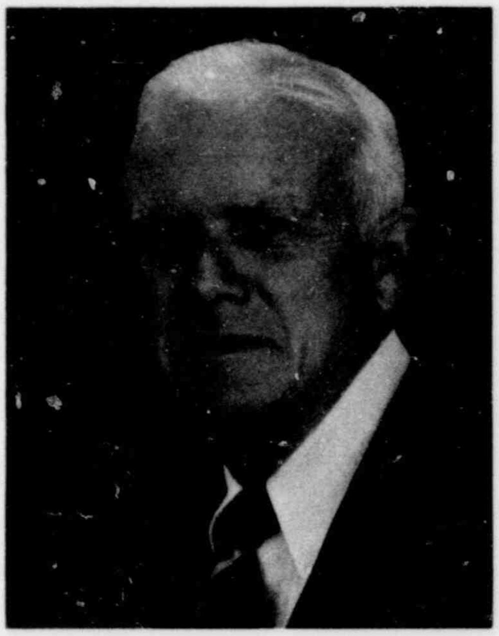
We have made certain accounting changes which will affect our reported net income and earnings per share in 1980 and thereafter. The changes are discussed in a special section on page 4.

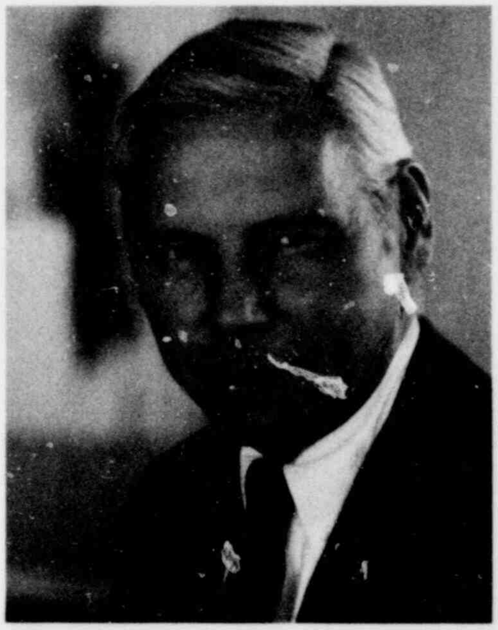
In this year's report we have also provided supplementary information on the effect of changing prices on our traditional measures of income and capital. We believe the data will make clear the critical need in our country for national monetary and fiscal policies that will allow corporations to provide reasonable dividend returns to stockholders while retaining adequate capital for future business growth. The supplementary information, and further discussion of it, appear as Note 17 on page 32.

Research and Development When the prestigious Kirkpatrick Chemical Engineering Achievement Awards were announced for 1979, Union Carbide won three out of a total of five citations. Honor Awards went to our Linde Division, for its new high-purity hydrogen process, and to our Nuclear Division, for its new uranium recovery process. The first-place Kirkpatrick Award itself went to our Polyolefins Division for its development of the *Unipol* polyethylene process. That process, which requires one-quarter of the energy input and one-half of the capital investment of previous processes, was licensed to several companies in 1979, and will be licensed to others as well as used in plants of our own.

The 1980 Outlook Uncertainty about the domestic economy and turmoil abroad make it difficult to forecast business conditions in 1980. In general, however, we feel that as 1980 progresses, business conditions will slow and demand for our products will begin to decline accordingly, especially in those businesses that serve the auto, housing, and steel industries. In addition, the current high rate of inflation will continue to affect raw material costs. We believe that sales of consumer products, together with exports and our significant international business, should provide an offsetting influence; but the overall result may be a decline in operating profit as compared with 1979, before the effect of the accounting changes discussed on page 4.

Nevertheless, we are in a good position to react effectively to declining levels of business activity. Our inventories and employment are at relatively low levels, overhead is under tight control, and our businesses are diversified. Thus the effects of the





Top: William S. Sneath, Chairman of the Board and Chief Executive Officer

Bottom: Warren M. Anderson, President and Chief Operating Officer forecast downturn should be much more moderate than those that were experienced in the 1974 recession and reflected in 1975 results.

Portfolio Review Our strengthened position as we begin 1980 is attributable in part to realignment of our portfolio of businesses. We have discontinued or sold several businesses that careful reviews of our portfolio showed to be unrelated to our basic direction or character or unlikely to achieve acceptable levels of profitability.

In 1979 we withdrew from the imaging systems hardware business and sold our fish farming operations, and in January of 1980 we sold a metalworking chemicals business.

Earlier, during the period 1977 through 1978, we withdrew from, or divested ourselves of, a number of businesses which, though well established, were not contributing to our objectives. Those businesses—12 in all—comprised more than $435 million in net assets employed, yet were returning only about 0.6% on assets.

During the same period, we discontinued some 25 new business ventures that did not fit within our developing portfolio. As a result, we are now saving at least $20 million annually in cash outflow.

Issues for the '80s It is becoming more apparent that increasing the level of business activity and improving the condition of our economy will depend increasingly on our country's ability to forge reasonable and realistic public policy. We have yet to see a willingness to adopt fiscal and monetary policies of sufficient strength to contain our pervasive double-digit inflation. Energy policy is still in the formative stages, even while our dependence on foreign oil becomes more precarious. We are only beginning to hear the admission at high levels of government of the need for a more reasonable balance between environmental and economic priorities. And efforts to stimulate productivity are still merely conjectural, despite conditions that are making it increasingly difficult for the United States to compete in world trade.

A business of any size that stays aloof from these issues is in a very real sense defaulting on its obligation—not only to stockholders, customers and employees, but also to the public at large. Union Carbide has become increasingly active in

IMPACT OF CERTAIN ACCOUNTING CHANGES EFFECTIVE IN 1980

In order to improve its financial reporting, Union Carbide is making several accounting changes effective in 1980. While not affecting income for tax purposes or cash flow, the changes will lead to an increase in reported net income and earnings per share in 1980 and subsequent years.

To depreciate the cost of machinery and equipment, Union Carbide will be using revised estimated useful lives rather than the shorter Internal Revenue Service guideline lives adopted in 1962. The use of revised lives, in conjunction with the straight line depreciation method we have used since 1967, will result in more realistic historical depreciation costs and also will allow us to provide, beginning in 1979, realistic supplemental information on inflation adjusted depreciation cost.

On the whole, asset lives will be extended by about 35% over those used before the change. That extension will provide management and others with a better matching of depreciation cost with the revenue producing capabilities of assets; and it will bring our asset depreciation lives more in line with those used by competitors.

Following a new requirement of the Financial Accounting Standards Board, the corporation will capitalize, rather than charge as expense, interest costs attributable to major capital projects in progress. The capitalized interest will be amortized over the average useful life of the asset.

Beginning in 1980, Union Carbide will include investment tax credits in income in the year earned (the flow-through method), rather than deferring them and taking them into income over the average guideline life of the assets earning the credit (the deferred method).

The flow-through method will alleviate the decreasing impact of the investment tax credit which results from use of the deferred method during periods of continuing high inflation. The large majority of industry utilizes the flow-through method.

The cumulative effect of deferred investment tax credits for the periods through December 31, 1979 will be reported as a non-recurring credit in the first quarter of 1980.

We estimate that changes in accounting for the items described above will have the following effects on the results we report for 1980:

	Net Income ($ Million)	Earnings Per Share ($)
Depreciation	+ $ 92	+ $ 1.37
Capitalization of Interest	+ 20	+ .30
Investment Tax Credit (ITC)	+ 17	.26
	+ 129	+ 1.93
Cumulative Prior ITC Effect	+ 217*	+ 3.27
	+ $ 346	+ $ 5.20

*Actual at December 31, 1979

this area over the past several years through the medium of a formal Key Issues Program which tracks, analyzes, and supports the company's spokesmanship role on the issues which most seriously affect our businesses.

On our immediate agenda are public policy issues relating to energy and feedstocks, environmental regulation, international trade and investment, and capital formation.

Energy and Feedstocks We are active advocates of an energy program that fully recognizes the importance of conservation—and incentives to induce conservation—as a means of reducing our reliance on imports and stretching domestic supplies. For Union Carbide, this is a basic dimension of our business planning. Between 1971 and the end of 1979, we reduced the amount of energy needed to produce a pound of product by 20%, and it is our goal to improve that figure to 30% by 1985.

We will also support policy which acknowledges the higher economic value of hydrocarbon feedstocks utilized in petrochemical production. Petrochemical production, which consumes only 4.5% of the nation's oil and gas, accounts for 413,000 jobs in the chemicals and plastics industries alone. In most cases products made from petrochemicals are less energy intensive than the natural products they replace. Many other industries, particularly the auto industry, depend on lightweight plastics and other petrochemical products to meet their own energy related goals and objectives.

Environmental Regulation We will continue to press for sound, cost-effective environmental regulation based on the best available scientific information. We recognize our responsibility to assist in establishing scientific standards for environmental testing, and will continue to strengthen and improve our own testing capability; attention to the environmental impact of our products and operations continues to be an explicit accountability of managers at all levels of our company. But we will continue to urge that scientists, not regulators, decide which chemicals and other materials are hazardous, and the degree of hazard they pose, before regulatory decisions are made; and that the relative benefits and costs of various levels and methods of control be considered.

Economic Competitiveness We will also continue to urge Government to adopt the kinds of tax and regulatory policy that will serve to stimulate capital investment and investment in research and development. We believe that such investment is the key to an expanding economy and increased employment. It is also an essential element of any economic policy which hopes to reverse the trend toward declining productivity. Falling behind our overseas competitors in productivity will only exacerbate inflation, put further pressure on the dollar and our balance of payments deficit, and cause U.S. exports to be less competitive in both developed and developing countries around the world.

Management Changes In 1979 Arthur C. MacLeod, Robert E. Pyle, and Heinn F. Tomfohrde III were elected Vice-Presidents of the Corporation, as was John H. Field in January of 1980.

We are pleased to welcome to the Board of Directors C. Peter McColough, chairman and chief executive officer of Xerox Corporation and a member of the boards of several organizations, among them The New York Stock Exchange, Citicorp, and the Overseas Development Council.

Leaving the Board in 1979 were Birny Mason, Jr., a former Chairman of the Board, who served the company for 47 years and was on the Board for 21 years, and Douglas H. Freeman, Executive Vice-President, who retired after 40 years with the company. F. Bruce Vernon, Senior Vice-President, also retired in 1980 after 41 years of service.

As of March 1, 1980 the Board will number 14 Directors, including 12 outside directors, one of whom is a former Chairman of the Board of Union Carbide. The individuals who sit on the Board have been recommended by our Nominating Committee, which seeks individuals whose special skills, experience, and points of view will enrich the collective expertise of the Board and can be used to the benefit of all stockholders. We are confident that our Board, with its strong complement of outside Directors, is well-prepared to meet Union Carbide's traditional high standards, as well as evolving standards, of corporate governance.

Into the '80's As we move into the 1980's, we can point to strengths or opportunities in each of our five industry segments, and to a balanced portfolio of businesses at different stages of growth, maturity, or development. The task before us is to ensure that each business makes the fullest possible contribution, consistent with the unique business environment it faces, to the performance of Union Carbide as a whole.

Moreover, we have a full public policy agenda that we expect to pursue with vigor and purpose. We believe that our program will benefit our stockholders and, at the same time, advance and enrich public dialogue on issues that will affect all our futures.

William S. Sneath

William S. Sneath
Chairman of the Board

Warren M. Anderson

Warren M. Anderson
President

February 20, 1980

Overview This segment is our largest, comprising 37% of sales and operating profit in 1979. In addition, Chemicals & Plastics is a significant supplier to other segments of Union Carbide. Domestically, we are the leading producer of a majority of our chemicals and plastics products. In polyethylene, we are the world's leader in size and proprietary technology, and it is the largest of our Chemicals & Plastics businesses. Our many leading positions, low cost production facilities, and technological strengths enhance our long-term prospects in this competitive segment and we believe we can deal successfully with problems of feedstock price and supply.

1979 Highlights Sales were $3,348 million, an increase of 15% over those of 1978. Operating profit increased 28% to $396 million. Excluding results of the consolidated ethylene derivatives businesses in Europe, which we sold in 1978, the increase in sales was 26%. Domestically, the sales increase was due more to higher prices (+13%) than to change in volume and/or product mix (+10%). Canadian sales are the most important factor in international sales.

Several factors had a positive influence on the current year's results:

□ With good overall industry demand, customers were more willing to accept price increases necessitated by rapidly accelerating increases in feedstock and energy costs.

□ Export demand was exceptional, and was aided by lower feedstock costs in the U.S. as compared with overseas. Exports of chemicals and plastics grew to almost half of Union Carbide's total exports.

□ Currency translation and exchange losses were reduced.

□ By using our proprietary catalyst technology, we added several hundred million pounds of ethylene oxide capacity with minimal capital expenditures.

□ Our award-winning *Unipol* process for high- and low-density polyethylene was successfully licensed.

Adverse effects were felt from rapidly escalating feedstock costs, especially of imported naphtha, which is used primarily at our Ponce, Puerto Rico subsidiary. We are continuing to improve feedstock flexibility there, so as to increase substantially our use of less expensive liquified petroleum gas from the present level of 20% of feedstock input.

To meet expected long-term demand, expansions are planned in several areas:

□ Low-density polyethylene—We plan to add a total of over a billion pounds per year of capacity by the end of 1982, using our new *Unipol* process.

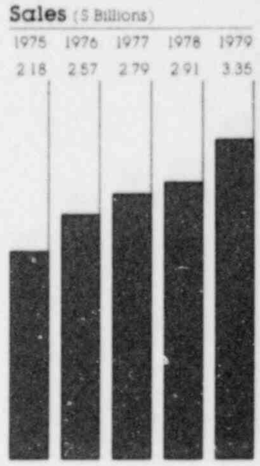
□ Ethylene oxide/glycol—An additional annual capacity of 650 million pounds of oxide and more than 900 million pounds of glycol is planned for start-up in late 1983.

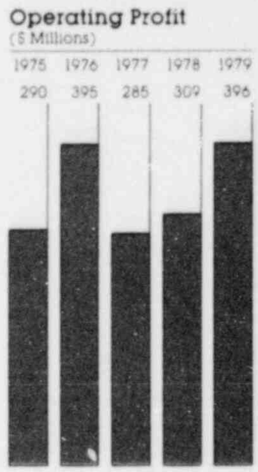
□ Ethyleneamines—We plan to add an additional 70 million pounds of capacity by 1981.

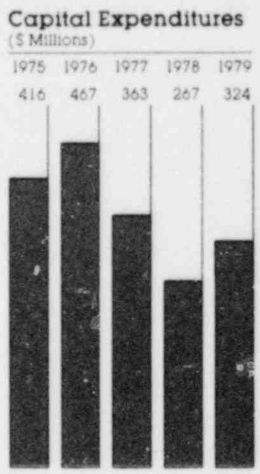
□ *Cellosize* thickener—A new plant with a capacity of 7.5 million pounds per year of this performance coatings material is scheduled to start up in Brazil during 1981.

