# 1980 Annual Report

DOW

PLAINTIFF'S EXHIBIT

DOW-1478


ST00349960

# To Our Stockholders

While doing research for this letter, I came across Dow's "first-ever" annual report, released in 1932. It contained only two pages, and because it is a fascinating glimpse into Dow's history, we have reproduced it as an insert in this year's report.

1932 was a memorable year for America. It marked the beginning of the "New Deal" and the start of fed-

phasis on end-use products and services continued to bear fruit. Dow's profits from such businesses — the Dowell Division, health and consumer products, and our Styrofoam plastic foam are examples — have grown from 20 percent of operating income in 1976 to 30 percent in 1980.

I hope every shareholder will take time to read the "Year In Review" section of this report, which more

**Growth in Sales**

1980
$10 Billion

1964
$1 Billion

1943
$100 Million

THE DOW
CHEMICAL COMPANY

DIRECTORS—JUNE 22, 1932

| | |
|---|---|
| E. O. BARSTOW | |
| E. W. BENNETT | J. S. CRIDER |
| G. E. COLLINGS | W. H. DOW |
| A. E. CONVERS | J. T. PARDEE |
| | C. J. STROSACKER |
| W. R. VEAZEY | |

OFFICERS—JUNE 22, 1932

| | |
|---|---|
| Chairman of the Board | A. E. CONVERS |
| President and General Manager | W. H. DOW |
| Vice President | G. E. COLLINGS |
| Vice President and Secretary | J. T. PARDEE |
| Vice President | E. W. BENNETT |
| Treasurer | J. S. CRIDER |
| Auditor, Asst. Treas. and Asst. Sec'y | E. W. BENNETT |

Registrar and Transfer Agent
THE CLEVELAND TRUST COMPANY
Cleveland, Ohio

THE DOW
CHEMICAL
COMPANY

CONDENSED
BALANCE SHEET

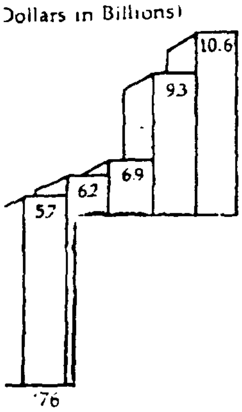
MAY 31, 1932

DOW



# Highlights of the Year

ales
Dollars in Billions)




| | 1980 | 1979 | % change | 10-year compound annual % change |
|---|---|---|---|---|
| | (in millions unless otherwise stated) | | | |
| Net sales | $10,626 | $9,255 | +14.8% | +18.7% |
| Net income | 805 | 784 | + 2.7% | +20.0% |
| U.S. and foreign income taxes | 424 | 515 | −17.7% | +17.0% |

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Divider
Earni
Divid
Share
(Dolla


## THE DOW CHEM ICAL COMPANY

GENERAL BALANCE SHEET, MAY 31, 1932

### ASSETS

| | | |
|---|---|---|
| ***Current Assets:*** | | |
| Cash | $ 500,787.17 | |
| Notes and Accounts Receivable Less Reserve | 1,380,842.30 | |
| Merchandise, Materials and Supplies | 4,259,881.93 | |
| Total Current Assets | | $ 6,111,511.40 |
| Land Contracts Receivable | | 49,636.07 |
| Investment in Affiliated and Other Companies | | 577,496.62 |
| Real Estate, Plant, Equipment, Patents, Etc., Less Reserves for Depreciation | | 16,365,222.20 |
| Deferred Charges | | 114,059.65 |
| **TOTAL** | | **$23,247,925.94** |

### LIABILITIES

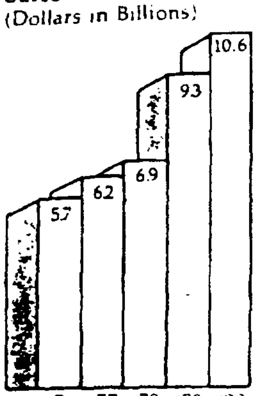
| | | |
|---|---|---|
| **Current Liabilities:** | | |
| Notes Payable | $700,000.00 | |
| Accounts Payable | 746,994.81 | |
| Accrued Taxes | 416,131.40 | |
| Accrued Interest on Gold Notes | 63,940.00 | |
| Total Current Liabilities | | $ 1,927,066.21 |
| Reserve for Fire and Accident Insurance | | 238,481.41 |
| Ten Year 6% Sinking Fund Gold Notes, due February 1, 1940 | | 3,197,000.00 |
| Preferred Capital Stock—7% Cumulative | | 3,000,000.00 |
| Common Capital Stock (630,000 shares Non-Par) | | 8,275,000.00 |
| Surplus | | 6,610,378.32 |
| **TOTAL** | | **$23,247,925.94** |

Net Income on Common Stock $2.95 per share (after deducting depreciation, taxes and dividends on Preferred Stock)

program, see the story beginning on page thirteen.

# Highlights of the Year

Sales
(Dollars in Billions)

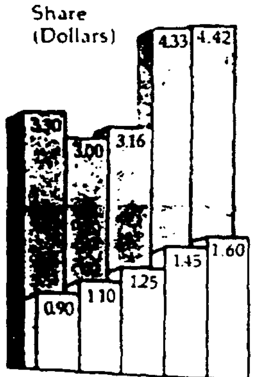



| | 1980 | 1979 | % change | 10-year compound annual % change |
|---|---|---|---|---|
| | (in millions unless otherwise stated) | | | |
| Net sales | **$10,626** | $9,255 | +14.8% | +18.7% |
| Net income | **805** | 784 | + 2.7% | +20.0% |
| U.S. and foreign income taxes | **424** | 515 | −17.7% | +17.0% |
| Net income per share (in dollars) | **4.42** | 4.33 | + 2.1% | +19.9% |
| Dividends paid per share (in dollars) | **1.60** | 1.45 | +10.3% | +14.0% |

Earnings Per Share vs. Dividends Per Share

- Earnings Per Share
- Dividends Paid Per Share

(Dollars)




| | | | | |
|---|---|---|---|---|
| Average shares outstanding | **182.2** | 181.1 | + 0.6% | — |
| Stockholders (in thousands, year-end) | **137.0** | 141.5 | − 3.2% | + 4.2% |
| Employees (in thousands, year-end) | **56.8** | 55.9 | + 1.6% | + 1.8% |
| Wages, salaries and benefits | **$ 1,807** | $1,598 | +13.1% | +13.8% |

## About the Cover

All of the employees shown on the cover are the "stars" of an advertising program designed to create greater public understanding of issues which affect Dow and the chemical industry. From the top, left to right, they are Ernie Singleton, waste treatment superintendent, Louisiana Division; Margaret Baker, environmental manager, Oyster Creek Division; "Beans" Little, emergency response coordinator, Texas Division; Pam Smith, petroleum engineer, Dowell Division; Bill Franklin, fire protection superintendent, Louisiana Division; Ron Malecki, environmental engineer, Michigan Division; Phil Watanabe, molecular biologist, Dow U.S.A.; Edith Whatley, industrial hygienist, Texas Division; Agnes Brief, nurse coordinator, Michigan Division; Bob Cole, waste control technician, Oyster Creek Division; Lowell Jones, driving training manager, Dowell Division; Ardell Lawson, distribution specialist, Western Division, and Gary Grice, industrial rigger, Michigan Division. For more about the company's expanded communication program, see the story beginning on page thirteen.

# To Our Stockholders

While doing research for this letter, I came across Dow's "first-ever" annual report, released in 1932. It contained only two pages, and because it is a fascinating glimpse into Dow's history, we have reproduced it as an insert in this year's report.

1932 was a memorable year for America. It marked the beginning of the "New Deal" and the start of federal programs and bureaucracies which have grown so pervasive they threatened our very existence in 1980. It was also a memorable year for Dow. Results in that first report show the company was successfully weathering the economic storms of those days.

I believe history will record 1980 as another pivotal year in United States history. The American people have chosen a new course . . . one essential to the future well being of *all* Americans, and one which deserves a full measure of support from each of us. Fiscal responsibility, world respect, energy independence, and peace through strength are national objectives every thinking American can and must support.

1980 was also a remarkable year for Dow.

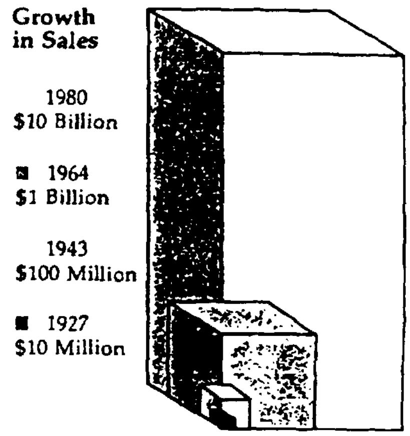
Your company had record sales and earnings, and became the world's most profitable chemical company despite global economic conditions that included a major recession in the United States and many other countries in which we operate.

Dow earned $805 million in 1980, and sales exceeded $10.6 billion. Moreover, while we maintained our leadership in the basic chemicals and plastics that have long been the backbone of the company, our emphasis on end-use products and services continued to bear fruit. Dow's profits from such businesses — the Dowell Division, health and consumer products, and our Styrofoam plastic foam are examples — have grown from 20 percent of operating income in 1976 to 30 percent in 1980.

I hope every shareholder will take time to read the "Year In Review" section of this report, which more fully describes the remarkable performance turned in during 1980 by Dow employees around the world.

Dow sales exceeded $10 billion for the first time in 1980, and that made me curious about the timing of earlier milestones in our growth. The chart at right shows what I discovered. Sales of The Dow Chemical Company have consistently increased *tenfold* in periods of only 15-20 years. I'll leave it to the reader to make a projection for the year 2000.

Proud as I am of our financial achievements, I take even greater pride in another facet of our 1980 performance. Dow employees set an all time safety record, demonstrating once again that our commitment to human health and safety pays big dividends on its own.




That's especially important, because it has become fashionable in recent years to criticize the chemical industry as unsafe, hazardous, and willing to compromise the health of its employees. The facts demonstrate just the opposite. National Safety Council data for 1979 show the U.S. chemical industry *second* of 43 industries in safety performance, and more than *ten* times safer than non-military government service. Dow's record is better still.

Moreover, detailed epidemiological studies on long time Dow employees, many of whom are now retired, show they are healthier than a comparable sample of the population at large.

It all adds up to the fact that Dow has one of the safest, healthiest, most productive work environments in the world. We intend to keep it that way.

Paul F. Oreffice
President

The Year in Review —

# Company Increases Profit Level Despite Roller Coaster U.S. Economy

It was a year to test the mettle of any company. Sharp swings in the U.S. economy, and elsewhere, challenged our ability to react quickly and effectively to sudden changes in demand for our products.

In the United States, business boomed through the first quarter, dropped off sharply in mid-April, then picked up again in the fall almost to the earlier pace.

Demand in some areas outside the United States was also hampered by the U.S. recession — principally in the Pacific. Overall, however, the fact that more than half of Dow's sales are outside the United States helped the company weather the U.S. recession better than did the chemical industry as a whole.

Despite the roller-coaster U.S. economy, Dow achieved a substantial increase in sales, owing to higher prices, and a modest increase in profits above those in 1979.

Sales for the year totaled $10.6 billion, an increase of 14.8 percent over 1979's $9.3 billion. Earnings were $4.42 a share, or $805 million, compared with $4.33 a share, or $784 million in 1979.

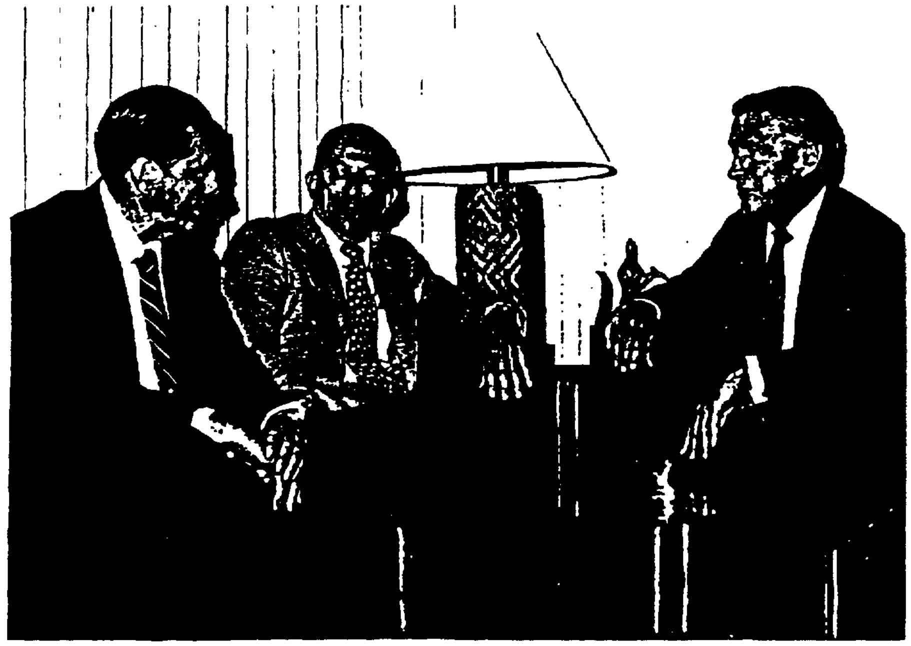
Earnings improved even though the economic downturn brought lower operating rates and greater resistance to price increases. Operating rates dropped from more than 80 percent of capacity to less than 65 percent; at year's end they had rebounded to about 75 percent of capacity.

The rate of price increases slowed considerably during the summer, as supply outstripped the dwindling demand. Such was not the case, however, with costs. Dow's expenses for hydrocarbons and energy, its principal purchases, rose some 34 percent during the year.

The recession took its toll in earnings in the second and third quarter; profit slipped 20 percent behind the same periods in 1979. But the recovery was almost as dramatic. Demand picked up smartly starting in September, especially in the United States. Continued demand during the final months of the year was an encouraging sign for business during the early part of 1981.

One reason the company was able to maintain its earnings was strict control over capital spending. Capital spending for the year totaled $1.18 billion, down somewhat from the $1.27 billion in 1979.

Nevertheless, Dow remained by far the largest 'investor' in its own business among companies in the chemical industry. One result of this was a 'penalty' in 1980 of more than $100 million in added depreciation and interest costs, in addition to start-up expenses. Another result on the 'plus' side, is that the corporation continues to have the newest, most efficient plant facilities among the major chemical companies; nearly



*Paul F Oreffice (center), president and chief executive officer, confers with Earle B Barnes (left), chairman of the board, and Robert W. Lundeen, executive vice president.*

half of all Dow plant and equipment has been built in the last five years.