□ Organo-functional silanes—A new plant planned for Europe is expected to be built by 1982.

1980 Outlook We anticipate that a slowdown in demand will follow the exceptionally successful year of 1979. Although the strength of export sales and additional licensing income may mitigate the effects of a U.S. slowdown, we see operating profit (before accounting changes) declining over the short term, because we do not expect price increases fully to offset added raw material and energy costs.







Basic Businesses

Polyolefins
Coatings Materials
Ethylene Oxide Derivatives
Solvents & Intermediates
Silicones & Urethane Intermediates
Ethylene Oxide/Glycol
Specialty Chemicals & Plastics
Hydrocarbons

Principal Raw Materials, Products, and Markets

Purchased LPG and naphtha are processed into ethylene, propylene, and benzene. These intermediates, together with additional purchased amounts, are used to make:

□ Polyethylene—for packaging, pipe, and electrical insulation, and for transfer to the Batteries, Home & Automotive Products segment for plastic wrap and bags.

□ Ethylene oxide/glycol and derivatives—transferred to the Batteries, Home & Automotive Products segment for antifreeze/summer coolant; and for petroleum processing, coatings, lubricants, and other uses.

□ Alcohols and Oxo-Alconols—for coatings, preservatives, detergents, and cosmetics.

Intermediates, together with purchased materials, are used to produce phenoxy, phenolic and solvent vinyl resins, and vinyl acetate, acrylates, and acetic esters for coatings, latexes, and packaging.

Purchased propylene oxide is used to make urethane intermediates for automotive, furniture, and other products.

Purchased materials and our own silicon are used to make silicones for electronics and other uses.

Value-added: We blow-mold plastic bottles from our own high-density polyethylene. Later they will be filled with *Prestone* antifreeze/summer coolant, also made by Union Carbide.

Overview We continue to build on our position as one of the worldwide leaders in industrial gases. This includes not only continuing growth in countries where we have major participation, but also increasing our standing in some of the highly industrialized areas and establishing positions in newly developing nations with attractive growth prospects. As a major producer of industrial gases with outstanding market technology, we are strongly positioned for the future.

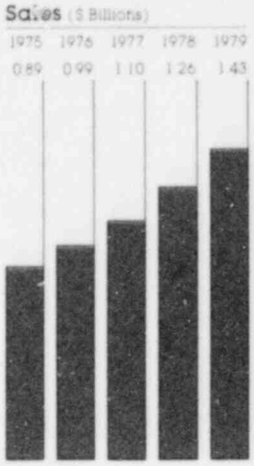
1979 Highlights Record worldwide sales were achieved. Sales were $1,432 million, an increase of 13% over those of 1978. Domestically, sales were vigorous. Higher sales were attributable to price increases (+8%) and a favorable change in volume and/or product mix (+6%). Our activities in Canada, Brazil, and Europe also produced important sales increases. Worldwide operating profit decreased 5% from that of 1978, to $158 million, largely because of reduced reported U.S. dollar earnings from Brazil, the result of severe inflation and currency effects in that country. Increases in profits domestically and in most international areas of the world reflect the results of good demand, a strong commitment to operating cost reduction, and effective overhead control.

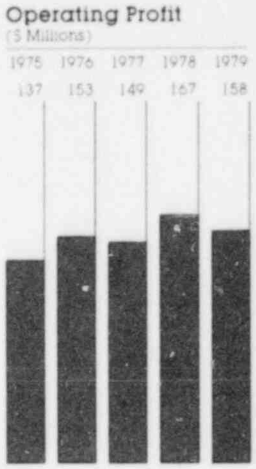
Industrial gases are important to industry as a result of their contribution to increased productivity, energy savings, and environmental improvement. A broad market mix enhances our growth prospects in the Industrial Gases business. Most of our recent gain in oxygen sales has been due to increased consumption in the steel, chemicals, and fabricated metal products industries. Impressive gains have taken place in our nitrogen shipments to a wide variety of users. Growth markets for nitrogen are materializing in enhanced oil recovery and in substitution for heat treating atmospheres made from natural gas.

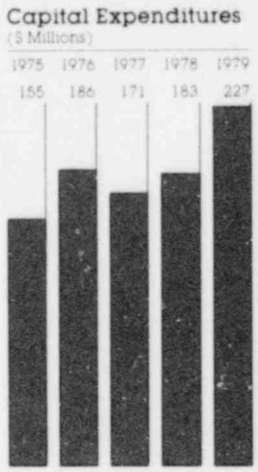
We started up the world's largest commercial helium plant during the year, in Bushton, KS, with capacity to liquefy three million cu. ft. of helium annually. Continuing demand for other of our industrial gases has required expansions at several domestic locations. Added penetration of overseas markets for industrial gases will occur upon completion in 1980 of plants in Germany, France, Brazil, and Canada.

Among the other businesses of the segment, performance was generally good. As a leading supplier of products to the welding industry, we are continuing to focus our efforts on those welding and cutting processes which are important to our Industrial Gases business and to our network of distributors.

1980 Outlook The year 1980 is expected to continue the uptrend in sales. The key to future growth is our focus on continuing technology programs for new applications of industrial gases and the growing opportunities in the energy-related areas of coal gasification, synfuels and catalysts. Selective capital expansion will assure the opportunity to meet increased levels of demand. Despite an anticipated weakening in the economy, operating profit is expected to grow, largely because of higher sales and the effects of plant modernization for increased efficiency.







Basic Businesses

Industrial Gases
Welding & Related Products
Engineering Systems & Services
Environmental Systems
Molecular Sieves

Principal Raw Materials, Products, and Markets

The raw material for major industrial gases is air, from which oxygen, nitrogen, and argon are separated. A major operating cost in this process is that of electrical power. Gases are sold from on-site plants and in distributable form (through tank trucks and cylinders). Demand is primarily from the steel, chemicals, metal fabrication, petroleum, and food-freezing industries. Hydrogen and other gases are produced from our own or purchased chemicals.

Purchased materials and chemicals are used to manufacture the following products for sale as indicated:

- Welding equipment and materials—to the metal fabricating and welding industries.
- Cryogenic and chemical systems and equipment—to the oil, chemicals, and industrial gases industries.
- *Unox* wastewater treatment systems—principally to municipalities.
- Molecular Sieves—chiefly to the oil and chemicals industries.

To speed deliveries of industrial gases to customers, Union Carbide maintains one of the largest and most efficient tanker truck fleets in U.S. industry.

Overview Our metals businesses comprise mineral products (primarily those of tungsten, vanadium, and uranium) together with commodity and specialty alloy products (primarily of manganese, silicon, and chromium). Our strategic emphasis is on mineral products, where we have in-ground positions and our own mining and milling operations. We are aggressively exploring for mineral products worldwide. The majority of sales are domestic with western Europe the most important international market.

Our carbon businesses include graphite electrodes, carbon specialties, and carbon fiber products. More than half of the carbon business in 1979 was in graphite electrodes, where we are the world's leader. Graphite Electrodes is truly an international business, with about 50% of 1979's total production and sales overseas.

Our diversified mineral products and our top ranked position in Graphite Electrodes worldwide are strengths which are expected to provide future long-term benefits.

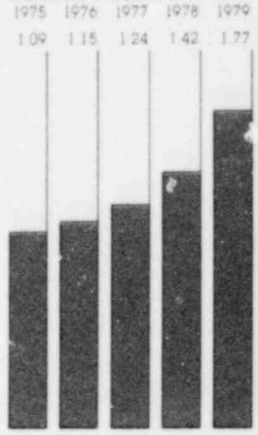
1979 Highlights Sales and profits attained record levels. Sales reached $1,772 million, an increase of 25% over those of 1978. Dramatic improvement took place in operating profit, which rose to $267 million, increasing 61% over that of 1978. These percentage increases were the highest for any of the Corporation's segments. Large sales increases were recorded domestically, the result of a combination of price increases (+13%) and a favorable change in volume and/or product mix (+5%). Similar results were achieved in international areas, with particularly good results in Italy, France, the United Kingdom, and Spain. Carbon exports from the U.S. and Puerto Rico were more than double those of last year.

In mineral products, total sales gains were a result of both price and volume increases, especially in vanadium. Strong market demand for alloy products allowed price increases to offset cost inflation. Favorable sales volumes were experienced for most products.

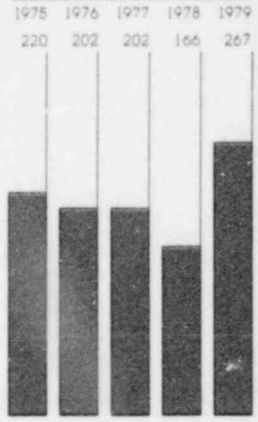
Electric arc furnace steelmaking, which utilizes graphite electrodes, set an all-time U.S. production record in 1979. A similar experience took place internationally. The increasing popularity of the electric arc method of steelmaking is based on the substantially lower capital and energy costs of that method compared with those of other forms of steelmaking. Arc furnaces are also relatively free from the pollution problems associated with basic oxygen and open hearth furnaces. Such factors, together with good overall steel demand, boosted results substantially over 1978. Support for future longer-term growth includes a new $110 million graphite electrodes plant, to be completed by mid-1981, in Clarksville, TN. Expansion is also taking place in Canada and Europe. The world's largest carbon fiber plant in Greenville, SC will provide for an initial production capacity of 800,000 pounds of carbon fibers per year.

1980 Outlook A weakening economic outlook for 1980 will probably result in reduced activity in steel and other basic industries we supply. Although the carryover effect of price increases implemented in 1979 may increase dollar sales, volume is expected to be flat or down for many products. An important exception is carbon fibers, which will benefit from continued strong demand for fibers for aircraft and automotive applications. Overall, we see difficulties in increasing selling prices enough to offset fully increases in the costs of energy and raw materials and thus we anticipate lower operating profit in 1980 (before accounting changes).

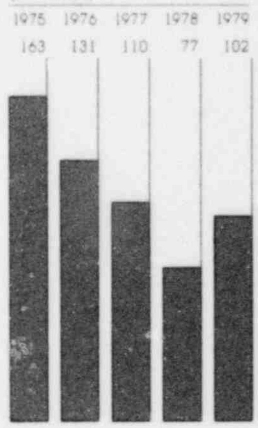
Sales ($ Billions)



Operating Profit ($ Millions)



Capital Expenditures ($ Millions)



Basic Businesses

Uranium
Tungsten
Vanadium
Manganese, Silicon, Chromium
Graphite Electrodes
Carbon Fiber Products
Carbon Specialties

Principal Raw Materials, Products, and Markets

The following ores are mined and milled from company-owned reserves to produce mineral products for sale to the industries indicated:

- ☐ Uranium—to electric utilities.
- ☐ Tungsten—to the electrical, chemical, and machine tools industries.
- ☐ Vanadium—to the steel industry.

Manganese, silicon and chromium alloys are smelted from purchased ores and sold to producers of steel, aluminum, foundry products, and chemicals.

Anthracite coal, premium grade petroleum coke, and coal tar pitch are purchased to make electrodes, refractory linings, metallurgical specialties, and other carbon and graphite forms. These are sold to the steel, ferroalloys, aluminum, chemicals, and transportation industries.

Carbon fibers, both manufactured and purchased, are sold to the aerospace, transportation, and recreation industries.

These giant graphite electrodes, made by Union Carbide, are producing steel in an electric arc furnace.

Overview We are the world's leading producer of each of the principal consumer products of this segment. Outstanding brand name recognition, supported by an extensive network of consumer product organizations, provides us with good visibility in a highly competitive marketplace. Our consumer products segment has contributed significantly to record corporate sales. Operating profit of the segment has achieved a new record. Consumer demand helps balance the industrial and agricultural demand of most of our other businesses.

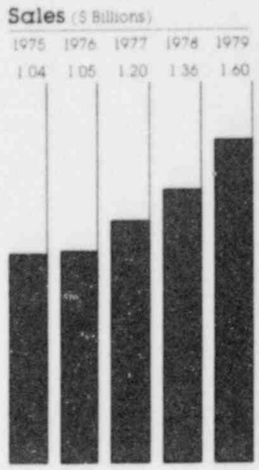
1979 Highlights Sales advanced to $1,599 million, an increase of 18% over 1978. Operating profit increased 10% to $195 million. Higher domestic sales were mainly attributable to a favorable change in volume and/or product mix (+ 12%) with prices up modestly (+ 5%).

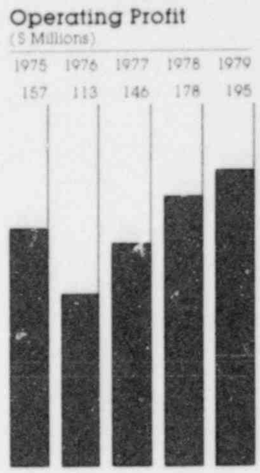
With our *Eveready* and *Ucar* batteries sold in over 100 countries, we are the world sales leader in battery products. Including this year's increase, sales have grown without interruption for more than twenty years. International operations contribute over half of total sales. We are expanding at most of our existing domestic and international Batteries locations, and have built new plants in Egypt and Nigeria. Batteries contributes a strong majority of this segment's sales and profits. Batteries operating profits also reached new records, but performance was held back by our inability, in a highly competitive marketplace, to offset fully increased raw material costs.

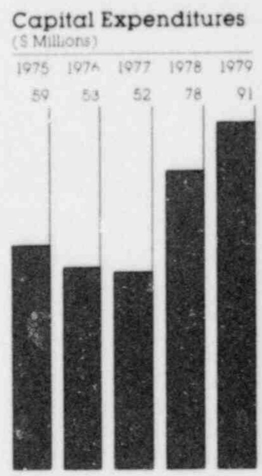
Our key strength in Batteries is our comprehensive approach to the market. We have a full line of seven different electrochemical battery systems, and are a leader in both carbon zinc and the alkaline and other high performance segments of the business. This approach allows us to meet the substantial and increasing demand from developing countries and others for carbon zinc batteries as well as the growing trend in the developed countries to trade up for high performance. Sales of alkaline products increased dramatically during the year.

The performance of our group of home and automotive products resulted in both sales and operating profit increases. Those products are sold primarily in the United States and Canada. A strong gain in the performance of antifreeze was a result of increased market share. Sales were also stimulated by uncertain market supply and rising prices. Partially offsetting the good performance of antifreeze were the less favorable results of plastic wrap and bags due to escalating resin costs, private brand competition, and consumer resistance to commensurate price increases.

1980 Outlook The results for 1980 depend largely on economic conditions that affect consumer spending patterns. Although overall demand may be softer than 1979, we expect battery sales to continue their long history of growth, as sales are stimulated by the popularity of electronic toys and games in this country and others, and demand in developing countries continues to grow. Our volume sales of antifreeze are expected to return to more normal growth as compared with an atypical 1979 performance. Improved sales are expected for plastic wrap and bags. Overall higher sales are expected to impact favorably on operating profit.