Another factor that helped Dow during 1980 was its broadening product mix. The recession drove down demand for some of Dow's traditional high-volume industrial chemicals and plastic resins, but this was not the case with most of Dow's growing family of end-use products and services. The outstanding example of this was the Dowell Division and Dow's overseas joint venture, Dowell-Schlumberger. As more U.S. oil was decontrolled, drilling activity soared — and so did Dowell's business. Sales surged ahead by some 45 percent over 1979, to more than $750 million. Dow's profits from Dowell and Dowell-Schlumberger together accounted for almost 20 percent of Dow's earnings in 1980.

Although Dow remains dedicated to maintaining its leadership position in the basic chemicals which provide the lion's share of sales and profit dollars, the company continued its move into products and services closer to the consumer. Dow research spending for 1980 totaled some $314 million, up 17%, and about half that effort was devoted to end use products and services. During the last four years, profit from end products and services has grown from 20 percent of the total to 30 percent.

One move further in this direction came when Dowell, which sells products and services for fracturing, cementing and acidizing wells, entered the drilling fluids business. The company purchased Anadarko Mud Service, Inc., and an interest in Anadarko's parent, Top Drilling, Inc. Dowell also agreed to acquire substantially all of the operating assets of the G-H Fluid Services Division of Galveston-Houston Company for $46 million.

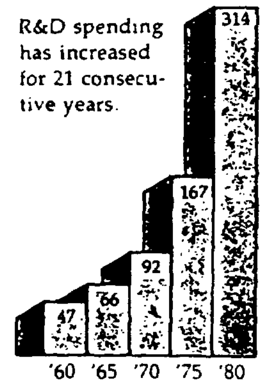
In November, Dow took a large and significant step in further diversifying its product lines when it agreed to acquire Richardson-Merrell's ethical pharmaceutical business. The purchase, subject to approval by Richardson-Merrell stockholders, will be by an exchange of Dow stock valued at $260 million for shares of Richardson-Merrell. The combination of Dow's U.S. pharmaceutical interests, the worldwide pharmaceutical interests of Lepetit (Dow's Italian subsidiary) and Merrell's national and international business will generate sales of about $800 million annually, making Dow a significant factor in the world health products business.

Also in the pharmaceutical field, Lepetit acquired Archifar S.p.A., located in Italy, which produces bulk antibiotics and has annual sales of $30 million. In Brazil, Dow reached agreement with Astra of Sweden to make and market Astra's full line of products in the anesthetic, respiratory and cardiovascular field.

While the company's continuing operations contributed by far the greatest portion of net income, profits were also helped by a lower tax rate due to some capital gains and foreign tax benefits. Interest expense increased $97 million but was offset in part by the capitalization of interest in the amount of $71 million, which was required accounting treatment for the first time in 1980.

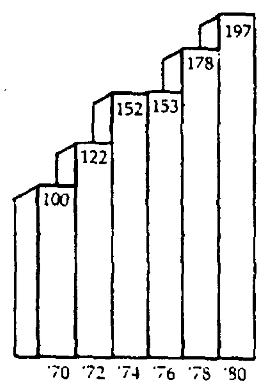
**Global Research**
(Dollars in Millions)

R&D spending has increased for 21 consecutive years.




**Real Growth**
(Index: 1970 = 100)

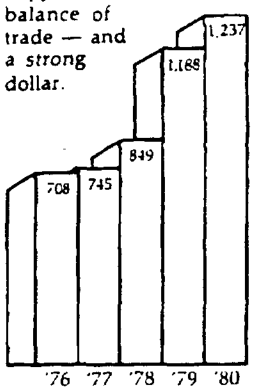
Physical output of the company has nearly doubled in the past decade.



## The Year in Review — Continued

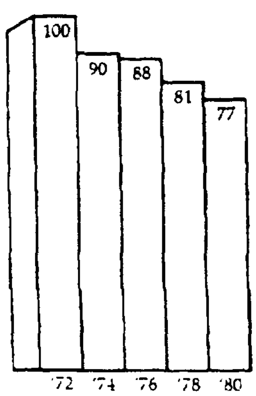
**Market Value of Exports from the U.S.**
(Dollars in Millions)

Dow (as well as the entire chemical industry) has been a consistent supporter of the U.S. balance of trade — and a strong dollar.




**Energy Conservation**
(1972 = 100, Dow U.S.A.)

Dow's continuing efforts to conserve energy are shown in the declining amount of conversion energy (such as purchased power, fuel oil, gas and coal) which is required for each unit of production.




## United States

*David L. Rooke*
*President*
*Dow Chemical U.S.A.*

Sales of $5.1 billion were reported in the United States during 1980, representing nearly half of Dow's total revenue. Sales were up 12 percent over 1979. Despite a soft economy and a major increase in feedstock and energy costs, record profits before tax of $809 million were recorded, due in part to successful price management, cost reduction programs and optimal utilization of manpower resources. This compares with pretax profits of $689 million in 1979.

Exports of products from the United States exceeded expectations during the first half of the year and then slackened during the second half, resulting in exports with a market value of $1.2 billion for the year.

At the operating level, innovative cost saving programs were instituted which contributed about $100 million directly to Dow U.S.A. profit in 1980. Moreover, many of these programs will continue to pay important dividends in future years.

At mid-year, the Chemical Manufacturers Association selected Dow U.S.A. as winner of the Lammot du Pont Safety Award for the greatest reduction in recordable injury cases over a five year period. The award was based on the company's 58 percent improvement during 1978 and 1979 over the previous three year period. Moreover, our 1980 safety performance was even better, with our lowest-ever frequency rate of 0.25 per million work hours.

As expected, Dowlex polyethylene resins excelled in both sales and profits. Dowlex is a linear low density polyethylene which has exceptional toughness, puncture resistance and tear strength. Principal markets include wire and cable jacketing, films for agricultural use, packaging, construction, piping and household products. Dowlex has great potential and the company has plans to increase production capacity from 150 million pounds a year to 850 million pounds, worldwide, by 1983.

A major contributor to U.S. profits was the Dowell Division, the oil and gas well servicing unit mentioned earlier. Dowell is expanding aggressively to meet the needs of the nation's energy exploration activities.

Also showing strong gains were Ziploc plastic bags, which recorded sales 38 percent higher than in 1979. Ziploc bags are the leading food storage bags in the United States.

Other major products with outstanding sales performance included methylene chloride, propylene glycol and glycerine.

Products representing future high sales potential include high-gloss, high-impact ABS resins for a variety of plastics applications, S/B latexes for fillers to replace fiber in paper making; titanium for use in aircraft and aerospace industries; acrylic and vinylidene chloride latex for the paint and other industries, and fumed silica for silicone applications.

A number of other products are exhibiting exceptional potential. They include Garlon herbicide, used principally for brush control along rights-of-way for utility lines and forestry control; polycarbonate plastics for automotive applications, window glazing, appliance housings and panels; weight-saving metal-plastic laminates for automobiles and household appliances and duct work; and hollow fiber membranes for artificial kidneys, gas separation and water purification. Dursban insecticide also shows promise as an effective product for termite control.

Start-up of the Oyster Creek Division's crude oil processing plant in Texas was completed in the spring. This plant is capable of processing

200,000 barrels of crude oil a day. Dow also completed construction of a new, large naphtha cracker at its Louisiana Division, taking its naphtha feedstock from the Oyster Creek facility.

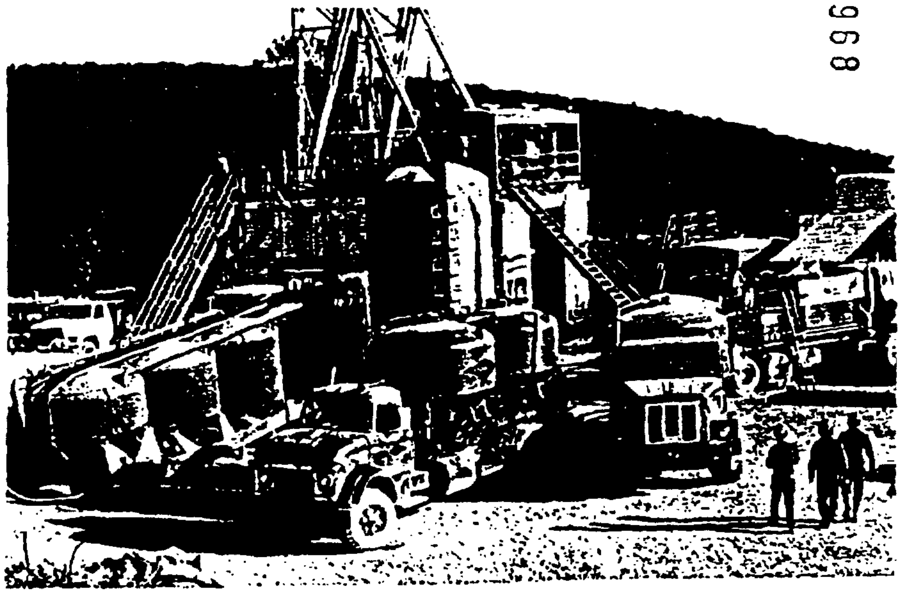
In other hydrocarbon technology developments, progress continued in the fields of conversion of coal to petroleum and the gasification of coal and lignite.

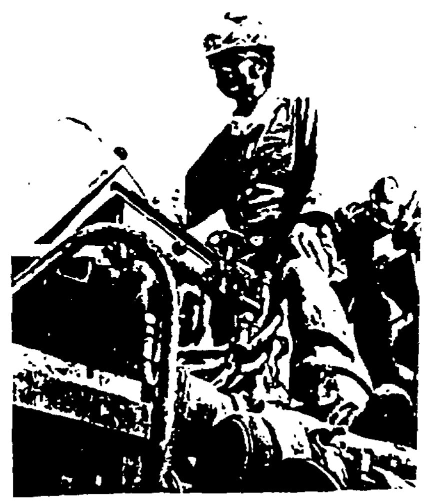
Energy conservation programs, coupled with new technology, were instrumental in helping reduce total raw material and energy costs. Fourteen new gas turbine generators were authorized for the Gulf Coast which, when completed, will increase fuel efficiency by one third.

The State of Alaska chose Dow to head a petrochemical project under the name of the Dow-Shell group to conduct a year-long study which could lead to the construction of more than $3 billion in petrochemical plants, pipelines and support facilities in Alaska during the next five years.

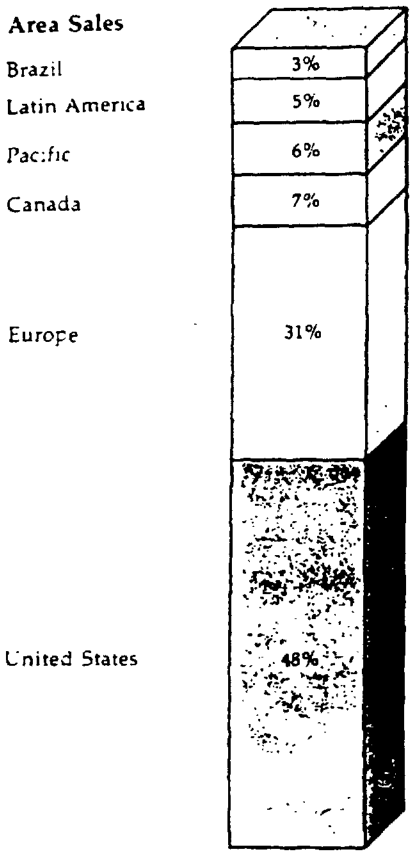
Two small subsidiaries were sold during the year. The Tennessee operations of Hydroscience, Inc., an environmental engineering firm acquired by Dow in 1972, were sold to IT Corporation. Wanda Petroleum Company, a subsidiary involved in the storage, transportation and marketing of natural gas liquids and refinery products, was sold to Enterprise Products Company.

Two new Dow distribution terminals were authorized at Joliet, Illinois, and Bayonne, New Jersey, and an expansion was authorized for the Long Beach, California, terminal. When completed, these will further improve Dow's ability to effectively and efficiently move products to Dow customers. Dow U.S.A. has 140 terminals and warehouses to serve its customers, and has added 700 cars to its modern rail fleet, which now totals 8,500 cars.





*Oil and gas fields all across the United States and Canada are the work place for 7,000 employees of the Dowell Division, Dow's oil well servicing unit. Booming oil and gas drilling activity has boosted demand for Dowell and for Dowell-Schlumberger, Dow's overseas joint venture.*




## Europe

*Frank P. Popoff*
*President*
*Dow Chemical Europe S.A.*

While strong demand in the early months of 1980 enabled sales for the year in Europe to advance 21 percent to $3.2 billion, rapidly deteriorating business conditions held pre-tax profits to $312 million, compared with $348 million the previous year.

The past year was characterized by a marked slowdown in the economies of the major European countries. Growth in output was substantially reduced compared with 1979 and both inflation and unemployment persisted at high levels.

Strong demand for basic chemicals lasted into the second quarter of 1980, but the effects of rapidly declining economic activity and escalating feedstock and operating costs were increasingly felt throughout the remainder of the year. Prices for petrochemicals and plastics fell during the third quarter and recovered only slightly during the final quarter of the year.

In the chemicals business, sales of caustic soda showed strong growth, due to price increases, while in plastics, demand for coatings products continued at the high levels of 1979. Exceptionally good results were recorded by Derakane vinyl ester resins. Specialty chemicals also enjoyed an excellent year, with fabricated products and agricultural chemicals showing outstanding growth.

Expansions in propylene oxide, chlorine and chloromethanes at Stade came on stream in 1980, while at Terneuzen ethylene oxide and ethylene amines expansions are due for completion in 1981 and 1982, respectively.

Work on DINA, a major petrochemical complex in Yugoslavia, continues satisfactorily with start-up of the first phase planned for 1981-82. DOKI, a smaller polystyrene joint venture in Yugoslavia, completed its second full year of operations.

In Spain, expansion of the Tarragona site to world scale dimensions has begun. Negotiations continue for major petrochemical developments in Saudi Arabia and Scotland.

Steps were taken during the year to strengthen Dow's European energy feedstock position. In conjunction with Sovereign Oil and Gas, oil exploration activity in the United Kingdom sector of the North Sea was initiated. In another development, agreement was reached with La Compagnie Francaise des Petroles (CFP) to purchase a twenty percent participation in the Total refinery at Flushing in The Netherlands.