Basic Businesses

Batteries
Plastic Wrap & Bags
Automotive Products

Principal Raw Materials, Products, and Markets

Zinc, silver, and other materials are purchased to manufacture primary and secondary dry cell batteries. Polyethylene from our Chemicals & Plastics segment and purchased steel, aluminum, and hardware are used to make flashlights, lanterns, and miniature lamps. Purchases of some flashlights and lamps round out our product line. The complete battery and portable lighting product lines are distributed to original equipment manufacturers and through a varied network of wholesalers and retailers under the *Eveready, Ucar,* and other trademarks.

Polyethylene from our Chemicals & Plastics segment is used to make both *Glad* and private label plastic wrap and bags, which are distributed chiefly through food brokers to supermarkets.

Ethylene glycol from our Chemicals & Plastics segment is used to make both *Prestone II* and private label antifreeze/summer coolant. *Simoniz* wax and other automotive specialty products are produced for us under contract and are distributed through wholesale and retail outlets.

Eveready Energizer alkaline batteries—"Energized for Life. . .Long Life"—were introduced nationwide early in 1980.

Overview These distinct businesses are being aggressively developed to increase their contributions to future sales and profits. Not all of our specialty products are sales leaders in their industries. However, we have emphasized products that enjoy "market niches"—that is, those that provide a unique combination of performance and service. Most of the products in this segment have experienced rapid growth in sales or earnings or high quality return on assets, or else have potential for such performance.

1979 Highlights Sales of the segment contribute the smallest proportion to total corporate sales, but have passed the billion dollar mark for the first time, increasing 11% over those of 1978 to $1,026 million. Operating profit has broken through the flat performance of the past three years, rising to $56 million, an increase of 17% over that of 1978. Domestic and international sales and operating profit were up significantly over that of 1978.

Agricultural Products & Services contributed approximately half of segment sales in 1979. Development of agricultural products and services, will continue to be one of our major strategic thrusts in coming years. We participate in three product areas: insecticides, herbicides, and growth regulators. Insecticides, the most important contributors to sales and profits, include *Sevin* brand and *Temik* brand. We are also an important supplier of intermediates to other producers. Sales of *Amiben* multicrop herbicide continue to show attractive gains. Our growth regulators participate in the fastest growing portion of the industry.

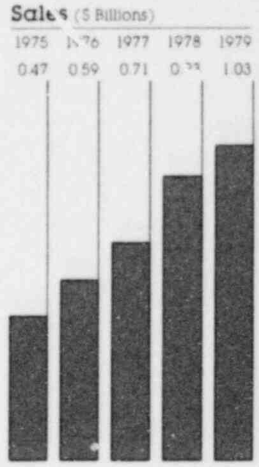
Sales and operating profits for Food Processing & Packaging Materials were good in 1979. We are the world's largest producer of cellulosic casings for hot dogs, sausages, and processed meats. We also supply shrink bags to frozen poultry processors and to meat packers for fresh beef packaging. Demand is primarily in the U.S. and Canada.

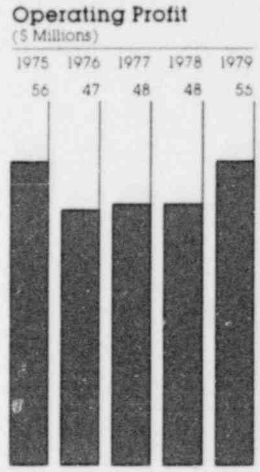
Continued high industry growth rates substantially improved both sales and operating profits in our Electronic Components & Materials business. We are the world's leading producer of solid tantalum capacitors, and hold an important position in monolithic ceramic capacitors, the newest and fastest-growing segment of the capacitor industry. Our specialized electronic materials business is growing rapidly and is an important factor in our electronic business. The materials are used in such products as integrated circuits and bubble-domain memories.

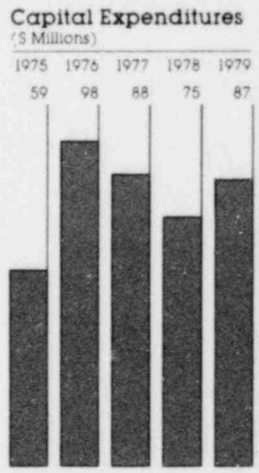
Our focus in Medical Products is on blood analyzers and supporting reagents, and on radiopharmaceuticals, which together accounted for the largest proportion of Medical Products sales in 1979. Both of those product areas experienced increased demand. Continuing careful assessment of the potential for the imaging systems hardware business, however, led to the discontinuance of that product line late in 1979. Our Medical Products businesses were not yet profitable.

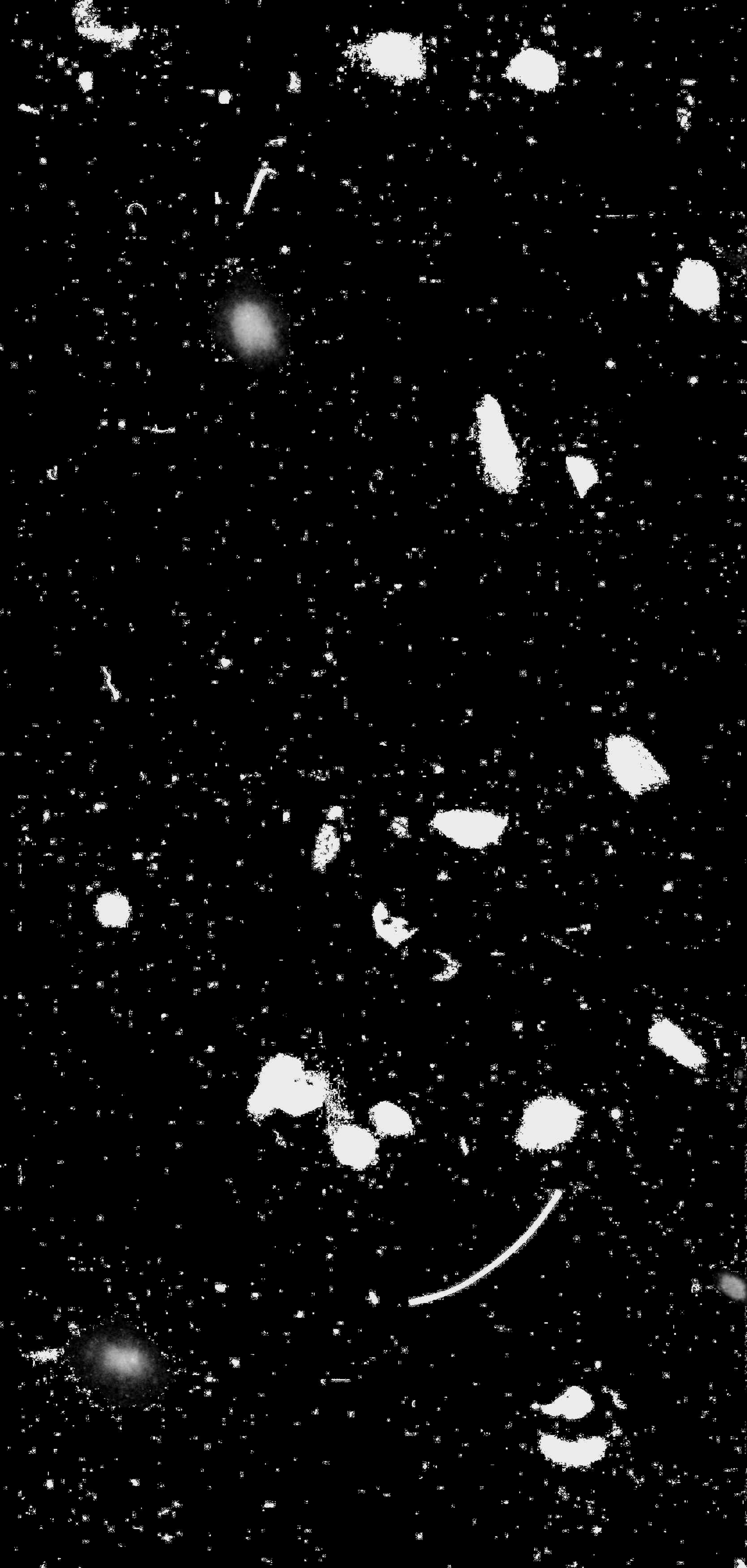
Through our Nuclear Division, we also operate government-owned facilities involved in nuclear materials production and nuclear and nonnuclear research, including a multipurpose R&D center, a national defense engineering facility, and a gaseous diffusion plant at Oak Ridge, TN; and a gaseous diffusion plant at Paducah, KY.

1980 Outlook Total sales are expected to be up modestly in 1980, with increases expected in most businesses. On the whole, general economic weakness in 1980 may temporarily decrease demand for our electronic products. Operating profit of the Specialty Products segment in 1980 should increase more significantly than sales, due to improved manufacturing efficiencies and the approach to profitability of Medical Products.









Basic Businesses

Agricultural Products & Services
Food Processing & Packaging Materials
Electronics Components & Materials
Medical Products

Principal Raw Materials, Products, and Markets

All of the following specialty products are produced from manufactured or purchased chemicals, metals, components, and other materials:

□ Insecticides, herbicides, and growth regulators are sold directly and through distributors to a broad range of agricultural markets.

□ Intermediates for insecticides are sold to chemical manufacturers.

□ Cellulosic casings are made for production of hot dogs, sausages, and processed meats. Shrinkable plastic bags are made for fresh beef and poultry packaging. The casings and bags are sold to meat and poultry processors and packers.

□ Capacitors, substrates, and proprietary processing chemicals and materials are sold to the electronics industry for computers, television receivers, ground-based and satellite communications systems, etc.

□ Blood analyzers and radiopharmaceuticals are sold to the health care industry.

Tomatoes treated with *Ethrel* growth regulator, one of the newest of Union Carbide's agricultural products, ripen faster and at a more uniform rate.

Overview Sales from operations in the United States and Puerto Rico ("domestic operations") have increased during each of the last five years, with the largest gain taking place in 1979. Exports, which are included in domestic sales, have had a more significant influence during recent years. Domestic operating profit has been cyclical, but has increased during each of the last two years to reach its highest level in five years.

In general, a similar pattern has occurred in operations outside the United States and Puerto Rico ("international operations"). Although sales and operating profit have been smaller in international than in domestic operations, our international operations have contributed significantly to the success of our current and longer-term goals of maintaining our status as an important worldwide corporation.

Exports and international sales together account for 37% of total consolidated sales. In addition, although their sales are not consolidated, companies which are 20%-to-50% owned by Union Carbide also contribute to net income.

1979 Highlights In 1979, domestic sales reached a record level, increasing 20% over those of 1978 to $6,395 million. Exports increased more than 50%. The largest proportion of exports was attributable to chemicals and plastics products. Metals and carbons, as well as welding products and molecular sieves, were among the other more significant exports. Domestic sales were favorably influenced both by higher prices (+10%) and by favorable changes in volume and/or product mix (+9%).

Domestic operating profit, advancing to $754 million, was up 20% over that of 1978.

International sales also achieved new highs, reaching $2,782 million, an increase over those of 1978 of 10%. Prices increased during the year (+14%), but changes in volume and/or product mix were unfavorable (−4%).

International operating profit increased to $318 million, compared with $242 million in 1978, representing a gain of 31%.

In spite of lower sales in Europe following the divestment of our consolidated ethylene derivatives businesses there in 1978, Europe remains our largest international area. Adjusted for the divestment, European sales from continuing operations increased 38% over those of 1978. While all of our industry segments participated in meeting demand from Europe, our metals and carbons products accounted for more than half of our total sales there. In 1979, results in Europe were favorably affected by high demand, permitting implementation of substantial price increases in a majority of business areas.

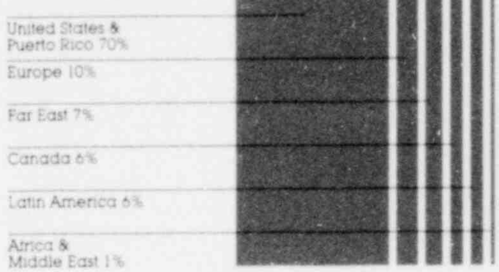
Adjusted for the gain on the sale of our consolidated ethylene derivatives businesses, and the results of operations of those businesses, operating profit in Europe in 1979 was more than double that of 1978. Our ongoing program to expand battery products in Europe is progressing very well, though it has not yet contributed to profits.

Our second largest sales area was the Far East, where batteries, chemicals, and plastics were our most important products. Sales of these products increased significantly over the previous year's. Continuing a recent trend, operating profit in the Far East rose 37% in 1979.

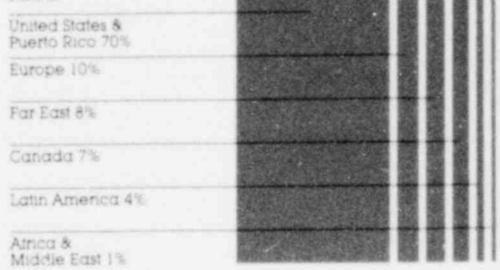
Aided by increased sales of batteries, gases, and related products, sales also increased in Latin America. Latin American operating profit declined to $41 million from $75 million in 1978, largely because of reduced reported U.S. dollar earnings from Brazil, the result of severe inflation and currency effects in that country.

Excellent results were achieved in Canada, where the Chemicals & Plastics and Metals & Carbons segments are among more important contributors to sales. In Canada, operating profit more than doubled, reflecting a higher operating rate and a more profitable product mix.

Sales by Geographic Area



Operating Profit by Geographic Area



Millions of dollars	Sales 1979	1978	1977	1976	1975	Operating Profit 1979	1978	1977	1976	1975
Industry Segments										
Chemicals & Plastics	**$3,348**	$2,908	$2,787	$2,571	$2,183	**$ 396**	$309	$285	$395	$290
Gases & Related Products	**1,432**	1,263	1,104	987	885	**158**	167	149	153	137
Metals & Carbons	**1,772**	1,416	1,243	1,151	1,088	**267**	166	202	202	220
Batteries: Home & Automotive Products	**1,599**	1,356	1,196	1,052	1,036	**195**	178	146	113	157
Specialty Products	**1,026**	927	706	585	473	**56**	48	48	47	56
Total UCC Consolidated	**$9,177**	$7,870	$7,036	$6,346	$5,665	**$1,072**	$868	$830	$910	$860
Geographic Segments										
United States & Puerto Rico	**$6,395**	$5,336	$4,789	$4,253	$3,726	**$ 754**	$626	$619	$669	$609
Africa & Middle East	**105**	85	75	48	48	**13**	10	9	9	4
Canada	**531**	426	366	381	369	**74**	30	58	50	53
Europe	**959**	1,011	929	910	819	**108**	67	15	80	98
Far East	**597**	478	406	355	315	**82**	60	45	41	35
Latin America	**590**	534	471	399	388	**41**	75	84	61	61
International Operations	**2,782**	2,534	2,247	2,093	1,939	**318**	242	211	241	251
Total UCC Consolidated	**$9,177**	$7,870	$7,036	$6,346	$5,665	**$1,072**	$868	$830	$910	$860

Millions of dollars	Identifiable Assets 1979	1978	1977
Industry Segments			
Chemicals & Plastics	**$3,463**	$3,232	$3,114
Gases & Related Products	**1,362**	1,254	1,122
Metals & Carbons	**1,577**	1,433	1,442
Batteries: Home & Automotive Products	**907**	777	672
Specialty Products	**955**	768	669
Intersegment eliminations	**(68)**	(56)	(55)
Total Identifiable Assets	**$8,196**	$7,408	$6,964

Millions of dollars	Identifiable Assets 1979	1978	1977
Geographic Segments			
United States & Puerto Rico	**$5,884**	$5,344	$4,770
Africa & Middle East	**124**	107	90
Canada	**615**	566	520
Europe	**833**	726	1,096
Far East	**459**	372	271
Latin America	**486**	471	385
International Operations	**2,517**	2,242	2,362
Intersegment eliminations	**(205)**	(178)	(168)
Total Identifiable Assets	**$8,196**	$7,408	$6,964

Notes to Segment Data

□ Sales of chemicals in each of the years 1975-1979 were $1,482, $1,664, $1,824, $1,969, and $2,286 million, respectively. Sales of plastics were $701, $907, $963, $939, and $1,062 million, respectively.