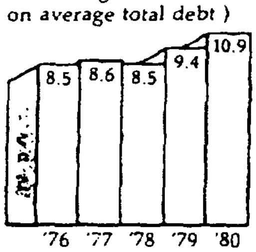
In a move to broaden coverage of the agricultural chemicals business in France, a new company called Prochimagro was formed through the acquisition of Prochim, a company formulating and selling agricultural chemicals in France since 1946.

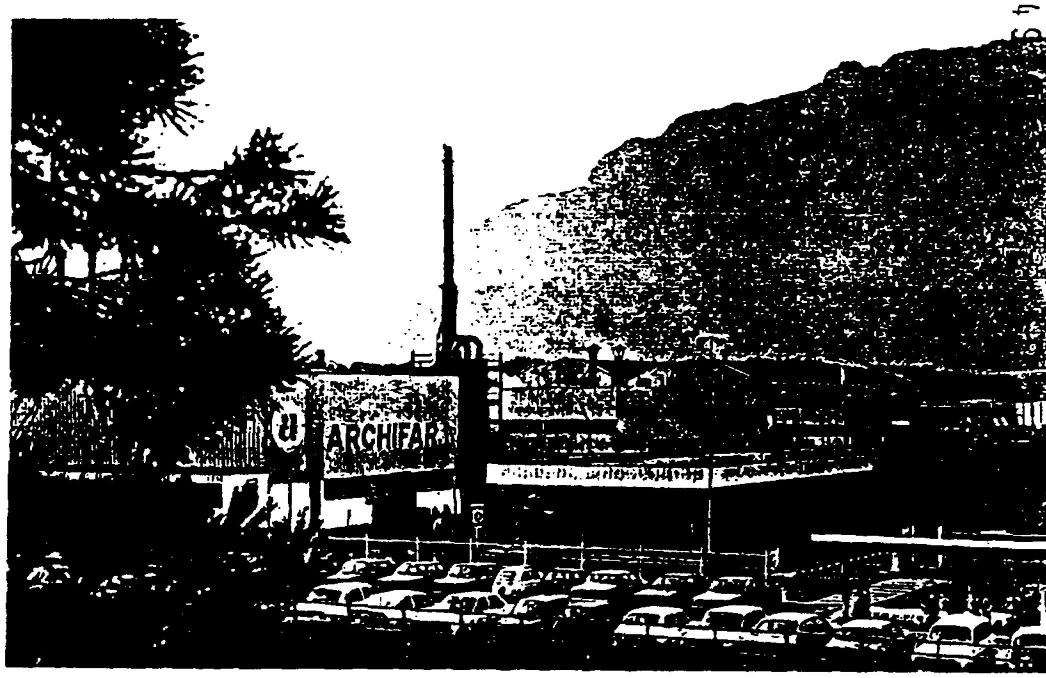
In Zurich, the Dow Banking Corporation, a wholly owned subsidiary, sold 24 percent of its shares on the Swiss open market. Dow retains 76 percent of the shares. Founded 15 years ago, the international merchant bank has grown consistently. Broadening the shareholder base opens up new sources of equity financing to support further expansion.

**Company Interest Rates**

Dow has long used debt to fuel its growth — and made money on the borrowed dollars. The company consistently earns a higher rate of return than the interest it pays.

(Percentage interest rate on average total debt.)

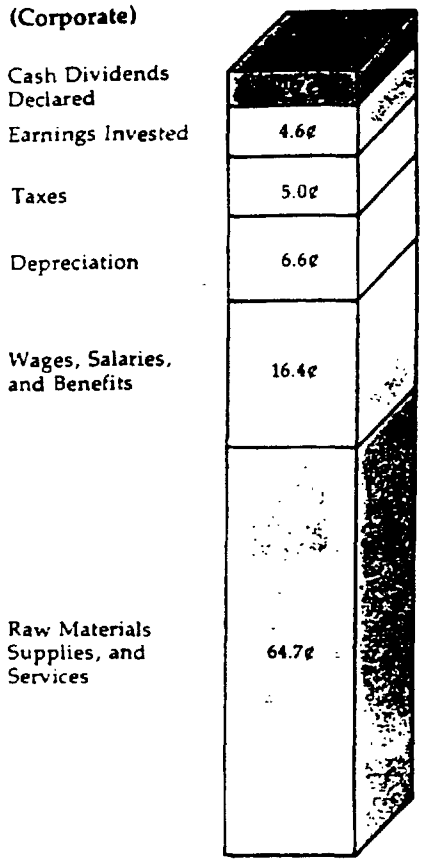



*Top: Archifar S.p.A., an Italian firm that produces bulk antibiotics, including Erythromycin and Ampicillin, has been acquired by Gruppo Lepetit, a Dow subsidiary in Italy that has extensive interests in Brazil and the rest of Latin America. Archifar has annual sales of $30 million.*

*Lower: One of Dow's newest plants to make Styrofoam plastic foam is located at Sharjah in the United Arab Emirates. Dow now has a global network of 16 plants producing Styrofoam insulation.*

**Distribution of the 1980 Income Dollar (Corporate)**




## Canada

*James M. Hay*
*President*
*Dow Chemical of Canada, Limited*

Although 1980 was a recession year, sales rose to $731 million, up 16 percent from $630 million in 1979. Sales volume grew more than four times as fast as the "real" Canadian gross national product. Pre-tax profit reached $59 million, the same amount (excluding a one time sale of oil and gas assets) as in 1979.

Decreased demand for some major products caused a decline in selling prices during the second half of the year while costs of raw materials and energy continued to increase. This, however, was partially offset with continued strength in other product areas. The Alberta project was completed in 1980 with the final unit, ethylene oxide/ethylene glycol, coming on stream in July, but start-up costs and a weak worldwide vinyl chloride market resulted in the project not contributing to profit in 1980. It is expected to be profitable in 1981.

Export sales, which doubled from 1979 levels, contributed to improved profits. Exports accounted for 23 percent of Dow Canada's chemical and plastic production in 1980 and this figure is expected to grow to about 29 percent in 1981. Over the past twelve months, Canadian plants produced at an average of 85 percent of capacity.

Dow Canada has received approval from the Energy Resources Conservation Board of Alberta for a new 400 million pound per year Dowlex polyethylene resins plant at Fort Saskatchewan. To provide assured long term feedstock supplies for Canadian operations, construction of a second 1.5 billion pound per year ethylene-from-ethane plant has begun by Alberta Gas Ethylene Company Ltd. Completion of both plants is expected in 1984.

There is some political confrontation in Canada as Alberta and the Federal Government disagree on the national energy program. A political compromise is expected and management believes Dow Canada will continue to contribute to the country's economic strength.

## Pacific

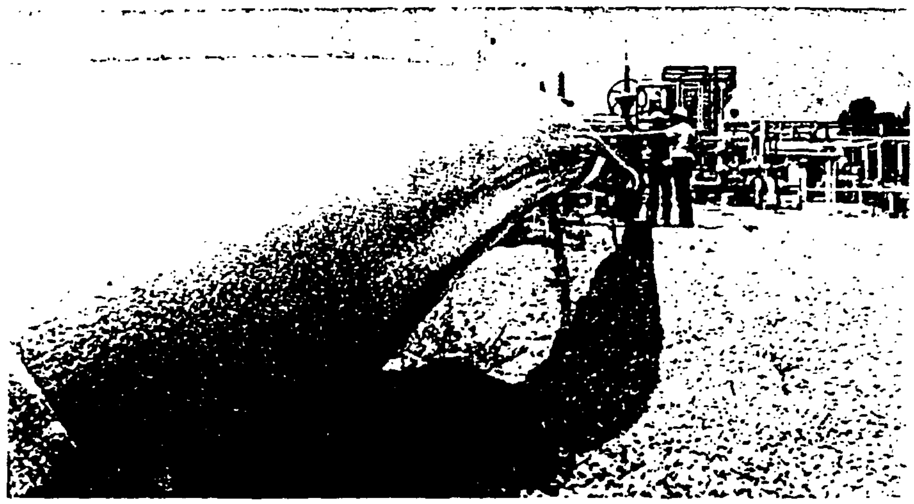
*Andrew J. Butler*
*President*
*Dow Chemical Pacific Limited*

The global recession reached the Pacific approximately six months after the United States, as several Asian countries' exports to industrialized nations fell off badly in the second half. Commodities such as vinyl chloride, ethylene dichloride and caustic soda were affected most. Agricultural products, pharmaceuticals and designed products showed good growth in volume and profits.

Area sales increased a modest eight percent to $680 million, with the regions of New Zealand and Japan doing especially well. Area profits declined to $75 million, reflecting generally lower volume, the first full year of operations for the Korean facilities and the worldwide trend of greatly increased raw material and energy costs. The profit before tax in 1979 was $124 million.

Korea's export-oriented economy, reacting to the second oil shock and internal political tensions, took a backward step with a contraction in the gross national product of six percent, its first in twenty years. However, new plants for chlorine, caustic soda, vinyl chloride and low density polyethylene were started successfully and there should be a substantial improvement in 1981.

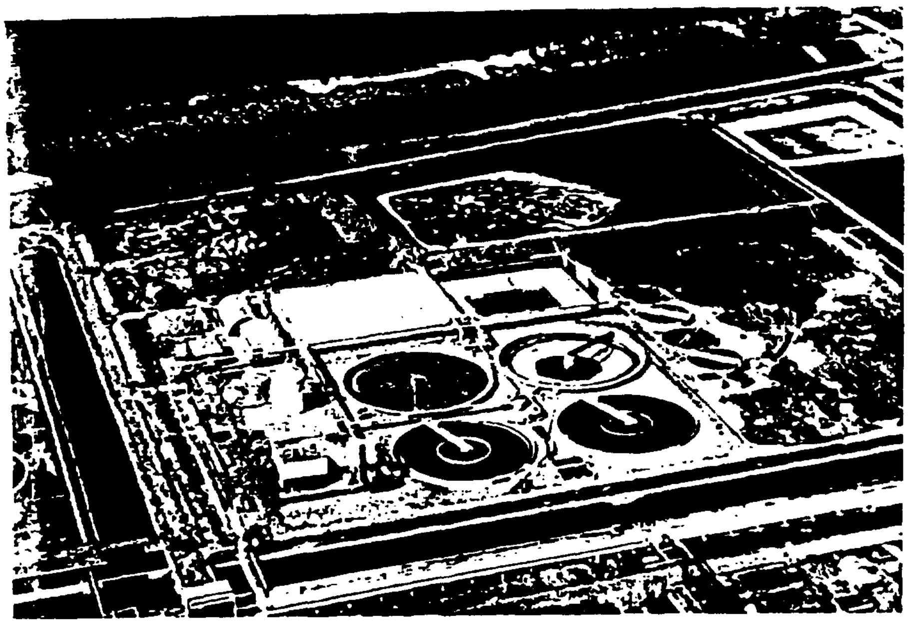
At the close of the year, Dow revealed long-range plans for substantial expansion of its chemical business in Japan. Since on-shore production of chloralkali products is severely impacted by high power and salt costs, the original plans to produce chlorine in Japan have been deferred. Major marine terminal facilities will be developed to handle much larger volumes of ethylene dichloride, vinyl chloride and caustic soda. A joint venture vinyl chloride product plant is also in the planning stage.



*Top: The longest artery ever built to move batched gas products – the 1,900 mile Cochin Pipeline – runs from Dow's complex at Fort Saskatchewan through the northern tier of the United States to the termination (above) at the Sarnia Division in Ontario. Dow is a one-third partner in the twelve-inch line.*

*Lower left: One of Dow's fastest growing products is Dowlex linear low density polyethylene. Its superior qualities contribute to the development of products such as this Roughneck trash can made by the Rubbermaid Company.*

*Lower right. A "PizzaTHERM" carton, made with Styron 685D polystyrene resin, won first place in the Packaging Division of a design competition sponsored by Plastics World magazine. The package provides exceptional heat insulation and resists leak-through*



## Latin America

*Enrique C. Falla*
*President*
*Dow Chemical*
*Latin America*

The environment in the major Latin American countries during 1980 was characterized by a climate of relative political stability, a moderate — but steady — economic growth, and a deceleration in the rates of inflation. Sales rose to $557 million, up 17 percent from $476 million in 1979. Gains were achieved in both physical volume and prices, but the increase in prices was insufficient to cover rising costs. Pre-tax profits totaled $93 million, compared to a record level of $102 million in 1979.

Throughout the year, Dow maintained its leading position as suppliers of industrial chemicals, while specialties continued as the

*Top left: A biological oxidation facility serving Dow's manufacturing complex at Stade Federal Republic of Germany, can treat waste water with salt content up to 25 percent. The facility has a capacity equivalent to the needs of a city of 600,000 people*

*Lower left: A farm worker in Ecuador puts Dow Polyethylene D film on an immature banana bunch. This insecticide film protects maturing bananas from attack by Collapsis beetles, red thrip and other pests.*

*Lower right: At Dow Brazil's research and development center in Franco da Rocha, an employee studies a polymerization process for making polyester resins from propylene glycol The laboratory, which was dedicated in February 1981, is the first of its kind in Brazil for the analysis of chemical residues and environmental samples.*

fastest growing products for the area. Agricultural products maintained their record of consistent growth. Tordon products solidified their position as the leading herbicide, while Lorsban insecticide, in combination with other insecticides, effectively penetrated the cotton pesticides market with a cost performance advantage. The pharmaceutical business, through the introduction of new products, an effective promotional program, and better utilization and deployment of resources, has become a solid profit contributor to the area.

Although locally manufactured products still constitute less than one-half of Dow sales in the area, construction is underway on two projects to expand the local manufacturing base. A new Voranol polyols plant will expand operations at the San Lorenzo, Argentina site, with a starting date in 1982. Insecticide formulation facilities will come on stream in mid-1983 in Cartagena, Colombia.

## Brazil

*Hunter W. Henry, Jr.*
*President*
*Dow Quimica, S.A.*

Sales in 1980 increased to $300 million from the $276 million registered in 1979, with a healthy physical volume growth of seven percent. However, stringent application of price controls by the Brazilian government, particularly with respect to the chemical and pharmaceutical industries, resulted in an unsatisfactory profit performance. The loss totaled $13 million, compared with a loss of $3 million in 1979. Energy, raw materials and labor escalated rapidly during the year and the control mechanisms did not allow a timely pass-through of these costs.

The volume growth in the industrial sector came from strong performances by such products as caustic soda, chlorinated solvents, and glycols. Herbicides and insecticides also grew significantly in physical and dollar volume in response to the government emphasis on agriculture and a special program to increase alcohol production as a means of reducing oil imports.

The design and plastics group had good growth as increased capacity was realized from the S/B latex plant. The new epoxy resins plant completed its first full year of operation with subsequent growth of over 40 percent in sales. Significant export shipments of Voranol polyols were registered. Two new Styron polystyrene resins, for injection and extrusion, were introduced.

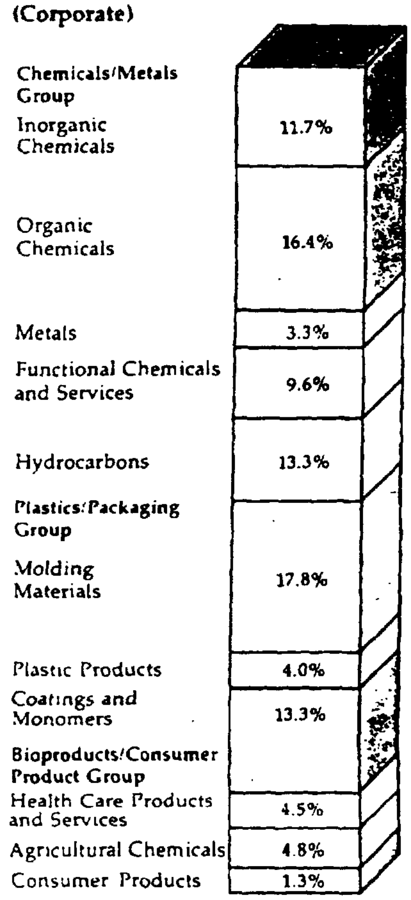
The pharmaceuticals business faced a very difficult year, especially due to government restrictions on ethical products and severe hikes on customs duties and taxes for imports. Dow's anti-cholesterol drug, probucol, was successfully introduced in Brazil under the trade name Lesterol, reaching a 30 percent market share within three months of launching.

Energy savings put into operation during 1980 enabled Dow Brazil to reduce fuel oil consumption by 13 percent compared to 1979, despite a nine percent increase in physical output.

A laboratory for the analysis of chemical residues in agricultural products and environmental samples was established in Dow Brazil's new research and development center. This laboratory is the first of its kind in Brazil.

Dow maintained its position as the largest exporter of industrial and agricultural chemicals in Brazil with an increase of 50 percent in sales from its plants in Brazil.

**Global Sales By Product Group (Corporate)**




*Franklin*


*Naegele*


*Schornstein*


*Temple*


*Boyd*


*Williams*


*Pruitt*


*Keil*


*Sheetz*


*McKennon*

## Board and Management Changes

During the year, the following changes took place on the board of directors and among corporate officers.

Barbara Hackman Franklin was elected to the board of directors. She has served as a commissioner of the U.S. Consumer Products Safety Commission and was a presidential assistant on the White House staff. She is now a senior fellow in Public Management of the Wharton School of the University of Pennsylvania.

Robert E. Naegele, Dave W. Schornstein and Joseph G. Temple, Jr., were named to the newly created post of group vice president. They were replaced as presidents of Dow Chemical Canada, Dow Chemical Pacific and Dow Chemical Latin America by James M. Hay, Andrew J. Butler and Enrique C. Falla, respectively.

In accord with company policy for directors, Clyde H. Boyd, president of Dow Chemical Europe, and G. J. Williams, financial vice president, relinquished their line duties. Both remain vice presidents and directors. M. E. Pruitt, corporate director of research and a vice president, retired from the company.

Replacing Williams as financial vice president is Robert M. Keil, who had been executive vice president of Dow Chemical U.S.A. Replacing Boyd as president of Dow Europe was Frank P. Popoff.

David P. Sheetz replaced Pruitt as vice president and corporate director of research. Sheetz had been vice president and director of R&D for Dow Chemical U.S.A.

In April, Keith R. McKennon, director of Government and Public Affairs, was elected a vice president of the company.

Via Print, Podium, Airwaves —

# Dow People Are Speaking Up To Improve Public Understanding Of Issues Facing The Industry

All around the world today, Dow people are speaking up. People who care deeply about their company, what it stands for, and how it is viewed by others. People who are immensely proud of their company's performance, yet realistic enough to realize it is the public's *perception* of that performance that counts in the long run.

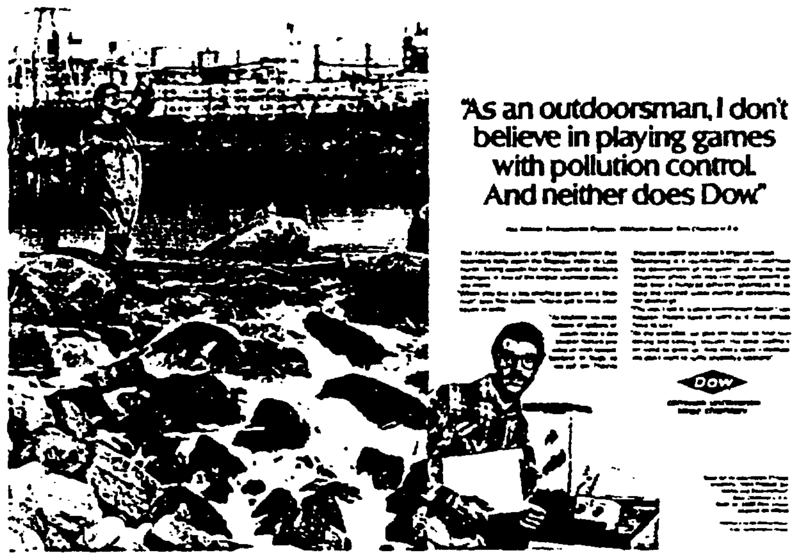
Says Keith McKennon, corporate vice president for Government and Public Affairs, "People who know Dow firsthand have great respect for the company and what it represents. Our job is to give more people an opportunity to know us better."

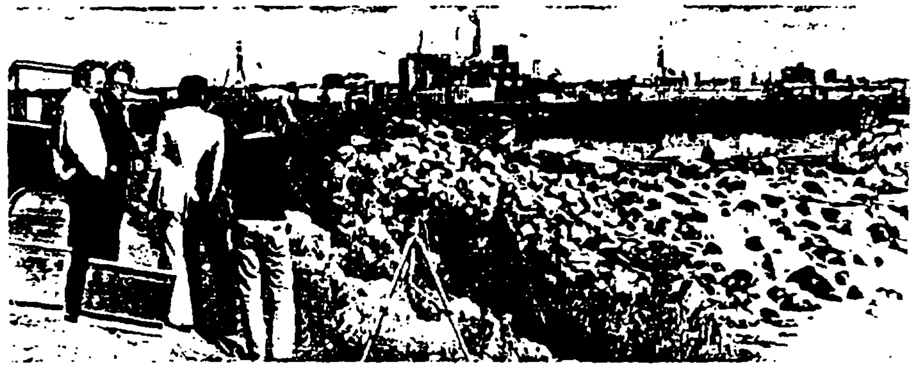
Setting the tone for this spirited effort is an expanding U.S. regional advertising program that focuses on, and defines, Dow's emerging edge for the eighties. We call it simply, "common sense/uncommon chemistry." But there's more to it than a phrase to capture people's attention.

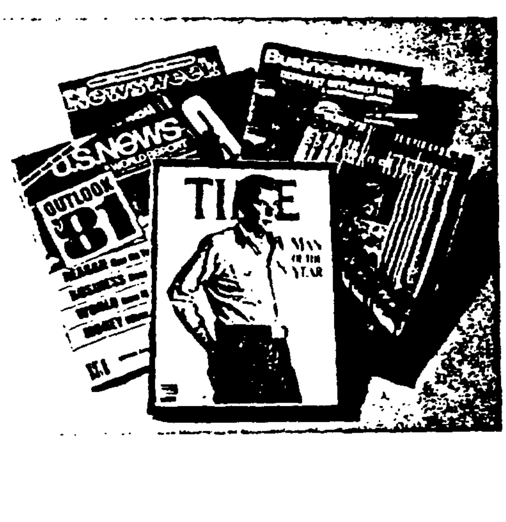
"It's Dow's formula for growth," says Dow U.S.A. president David Rooke, "and it's based on *people* as the catalyst . . . If you look at our progress in the areas of health, safety and the environment, you'll begin to see how the uncommon chemistry we achieve depends on the common sense we share."

In the advertising produced by Dow, employees speak forcefully and credibly about the work they do and its relevance to the people of our plant communities. No Madison Avenue here. The spokespeople are what they appear to be: engineers, technicians, toxicologists, nurses, industrial hygienists, maintenance workers — all dedicated to bettering public understanding of the industry they work in and the company they work for.

In addition to Dow's Michigan headquarters area, current media coverage includes Freeport and Oyster Creek, Texas, Pittsburg,






*Keystone of the company's issues advertising program is a series of commercials and ads "starring" employees who talk about their work and how it contributes to society. The advertisement above, featuring Ron Malecki, an environmental engineer with the Michigan Division, was produced on location by Dow personnel (center). The final product was published in regional editions of leading national magazines and a companion television commercial was shown on stations in selected markets*

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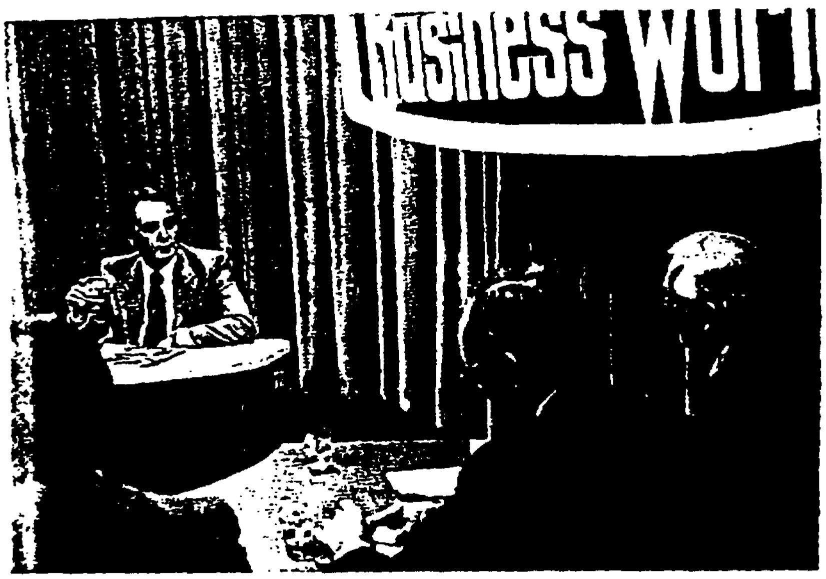


*Above left: In the "hot box," a Dow executive undergoes rigorous questioning as the guest star on a simulated television panel news program called "Business World."*

*Above right: More than a hundred employees such as Joe Quick volunteer as speakers to school, civic, service and other groups, including this class at Northwood Institute. Quick is project leader for aquatic toxicology in the Environmental Sciences Research Laboratory.*

*Left: Free enterprise contests are among numerous campus activities devoted to business understanding that are supported by the company.*



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California, Plaquemine, Louisiana, and Tulsa, Oklahoma. We're also running in the state capital cities of Lansing, Austin, Sacramento, Indianapolis, Baton Rouge — and Washington, D.C.

So why not a *national* program?

"It may be coming," says Bud Carpenter, director of communications, "but credibility begins at home. Our first priority has always been for our employees and for those who live and work in our plant communities. That's why we have initiated a regional program before considering a national effort."

Keeping the advertising credible is essential. People today sense that big companies are somehow awesomely distant and lacking in human scale. With this approach, we take people "into" our plants and into our confidence. We want them to know what we're really like — and that we have the same concerns they do.

That's important, because national surveys have shown a disturbing trend in public opinion. While people clearly appreciate the miracles of modern chemistry, they're not all that certain about the industry that produces them.

So far, attitude research shows we're making some progress. Telephone surveys indicate the campaign has enjoyed excellent audience recall and response. And people with no prior impression of Dow now have a positive view of the company.

Will the program continue to stress chemical safety and the safeguarding of human health and the environment? Yes, because it demonstrates in a very visible way Dow's firmly-held belief in a common-sense approach to these critical activities.

But "common sense" is only the first half of our equation for growth. Another aspect is equally important in its own right, and that's our concept of "uncommon chemistry."

For years, Dow has been honing the cutting edge of new chemical technology with great success. But until now, the company has chosen to speak somewhat modestly about many of its achievements.

No more. Today, the company is involved in the development of whole new sciences including such promising pursuits as laser and enzyme chemistry, and the use of recombinant DNA in restructuring molecules. These are the emerging *bio*-technologies, and they will fundamentally alter the way chemical companies operate in the future.

With Dow having an important role in bringing this about, telling our high-technology story is essential if people's perceptions of Dow are to keep pace with their expectations.

Right now, we're laying that groundwork by testing some exciting concepts in national advertising for next year. With the help of Dow's advertising agency, we're developing messages that will highlight Dow's unique ability to bring its "uncommon chemistry" to bear on the worldwide problems of energy, food production, transportation and human health.

In a related move, Dow has taken the plunge into public television — helping to underwrite thoughtful programs that enhance the notions of private enterprise and freedom of choice in people's lives. Last year, these included the series, "Ben Wattenberg's 1980," and the widely-acclaimed "Firing Line," with commentator, William Buckley.

Television may be the obvious forum to address public issues, but it can also be a minefield for the unwary: Companies can find themselves debating in an electronic climate aflutter with bad science, unwarranted assumptions and wobbly conclusions — which are often given credence by alarmingly shallow and peremptory reporting.

Which is to say, "speaking up" *can* be downright risky.

But it's a risk worth taking. For a dozen years or more, business has been in a one-sided debate — with many companies sitting on the sidelines, losing by default. That's changing. Companies now realize that their adversaries are playing hard ball, and that to retain and enlarge its constituency, business must stand up, speak up, and enter the fray. If it doesn't, no one else will.

And that's precisely the point of "The Point Is . . . ," a twice-a-month summary of public issues that are important to Dow and the chemical industry.

Published in a newsletter format, it addresses issues running the gamut from safety and cancer to Big Government and the media. Regular mailings are made to legislators, educators, environmental groups, editors, opinion leaders, and a host of others who influence public policy.

Apparently, we've struck a responsive chord: of the 18,000 people who now receive "The Point Is . . . ," most have *asked* to be put on our mailing list.