□ Sales as presented are to unaffiliated customers. Transfers between segments were as follows:

Millions of dollars	1979	1978	1977
From Chemicals & Plastics	**$ 224**	$ 186	$ 184
From other industry segments	**51**	37	34
Total between segments	**$ 275**	$ 223	$ 218
From United States & Puerto Rico	**$ 437**	$ 358	$ 320
From other geographic segments	**136**	96	59
Total between segments	**$ 573**	$ 454	$ 379

Products are transferred between segments on a basis intended to represent the approximate market value of the products.

□ The following table reconciles total identifiable assets to the consolidated financial statements:

Millions of dollars	1979	1978	1977
Total identifiable assets	**$8,196**	$7,408	$6,964
Investments and advances	**320**	291	268
Corporate assets	**287**	167	191
Total UCC Consolidated	**$8,803**	$7,866	$7,423

□ In 1978, assets shown for Chemicals & Plastics and for United States & Puerto Rico include $322 million representing identifiable assets of Gulf Coast Olefins Company, an affiliate consolidated in 1978. In 1977, assets shown for Europe include $363 million representing identifiable assets of European ethylene derivatives businesses, reported principally under the Chemicals & Plastics industry segment, that were sold in 1978.

□ Withdrawal from the imaging systems hardware business in 1979 resulted in a net charge of $24.3 million included in operating profit of the Specialty Products and United States & Puerto Rico segments.

□ Sale of consolidated European ethylene derivatives businesses in 1978, resulting in a gain of $52.9 million, is included in operating profit of the Chemicals & Plastics and Europe segments.

□ Sale of the calendered rigid vinyl products business in 1977, resulting in a gain of $9.8 million, is included in operating profit of the Specialty Products and United States & Puerto Rico segments.

□ A write-off in 1976 due to abandonment of plans to produce disposable diapers, resulting in a net charge of $14.7 million, is included in operating profit of the Batteries: Home & Automotive Products and United States & Puerto Rico segments.

□ Sale of the flexible vinyl film business in 1976, resulting in a gain of $8.1 million, is included in operating profit of the Specialty Products and United States & Puerto Rico segments.

□ Shutdown in 1975 of facilities at Whiting, Indiana, resulted in a net charge of $11.0 million to operating profit of the Chemicals & Plastics and United States & Puerto Rico segments.

□ International Operations amounts reported do not include results of international companies carried at equity. See Note 5 on p. 28.

Discussion of 1979 and 1978 Consolidated Operations

Net Sales Sales continued to grow and reached a new record in 1979, increasing 17% to $9,177 million. The increase in 1978 was 12%. In 1979 the impact on sales of price increases (+11%) was greater than that of change in volume and/or product mix (+5%). Eliminating the results of our consolidated European ethylene derivatives businesses, which we sold in 1978, sales increased 21%. All of our segments participated in greater sales in 1979, the largest percentage increases taking place in the Metals & Carbons and the Batteries; Home & Automotive segments. Aided by strong exports, domestic sales grew twice as fast as international sales.

Cost of Sales Cost of sales increased 16% to $6,491 million, primarily because of increased volume and/or changes in product mix, but also because of increased unit costs. Cost of sales increased 13% in 1978. Contributing to higher costs in 1979 was inflation in labor, hydrocarbon feedstocks and other major raw materials, and fuels and electric power. Distribution expenses also advanced over those of the prior year. Approximate changes in average unit costs—for domestic operations only—of three significant elements in purchased materials and power were as follows:

Percent change over prior year	1979	1978
Hydrocarbon feedstocks	+36	+ 3
Other major raw materials	+18	+ 5
Fuels and electric power	+18	+14

Rising costs were only partly offset by solid advances in energy conservation. Nevertheless, because of higher sales as a result of favorable changes both in price and in volume and product mix, the gross margin percent increased in 1979 to 29.3%. That compares with a gross margin percent of 29.1% in 1978, which represented a decline from 29.9% in 1977.

For more information about Union Carbide's principal raw materials, products, markets, and methods of distribution, see pp. 7, 9, 11, 13, and 15. Unless otherwise indicated there, the products of Union Carbide are sold principally by its own sales force, directly to customers in the industries named or for the uses mentioned.

Overhead Research and development expenses, which increased 3% in 1979 to $161 million, are directed towards product development and process technology. In our Agricultural Products & Services and our Food Processing & Packaging Materials businesses, research and development spending equaled 3% or more of sales. Our corporate development group and research laboratory was discontinued in 1978 and research and development expenses in that year were virtually unchanged from those of 1977.

Selling, administrative, and other expenses in 1979 were $1,053 million, an increase of 12%. That compares with an increase of 10% in 1978. Selling expenses, which usually change in proportion to sales, increased only 12% in 1979 to $507 million, less than the increase in sales of 17%—an improvement over the results of 1978, when selling expenses increased 14%, compared with a 12%

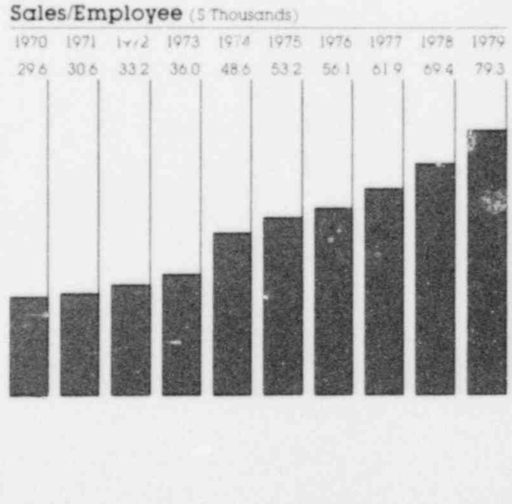
Number of Employees (Year-end)	1979	1978
United States & Puerto Rico	**65,626**	63,838
Africa & Middle East	**2,465**	2,368
Canada	**4,781**	4,731
Europe	**8,986**	8,848
Far East	**20,312**	19,506
Latin America	**13,593**	14,080
International operations	**50,137**	49,533
Total UCC Consolidated*	**115,763**	113,371

*Does not include 19,976 employees (19,807 in 1978) of the Nuclear Division at facilities operated for the U.S. Government.

Employment Costs* (Wages, benefits, payroll taxes)	1979	1978
Domestic		
Millions of dollars	**$1,632.7**	$1,457.3
Percent of domestic sales	**26**	27
International		
Millions of dollars	**$ 515.5**	$ 474.2
Percent of international sales	**19**	19
Total UCC Consolidated		
Millions of dollars	**$2,148.2**	$1,931.5
Percent of total sales	**23**	25

*Does not include employment costs of employees of the Nuclear Division at facilities operated for the U.S. Government.

Sales/Employee ($ Thousands)



sales increase. Efforts to hold down administrative and other expenses continue. In 1979 those expenses increased 12% to $546 million. In 1978 they increased 6%.

Depreciation Depreciation expense continued to rise in 1979, to $470 million, representing an increase of 13% over that of 1978. Depreciation in 1978 increased, to $417 million, 16% over that of 1977.

Other Income and Expenses Interest on long-term and short-term debt increased more slowly in 1979, rising by 1%. In 1978, total interest expense increased 7%. Short-term interest rates continued to rise during both 1979 and 1978, but in 1979 a portion of short-term debt was reduced from the proceeds of $300 million of long-term debt issued at more favorable rates.

Many transactions account for the change in the "Other income—net" category to a net expense position in 1979 from a net income position in 1978. An analysis of both years is included in Note 8 on Page 29. A provision was made in 1979 for expenses in connection with withdrawal from the Corporation's imaging systems hardware business. In contrast, 1978 included a major nonrecurring gain from the sale of our consolidated European ethylene derivatives businesses. There was little change overall in the "Other income-net" category in 1978 compared with 1977. Effects of foreign currency translation and exchange adjustments are discussed below.

Foreign Currency Losses Foreign currency translation and exchange adjustments had the following effect on net income:

Foreign currency loss	1979	1978
Millions of dollars	**$29.3**	$59.1
Dollars per share	**$0.45**	$0.91

The reported losses arise from currency exchange rate fluctuations, which affect the dollar value at which the accounts of foreign affiliates are included in our consolidated financial statements. There is no cash gain or loss unless funds are actually converted between currencies. Such conversions took place to only a minor degree in 1979 and 1978.

The major part of the currency losses both in 1979 and 1978 reflected the translation of foreign currency amounts into U.S. dollars. In 1979 the loss was due principally to the depreciation of the Brazilian cruzeiro against the U.S. dollar. In 1978 the loss was due principally to the depreciation of the cruzeiro and the weakening of the U.S. dollar relative to the Belgian franc. The Belgian franc loss was attributable mainly to debt in that currency.

The reported figures do not include the effect of currency rate changes on inventories, which are required to be translated at the exchange rates in effect at the time the inventories were acquired. Sales revenues, however, are translated at current exchange rates. As a conse-

Balance of Payments

Millions of dollars	1979	1978
Exports to customers from domestic operations	**$ 602**	$ 385
Exports to subsidiaries from domestic operations	**437**	358
Total exports	**1,039**	743
Net dividends from international affiliates	**50**	45
Proceeds from European divestiture	**—**	193
Other receipts	**44**	36
Total dollar inflow	**$1,133**	$1,017
Total imports	**$ 339**	$ 226
International investments	**30**	60
Other disbursements	**101**	80
Total dollar outflow	**$ 470**	$ 366
Net Favorable Balance	**$ 663**	$ 651

Price Index by Year (1972 = 100)

	1979	1978
Domestic	**216**	196
International	**204**	178
Total UCC	**212**	190

quence, when inventories are subsequently sold and charged against revenues, there is an increase or decrease in U.S. dollar profit margins.

In 1979, the most significant impact from this inventory effect was in Brazil. When inventories there were sold and charged against revenue, there was a substantial decrease in U.S. dollar profit margins.

In 1978, there was an increase in U.S. dollar profit margins as a result of inventory effects worldwide.

In Brazil translation losses in both 1979 and 1978, and the reduction in profit margins from inventory sales in 1979, were partially offset by a number of currency protection measures which are reflected in other accounts.

Provision for Income Taxes The effective income tax rate decreased in 1979. The effective rate was 31.4%, as compared with 32.8% in 1978, principally due to changes in United Kingdom Tax Laws and a reduction in the statutory Federal tax rate. The effective rate in 1977 was 30.1%. The increase to 32.8% in 1978 occurred primarily because, compared with the previous year, a lower proportion of income was derived from areas subject to lower tax rates. An analysis of the major items in 1979 and 1978 is included in Note 7 on Page 29.

Minority Interest and Equity Companies The minority stockholders' share of income decreased by 23% in 1979. Higher earnings were achieved in many of our subsidiary companies, especially Canada. These were more than offset, however, by lower income in Brazil. In 1978 there was an increase of 3%, the result of higher earnings in several subsidiaries, partially offset by lower earnings in Canada.

Our share of income of companies carried at equity expanded significantly in 1979 to $33 million, from $5 million in 1978. A major part of this increase was due to polyolefins business improvement in Japan and Sweden. A smaller increase took place in 1978 as compared to the prior year, and was attributable to affiliates in Mexico, South Africa, and Japan.

Net Income Net income in 1979 achieved a significant advance over 1978, rising 41% to $556 million, a record high. The increase in 1978 was 2%. The ratio of net income to net sales increased to 6.1% in 1979, compared with 5.0% in 1978, and 5.5% in 1977.

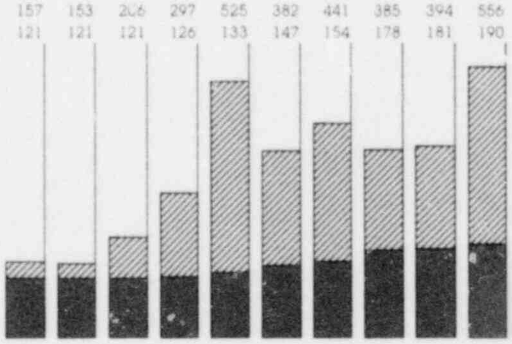
Income Statement Data by Quarter

Millions of dollars	1st quarter	2nd quarter	3rd quarter	4th quarter	Year
1979					
Net Sales	$2,164.8	$2,289.7	$2,325.7	$2,396.3	$9,176.5
Cost of sales	1,536.4	1,577.8	1,622.1	1,754.4	6,490.7
Depreciation	113.6	122.3	115.0	118.8	469.7
Net income	124.6	150.5	149.4	131.7	556.2
1978					
Net sales	$1,823.0	$1,979.8	$1,976.2	$2,090.7	$7,869.7
Cost of sales	1,310.6	1,397.8	1,416.9	1,455.1	5,580.4
Depreciation	102.3	103.0	106.2	105.1	416.6
Net income	78.9	106.8	80.7	127.9	394.3

Supplementary Income Statement Data

Millions of dollars	**1979**	1978
Taxes other than income taxes	**$233.2**	$207.1
Maintenance and repairs	**$616.3**	$518.6
Domestic advertising expenditures	**$ 55.1**	$ 51.1
International advertising expenditures	**30.8**	25.4
Total advertising expenditures	**$ 85.9**	$ 76.5

Net Income and Dividends ($ Millions)



Ten-Year Summary

Union Carbide Corporation and Consolidated Subsidiaries

Millions of dollars—except per share figures

For The Year	1979	1978	1977	1976	1975	1974	1973	1972	1971	1970
Net sales	**$9,176.5**	$7,869.7	$7,036.1	$6,345.7	$5,665.0	$5,320.1	$3,938.8	$3,261.3	$3,037.5	$3,026.3
Deductions (additions)										
Cost of sales	**6,490.7**	5,580.4	4,930.6	4,337.2	3,839.3	3,497.9	2,575.9	2,137.1	2,016.4	2,002.9
Research and development	**160.8**	155.9	155.8	142.4	120.2	94.2	76.8	69.6	78.3	78.0
Selling, administrative, and other expenses	**1,052.6**	942.9	860.2	756.1	638.7	531.3	426.2	376.8	368.7	360.3
Depreciation	**469.7**	416.6	358.8	301.0	269.8	248.3	245.2	245.2	229.3	236.4
Interest on long-term and short-term debt	**161.3**	159.3	149.1	120.2	100.2	69.8	60.6	56.1	60.9	58.5
Other income—net	**42.1**	(12.4)	(12.9)	(37.7)	(48.7)	(25.6)	(0.5)	(10.3)	(7.3)	(6.7)
Income before provision for income taxes	**799.3**	627.0	594.5	726.5	745.5	904.2	554.6	386.8	291.2	296.9
Provision for income taxes	**251.4**	205.5	178.8	266.4	343.2	375.4	245.0	164.3	126.9	130.4
Income of consolidated companies	**547.9**	421.5	415.7	460.1	402.3	528.8	309.6	222.5	164.3	166.5
Less: Minority share of income	**25.0**	32.5	31.6	27.9	28.4	30.7	25.0	17.8	15.7	13.3
Plus: UCC share of income of companies carried at equity	**33.3**	5.3	1.0	9.0	7.8	27.0	12.6	3.5	4.4	4.1
Income before extraordinary items	**556.2**	394.3	385.1	441.2	381.7	525.1	297.2	208.2	153.0	157.3
Extraordinary items	**—**	—	—	—	—	—	—	(2.2)	(0.2)	—
Net income	**556.2**	394.3	385.1	441.2	381.7	525.1	297.2	206.0	152.8	157.3
Net income per share	**8.47**	6.09	6.05	7.15	6.23	8.61	4.89	3.40	2.52	2.60
Dividends	**190.1**	181.2	178.4	153.8	146.9	132.6	126.1	121.3	121.1	121.0
Dividends per share	**2.90**	2.80	2.80	2.50	2.40	2.175	2.075	2.00	2.00	2.00
Capital expenditures	**831.3**	687.8	805.4	964.5	862.2	516.6	288.7	243.9	335.2	393.7
Market price range per share										
High	**44½**	43¼	62⅜	76¾	66½	46	51¾	52	50⅝	40½
Low	**34**	33⅝	40	55⅝	40⅛	31¾	29¼	41⅞	38⅝	29½

At Year-End	1979	1978	1977	1976	1975	1974	1973	1972	1971	1970
Working capital	**2,070.4**	1,621.3	1,645.2	1,663.2	1,654.4	1,347.0	1,205.0	997.3	870.7	789.3
Total assets	**8,802.6**	7,866.2	7,423.2	6,621.6	5,740.8	4,879.2	4,163.4	3,711.3	3,546.3	3,563.8
Total capitalization	**6,316.8**	5,794.1	5,603.3	5,087.4	4,411.5	3,773.0	3,344.3	3,091.5	3,020.5	3,070.1
UCC stockholders' equity	**4,042.5**	3,638.5	3,407.0	3,055.1	2,748.0	2,502.4	2,106.4	1,929.4	1,839.3	1,804.6
Equity per share	**61.06**	55.92	52.79	49.45	44.80	41.01	34.60	31.77	30.37	29.84

Other Data	1979	1978	1977	1976	1975	1974	1973	1972	1971	1970
Current ratio (at year-end)	**2.2**	2.0	2.2	2.3	2.5	2.2	2.5	2.6	2.6	2.2
Total debt as percent of total capitalization (at year-end)	**31.4**	32.3	34.5	36.3	33.8	29.3	32.6	33.2	34.9	38.2
Net income as percent of										
Sales	**6.1**	5.0	5.5	7.0	6.7	9.9	7.5	6.3	5.0	5.2
UCC stockholders' equity (average)	**14.5**	11.2	11.9	15.2	14.5	22.8	14.7	10.9	8.4	8.8
Net income plus minority share of income as percent of total capitalization (average)	**9.6**	7.5	7.8	9.9	10.0	15.6	10.0	7.3	5.5	5.7
Dividends as percent of net income	**34.2**	46.0	46.3	34.9	38.5	25.3	42.4	58.9	79.3	76.9
Shares outstanding (thousands, at year-end)	**66,206**	65,065	64,533	61,787	61,336	61,016	60,868	60,732	60,568	60,479
Number of employees (at year-end)	**115,763**	113,371	113,669	113,118	106,475	109,566	109,417	98,114	99,181	102,144

Net income per share is based on weighted average number of shares outstanding during the year.
Total debt consists of short-term debt, long-term debt, and current installments of long-term debt.
Total capitalization consists of total debt plus minority stockholders' equity in consolidated subsidiaries and UCC stockholders' equity.

Changes in Financial Position: Sources of Funds

Operations Internally generated cash flow from operations is the source of most of our funds. This cash flow equals net income before non-cash items—that is, mainly before depreciation and deferred income tax charges. In 1979, cash flow from operations constituted 71% of the total sources of funds, the highest proportion in several years. The remainder of funds provided came from financing and other sources. In 1979, cash flow from operations increased 22% over that of the prior year, reaching $1124.3 million, compared with $924.2 million and $877.0 million for 1978 and 1977, respectively.

Financing Major new domestic borrowings in 1979 resulted from the issuance in August of $200 million of debentures, due 2009, and $100 million of notes, due 1986. Net proceeds were used to reduce short-term debt. In addition, revenue bonds totaling $15.6 million were issued by local authorities to finance domestic pollution abatement projects that will be operated in connection with our manufacturing facilities. During the year we sold commercial paper from time to time, at the highest-grade rating, in order to obtain short-term funds. Various lines of credit are also available to Union Carbide and its subsidiaries. Funds obtained from the sale of stock through Union Carbide's Dividend Reinvestment and Stock Purchase Plan amounted to $27.2 million.

Debt Ratio At year-end 1979, the ratio of total debt to total capitalization was 31.4%, slightly below that of the prior year, 32.3%. The year-end 1977 ratio was 34.5%. Total debt includes short-term debt, long-term debt, and the current portion of long-term debt; total capitalization consists of total debt plus minority stockholders' equity in consolidated subsidiaries and UCC stockholders' equity.

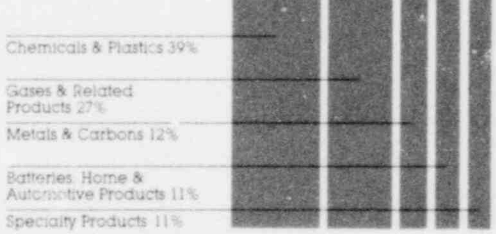
Changes in Financial Position: Uses of Funds

Dividends The quarterly cash dividend was increased to 75¢ per share, commencing with the payment made on September 1, 1979, thus increasing the total payout in 1979 to $2.90 a share. Total dividends declared during 1979 amounted to $190.1 million, representing a payout ratio of 34% of net income. Of the total dividends declared, $23.4 million, or 12%, was reinvested in Union Carbide common stock through our Dividend Reinvestment and Stock Purchase Plan. Total dividends declared in 1978 and 1977 were $181.2 million and $178.4 million, respectively. Payout ratios were 46% in both years. Dividend reinvestment was negligible in 1978, the year the Plan was introduced; the first dividends to be reinvested under the Plan were reinvested on September 1, 1978.

Capital Expenditures The major use of funds was for capital projects, which amounted to $831.3 million in 1979 and $687.8 million in 1978. Capital expenditures in 1977 amounted to $805.4 million. In 1979, approximately half of our expenditures were for additional capacity. A significant share of expenditures was applied to cost reduction projects, and to replacement of machinery and equipment with an emphasis on increasing productivity. Approximately 70% of our capital expenditures in 1979 were for domestic construction, while a majority of the remainder was spent in Latin America and Europe.

Working Capital During the year, working capital increased by $449.1 million, a change of 28%. Total inventories at year-end 1979 had risen by 15% over those of the prior year, with accounts receivable increasing by 14%. Accounts receivable levels continued to increase in line with the strong increase in sales. In terms of days' sales outstanding at year-end (based on fourth quarter sales), receivables represented about 54 days at year-end 1979 and 1978.

Capital Expenditures by Industry Segment



Management's Responsibility for Financial Statements

Union Carbide Corporation's financial reports are prepared by the Corporation's management, which is responsible for their fairness, integrity, and objectivity. The accompanying financial statements have been prepared in conformity with generally accepted accounting principles applied on a consistent basis and, accordingly, include amounts which are estimates and judgments. All historical financial information in this Annual Report is consistent with the accompanying financial statements.

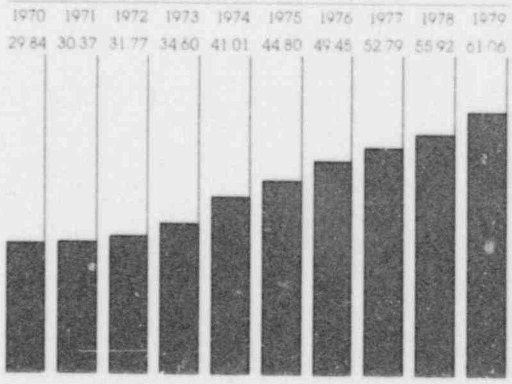
The Corporation maintains accounting systems, including internal audit controls administered by a staff of internal auditors, which are designed to provide reasonable assurance as to the reliability of the Corporation's financial records and the protection of assets. The effectiveness of those systems depends primarily upon the careful selection of financial and other managers, clear delegation of authority and assignment of accountability, inculcation of high business ethics and conflict-of-interest standards, policies and procedures for coordinating the management of corporate resources, and the leadership and commitment of top management.

The Corporation's financial statements are examined by Main Hurdman & Cranstoun, independent certified public accountants, in accordance with generally accepted auditing standards. These standards provide for a review of internal accounting control systems and tests of transactions to the extent they deem appropriate. The accountants' report appears on page 34.

The Audit Committee of the Board of Directors, which consists solely of non-employee directors, is responsible for overseeing the functioning of the accounting system, related controls and annual financial statements. The Audit Committee recommends to the Board of Directors the selection of the independent auditors, subject to the approval of shareholders. The Audit Committee periodically meets with the independent auditors, management and internal auditors to review and evaluate their accounting, auditing and financial reporting activities and responsibilities. The independent and internal auditors have full and free access to the Audit Committee and meet with it, with and without management present, to discuss the results of their examinations.

Earnings Variance Dollars per share	**1979 vs. 1978**	1978 vs. 1977
Domestic gross margin		
Selling prices	**$+6.14**	$+1.55
Volume and product mix	**+1.47**	+1.40
Manufacturing and distribution costs	**−5.04**	−1.77
	+2.57	+1.18
International gross margin		
Selling prices	**+3.62**	+1.19
Volume and product mix	**−0.28**	+0.52
Manufacturing and distribution costs	**−1.79**	−0.87
	+1.55	+0.84
Total gross margin	**+4.12**	+2.02
Research and development	**−0.05**	−
Selling, administrative, and other expenses	**−1.14**	−0.91
Depreciation	**−0.55**	−0.64
Other income-net	**−0.57**	−
Interest on long-term and short-term debt	**−0.02**	−0.11
Effective income tax rate	**+0.17**	−0.26
Minority stockholders share of income	**+0.11**	−0.02
Share of income of companies carried at equity	**+0.43**	+0.07
Increase in shares outstanding	**−0.12**	−0.11
Net change	**$+2.38**	$+0.04

UCC Equity/Share ($)



Union Carbide Corporation and Subsidiaries

Millions of dollars (except per share figures), year ended December 31.

	1979	1978
Net sales	**$9,176.5**	$7,869.7
Deductions (additions)		
Cost of sales	**6,490.7**	5,580.4
Research and development	**160.8**	155.9
Selling, administrative, and other expenses	**1,052.6**	942.9
Depreciation	**469.7**	416.6
Interest on long-term and short-term debt	**161.3**	159.3
Other income-net	**42.1**	(12.4)
Income before provision for income taxes	**799.3**	627.0
Provision for income taxes	**251.4**	205.5
Income of consolidated companies	**547.9**	421.5
Less: Minority stockholders' share of income	**25.0**	32.5
Plus: UCC share of income of companies carried at equity	**33.3**	5.3
Net income	**556.2**	394.3
Retained earnings at January 1*	**3,120.3**	2,904.8
	3,676.5	3,299.1
Dividends declared	**190.1**	181.2
Retained earnings at December 31	**$3,486.4**	$3,117.9
Per share		
Net income†	**$ 8.47**	$ 6.09
Dividends declared	**$ 2.90**	$ 2.80

*After adjustment for a credit of $2.4 million in 1979 for companies with which business combinations were effected on a pooling of interests basis ($0.3 million charge in 1978).

†Based on 65,673,908 shares (64,738,610 shares in 1978), the weighted average number of shares outstanding during the year.

The Notes to Financial Statements on pages 27 through 34 are an integral part of this statement.

Union Carbide Corporation and Subsidiaries

Millions of dollars, at December 31,

	1979	1978
Assets		
Cash	$ 115.7	$ 109.1
Time deposits and short-term marketable securities	333.3	174.6
	449.0	283.7
Notes and accounts receivable	1,433.3	1,258.6
Inventories		
Raw materials and supplies	498.8	436.5
Work in process	445.6	396.2
Finished goods	829.2	708.4
	1,773.6	1,541.1
Prepaid expenses	155.3	154.3
Total current assets	3,811.2	3,237.7
Property, plant, and equipment	8,729.5	8,050.1
Less: Accumulated depreciation	4,271.2	3,931.2
Net fixed assets	4,458.3	4,118.9
Companies carried at equity	213.1	178.2
Other investments and advances	107.1	113.1
Total investments and advances	320.2	291.3
Other assets	212.9	218.3
Total assets	$8,802.6	$7,866.2
Liabilities and stockholders' equity		
Accounts payable	$ 528.0	$ 433.8
Short-term debt	155.6	338.2
Payments due within one year on long-term debt	51.9	53.6
Accrued income and other taxes	239.4	220.0
Other accrued liabilities	765.9	570.8
Total current liabilities	1,740.8	1,616.4
Long-term debt	1,773.1	1,482.5
Deferred credits	952.5	847.5
Minority stockholders' equity in consolidated subsidiaries	293.7	281.3
UCC stockholders' equity		
Common stock		
Authorized—90,000,000 shares		
Issued—66,292,649 shares (65,165,069 shares in 1978)	557.1	521.7
Retained earnings	3,486.4	3,117.9
	4,043.5	3,639.6
Less: Treasury stock, at cost—87,090 shares (99,846 shares in 1978)	1.0	1.1
Total UCC stockholders' equity	4,042.5	3,638.5
Total liabilities and stockholders' equity	$8,802.6	$7,866.2

The Notes to Financial Statements on pages 27 through 34 are an integral part of this statement.