These issue-oriented commentaries are part of a grassroots effort by many Dow people, including the enthusiastic employees who man the

*Top: Toxicologists and industrial hygienists, such as Dr. Jessie Norris (right), periodically take time to participate in media tours to explain their work.*

*Center: Direct communication with legislative and regulatory officials is a routine part of the work-week for many Dow managers, including Fred Hoerger, director of regulatory and legislative issues for the Health and Environmental Research department.*

*Lower: Public issues important to Dow and the chemical industry are discussed in "The Point Is . . .," a newsletter that is circulated to people in government, education and the media.*

company's volunteer speakers' bureau.

Over the past two years, these employees have given over 650 talks before an aggregate audience estimated at over 50,000 people. This includes civic organizations, service clubs — even activist groups.

The talks aren't "canned propaganda," but genuine efforts to get at the issues and dispel the doubts and misconceptions that accompany them.

That's also the purpose behind Dow's "Visible Scientist" program: To facilitate a more rational dialogue on issues, Dow has assembled a cadre of knowledgeable "expert witnesses" from among its own scientific ranks. Articulate and personable, these Dow people approach controversy armed with reason instead of rhetoric, facts instead of supposition, science instead of chicanery.

The electronic media provide most of the exposure, but surviving the give-and-take of television takes more than preparation. It takes television 'presence.' That's what we hope to build with an innovative, closed-circuit, on-camera training program called "Business World."

In it, we use a half-hour question and answer format similar to actual public affairs programming on television. Dow people, posing as a "panel of experts" from the working press, fire questions at the person in the "hot box." It's a no-holds-barred exercise to acquaint selected Dow people with the "realities" of television journalism.

Dow's "Speak Up" effort has its political side, too. In the last election, for example, many a Dow employee put his "money where his mouth is" by contributing to one of eight employee Political Action Committees (PACS) around the country. There is no "button holing" by management. No pressure of any kind. The only common thread is the individual's desire to support Congressional candidates with a strong belief in free enterprise.

However, Dow employees do not restrict their support of free enterprise to the ballot box. For years, they have participated in business awareness programs to reach students and teachers in secondary schools and higher education. As part of these programs, Dow provides films, booklets, and other instructional aids on request.

So there you have it: The people of Dow *are* being heard. Today, their voices are joining with others in industry who are determined to stand up and speak up for what they believe. About their country. About their business. About the quality of all our lives.

About time, isn't it?

## Need a Speaker? Call Dow

If you'd like to obtain a Dow speaker for your organization, please contact the Speak Up Coordinator, Dow Chemical U.S.A., 2020 Dow Center, Midland, Michigan 48640. We would like to have an audience of at least 30 persons. While not every request can be met because of prior commitments, speaker availability or remote locations, a sincere effort will be made to honor your request.

common sense — uncommon chemistry

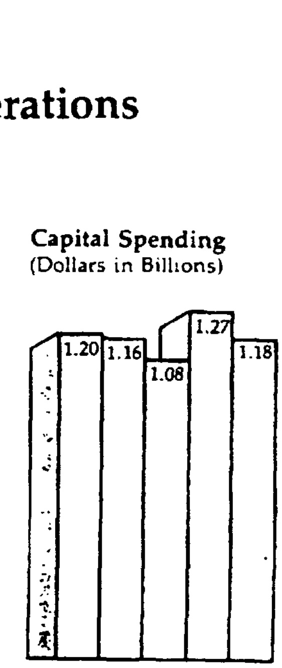
# Management's Discussion and Analysis of Financial Condition and Results of Operations

1980 was a year of anomalies. Sales established a new record each month in the first quarter. Demand was strong, prices showed firmness, plant utilization was at a high level and inventories were under control. All areas of our global business shared in this prosperity. Commencing in April, our two principal markets, the United States and Europe, experienced significant reductions in sales and resistance to needed price increases surfaced. Then, as the year drew to a close, the U.S. market began to show signs of revitalization but Europe failed to show the same vigor.

The quarterly financial statistics shown below reflect these conditions. Net income for the fourth quarter of 1980 and 1979 each includes profit from the sale of hydrocarbon properties equal to $.28 per share. The disposals will not have a material effect on the continuing profitability of the Company.

Unaudited quarterly financial data for 1980 and 1979 follow (in millions, except per share data):

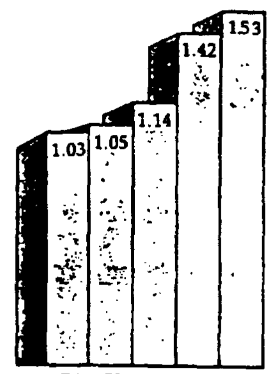
**Capital Spending**
(Dollars in Billions)




| 1980 | 1st Quarter | 2nd Quarter | 3rd Quarter | 4th Quarter | Total |
|---|---|---|---|---|---|
| Net sales | $2,810 | $2,523 | $2,521 | $2,772 | $10,626 |
| Operating income | 399 | 305 | 273 | 235 | 1,212 |
| Net income | 231 | 171 | 161 | 242 | 805 |
| Earnings per common share | 1.27 | .94 | .88 | 1.33 | 4.42 |
| Cash dividends paid per common share | .40 | .40 | .40 | .40 | 1.60 |
| Market price range of common stock: | | | | | |
| High | 39.25 | 35.63 | 38.25 | 36.75 | 39.25 |
| Low | 28.25 | 29.00 | 31.75 | 30.25 | 28.25 |

| 1979 | 1st Quarter | 2nd Quarter | 3rd Quarter | 4th Quarter | Total |
|---|---|---|---|---|---|
| Net sales | $2,075 | $2,307 | $2,426 | $2,447 | $9,255 |
| Operating income | 337 | 395 | 366 | 236 | 1,334 |
| Net income | 176 | 215 | 199 | 194 | 784 |
| Earnings per common share | .97 | 1.19 | 1.09 | 1.08 | 4.33 |
| Cash dividends paid per common share | .35 | .35 | .35 | .40 | 1.45 |
| Market price range of common stock: | | | | | |
| High | 29.63 | 29.00 | 34.88 | 33.75 | 34.88 |
| Low | 24.38 | 24.75 | 25.00 | 27.13 | 24.38 |

**Cash Flow**
(Dollars in Billions)




Sales in 1980 totaled $10.6 billion, an increase of 14.8 percent over 1979 sales of $9.3 billion. The significant increase in basic cost components forced the Company to raise the selling prices of its products and services. Dow's selling price increases for 1980 and 1979 were:

| Selling Prices | Percent increase from prior year 1980 | 1979 |
|---|---|---|
| United States | 16.8 | 12.9 |
| Non-U.S. | 11.9 | 32.7 |
| Global | 14.2 | 22.1 |

The percentage increases in sales for industry segments and geographic areas were:

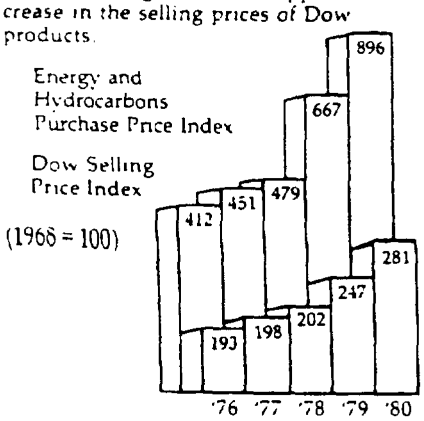
| Sales | Percent increase from prior year 1980 | 1979 |
|---|---|---|
| **Industry segments** | | |
| Chemicals/Metals | 21 | 35 |
| Plastics/Packaging | 8 | 39 |
| Bioproducts/Consumer Products | 12 | 16 |
| **Geographic areas** | | |
| United States | 12 | 26 |
| Europe | 21 | 47 |
| Canada | 16 | 44 |
| Pacific | 8 | 55 |
| Latin America | 17 | 41 |
| Brazil | 9 | 11 |

The escalation of the cost of feedstocks and energy, as well as labor and employee benefits, continued the pattern set in recent years.

| Costs | Percent increase from prior year 1980 | 1979 |
|---|---|---|
| Feedstocks and energy, per unit | 34 | 39 |
| Labor and benefits, per employee | 9 | 13 |

### Energy Cost vs. Selling Prices

The cost of energy and hydrocarbons — by far the company's largest single cost item — once again far outstripped the increase in the selling prices of Dow products.




The ratio of operating income to sales in 1980 was 11.4 percent, down from 14.4 percent in 1979, and due almost exclusively to the inability to obtain adequate price adjustments.

Operating income by segments and geographic areas reflected the following changes:

| Operating Income | Percent increase (decrease) from prior years 1980 | 1979 |
|---|---|---|
| **Industry segments** | | |
| Chemicals/Metals | 7 | 6 |
| Plastics/Packaging | (25) | 67 |
| Bioproducts/Consumer Products | 16 | (33) |
| **Geographic areas** | | |
| United States | 2 | 5 |
| Europe | (11) | 62 |
| Canada | 22 | 37 |
| Pacific | (37) | 97 |
| Latin America | (17) | 86 |
| Brazil | (100) | 15 |

Plastics/Packaging operating income showed a decline of 25 percent following an outstanding year in 1979. Demand dropped sharply and prices for polyolefins and styrene polymers softened while costs continued to soar. Prices began to firm near year-end.

Operating statistics by industry segments and geographic areas are shown in greater detail in Note S to the financial statements.

Interest cost rose sharply during 1980 by $98 million to $456 million due to increased borrowing and higher rates. However, the impact on income was moderated by the capitalization of $71 million of interest during construction of capital additions which was required by accounting rules for the first time in 1980.

The reduction in the effective income tax rate from 39.2 percent in 1979 to 34.3 percent in 1980 added $61 million, or $.33 per share to net income. The conditions which gave rise to the rate change are shown in Note E to the financial statements.

Capital spending at $1.2 billion in 1980 continued expansion and improvement programs which have been above $1 billion annually since 1976. The probabilities are that construction expenditures will continue at or above this level for several years.

The financing of capital programs is expected to come both from internally generated cash flow and from external borrowings.

Quarterly cash dividends of $.40 per share were paid during 1980. However, in December, the board of directors raised the rate to $.45, effective for the dividend paid January 30, 1981.

#### 1979 vs. 1978

An analysis of 1979 operations versus 1978 shows that sales rose from $6.9 billion to $9.3 billion, or 34 percent. Approximately 22 percent was due to increased prices which were necessary because of huge jumps in costs. All areas registered significant sales improvement. In terms of industry segments, Bioproducts/Consumer Products sales realized the smallest percentage increase in 1979, which was due in large measure to government controls on the price of pharmaceuticals.

Operating income showed a 27 percent increase overall, but industry segments experienced an erratic pattern. Chemicals/Metals increased only 6 percent mainly due to unrecovered cost increases. Strong selling prices in Plastics/Packaging resulted in a 67 percent increase, while Bioproducts/Consumer Products operating profits declined 33 percent for the reason mentioned above.

Income benefited by $.28 a share in the fourth quarter of 1979 from the sale of an interest in certain oil and gas properties in Canada.

**SUPPLEMENTARY INFORMATION ON EFFECTS OF CHANGING PRICES** The table below shows certain income data presented in the historical cost income statement on page 23, adjusted to constant dollars and current costs expressed in dollar values generally at the average 1980 price level. The changes to costs and income are presumed to reflect some of the deleterious effects of inflation on reported income under the two different methods of measuring inflation. Those changes are moderated because the primary financial statements already give substantial recognition to the effects of inflation by worldwide use of declining balance depreciation and the last-in, first-out method for valuing inventories.

**Consolidated Statement of Income Adjusted for Changing Prices**
**Year Ended December 31, 1980**
(In millions)

| | As Reported in the Financial Statements | Adjusted for General Inflation (Constant Dollars) | Adjusted for Changes in Specific Prices (Current Costs) |
|---|---|---|---|
| Net sales | $10,626 | $10,626 | $10,626 |
| Cost of sales, excluding depreciation | 7,921 | 8,000 | 8,000 |
| Depreciation expense | 728 | 829 | 806 |
| Interest expense — net | 298 | 298 | 298 |
| Gain on sale of hydrocarbon properties | (74) | (74) | (74) |
| Other operating expense | 524 | 524 | 524 |
| Provision for taxes on income | 424 | 424 | 424 |
| | 9,821 | 10,001 | 9,978 |
| Income from continuing operations | $ 805 | $ 625 | $ 648 |
| Purchasing power gain on net monetary liabilities held during the year | | $ 470 | $ 470 |

**Historical Cost Adjusted for General Inflation**

The supplemental data in constant dollars reflect historical costs adjusted for changes in purchasing power of the dollar as measured by the Consumer Price Index for All Urban Consumers published by the Bureau of Labor Statistics. These amounts do not purport to represent appraised value or any other measure of current value. Depreciation was computed under the straight line method.

At December 31, 1980, there was an excess of monetary liabilities over monetary assets. As inflation erodes the purchasing power of the dollar, net debts are repayable with dollars of lesser value resulting in a gain in purchasing power of $470 million.

**Current Costs**

Cost of sales was calculated by applying the last-in, first-out method to all inventories. The carrying value of $2,745 million for inventories at December 31, 1980 was determined by using the year-end purchase prices of raw materials and supplies and the standard cost of manufacturing for finished goods and work-in-process inventories which approximates current cost.

Net plant properties were determined primarily through the use of indices related specifically to the construction cost of chemical plants. These values which totaled $8,776 million at December 31, 1980 represent the estimated current costs of existing assets and do not consider technological improvements and efficiencies associated with normal replacement of productive capacities. Depreciation was computed using the straight line method.

Cost for assets outside the United States was determined in local currency and translated into U.S. dollars at exchange rates in effect at year-end.

## Management Discussion and Analysis — Continued

Increases in current costs of inventories and plant properties held during the year, less the effect of general inflation, are not included in income from continuing operations but are shown below:

| | Inventories | Plant Properties | Total |
|---|---|---|---|
| Increase in current cost | $ 151 | $ 402 | $ 553 |
| Less — General inflation | 271 | 985 | 1,256 |
| Net | $(120) | $(583) | $ (703) |

The following table is a five-year comparison of selected supplementary financial data adjusted for effects of changing prices. Certain information pertaining to years ended on or before December 31, 1978 is omitted because it is impracticable to obtain such information.