Union Carbide Corporation and Subsidiaries

Millions of dollars, year ended December 31,

	1979	1978
Cash and time deposits and short-term marketable securities at beginning of year	**$ 283.7**	$ 323.1
Funds provided by		
Net income	**556.2**	394.3
Noncash charges to net income		
Depreciation	**469.7**	416.6
Deferred income taxes	**104.0**	85.7
Other noncash charges—net	**(5.6)**	27.6
Total funds from operations	**1,124.3**	924.2
Long-term debt		
New borrowings	**370.4**	39.8
Reductions	**(80.1)**	(43.3)
Increase (decrease) in short-term debt and current portion of long-term debt	**(184.3)**	156.6
Increase in common stock	**35.5**	18.7
Total funds from financing	**141.5**	171.8
European ethylene derivatives businesses sold		
Net fixed assets	**—**	267.5
Other assets—net	**—**	101.7
Long- and short-term debt assumed by purchaser	**—**	(217.9)
Net assets sold	**—**	151.3
Reductions of net fixed assets	**22.9**	23.7
Decrease (increase) in investments and other assets	**7.1**	(18.2)
Increase in payables and accruals	**290.8**	221.0
Other—net	**7.3**	(40.0)
Total funds from other sources	**328.1**	337.8
Total funds provided	**1,593.9**	1,433.8
Funds used for		
Dividends	**190.1**	181.2
Capital expenditures	**831.3**	687.8
Net fixed assets of Gulf Coast Olefins Company, an affiliate consolidated in 1978	**—**	296.9
Increase in notes and accounts receivable	**174.7**	224.2
Increase in inventories	**232.5**	83.1
Total funds used	**1,428.6**	1,473.2
Net increase (decrease) in funds	**165.3**	(39.4)
Cash and time deposits and short-term marketable securities at end of year	**$449.0**	$ 283.7

Major changes in financial position resulting from significant acquisitions and divestments are reported separately in this statement. See Note 3, "Significant Transactions," for further details. Amounts reported for 1978 changes in asset and liability accounts are exclusive of changes in account balances resulting from the sale of consolidated European ethylene derivatives businesses.

The Notes to Financial Statements on pages 27 through 34 are an integral part of this statement.

Union Carbide Corporation and Subsidiaries

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Principles of consolidation—The consolidated financial statements include the assets, liabilities, revenues, and expenses of all significant subsidiaries except Ucar Capital Corporation, which is carried at equity in net assets. All significant inter-company transactions have been eliminated in consolidation. Investments in significant companies 20 to 50 percent owned are carried at equity in net assets, and Union Carbide's share of their earnings is included in income. Other investments are carried generally at cost or less.

Marketable securities—Marketable securities are carried at the lower of cost or market.

Inventories—Inventory values, which do not include depreciation, are stated at cost or market, whichever is lower. Cost is determined generally on the "last-in, first-out" (LIFO) method for U.S. companies and for certain subsidiaries operating outside the United States. Generally, the "average cost" method is used by all other subsidiaries.

Approximately 63 percent of inventory amounts before application of the LIFO method at December 31, 1979 (65 percent at December 31, 1978) have been valued on the LIFO basis. It is estimated that if these inventories had been valued at current costs, inventories would have been approximately $786 million and $655 million higher than reported at December 31, 1979, and December 31, 1978, respectively.

Fixed assets and depreciation—Fixed assets are carried at cost. Expenditures for replacements are capitalized and the replaced items are retired. Maintenance and repairs are charged to operations. Gains and losses from the sale of property are included in income.

Depreciation is calculated on a straight-line basis utilizing generally 1962 U.S. Internal Revenue Service guideline lives. The Corporation and its subsidiaries use other depreciation methods (generally accelerated) for tax purposes where appropriate.

Patents, trade marks, and goodwill—Amounts paid for purchased patents and for securities of newly acquired subsidiaries in excess of the fair value of the net assets of such subsidiaries have been charged to patents, trade marks, and goodwill. The portion of such amounts determined to be attributable to patents is amortized over their remaining lives and the balance is amortized over the estimated period of benefit, but not more than 40 years.

Research and development—Research and development costs are charged to expense as incurred. Depreciation expense applicable to research and development facilities and equipment is included in Depreciation in the income statement ($10.4 million in 1979 and $8.1 million in 1978).

Income taxes—Provision has been made for deferred income taxes where differences exist between the period in which transactions, principally relating to depreciation, affect taxable income and the period in which they enter into the determination of income in the financial statements.

The investment tax credit is deferred and amortized over the average depreciable life of fixed assets by reductions in the provision for income taxes. Benefits from energy tax credits are included currently in net income.

Retirement program—The Corporation's contribution to the U.S. retirement program in each year is based on the recommendation of an independent actuarial firm using the entry age normal method. Accrued costs are funded for all employees age 25 and over, with unfunded prior service costs being amortized over 30 years except for experience gains and losses occurring after 1975 and adjustments to retirees' benefits which are amortized over 15 years. An investment income assumption of 6 percent is used for actuarial purposes.

Program costs of consolidated international subsidiaries are accounted for substantially on an accrual basis.

Net income per share—Net income per share is based on the weighted average number of shares of common stock outstanding in each year. There would have been no material dilutive effect on net income per share for 1979 or 1978 if convertible securities had been converted and if outstanding stock options had been exercised.

2. UCAR CAPITAL CORPORATION

Ucar Capital Corporation (Capital), a wholly owned finance subsidiary, purchases without recourse certain customer obligations from Union Carbide at a discount sufficient to yield earnings of not less than one and one-half times its fixed charges. In the Consolidated Statement of Income and Retained Earnings, Capital's income before income taxes, which amounted to $8.5 million in 1979 and 1978, is included in Other income—net as a reduction of discount expense, and the related income tax is included in Provision for income taxes.

The average effective interest rate on Capital's borrowings, which consist of $100 million of 15-year notes due 1992 and $100 million of 5-year notes due 1982, was 8.4 percent in 1979 and 1978.

Additional financial information relating to Capital is presented below:

Millions of dollars	December 31, 1979	1978
Total assets	$ 251.6	$ 250.1
Less: Total liabilities	203.8	206.9
Net assets	$ 47.8	$ 43.2

3. SIGNIFICANT TRANSACTIONS

In October 1978, the Corporation purchased the remaining interest in Gulf Coast Olefins Company (GCOC), whose principal asset is an olefins unit at Taft, Louisiana, thereby increasing its interest in GCOC to 100 percent. Concurrently, GCOC retired its long-term debt of $292 million with funds provided by Union Carbide.

Also in 1978, the Corporation sold its consolidated European ethylene derivatives businesses for net proceeds of $176 million plus assumption by the purchaser of $217.9 million in long- and short-term debt. In the Consolidated Statement of Income and Retained Earnings, Net sales for 1978 includes $314.6 million and Net income includes a loss of $31.8 million for these European operations. This sale resulted in a gain of $52.9 million ($24.7 million after tax, or $0.38 per share) which is included in Other income—net in 1978.

4. FOREIGN CURRENCY ADJUSTMENTS

In 1979, translation of balance sheet accounts carried in foreign currencies, and exchange gains and losses, resulted in a charge to Other income-net of $36.8 million ($51.4 million in 1978). The effect, after adjustments for taxes on exchange gains and losses, for minority interests, and for currency adjustments of companies carried at equity, was to decrease net income in 1979 by $29.3 million ($59.1 million in 1978).

5. INTERNATIONAL OPERATIONS

The following is a financial summary of consolidated international subsidiaries and international companies carried at equity:

Millions of dollars	December 31, 1979		December 31, 1978	
	Consolidated subsidiaries	Companies carried at equity	Consolidated subsidiaries*	Companies carried at equity
Total assets	$2,690.2	$ 963.6	$2,407.0	$ 784.2
Less: Total liabilities	1,288.8	632.6	1,166.3	523.4
Net assets	1,401.4	331.0	1,240.7	260.8
UCC equity	$1,139.5	$ 151.8	$ 991.1	$ 121.5
Net sales	$2,782.1	$ 920.0†	$2,533.8	$ 602.7†
Net income	$ 168.3	$ 69.4	$ 106.4	$ 14.7
UCC share	$ 145.7	$ 32.0	$ 76.4	$ 9.1

*Net sales includes $314.6 million representing sales of European ethylene derivatives businesses that were sold in 1978 and Net income and UCC share include a loss of $31.8 million for these operations. Net income and UCC share also include a gain of $24.7 million from the sale of these businesses. See Note 3.

†Exclusive of $77.5 million net sales to UCC and its consolidated subsidiaries in 1979 ($78.1 million in 1978).

6. SEGMENT INFORMATION

Summaries of industry and geographic segment data are included in the Financial Review on page 17. Amounts for 1979 and 1978 included in the summaries are incorporated by reference as part of this note.

Capital expenditures and depreciation by industry segment are as follows:

Millions of dollars	Capital Expenditures 1979	1978	Depreciation 1979	1978
Chemicals & Plastics	$ 324	$ 267	$ 218	$ 191
Gases & Related Products	227	183	101	88
Metals & Carbons	102	77	75	65
Batteries, Home & Automotive Products	91	78	36	30
Specialty Products	87	75	40	36

The following is a reconciliation of segment operating profit to the consolidated financial statements:

Millions of dollars	1979	1978
Total segment operating profit	$1,072	$ 868
Less: General corporate expenses-net	112	82
Interest on long-term and short-term debt	161	159
Income before provision for income taxes	$ 799	$ 627

Union Carbide's businesses and products are described on pages 6 through 16.

7. INCOME TAXES

The following is an analysis of income tax expense:

Millions of dollars	1979		1978	
	Current	Deferred	Current	Deferred
U.S. Federal income taxes	$ 81.5	$ 52.7	$ 86.7	$ 53.6
U.S. investment tax credit	(49.6)	23.8	(57.8)	38.2
U.S. energy tax credit	(1.4)	—	(6.9)	—
U.S. state and local taxes based on income	11.5	—	9.7	—
Non-U.S. income taxes	105.4	27.5	88.1	(6.1)
	$147.4	$104.0	$119.8	$ 85.7
Provision for income taxes	$251.4		$205.5	

The consolidated effective income tax rate was 31.4 percent in 1979 and 32.8 percent in 1978. An analysis of the difference between the provision for income taxes and the amount computed by applying the statutory Federal income tax rate to consolidated income before provision for income taxes is as follows:

	1979		1978	
	Millions of dollars	Percent of pretax income	Millions of dollars	Percent of pretax income
Tax at statutory Federal rate	$367.7	46.0	$300.9	48.0
Income taxes of subsidiaries operating in Puerto Rico and outside the United States	(67.6)	(8.5)	(56.9)	(9.1)
Amortization of U.S. investment tax credit	(25.8)	(3.2)	(19.6)	(3.1)
U.S. energy tax credit	(1.4)	(0.2)	(6.9)	(1.1)
Allowable depletion in excess of cost depletion	(15.5)	(2.0)	(15.3)	(2.4)
U.S. state and local taxes based on income, net of Federal income tax benefit	6.2	0.8	5.1	0.8
Domestic international sales corporation	(11.5)	(1.4)	(7.6)	(1.2)
Other, net	(0.7)	(0.1)	5.8	0.9
	$ 251.4	31.4	$ 205.5	32.8

Portions of the income of several subsidiaries operating in Puerto Rico and outside the United States are exempt from income taxes under local tax statutes. Non-U.S. income taxes were reduced by $42 million in 1979 ($41 million in 1978) as a result of these exemptions, which expire principally in 1989.

The Corporation provides for taxes on undistributed earnings of affiliates included in consolidated retained earnings to the extent such earnings are planned to be remitted and not reinvested indefinitely. Undistributed earnings of affiliates intended to be reinvested indefinitely amounted to $1.4 billion at December 31, 1979.

8. OTHER INCOME—NET

The following is an analysis of Other income-net:

Millions of dollars	1979	1978
Investment income (principally from short-term investments)	$ 39.1	$ 30.7
Foreign currency adjustments	(36.8)	(51.4)
Net discount expense on sales of customer obligations to Ucar Capital Corporation	(17.0)	(17.0)
Charges related to the sale of a mineral production payment	(11.6)	(11.6)
Sales and disposals of businesses and other assets*	(21.1)	54.4
Other	5.3	7.3
	$ (42.1)	$ 12.4

*Includes for 1979 a charge of $24.3 million ($13.1 million after tax, or $0.20 per share) resulting from withdrawal from the Corporation's imaging systems hardware business. Includes for 1978 a gain of $52.9 million ($24.7 million after tax, or $0.38 per share) from sale of the Corporation's consolidated European ethylene derivatives businesses.

9. SUPPLEMENTARY BALANCE SHEET DETAIL

Millions of dollars	December 31, 1979	1978
Notes and accounts receivable		
Trade	$1,334.4	$1,159.1
Other	128.1	120.5
	1,462.5	1,279.6
Less: Allowance for doubtful accounts	29.2	21.0
	$1,433.3	$1,258.6
Fixed assets		
Land and improvements	$ 489.1	$ 464.8
Buildings	911.0	854.8
Machinery and equipment	6,646.6	6,242.0
Construction in progress and other	682.8	488.5
	$8,729.5	$8,050.1
Other assets		
Deferred charges	$ 72.7	$ 70.4
Long-term receivables	47.6	57.7
Patents, trade marks, and goodwill	92.6	90.2
	$ 212.9	$ 218.3
Deferred credits		
Income taxes*	$ 491.1	$ 399.4
Investment tax credit	217.9	195.2
Mineral production payment	68.6	91.4
Deferred revenue from sales of certain customer obligations to Ucar Capital Corporation	122.9	123.0
Other	52.0	38.5
	$ 952.5	$ 847.5

*Deferred income taxes related to current items are included in accrued income and other taxes in the amount of $61.4 million in 1979 ($80.3 million in 1978).

10. LONG-TERM DEBT

Millions of dollars	December 31, 1979	1978
Union Carbide Corporation		
3.50% Notes due semiannually to 1984	$ 75.0	$ 90.0
3.625% Notes due semiannually to 1990, issued at a discount (effective rate 4.50%)	27.5	30.0
4.50% Notes due semiannually to 1996	33.6	35.5
4.50% Notes due annually, 1985 to 1994	200.0	200.0
5.30% Sinking Fund Debentures, with equal annual sinking fund payments, 1978 to 1997	177.0	189.8
7.50% Sinking Fund Debentures due 2006, issued at a discount (effective rate 7.55%), with annual sinking fund payments, 1987 to 2005	200.0	200.0
8.50% Sinking Fund Debentures due 2005, with annual sinking fund payments, 1986 to 2004	300.0	300.0
9.125% Notes due 1986, issued at a discount (effective rate 9.22%)	100.0	—
9.35% Sinking Fund Debentures due 2009, with annual sinking fund payments, 1990 to 2008	200.0	—
Pollution abatement facility obligations	137.1	129.2
Obligations under capital leases	12.0	13.0
Domestic subsidiary		
4.75% Guaranteed Debentures due 1982, convertible into Union Carbide Corporation common stock at $56.50 per share	38.6	38.6
International subsidiaries		
8.375% Canadian Dollar Notes due 1992	19.5	20.0
9.25% Canadian Dollar Notes due 1982	25.7	25.5
9.75% Canadian Dollar Debentures due 1986	22.4	23.3
10.75% Canadian Dollar Debentures due 1995	64.2	63.6
Other debt—various maturities and interest rates	192.4	177.6
	1,825.0	1,536.1
Less: Payments due within one year	51.9	53.6
	$1,773.1	$1,482.5

During 1979 and 1978, the Corporation and a subsidiary purchased a total of $35.5 million of the 5.30% Sinking Fund Debentures to apply against future sinking fund requirements. Previously, the Corporation had repurchased $37.5 million of the debentures to satisfy sinking fund requirements through 1980.

Pollution abatement facility obligations represent state, commonwealth, and local governmental bond financing of pollution abatement facilities and are treated for accounting and tax purposes as debt of Union Carbide Corporation. The bonds mature at various dates from 1998 through 2009 and have an average annual effective interest rate of 5.81 percent.

International subsidiaries' debt includes $58.8 million ($51.6 million in 1978) due in U.S. dollars. At December 31, 1979, $322.5 million of international consolidated assets was pledged as security for $81.6 million of international subsidiaries' debt.

Payments due on long-term debt in the four years after 1980 are: 1981, $61.9 million; 1982, $126.6 million; 1983, $54.4 million; 1984, $67.0 million.

Various lines of credit are available to the Corporation and its subsidiaries. The principal domestic line of credit, which is subject to customary review and annual renewal, provides for borrowings of up to $800 million at the prime rate. There were no borrowings in 1979 under this arrangement. The Corporation as a matter of practice maintains its bank balances in amounts sufficient to compensate banks for credit lines and services.

11. LEASES

Leases that meet the criteria for capitalization set forth in Financial Accounting Standards Board Statement No. 13 have been classified and accounted for as capital leases. For noncapitalized leases, involving primarily distribution equipment and facilities, commitments under noncancelable leases extending for one year or more will require the following future payments:

Millions of dollars			
1980	$59	1985-1989	$90
1981	$48	1990-1994	$73
1982	$38	1995-1999	$53
1983	$30	After 1999	$26
1984	$23		

Total lease and rental payments under noncapitalized leases extending one month or more were $92.1 million in 1979 ($91.1 million in 1978).

12. CAPITAL STOCK

At December 31, 1979 and 1978, there were 10,000,000 shares of preferred stock ($1 par value) authorized and unissued. Issued shares of common stock ($1 par value) include 31,818 shares at December 31, 1979 (46,418 shares at December 31, 1978) held by the Corporation as collateral under employee stock purchase contracts executed under the Corporation's previous stock option plans. The amount to be paid under these contracts, $0.8 million at December 31, 1979 ($1.1 million at December 31, 1978), has been deducted from common stock.

Issuances of shares of common stock were as follows:

	1979	1978
Dividend Reinvestment and Stock Purchase Plan		
Issued at 95% of market price for dividend reinvestments	620,139	173,457
Issued at market price for optional cash payments	97,400	69,961
Purchased at market price by the Trustee under the Savings Plan for Employees	200,803	228,013
Issued under employee stock option plans	2,100	–
Issued in business combination transactions	207,138	–
	1,127,580	471,431

During 1979 the Corporation transferred 12,756 shares of treasury common stock in business combination transactions (60,574 shares in 1978).

Shares of common stock were reserved for issuance as follows:

	December 31, 1979	1978
For sale under the Dividend Reinvestment and Stock Purchase Plan	**539,043**	1,256,582
For conversion of convertible debentures	**683,592**	683,592
For stock option plans:		
Options granted but not exercised	**458,894**	203,246
Available for granting future options	**1,224,120**	1,500,000
For sale to Trustee under the Savings Plan for Employees	**136,022**	336,825
	3,041,671	3,980,245

13. RETIREMENT PROGRAM

The retirement program of Union Carbide Corporation covers substantially all U.S. employees and certain employees in other countries. Various arrangements for providing retirement benefits are maintained by consolidated international subsidiaries. Total program costs for 1979 amount to $172.6 million ($157.5 million in 1978), of which $148.0 million ($133.8 million in 1978) related to the U.S. Retirement Program.

At January 1, 1979, the date of the latest actuarial valuation, the computed value of benefits vested with U.S. and internationally assigned employees exceeded the carrying value of plan assets by approximately $167 million. At September 30, 1979, the estimated corresponding amount was approximately $133 million.

The estimated amount necessary to provide for all unfunded prior service costs was approximately $896 million at September 30, 1979.

14. INCENTIVE PROGRAMS

In 1978, stockholders approved the five-year Union Carbide Incentive Compensation Plan. The plan, which became effective January 1, 1979, provides for granting stock option awards and annual bonus awards to key employees. Employees awarded options may also be awarded stock appreciation rights related to part or all of the optioned shares. On exercise, such rights would enable a holder to receive in cash or common stock the amount by which the market price of the common stock on the date of exercise exceeds the option price. The number of shares subject to options may not exceed 1,500,000. Option prices are 100 percent of fair market value on the date of the grant. Options, and any related stock appreciation rights, generally become exercisable two years after such date. Options may not have a duration of more than ten years. Annual bonus awards are cash bonuses which are intended to provide incentives for meritorious performance and total compensation levels comparable to those of major competitive employers.

Previously, in 1974, stockholders had approved the Union Carbide Incentive Program for key employees, which consisted of a combination cash payment and stock option plan and a separate cash awards plan. Under the 1974 Program, no award could be granted for any year after 1978. Option prices were 100 percent of fair market value on the date of the grant and options generally become exercisable five years after, and expire seven years after, the date of grant. Option awards were coupled with a contingent cash award, which may not exceed two times the aggregate option price, payable five years after the date of the award. The payment of the cash award is contingent upon achievement by the Corporation of certain earnings objectives.

When shares are issued upon exercise of options, no charges are made to income and the entire proceeds when received are credited to the common stock account. For stock appreciation rights granted, income is charged in each quarter for their appreciation. The charge is based on the amount, if any, by which the market price of the common stock exceeds the option price set forth in the related stock option.

The status of options is as follows:

Number of shares of common stock	1979	1978
Outstanding at January 1	**203,246**	108,430
Granted during the year	**275,880***	127,121
Exercised during the year	**2,100**	—
Canceled or expired during the year	**18,132**	32,305
Outstanding at December 31	**458,894**	203,246

*Includes 90,400 shares granted with stock appreciation rights attached.

15. COMMITMENTS AND CONTINGENCIES

At December 31, 1979, the cost of completing authorized construction projects is estimated at $1.3 billion. A portion of this amount is covered by firm commitments. Also, the Corporation and its consolidated subsidiaries have various purchase commitments for materials and supplies incident to the ordinary conduct of business; and commitments to several companies, in which the Corporation has investments, for working capital or supplies and for product support. The commitments are, in the aggregate, not expected to have a material adverse effect on the consolidated financial position of the Corporation.

In the normal course of business the Corporation and its consolidated subsidiaries are involved in a number of legal proceedings and claims with both private and governmental parties. These cover a wide range of matters, including trade regulation, product liability, utility regulation, Federal regulatory proceedings, patents, trade marks, contracts, and taxes. In some of these cases, the remedies that may be sought or damages claimed are substantial. In the opinion of counsel, the outcome of the legal proceedings and claims are not expected to have a material adverse effect on the consolidated financial position of the Corporation. Should any losses be sustained, in excess of provisions therefor, they will be charged to income in the future.

16. QUARTERLY FINANCIAL DATA (UNAUDITED)

The quarterly Income Statement data for 1979 and 1978 included in the Financial Review on page 20, and the quarterly net income per share amounts for these years included in Information for Investors on page 35, are incorporated by reference as a part of this note.

17. SUPPLEMENTARY DATA ON CHANGING PRICES (UNAUDITED)

During the past 10 years, the United States has experienced rapid inflation as contrasted to the relatively low level of inflation in prior years. Continued inflation over time distorts traditional accounting measurements of income and capital. In an effort to produce financial information that discloses the effects of inflation, the Financial Accounting Standards Board (FASB) has issued Statement No. 33, *Financial Reporting and Changing Prices*, requiring companies to explain the effect of inflationary factors on their operations using two different methods to adjust historical financial statements for the effects of changing prices. The FASB believes that both types of information are likely to be useful and that experimentation is required to determine their usefulness.

The first method prescribed by Statement No. 33 provides data adjusted for "general inflation" using the Consumer Price Index for all Urban Consumers as the broad-based measure of the general inflation rate. The objective of this approach is to provide financial information in dollars of equivalent value or general purchasing power (constant dollars). Financial data presented for a series of years are made more comparable by reporting the amounts for each year in terms of a common unit of measure of purchasing power.

The second method of measurement adjusts for "changes in specific prices". The objective of this method is to reflect the effects of changes in the specific prices (also referred to as "current costs") of the resources actually used in a company's operations, so that measures of these resources and their consumption reflect the current cost of replacing these resources, rather than the historical cost amounts actually expended to acquire them.

The accompanying summary statement of income, summary balance sheet data, and five-year comparisons were prepared in accordance with Statement No. 33.

Management's Overview Management believes that "constant dollar/current cost" information is very significant in today's inflationary economy. Historical measures of profit are deceptive because of rapidly changing prices. While the current cost data is subjective, it provides a reasonable approximation of the margin between Union Carbide's current revenues and the current costs of goods consumed and services utilized. This margin is less than under traditional measures of income based on historical costs. The reduction in net income results from the higher levels of depreciation and cost of sales under constant dollar/current cost concepts.

Of particular concern is the higher proportion of income absorbed by income taxes in the data adjusted for the impact of inflation. The effective tax burden is shown to be approximately 25% greater than on a historical cost basis. The data emphasizes the critical need for national monetary and fiscal policies designed to provide adequate returns to stockholders and capital for future business growth which, in turn, will mean increased productivity and employment.

Following are additional comments pertaining to the supplementary data presented.

Net sales for 1979 were $9,176.5 million. Net sales for 1975, expressed at their equivalent in average 1979 dollars, amounted to $7,650.6 million. The average annual sales growth rate in constant dollars from 1975 to 1979 was 5%, compared with 13% on an historical cost basis.

The excess of increase in general price level over increase in specific prices of $505.2 million is the result of a significant difference between the Consumer Price Index for all Urban Consumers and the rate of increase in construction costs experienced by the corporation during the year.

Millions of dollars — Year ended December 31, 1979

Summary Statement of Income Adjusted for Changing Prices	At Historical Cost	Adjusted for General Inflation (Average 1979 Dollars)	Adjusted for Changes in Specific Prices (Current Costs)
Net Sales	$ 9,176.5	$ 9,176.5	$ 9,176.5
Cost of sales	6,490.7	6,631.4	6,632.5
Depreciation	469.7	490.4	487.8
Other operating expense—net	1,247.2	1,247.2	1,247.2
Interest expense	161.3	161.3	161.3
Provision for income taxes	251.4*	251.4*	251.4*
Net income	$ 556.2	$ 394.8	$ 396.3
Net income per share	$ 8.47	$ 6.01	$ 6.03
Gain due to decline in purchasing power of net monetary liabilities		$ 263.9	$ 263.9
Effect of increase in general price level of inventories and property, plant, and equipment held during the year			$ 992.5
Increase in specific prices (current cost)			487.3
Excess of increase in general price level over increase in specific prices			$ 505.2
Summary Balance Sheet Data Adjusted for Changing Prices			
Inventories	$ 1,773.6	$ 2,138.0	$ 2,559.1
Property, plant and equipment, net of accumulated depreciation	4,458.3	5,832.9	5,732.4
UCC Stockholders' Equity	4,042.5	5,781.5	6,102.1

*In accordance with Statement No. 33, no adjustment has been made to the provision for income taxes. As a result, the effective tax rate for 1979 rises from 31.4 percent on a historical cost basis to 39.4 percent and 39.3 percent, respectively, in the average 1979 dollar and current cost calculations.

Five-Year Comparisons	**1979**	1978	1977	1976	1975
Net Sales					
At historical cost	**$9,176.5**	$7,869.7	$7,036.1	$6,345.7	$5,665.0
In average 1979 dollars		8,767.8	8,439.4	8,102.4	7,650.6
Dividends per share					
At historical cost	**2.90**	2.80	2.80	2.50	2.40
In average 1979 dollars	**2.90**	3.12	3.36	3.19	3.24
Market price per share (at year-end)					
At historical cost	**42.00**	34.00	41.25	61.88	61.13
In average 1979 dollars	**39.70**	36.32	47.97	77.06	79.92
Average consumer price index	**217.7**	195.4	181.5	170.5	161.2

Valuation of Current Costs Current cost values presented in the supplementary data were determined as follows:

Inventories and Cost of Sales—Cost of sales, determined for historical cost purposes on the "last-in, first-out" (LIFO) method for U.S. companies and for certain subsidiaries operating outside the United States, have been adjusted to reflect current material, labor, and overhead costs. If the LIFO method had not been utilized in the primary financial statements, the impact on cost of sales would have been significantly greater.

Property, Plant and Equipment—The current cost of property, plant and equipment is defined by Statement No. 33 as the current cost of acquiring the same service potential embodied by the asset owned. It follows that the current cost of an asset will be directly affected by the differences between its operating costs and the operating costs of a technologically superior asset that has become available. Therefore, the estimated current cost of property, plant and equipment was calculated by application of indices, adjusted for technological change, to historical costs of assets. Indices appropriate to domestic operations were selected on the basis of applicability to major business segment facilities. For foreign property, plant and equipment calculations, indices utilized were selected based on major country/company operations. Adjustments for technology change based on representative facilities were extended to related asset groups before incorporation into the indices ultimately utilized.

Land—Real current costs of individual properties can be determined only by actual sale. Land values have been based on estimates of current cost.

Depreciation—Historical Depreciation expense is calculated on a straight line basis generally utilizing 1962 U.S. Internal Revenue Service guideline lives. These shortened lives have the effect of accelerating depreciation charges and tend to provide some allowance for inflation. The extension of historical costs of property, plant, and equipment by Constant Dollar or Current Cost indices and the use of guideline lives to arrive at inflation adjusted depreciation would overstate the effects of inflation. Consequently, for purposes of Statement No. 33, revised estimated useful lives have been used for calculating depreciation. Beginning in 1980, these revised lives will also be reflected in historical costs reported in Union Carbide's primary financial statements.