**Five-Year Comparison of Selected Supplementary Financial Data Adjusted for Effects of Changing Prices**
*(Average 1980 Dollars)*

| | Years Ended December 31 | | | | |
|---|---|---|---|---|---|
| | **1980** | 1979 | 1978 | 1977 | 1976 |
| | (In millions, except per share data) | | | | |
| Historical cost information adjusted for general inflation (constant dollars): | | | | | |
| Net sales | $10,626 | $10,507 | $8,699 | $8,477 | $8,182 |
| Income from continuing operations | 625 | 820 | | | |
| Income from continuing operations per share | 3.43 | 4.53 | | | |
| Purchasing power gain on net monetary liabilities held during the year | 470 | 494 | | | |
| Net assets held at year-end | 7,463 | 7,170 | | | |
| Current cost information: | | | | | |
| Income from continuing operations | 648 | 790 | | | |
| Income from continuing operations per share | 3.56 | 4.36 | | | |
| Increase in the general price level over increase in specific prices | 703 | 403 | | | |
| Net assets held at year-end | 7,980 | 8,027 | | | |
| Cash dividends declared per share | 1.63 | 1.68 | 1.63 | 1.55 | 1.37 |
| Market price per share at year-end | 30.68 | 34.49 | 30.26 | 35.48 | 61.42 |
| Average Consumer Price Index (1967 = 100) | 246.8 | 217.4 | 195.4 | 181.5 | 170.5 |

Income tax expense as shown by the primary financial statements has not been changed.

## Selected Financial Data

| | Years Ended December 31 | | | | |
|---|---|---|---|---|---|
| | 1980 | 1979 | 1978 | 1977 | 1976 |
| | (In millions, except per share) | | | | |
| Net sales | $10,626 | $ 9,255 | $6,888 | $6,234 | $5,652 |
| Net income | 805 | 784 | 575 | 554 | 612 |
| Net income per common share | 4.42 | 4.33 | 3.16 | 3.00 | 3.30 |
| Total assets | 11,538 | 10,252 | 8,789 | 7,752 | 6,944 |
| Long-term debt | 3,438 | 3,055 | 2,937 | 2,473 | 1,998 |
| Cash dividends declared per common share | 1.65 | 1.50 | 1.30 | 1.15 | .95 |

# Management's Statement of Responsibility for Financial Statements

The following consolidated financial statements and related notes of The Dow Chemical Company and its subsidiary companies were prepared by the management in accordance with generally accepted accounting principles. The Board of Directors, through its three-member Audit Committee, is responsible for assuring that management fulfills its responsibilities in the preparation of the financial statements.

The Company is responsible for the integrity and objectivity of the consolidated financial statements, which are presented in a consistent manner on the accrual basis of accounting. Established accounting procedures are designed to provide accurate books, records and accounts which fairly reflect the transactions of the Company.

The training of qualified personnel and the assignment of duties are intended to provide internal controls at a cost appropriate to our evaluation of the risks involved. Such controls are monitored by an internal audit staff, providing reasonable assurances that transactions are executed in accordance with management's authorization and that adequate accountability for the Company's assets is maintained.

Deloitte Haskins & Sells, independent public accountants, with direct access to the Board of Directors through its Audit Committee, have examined the consolidated financial statements prepared by the Company, and their report follows.

# Opinion of Independent Public Accountants

TO THE STOCKHOLDERS AND DIRECTORS OF
THE DOW CHEMICAL COMPANY

We have examined the consolidated balance sheets of The Dow Chemical Company and its subsidiary companies as of December 31, 1980 and 1979, and the related consolidated statements of income, additional paid-in capital, retained earnings, and changes in financial position for each of the three years in the period ended December 31, 1980. 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, such financial statements present fairly the financial position of The Dow Chemical Company and its subsidiary companies at December 31, 1980 and 1979, and the results of their operations and the changes in their financial position for each of the three years in the period ended December 31, 1980, in conformity with generally accepted accounting principles consistently applied during the period except for the change, with which we concur, in the accounting for interest cost as described in Note B to the financial statements.

Deloitte Haskins & Sells

Detroit, Michigan
February 13, 1981

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# Accounting Principles

**CONSOLIDATION** The accompanying consolidated financial statements include the assets, liabilities, revenues and expenses of all significant subsidiaries except for banks and insurance companies. Because of the nature of their operations, the accounts of these companies are not consolidated. However, their earnings are included in consolidated net income under the equity method of accounting.

**NON-CONSOLIDATED EQUITY INVESTMENTS** Investments in companies which are 20%-50% owned are carried on the equity basis. Marketable equity securities are carried at the lower of cost or market. Other investments are carried at cost less reserves.

**TRANSLATION OF FOREIGN CURRENCIES** Cash, marketable securities, receivables and liabilities are translated at current rates. Property, inventories and investments in capital stock are translated at rates prevailing when the transactions occurred. Deferred income taxes are translated in the same manner as the assets or liabilities to which they relate.

Revenues and expenses are translated at appropriate current rates for each month, except that depreciation is recorded at historical rates. Foreign currency gains and losses are reflected in income currently.

**INVENTORIES** Inventories are stated at cost, which is less than market value. Cost is determined on the last-in, first-out basis, except for operating supplies, which are carried on the first-in, first-out basis.

**PLANT PROPERTIES AND DEPRECIATION** Land, buildings and equipment, including property under capital lease agreements, are carried at cost less accumulated depreciation. Depreciation is based on the estimated service lives of depreciable assets and is provided using the declining balance method.

Fully depreciated assets are retained in the property and depreciation accounts until they are removed from service. In the case of disposals, the assets and related depreciation are removed from the accounts and the net amount, less proceeds from disposal, is charged or credited to income.

**EXPLORATION AND DEVELOPMENT COSTS** The successful efforts method is used in accounting for costs incurred in the acquisition, exploration, development and production of oil and gas reserves. Capitalized costs are amortized using the unit-of-production method on the basis of total estimated units of proved reserves and nonproductive efforts are charged to expense.

**GOODWILL** The excess of the cost of investments in subsidiaries over carrying value of assets acquired is shown as goodwill. Goodwill arising since October 1970 is amortized over 40 years. In the opinion of management, goodwill prior to that date requires no amortization.

**RETIREMENT PLANS** The Company and certain subsidiaries have plans which provide retirement benefits for eligible employees. The major plan covers substantially all full-time United States employees. The policy is to accrue and fund pension cost as computed by an actuary.

**TAXES ON INCOME AND INVESTMENT CREDITS** The companies compute and record income taxes currently payable based upon their determination of taxable income which may be different from pretax accounting income. These differences may arise from recording in pretax accounting income transactions which enter into the determination of taxable income in another period. The tax effect of these timing differences is recognized by adjustment currently to the provision for taxes.

Provision is made for taxes on that income of subsidiaries which is taxable in the United States as earned, and on unremitted earnings of subsidiary and 50% owned companies to the extent that such earnings are deemed to be not permanently invested. Income taxes are provided on the undistributed income of 20%-49% owned companies at the time the Company records its equity in such earnings.

A portion of the taxes due on foreign operations conducted through a domestic international sales corporation (DISC) is deferrable under U.S. tax rules. However, it is the practice of the Company to fully accrue such taxes currently.

Laws governing the determination of United States and certain foreign income taxes provide for investment credits for acquisition of qualified facilities. Such credits are reflected as a reduction of income tax expense on the flow-through basis in the year in which they are earned.

In addition to tax credits, certain foreign countries provide incentives which are granted to encourage new investment. Generally, such grants are credited to income as earned.

**EARNINGS PER COMMON SHARE** The calculation of earnings per share is based on the weighted average number of shares of common stock outstanding during each year.

# Consolidated Statement of Income

| | 1980 | 1979 | 1978 |
|---|---|---|---|
| | | Year Ended December 31 (In millions) | |
| **Net Sales** | $10,626 | $9,255 | $6,888 |
| **Operating Costs and Expenses** | | | |
| Cost of sales | 8,649 | 7,231 | 5,284 |
| Selling and administrative | 765 | 690 | 552 |
| | 9,414 | 7,921 | 5,836 |
| Operating income | 1,212 | 1,334 | 1,052 |
| **Other Income (Expense)** | | | |
| Equity in earnings: | | | |
| Non-consolidated subsidiaries | 10 | 20 | 37 |
| 20%-50% owned companies | 127 | 103 | 76 |
| Interest income | 87 | 86 | 50 |
| Interest and debt discount and expense | (385) | (358) | (287) |
| Sundry income — net | 187 | 128 | 40 |
| **Income Before Provision for Taxes on Income** | 1,238 | 1,313 | 968 |
| **Provision for Taxes on Income** | 424 | 515 | 384 |
| **Income Before Minority Interest** | 814 | 798 | 584 |
| **Minority Interests' Share in Income** | 9 | 14 | 9 |
| **Net Income** | $ 805 | $ 784 | $ 575 |
| **Earnings per Common Share** | $ 4.42 | $ 4.33 | $ 3.16 |

*See Accounting Principles and Notes to Financial Statements*

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# Consolidated Balance Sheet

## ASSETS

| | December 31 1980 | December 31 1979 |
|---|---|---|
| | (In millions) | |
| **Current Assets** | | |
| Cash | $ 25 | $ 42 |
| Marketable securities and interest-bearing deposits (at cost, approximately market) | 143 | 210 |
| Accounts and notes receivable: | | |
| Trade, (less allowance for doubtful receivables — 1980, $56; 1979, $53) | 1,660 | 1,573 |
| Other | 499 | 480 |
| Deferred income tax benefits | 129 | 135 |
| Inventories: | | |
| Finished and work in process | 1,415 | 857 |
| Materials and supplies | 519 | 456 |
| Total Current Assets | 4,390 | 3,753 |
| **Investments** | | |
| Capital stock of related companies — at cost plus equity in accumulated earnings: | | |
| Banking and insurance subsidiaries | 166 | 186 |
| Associated companies (50% owned) | 690 | 599 |
| 20%-49% owned companies | 110 | 72 |
| Other investments — (at cost) | 86 | 70 |
| Noncurrent receivables | 175 | 96 |
| Total Investments | 1,227 | 1,023 |
| **Plant Properties** | 9,873 | 8,909 |
| Less — Accumulated depreciation | 4,201 | 3,673 |
| Net Plant Properties | 5,672 | 5,236 |
| **Goodwill** | 109 | 107 |
| **Deferred Charges and Other Assets** | 140 | 133 |
| TOTAL | $11,538 | $10,252 |

*See Accounting Principles and Notes to Financial Statements*

## LIABILITIES

| | December 31 1980 | December 31 1979 |
|---|---|---|
| | (In millions) | |
| **Current Liabilities** | | |
| Notes payable | $ 617 | $ 528 |
| Long-term debt due within one year | 119 | 73 |
| Accounts payable: | | |
| Trade | 974 | 1,011 |
| Other | 209 | 163 |
| United States and foreign taxes on income | 215 | 267 |
| Accrued and other current liabilities | 669 | 573 |
| Total Current Liabilities | 2,803 | 2,615 |
| **Long-Term Debt** | 3,438 | 3,055 |
| **Other Liabilities** | | |
| Minority interests in subsidiary companies | 44 | 39 |
| Deferred employee benefits | 68 | 64 |
| Deferred income taxes | 745 | 582 |
| Total Other Liabilities | 857 | 685 |
| **Stockholders' Equity** | | |
| Common stock (authorized 500,000,000 shares of $2.50 par value each; issued 1980, 202,076,376; 1979, 200,554,994) | 505 | 501 |
| Additional paid-in capital | 516 | 480 |
| Retained earnings | 3,868 | 3,365 |
| Total | 4,889 | 4,346 |
| Less — Treasury stock, at cost (1980, 19,374,411; 1979, 19,373,819 shares) | 449 | 449 |
| Net Stockholders' Equity | 4,440 | 3,897 |
| TOTAL | $11,538 | $10,252 |

*See Accounting Principles and Notes to Financial Statements*

# Consolidated Statement of Additional Paid-In Capital

| | Year Ended December 31 | | |
|---|---|---|---|
| | 1980 | 1979 | 1978 |
| | | (In millions) | |
| **Balance at Beginning of the Year** | $480 | $447 | $436 |
| Add: | | | |
| Excess of selling or market price over par value of common stock issued to employees | 32 | 30 | 11 |
| Income tax benefit realized from sale of common stock to employees | 4 | 3 | |
| **Balance at End of the Year** | $516 | $480 | $447 |

# Consolidated Statement of Retained Earnings

| | Year Ended December 31 | | |
|---|---|---|---|
| | 1980 | 1979 | 1978 |
| | | (In millions) | |
| **Balance at Beginning of the Year** | $3,365 | $2,859 | $2,521 |
| Add (Deduct): | | | |
| Net income | 805 | 784 | 575 |
| Adjustments related to subsidiary companies | | (6) | |
| Cash dividends declared (per share — 1980, $1.65, 1979, $1.50; 1978, $1.30) | (302) | (272) | (237) |
| **Balance at End of the Year** | $3,868 | $3,365 | $2,859 |

*See Accounting Principles and Notes to Financial Statements*

# Consolidated Statement of Changes in Financial Position

| | 1980 | 1979 | 1978 |
|---|---|---|---|
| | Year Ended December 31 (In millions) | | |
| **Source of Working Capital** | | | |
| Net income | $ 805 | $ 784 | $ 575 |
| Charges (credits) to income not involving working capital: | | | |
| Depreciation | 728 | 634 | 562 |
| Equity in net income of non-consolidated companies, less dividends received | (99) | (92) | (90) |
| Deferred income taxes | 163 | 171 | 69 |
| Provided from operations | 1,597 | 1,497 | 1,116 |
| New long-term debt | 650 | 317 | 509 |
| Disposition of property and noncurrent investments | 103 | 166 | 96 |
| Sale of common stock to employees | 40 | 37 | 13 |
| Total working capital provided | 2,390 | 2,017 | 1,734 |
| **Use of Working Capital** | | | |
| New plant properties | 1,184 | 1,268 | 1,075 |
| Cash dividends declared | 302 | 272 | 237 |
| Purchase of treasury stock | | 40 | 54 |
| Reduction of long-term debt | 267 | 199 | 45 |
| Increase in noncurrent receivables and sundry assets | 127 | 58 | 9 |
| Investment in related companies | 61 | 207 | 23 |
| Total working capital used | 1,941 | 2,044 | 1,443 |
| **Increase (Decrease) in Working Capital** | $ 449 | $ (27) | $ 291 |

| | 1980 | 1979 | 1978 |
|---|---|---|---|
| **Increase (Decrease) in Working Capital by Element** | | | |
| Cash and marketable securities | $ (84) | $ (147) | $ 263 |
| Receivables | 106 | 405 | 291 |
| Deferred taxes | (6) | 65 | (3) |
| Inventories | 621 | 314 | (68) |
| Notes payable and current portion of long-term debt | (135) | (141) | 122 |
| Accounts payable | (9) | (337) | (192) |
| Income taxes and accruals | (44) | (186) | (122) |
| **Increase (Decrease) in Working Capital** | $ 449 | $ (27) | $ 291 |

*See Accounting Principles and Notes to Financial Statements*

# Notes to Financial Statements

**A. SIGNIFICANT EVENT SUBSEQUENT TO DECEMBER 31, 1980** Under the terms of an Agreement and Plan of Reorganization dated November 1, 1980 with Richardson-Merrell Inc. (RMI), the Company will acquire the ethical pharmaceutical business of RMI for a price of $260 million to be paid in Dow common stock. The number of shares to be issued will be based upon the average market price of Dow common stock for the twenty trading days immediately preceding the closing date. The determination of the closing date in 1981 is contingent upon the satisfactory performance of all requirements of the agreement by both parties. The ethical pharmaceutical sales and net income reported by RMI for the fiscal year ended June 30, 1980 were $282 million and $10 million, respectively.

**B. INTEREST COST** Effective January 1, 1980, the policy of capitalizing interest cost as a part of the cost of constructing capital assets was adopted in accordance with Statement of Financial Accounting Standards No. 34. Gross interest incurred in 1980 was $456 million, of which $71 million was capitalized. No interest cost was capitalized in 1979 or 1978. The effect of the change was to increase 1980 earnings per share by approximately $.20.

**C. SUNDRY INCOME — NET** The components of sundry income — net include:

| | Year Ended December 31 | | |
|---|---|---|---|
| | 1980 | 1979 | 1978 |
| | (In millions) | | |
| Royalty income | $ 24 | $ 21 | $21 |
| Gain on sale of hydrocarbon properties | 74 | 85 | |
| Profit on securities | 18 | 6 | 10 |
| Profit on redemption of long-term debt | 14 | 3 | |
| Foreign exchange and translation gains (losses) — other than Dow Banking Corporation | 31 | (8) | (13) |
| Other — net | 26 | 21 | 22 |
| Total | $187 | $128 | $40 |

Wanda Petroleum Company, a wholly-owned subsidiary, was sold to Enterprise Products Company in October 1980 for a pre-tax gain of $74 million. After applicable income taxes, net income in 1980 benefited by $52 million, or $.28 per share.

In December 1979, sale of an interest in certain Canadian oil and gas properties resulted in a pre-tax gain of $85 million and net income of $50 million, or $.28 per share.

**D. SUPPLEMENTARY INCOME STATEMENT INFORMATION**

| | Year Ended December 31 | | |
|---|---|---|---|
| | 1980 | 1979 | 1978 |
| | (In millions) | | |
| Maintenance and repairs | $597 | $537 | $420 |
| Depreciation and depletion of plant properties | 728 | 634 | 562 |
| Research and development | 314 | 269 | 231 |
| Taxes, other than United States and foreign taxes on income: | | | |
| Property, franchise and miscellaneous taxes | 126 | 113 | 92 |
| Payroll taxes | 129 | 120 | 96 |
| Provision for doubtful receivables | 15 | 18 | 12 |
| Foreign exchange and translation gains (losses): | | | |
| Other than Dow Banking Corporation | 31 | (8) | (13) |
| Dow Banking Corporation | (14) | 2 | 23 |

**E. TAXES ON INCOME** Domestic and foreign components of pre-tax income, classified primarily by the domicile of the individual subsidiaries, were:

| | Year Ended December 31 | | |
|---|---|---|---|
| | 1980 | 1979 | 1978 |
| | (In millions) | | |
| Domestic | $ 849 | $ 851 | $734 |
| Foreign | 389 | 462 | 234 |
| Income before tax | $1,238 | $1,313 | $968 |

This classification of profit before tax will differ from Note S, page 33 which presents revenue and profits allocated by geographic area in accordance with the area management organization.

The provision for taxes on income consisted of:

| (In millions) | Federal | State and Local | Foreign | Total |
|---|---|---|---|---|
| **1980** | | | | |
| Current | $125 | $13 | $117 | $255 |
| Deferred | 153 | | 16 | 169 |
| Total | $278 | $13 | $133 | $424 |
| **1979** | | | | |
| Current | $250 | $15 | $144 | $409 |
| Deferred | 34 | | 72 | 106 |
| Total | $284 | $15 | $216 | $515 |
| **1978** | | | | |
| Current | $192 | $18 | $102 | $312 |
| Deferred | 55 | | 17 | 72 |
| Total | $247 | $18 | $119 | $384 |

The current tax provision was reduced by investment tax credits of $94 million in 1980, $98 million in 1979 and $79 million in 1978.

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Deferred tax provisions related to the following:

| | 1980 | 1979 | 1978 |
|---|---|---|---|
| | (In millions) | | |
| Excess of depreciation and depletion claimed for tax purposes over book amounts | $125 | $113 | $49 |
| Doubtful accounts and other losses in excess of those deductible currently for tax purposes | (2) | (5) | (4) |
| Undistributed earnings of foreign subsidiaries deemed not to be permanently invested | 13 | 11 | 7 |
| Income of export and shipping companies operating outside the United States | 29 | 2 | 11 |
| Intercompany profit eliminated in consolidation | (5) | (7) | 2 |
| Use of LIFO method in countries where it is not allowed for tax purposes | (2) | (39) | 3 |
| Other — net | 11 | 31 | 4 |
| Total | $169 | $106 | $72 |

Major differences between the effective rate and the United States statutory rate were:

| | Percent | | |
|---|---|---|---|
| | 1980 | 1979 | 1978 |
| Statutory rate | 46.0 | 46.0 | 48.0 |
| U.S. investment credits | (6.1) | (6.3) | (7.0) |
| Taxes on income of foreign operations at tax rates different from U.S. statutory rate | (2.4) | 0.7 | 1.5 |
| Untaxed equity in income of companies whose accounts are not consolidated | (2.9) | (3.5) | (4.6) |
| State and local income taxes (net of federal tax) | 0.5 | 0.6 | 1.0 |
| Other | (0.8) | 1.7 | 0.8 |
| Effective rate | 34.3 | 39.2 | 39.7 |

Unremitted earnings of subsidiary and 50%-owned companies which are deemed to be permanently invested amounted to approximately $1.3 billion, $1.2 billion and $1.0 billion at December 31, 1980, 1979 and 1978, respectively.

Income tax returns filed in the United States through 1975 have been settled.

**F. INVENTORIES** The amount of reserve required to reduce inventories from the first-in, first-out basis to the last-in, first-out basis at December 31, 1980 and 1979 was $799 million and $795 million, respectively.

**G. RELATED COMPANY TRANSACTIONS** Investments in nonconsolidated subsidiaries and companies which are 20%-50% owned at December 31, 1980 and 1979 were $379 million and $341 million, respectively. The Company's equity in the net assets of related companies accounted for by the equity method approximated the carrying amount of such investments. Investments in 1980 included $27 million for the purchase of 20 percent participation in the Total refinery at Flushing, The Netherlands, from La Compagnie Francaise de Petroles, plus additional capital contributions to D-H Titanium Company, Dow Industrija Nafte (DINA) and MT Partnership. Investments in 1979 included $186 million arising from the contribution of oil and gas properties to MT Partnership, a joint venture with TCPL Resources, Ltd., to pursue acquisition, exploration and development programs for hydrocarbon reserves, plus a capital contribution to Dow Finance Company.

Noncurrent receivables at December 31, 1980 and 1979 included $14 million and $8 million, respectively, from 20%-50% owned companies.

Dividends received from related companies were $38 million in 1980, $31 million in 1979 and $23 million in 1978.

All other transactions with, and balances due to or from, related companies were not material in amount.

**H. OTHER INVESTMENTS** Noncurrent marketable equity securities included in other investments at cost on December 31, 1980 and 1979 were $21 million and $9 million, respectively. The market value of these securities exceeded cost by $23 million at December 31, 1980 and $1 million at December 31, 1979, after deducting $1 million of unrealized losses for both periods.

**I. PLANT PROPERTIES** Plant properties consisted of the following:

| | December 31 | |
|---|---|---|
| | 1980 | 1979 |
| | (In millions) | |
| Land | $ 163 | $ 155 |
| Land and waterway improvements | 285 | 250 |
| Buildings | 751 | 681 |
| Machinery and equipment | 7,243 | 5,975 |
| Wells and brine systems | 269 | 214 |
| Office furniture and equipment | 153 | 132 |
| Oil and gas land and leaseholds | 132 | 112 |
| Other | 74 | 62 |
| Construction in progress | 803 | 1,328 |
| Total | $9,873 | $8,909 |

**J. LEASED PROPERTIES** Capital leases included with owned property in the balance sheet were:

| | December 31 | |
|---|---|---|
| | 1980 | 1979 |
| | (In millions) | |
| Land | $ 1 | $ 1 |
| Buildings | 2 | 1 |
| Machinery and equipment | 155 | 165 |
| Office furniture and equipment | 7 | 8 |
| Total | 165 | 175 |
| Less — Accumulated depreciation | 104 | 103 |
| Net | $ 61 | $ 72 |

Minimum lease commitments at December 31, 1980, were as follows:

| | Capital Leases | Operating Leases |
|---|---|---|
| | (In millions) | |
| 1981 | $ 20 | $ 57 |
| 1982 | 16 | 50 |
| 1983 | 13 | 55 |
| 1984 | 12 | 51 |
| 1985 | 11 | 39 |
| 1986 and thereafter | 91 | 264 |
| Total minimum lease payments | 163 | $516 |
| Less — Estimated executory costs | 1 | |
| Net minimum lease payments | 162 | |
| Less — Amounts estimated to represent interest | 63 | |
| Present value of net minimum lease obligations | 99 | |
| Less — Current accounts payable | 14 | |
| Long-term capital lease obligations | $ 85 | |

Minimum operating lease commitments have not been reduced by minimum sublease rentals of $3 million due in the future under noncancelable subleases.

Rental payments under operating leases charged to expense were (in millions):

| | Year Ended December 31 | | |
|---|---|---|---|
| | 1980 | 1979 | 1978 |
| Minimum rentals | $108 | $92 | $87 |
| Contingent rentals | 10 | 8 | 1 |
| Less — Sublease rentals | (1) | (3) | (1) |
| Net | $117 | $97 | $87 |

**K. SUPPLEMENTARY STATISTICS FOR MINERAL RESERVES** (Unaudited) The estimated quantities of proven and probable mineral reserves at December 31, 1980 were:

| | (Thousands of tons) | |
|---|---|---|
| | Lignite | Dolomite |
| Reserves — December 31, 1979 | 1,079,000 | 158,446 |
| Reserves purchased | 71,000 | |
| Reserves mined | | 446 |
| Reserves — December 31, 1980 | 1,150,000 | 158,000 |
| Average market price per ton | $16.00 | $4.25 |

In several geographic areas throughout the world, the Company owns natural brine deposits which are rich in bromides, chlorides and in magnesium and calcium salts, rock salt deposits and limestone deposits. Approximately 28 million tons of salt and brine were produced in 1980, and the Company estimates these raw material deposits will last in excess of 100 years.

**L. OIL AND GAS PRODUCING ACTIVITIES** The Company is engaged in limited oil and gas producing activities, primarily in the United States and Canada. A summary of information on oil and gas activities follows:

| | Dow Share 100% Owned | Dow Share 50% Owned |
|---|---|---|
| | (In millions) | |
| Aggregate amount of capitalized costs at December 31: | | |
| 1980 | $258 | $346 |
| 1979 | 228 | 186 |
| Accumulated depreciation and depletion at December 31: | | |
| 1980 | 108 | 6 |
| 1979 | 91 | 1 |
| Expenditures for property acquisition and development during: | | |
| 1980 | 34 | 160 |
| 1979 | 102 | 1 |
| Exploration and production (lifting) costs during: | | |
| 1980 | 71 | 10 |
| 1979 | 51 | |
| 1978 | 37 | |
| Present value of estimated future net revenues (unaudited) at December 31: | | |
| 1980 | 385 | 150 |
| 1979 | 363 | 124 |
| Estimated quantities of proved oil and gas reserves (unaudited) at December 31 were: | | |
| Crude oil, condensate and natural gas liquids (millions of barrels): | | |
| 1980 | 7.1 | 25.3 |
| 1979 | 7.3 | 4.9 |
| Natural gas (billions of cubic feet) | | |
| 1980 | 244.2 | 411.8 |
| 1979 | 277.2 | 216.2 |

**M. RETIREMENT PLANS** The Company and its subsidiaries have several pension plans covering substantially all of their employees, including certain employees in foreign countries. The cost of all retirement plans was $127 million in 1980, $115 million in 1979 and $101 million in 1978. The Company makes annual contributions to the plans equal to the amounts accrued for pension expense. A comparison of accumulated plan benefits and plan assets for the Company's domestic defined benefit plan is presented below:

| | January 1 1981 | January 1 1980 |
|---|---|---|
| | (In millions) | |
| Actuarial present value of accumulated plan benefits: | | |
| Vested | $ 894 | $789 |
| Nonvested | 184 | 161 |
| | $1,078 | $950 |
| Net assets available for benefits | $1,044 | $776 |

The weighted average rate of return used in determining the actuarial present value of accumulated plan benefits was 6.5 percent for both 1981 and 1980

The Company's foreign pension plans are not required to report to certain governmental agencies pursuant to ERISA, and have not determined for 1981 the actuarial value of accumulated benefits or net assets available for benefits as calculated and disclosed above. However, as of the beginning of 1980, available assets in other plans exceeded vested benefits by approximately $50 million.

**N. INVESTMENT BENEFIT PLAN** Under the Tax Reform Act of 1976, the Company is entitled to a further one percent investment tax credit if a like amount is used to acquire its stock for distribution to employees. In addition, the Company can increase the tax credit as much as one-half percent provided employees contribute an equal amount, all of which is to be used for the purchase of the Company's common stock for the benefit of the participating employees. To carry out these provisions, the Company established the Dow Investment Benefit Plan for all U.S. employees, excluding directors. Costs of $14 million in 1980 and $7 million in 1979 and 1978 were offset in income tax expense by an equivalent amount of investment tax credit.