Report of Independent Certified Public Accountants

To The Stockholders and Board of Directors
of Union Carbide Corporation

We have examined the accompanying consolidated financial statements (pages 24 through 34) of Union Carbide Corporation and subsidiaries as of December 31, 1979 and 1978 and the Ten-Year Summary (page 21). Our examinations were made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

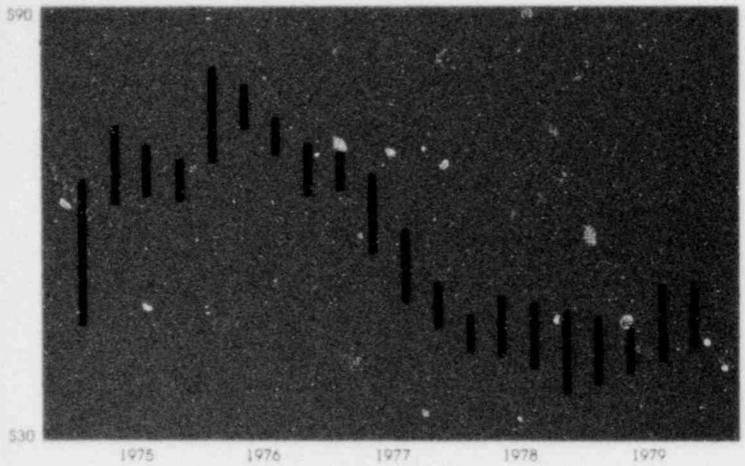
In our opinion, the accompanying consolidated financial statements present fairly the financial position of Union Carbide Corporation and subsidiaries at December 31, 1979 and 1978 and the results of their operations and the changes in their financial position for the years then ended, in conformity with generally accepted accounting principles applied on a consistent basis. Also, in our opinion, the Ten-Year Summary presents fairly the financial information included therein.

Main Hurdman & Cranstoun

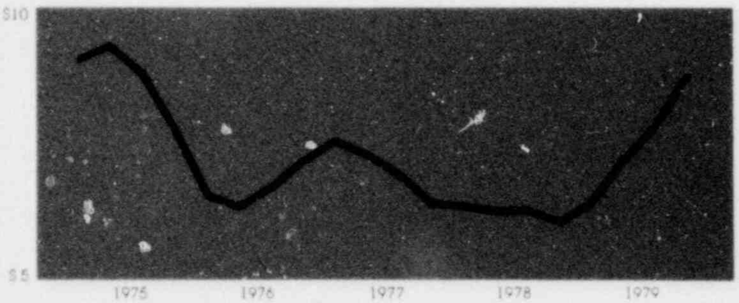
Certified Public Accountants

280 Park Avenue
New York, N.Y.
February 13, 1980

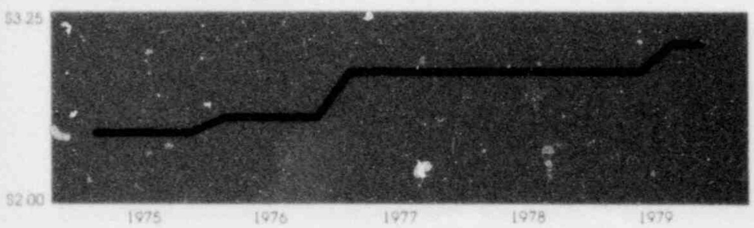
Quarterly Price Range



Previous 4 Quarters' Net Income Per Share



Annual Dividend Rate



The charts above are plotted on a semi-logarithmic scale.

Quarterly Stock Data Dollars per share	1st quarter	2nd quarter	3rd quarter	4th quarter	Year
1979					
Net income	$1.91	$2.30	$2.27	$1.99	$8.47
Dividends	0.70	0.70	0.75	0.75	2.90
Market Price					
high	40¾	40⅛	44¼	44½	44½
low	34	35⅝	36½	37¾	34
1978					
Net income	$1.22	$1.65	$1.25	$1.97	$6.09
Dividends	0.70	0.70	0.70	0.70	2.80
Market Price					
high	41	43¼	42⅜	41½	43¼
low	37½	37⅛	36	33⅝	33⅝

The 1980 Annual Meeting of Stockholders will be held at 10:30 a.m. on April 23, in the Auditorium at the Georgia World Congress Center, 285 International Boulevard, N.W., Atlanta, Georgia 30313.

A Notice of Annual Meeting and Proxy Statement, and a proxy voting card, are mailed to each stockholder in March, together with a copy of the current annual report.

A Form 10-K Annual Report for the year ended December 31, 1979 will be filed with the Securities and Exchange Commission in March. A copy will be made available without charge upon written request to the Secretary, Union Carbide Corporation, at the address below.

General Offices: 270 Park Avenue, New York, N.Y. 10017. Telephone: (212) 551-2345.

Inquiries from Stockholders and others interested in Union Carbide as an investment should be directed to the Investor Relations Department, 48th Floor, at the address above.

Stock Transfer Agent: Union Carbide Corporation, Stock Transfer Department, Saw Mill River Road, Route 100-C, Tarrytown, N.Y. 10591.

Registrar: Manufacturers Hanover Trust Company, 4 New York Plaza, New York, N.Y. 10004.

Principal Stock Exchange Listing: The New York Stock Exchange (Ticker Symbol: UK). Our stock is also listed on the Midwest Stock Exchange and on the Pacific Stock Exchange in the United States, and overseas on exchanges in Amsterdam, Basle, Brussels, Geneva, Lausanne, Paris, and Zurich.

A Dividend Reinvestment and Stock Purchase Plan is available to stockholders. Under the plan, stock may be bought free of commissions and service charges, and shares purchased through reinvested dividends are available at a discount. At December 1, 1979 about 13% of Union Carbide stockholders were enrolled in the plan. They reinvested approximately 15% of the Corporation's total dividends paid on that date. For a prospectus explaining the plan in detail, write Union Carbide Corporation, Stock Transfer Department, P.O. Box 340, Tarrytown, N.Y. 10591.

Publications Available on Request include reports on our Nuclear Division and operations in South Africa and the following Public Affairs material:

- □ "Key Public Issues 1980"—Union Carbide's positions on issues most critical to the Corporation.
- □ "An Energy User Joins the Energy Debate"—Reprints of Union Carbide's advertising on energy policy.
- □ "Perspectives"—Reprints of management speeches on critical economic, social, and political issues.

For your copies, write Key Issues, Box Z-6, Union Carbide Corporation, 270 Park Avenue, New York, New York 10017.

Directors of the Corporation

Warren M. Anderson[4]
President and Chief Operating Officer of Union Carbide Corporation

R. Manning Brown, Jr.[1,2,4]
Chairman of New York Life Insurance Company

Roberto de Jesus Toro[3,5]
President of Banco de Ponce

James L. Ferguson[2,5]
Chairman and Chief Executive Officer of General Foods Corporation

James M. Hester[3,5]
Rector of the United Nations University

Jerome H. Holland[3,4,5]
Director of various corporations

Jack B. Jackson[1,2]
Director of various corporations

Horace C. Jones[2,3,4]
Chairman of the Executive—Finance Committee of Burlington Industries, Inc.

C. Peter McColough[1,3]
Chairman and Chief Executive Officer of Xerox Corporation

Ian D. Sinclair[1,2]
Chairman and Chief Executive Officer of Canadian Pacific Limited

William S. Sneath[4]
Chairman of the Board and Chief Executive Officer of Union Carbide Corporation

Russell E. Train[1,3]
President of World Wildlife Fund—U.S.

F. Perry Wilson[1,3]
Director of various corporations; retired Chairman of the Board of Union Carbide Corporation

Kathryn D. Wriston[1,3,4]
Director of various organizations

Officers of the Corporation

Chairman of the Board and Chief Executive Officer
William S. Sneath

President and Chief Operating Officer
Warren M. Anderson

Senior Vice-Presidents
Alec Flamm
Richard J. Hughes
James M. Rehfield
J. Clayton Stephenson
Elio E. Tarika

Vice-President and Chief Financial Officer
William S. Gray, Jr.

Vice-President and General Counsel
John A. Stichnoth

Vice-President and Secretary
Morse G. Dial, Jr.

Vice-Presidents
John H. Field
James S. Freeman
A. Sherburne Hart
Fred C. Kroft, Jr.
Arthur C. MacLeod
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Treasurer
Stephen E. Nightingale

Controller
Louis G. Peloubet

Vice-President—Federal Government Relations
James C. Rowland

Division Presidents

Agricultural Products Division
R. Oldford, *President*

Battery Products Division
N. S. Livingston, Jr., *President*

Carbon Products Division
J. B. Reid, *President*

Coatings Materials Division
N. L. Zutty, *President*

Electronics Division
F. P. Holloway, *President*

Engineering and Hydrocarbons Division
R. G. Chenoweth, *President*

Ethylene Oxide/Glycol Division
J. H. Bees, *President*

Ethylene Oxide Derivatives Division
A. W. Lutz, *President*

Films-Packaging Division
G. E. Bailie, *President*

Home and Automotive Products Division
A. C. Egler, *President*

Linde Division
R. D. Kennedy, *President*

Medical Products Division
R. W. King, *President*

Metals Division
F. C. Kroft, Jr., *President*

Nuclear Division
R. F. Hibbs, *President*

Polyolefins Division
J. W. Luchsinger, *President*

Silicones and Urethane Intermediates Division
R. H. Towe, *President*

Solvents and Intermediates Division
L. A. Wilkinson, *President*

Specialty Chemicals and Plastics Division
T. T. Szc[illegible] *resident*

International Area Companies

Union Carbide Africa and Middle East, Inc.
B. Sokoloff, Jr., *Chairman*

Union Carbide Canada Limited
J. S. Dewar, *President*

Union Carbide Eastern, Inc.
J. B. Law, *Chairman*

Union Carbide Europe, Inc.
P. F. Hilton, *Chairman*
R. W. Eddy, *Vice-Chairman*

Union Carbide Pan America, Inc.
K. D. Rutter, *Chairman*

Union Carbide Southern Africa, Inc.
J. W. Rawlings, *Chairman*

Notes

Officers and Directors are listed as of March 1, 1980.

Directors serve on Committees of the Board as indicated below:

[1] Audit Committee (Mr. Brown, chairman)
[2] Compensation Committee (Mr. Ferguson, chairman)
[3] Public Policy Committee (Dr. Holland, chairman)
[4] Executive Committee (Mr. Sneath, chairman)
[5] Nominating Committee (Sr. de Jesus Toro, chairman)

Union Carbide Corporation is represented worldwide by the following divisions and subsidiaries. Major producing affiliates are listed beneath the division or subsidiary having management responsibility for them. Subsidiaries and affiliates are 100 percent owned by the Corporation unless otherwise indicated; ownership is direct or indirect. The data are for year end 1979.

Agricultural Products Division
Union Carbide Agricultural Products Company, Inc.
In January 1980 the Corporation announced the sale of its Amchem Products, Inc. subsidiary, which comprised a metalworking chemicals business active in 1979.

Battery Products Division

Carbon Products Division

Coatings Materials Division

Electronics Division

Engineering and Hydrocarbons Division
Gulf Coast Olefins Company

Ethylene Oxide/Glycol Division

Ethylene Oxide Derivatives Division

Films-Packaging Division

Home and Automotive Products Division

Linde Division

Medical Products Division

Metals Division

Nuclear Division
Operates facilities owned by the U.S. Government

Polyolefins Division

Silicones and Urethane Intermediates Division

Solvents and Intermediates Division

Specialty Chemicals and Plastics Division

Union Carbide Africa and Middle East, Inc.

GHANA
Ucar Plastics (Ghana) Limited—50%
Union Carbide Ghana Limited—66.67%

IVORY COAST
Union Carbide Cote d'Ivoire

KENYA
Union Carbide Kenya Limited—65%

SAUDI ARABIA
Carbide Hashim Industrial Gas Co.—25%

SUDAN
Union Carbide Sudan Limited—84%

Union Carbide Canada Limited—74.90%

Union Carbide Eastern, Inc.

AUSTRALIA
Chemos Industries Pty. Limited—60.02%
Union Carbide Australia Limited—60.02%

HONG KONG
Sonca Industries Limited

INDIA
Union Carbide India Limited—50.9%

INDONESIA
P.T. Agrocarb Indonesia—80%
P.T. Union Carbide Indonesia

JAPAN
Nippon Unicar Company Limited—50%
Showa Union Gosei Co., Ltd.—50%
Showa Unox K.K.—50%
Sony-Eveready, Inc.—50%
Union Carbide Services Eastern Limited

KOREA
Union Gas Company Limited—50%
Union High Polymers, Ltd.—50%

MALAYSIA
Union Carbide Malaysia Sdn. Bhd.—80%

NEW ZEALAND
Union Carbide New Zealand Limited—60.02%

PHILIPPINES
Union Carbide Philippines, Inc.

REPUBLIC OF SRI LANKA
Union Carbide Ceylon Limited—60%

SINGAPORE
Metals and Ores Pte. Limited
Union Carbide Singapore Pte. Limited

TAIWAN
Oriental Union Chemical Corporation—24.99%
Union Industrial Gas Corporation—50%

THAILAND
Union Carbide Thailand Limited

Union Carbide Europe, Inc.

BELGIUM
Union Carbide Benelux N.V.
Indugas N. V.—50%

FRANCE
La Littorale S.A.—99.95%
Union Carbide France S.A.
Viscora, S.A.—50%

GERMANY (WEST)
Ucar Batterien G.m.b.H.
Union Carbide Deutschland G.m.b.H.

GREECE
Union Carbide Hellas Industrial and Commercial S.A.

ITALY
Elettrografite Meridionale S.p.A.
Uniliq S.p.A.
Union Carbide Italia S.p.A.

NORWAY
A/S Meraker Smelteverk
A/S Saudefaldene
Sauda Smelteverk A/S

SPAIN
Argon, S.A.—50%
Union Carbide Iberica, S.A.
Union Carbide Navarra, S.A.

SWEDEN
Unifos Kemi AB—50%
Union Carbide Norden AB

SWITZERLAND
Union Carbide Europe S.A.

UNITED KINGDOM
British Acheson Electrodes Limited
Horstine Farmery Limited
Union Carbide U.K. Limited
Viskase Limited—50%

Union Carbide Pan America, Inc.

ARGENTINA
Union Carbide Argentina S.A.I.C.S.—99.99%

BRAZIL
Eletro Manganes Ltda.—55%
Tungstenio do Brasil Minerios e Metais Ltda.
S.A. White Martins—50.14%
S.A. White Martins Nordeste—50.14%
Union Carbide do Brasil Ltda.

COLOMBIA
Union Carbide Colombia, S.A.

COSTA RICA
Union Carbide Centro Americana, S.A.

ECUADOR
Union Carbide Ecuador C.A.

MEXICO
Union Carbide Mexicana, S.A.—45.70%

VENEZUELA
Union Carbide de Venezuela, C.A.

Union Carbide Puerto Rico, Inc.

Union Carbide Caribe Inc.
Union Carbide Films—Packaging, Inc.
Union Carbide Grafito, Inc.

Union Carbide Southern Africa, Inc.

REPUBLIC OF SOUTH AFRICA
Elektrode Maatskappy Van Suid Afrika (Eiendoms) Beperk—50%
Tubatse Ferrochrome (Proprietary) Limited—49%
Ucar Chrome Company (S.A.) (Proprietary) Limited
Ucar Minerals Corporation

RHODESIA
Consolidation of the Rhodesian subsidiaries was discontinued as of January 1, 1974, in recognition of lack of management control.
The African Chrome Mines Limited
Rhodesia Chrome Mines Limited
Union Carbide Rhomet (Private) Limited

Union Carbide Corporation
270 Park Avenue
New York, N.Y. 10017