**O. LONG-TERM DEBT AND AVAILABLE CREDIT FACILITIES** Details of debt due after one year were as follows:

| | December 31 1980 | 1979 |
|---|---|---|
| | (In millions) | |
| Promissory notes: | | |
| 12.85%, final maturity 1985 | $ 150 | |
| 8.00%, final maturity 1986 | 120 | $ 120 |
| 4.50%, final maturity 1990 | 65 | 70 |
| 5.00%, final maturity 1991 | 56 | 60 |
| Debentures: | | |
| 7.96%, final maturity 1987, Canadian dollar | 212 | 214 |
| 4.35%, final maturity 1988 | 40 | 42 |
| 6.70%, final maturity 1998 | 60 | 69 |
| 7.75%, final maturity 1999 | 64 | 73 |
| 8.875%, final maturity 2000 | 104 | 108 |
| 8.90%, final maturity 2000 | 103 | 111 |
| 7.40%, final maturity 2002 | 74 | 86 |
| 7.625%, final maturity 2003 | 76 | 90 |
| 8.50%, final maturity 2005 | 225 | 225 |
| 8.50%, final maturity 2006 | 200 | 200 |
| 7.875%, final maturity 2007 | 300 | 300 |
| 8.625%, final maturity 2008 | 300 | 300 |
| 11.25%, final maturity 2010 | 400 | |
| Bonds: | | |
| 8.50%, final maturity 1989, Swiss franc | 34 | 38 |
| 9.625%, final maturity 1994 | 198 | 200 |
| Other — Various rates and maturities: | | |
| Foreign currency loans | 93 | 106 |
| Brazilian U.S. dollar loans | 215 | 241 |
| Other U.S. dollar loans | 100 | 157 |
| Pollution control bond obligations | 175 | 157 |
| Capital lease obligations | 85 | 96 |
| | 3,449 | 3,063 |
| Less — Unamortized debt discount | 11 | 8 |
| Total | $3,438 | $3,055 |

The amounts shown are stated net of debentures purchased to satisfy future sinking fund requirements.

The average interest rate on long-term debt was 9.1% in 1980 compared to 8.4% in 1979.

Annual installments on long-term debt and capital lease obligations for the next five years are as follows (in millions): 1981, $119; 1982, $114; 1983, $165; 1984, $164; 1985, $347.

Unused and available credit facilities from various United States banks totaling $455 million at December 31, 1980 required the retention of average cash balances aggregating approximately $35 million. These requirements were generally satisfied by balances maintained for normal business operations.

Additional unused and available credit facilities with various United States and foreign banks totaling $596 million at December 31, 1980 required the payment of commitment fees.

Both of these groups of facilities, totaling $1,051 million, are available in support of commercial paper borrowing or long-term financing arrangements.

Additional unused credit facilities totaling $745 million at December 31, 1980 are available for use by foreign subsidiaries.

**P. NOTES PAYABLE** Notes payable at December 31, 1980 and 1979 included commercial paper in the amounts of $320 million and $296 million, respectively. Substantially all of the remainder were obligations due banks with a variety of interest rates and maturities.

**Q. STOCKHOLDERS' EQUITY** The authorized capital stock consists of 25 million preferred shares with a par value of $1.00 per share, none of which has been issued, and 500 million shares of common stock with a par value of $2.50 per share.

The changes in the number of issued shares (in thousands) in the last three years were:

| | 1980 | 1979 | 1978 |
|---|---|---|---|
| Beginning of the year | 200,555 | 199,082 | 198,551 |
| Sold to employees | 1,519 | 1,463 | 530 |
| Conversion of debentures | 2 | 10 | 1 |
| End of the year | 202,076 | 200,555 | 199,082 |

At December 31, 1980, 1979 and 1978, shares of common stock (in thousands) outstanding were 182,702, 181,181 and 181,174, after deducting 19,374; 19,374 and 17,908 shares of treasury stock, respectively.

Shares of common stock (in thousands) were reserved for the following purposes at December 31:

| | Shares 1980 | 1979 | 1978 |
|---|---|---|---|
| Stock option and award plans | 9,354 | 9,969 | 6,139 |
| Employees' stock purchase plan | 1,135 | 1,194 | 1,272 |
| Conversion of debentures | 12 | 14 | 24 |
| Total shares reserved | 10,501 | 11,177 | 7,435 |

Retained earnings of the Parent company were approximately $1,749 million at December 31, 1980, and there were no significant restrictions limiting the availability for dividend purposes.

Retained earnings includes approximately $1,684 million of undistributed earnings of consolidated subsidiaries, of which $130 million are restricted from payment of dividends. Restrictions include legal reserve requirements, currency controls and other governmental restrictions.

Undistributed earnings of unconsolidated subsidiaries and 20%-50% owned companies included in the retained earnings were $587 million and $516 million at December 31, 1980 and 1979, respectively.

In computing earnings per share, no adjustment was made for common shares issuable under award, option and stock purchase plans because there would be no material dilutive effect.

**R. STOCK OPTION AND AWARD PLANS** The Dow Chemical Company 1979 Award and Option Plan provides a maximum of 6.1 million shares of its common stock to officers and other managerial, administrative or professional employees of the Company who may be granted awards of deferred stock or options pursuant to the Plan, in lieu of cash for services. During the five-year period from the date of adoption of the Plan, the Company may grant options, incentive rights or a combination thereof covering an aggregate of four million shares of common stock which may be purchased upon exercise of options or may be transferred in respect of incentive rights. The Company may also grant awards during the ten-year period ending May 1989 of 2.1 million shares of deferred stock plus dividend units not to exceed 1.5 million outstanding at any one time. Dividend units represent the right to receive for a specified period cash payments equivalent in value to cash dividends paid during such period on one share of common stock. The Plan provides that options are not exercisable more than ten years after the date of grant.

In 1972 and 1976, stockholders authorized option plans permitting the granting during the ensuing five years to officers and key employees of options to purchase shares of common stock at the stock's fair market value at the time of the grant. The plans provide that qualified options, as defined by the Internal Revenue Code, are not exercisable more than five years after the date of grant, and non-qualified options are not exercisable more than ten years after the date of grant. The Tax Reform Act of 1976 established that qualified options exercised after May 20, 1981 will be treated for tax purposes as non-qualified options. The number of shares authorized under the 1972 and 1976 option plans were three million shares each.

In addition, management incentive awards which are related to consolidated net income may be granted to key employees, including directors and officers. Awards may be made in dividend units or deferred stock authorized by the Award Plan, or in cash, or a combination thereof.

Shares of deferred stock and dividend units under the various plans were:

| | Deferred Stock | Dividend Units |
|---|---|---|
| | (In thousands) | |
| Deferred stock and dividend units granted during: | | |
| 1980 | 14 | 6 |
| 1979 | 328 | 8 |
| 1978 | 103 | 8 |
| Deferred stock and dividend units outstanding at December 31: | | |
| 1980 | 475 | 369 |
| 1979 | 470 | 363 |
| 1978 | 147 | 355 |
| Deferred stock and dividend units available for grant at December 31: | | |
| 1980 | 1,762 | 1,488 |
| 1979 | 1,774 | 1,494 |
| 1978 | 1,695 | 1,145 |

Shares of common stock under option under the various plans were:

| | Number of Shares | Option Price Range |
|---|---|---|
| | (In thousands) | |
| Options outstanding at December 31. | | |
| 1980 | 3,990 | $22.14-$53.09 |
| 1979 | 3,902 | $22.14-$53.94 |
| 1978 | 3,973 | $22.14-$53.94 |
| Options granted during | | |
| 1980 | 835 | $32.25 |
| 1979 | 607 | $26.00-$28.75 |
| 1978 | 640 | $24.50 |
| Options exercised during: | | |
| 1980 | 215 | $22.14-$37.00 |
| 1979 | 118 | $22.14-$28.66 |
| 1978 | 8 | $22.14-$28.65 |
| Options expired or terminated during. | | |
| 1980 | 532 | |
| 1979 | 560 | |
| 1978 | 662 | |
| Options exercisable at December 31: | | |
| 1980 | 3,166 | |
| 1979 | 3,295 | |
| 1978 | 3,334 | |
| Options available for grant at December 31 | | |
| 1980 | 3,075 | |
| 1979 | 3,823 | |
| 1978 | 324 | |

Aggregate amounts charged to expense for all plans were $10 million in 1980, $12 million in 1979 and $5 million in 1978.

The Company made offerings of common stock to its employees, excluding directors, in 1980 at $27.60 per share, in 1979 at $22.60 per share, and in 1978 at $22.75 per share, payable generally through payroll deductions. Unfilled subscriptions (in thousands), cancellable at the option of the employee, were 1,135 and 1,194, respectively, at December 31, 1980 and 1979. Partial payments on these subscriptions aggregating $20 million and $17 million at December 31, 1980 and 1979, respectively, are included in current liabilities.

No charge is made against income for the excess, if any, of quoted market value on date of delivery of stock sold over the selling price, nor for employees' gains upon disqualifying disposition of stock acquired under stock option plans. Such amounts constitute taxable income to the employee and are deductible in the computation of United States income taxes. It is the practice of the Company to credit the reduction in income taxes to additional paid-in capital.

**5. GEOGRAPHIC AND INDUSTRY SEGMENTS** The Company conducts its worldwide operations through separate geographic area organizations which represent major markets or combinations of related markets. The practice of allocating corporate expense related to the overall management of the Company was discontinued in 1980 to better present geographic operating income, profit before income taxes, and identifiable assets. Amounts for 1979 and 1978 were restated to provide consistency between periods. The results by geographic area for the three years were (in millions):

| | United States | Europe | Canada | Pacific | Latin America | Brazil | Elim. and Corp. Items | Consolidated |
|---|---|---|---|---|---|---|---|---|
| **Year ended December 31, 1980:** | | | | | | | | |
| Sales to unaffiliated customers | $5,133 | $3,225 | $ 731 | $680 | $557 | $300 | | $10,626 |
| Transfers between areas | 909 | 186 | 113 | 1 | 6 | 30 | $(1,245) | |
| Operating income | 741 | 341 | 95 | 74 | 90 | | (129) | 1,212 |
| Profit (loss) before tax | 809 | 312 | 59 | 75 | 93 | (13) | (97) | 1,238 |
| Identifiable assets | 6,088 | 2,393 | 1,392 | 636 | 394 | 543 | 92 | 11,538 |
| Gross plant properties | 6,057 | 1,855 | 1,158 | 273 | 97 | 433 | | 9,873 |
| Capital expenditures | 754 | 235 | 113 | 33 | 15 | 34 | | 1,184 |
| Employees (thousands) | 34.8 | 11.3 | 4.0 | 2.0 | 2.5 | 2.2 | | 56.8 |
| **Year ended December 31, 1979:** | | | | | | | | |
| Sales to unaffiliated customers | $4,583 | $2,663 | $ 630 | $627 | $476 | $276 | | $ 9,255 |
| Transfers between areas | 816 | 188 | 44 | | 4 | 18 | $(1,070) | |
| Operating income | 725 | 382 | 78 | 118 | 108 | 23 | (100) | 1,334 |
| Profit (loss) before tax | 689 | 348 | 144 | 124 | 102 | (3) | (91) | 1,313 |
| Identifiable assets | 4,940 | 2,346 | 1,312 | 634 | 363 | 612 | 45 | 10,252 |
| Gross plant properties | 5,488 | 1,631 | 1,059 | 243 | 82 | 406 | | 8,909 |
| Capital expenditures | 748 | 126 | 292 | 58 | 8 | 36 | | 1,268 |
| Employees (thousands) | 34.1 | 11.4 | 3.8 | 1.9 | 2.5 | 2.2 | | 55.9 |
| **Year ended December 31, 1978:** | | | | | | | | |
| Sales to unaffiliated customers | $3,646 | $1,813 | $ 439 | $404 | $337 | $249 | | $ 6,888 |
| Transfers between areas | 606 | 123 | 25 | 1 | 2 | 9 | $ (766) | |
| Operating income | 693 | 236 | 57 | 60 | 58 | 20 | (72) | 1,052 |
| Profit (loss) before tax | 651 | 222 | 40 | 68 | 52 | (4) | (61) | 968 |
| Identifiable assets | 4,422 | 1,974 | 919 | 535 | 260 | 623 | 56 | 8,789 |
| Gross plant properties | 4,951 | 1,522 | 927 | 184 | 79 | 375 | | 8,038 |
| Capital expenditures | 616 | 106 | 250 | 62 | 4 | 37 | | 1,075 |
| Employees (thousands) | 32.3 | 11.4 | 3.3 | 1.8 | 2.6 | 2.1 | | 53.5 |

Transfers between areas are valued at cost plus a markup. There were no direct sales to foreign customers from domestic operations.

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## Notes to Financial Statements — Continued

Aggregation of products into industry segments is generally made on the basis of process technology and channels of distribution. The Chemicals/Metals segment embodies chemicals, hydrocarbon intermediates and the Company's magnesium business. The Plastics/Packaging segment includes large volume polyethylene and polystyrene products as well as a variety of plastic coatings, films and foams. The Bioproducts/Consumer Products segment encompasses human, animal and plant health care products, in addition to household films and cleaning chemicals.

Industry segment results for the three years were (in millions):

| | Chemicals/ Metals | Plastics/ Packaging | Bioproducts/ Consumer Products | Elim. and Corp. Items | Consolidated |
|---|---|---|---|---|---|
| **Year ended December 31, 1980:** | | | | | |
| Sales to unaffiliated customers | $5,771 | $3,726 | $1,129 | | $10,626 |
| Intersegment transfers | 1,402 | 55 | 7 | $(1,464) | |
| Operating income | 619 | 520 | 73 | | 1,212 |
| Identifiable assets | 6,898 | 2,116 | 1,023 | 1,501 | 11,538 |
| Depreciation | 509 | 161 | 58 | | 728 |
| Additions to property | 864 | 254 | 66 | | 1,184 |
| **Year ended December 31, 1979:** | | | | | |
| Sales to unaffiliated customers | $4,786 | $3,458 | $1,011 | | $ 9,255 |
| Intersegment transfers | 1,170 | 37 | 39 | $(1,246) | |
| Operating income | 578 | 693 | 63 | | 1,334 |
| Identifiable assets | 5,668 | 2,206 | 1,033 | 1,345 | 10,252 |
| Depreciation | 428 | 154 | 52 | | 634 |
| Additions to property | 992 | 205 | 71 | | 1,268 |
| **Year ended December 31, 1978:** | | | | | |
| Sales to unaffiliated customers | $3,535 | $2,479 | $ 874 | | $ 6,888 |
| Intersegment transfers | 862 | 40 | 9 | $ (911) | |
| Operating income | 544 | 414 | 94 | | 1,052 |
| Identifiable assets | 4,868 | 1,911 | 874 | 1,136 | 8,789 |
| Depreciation | 376 | 137 | 49 | | 562 |
| Additions to property | 841 | 180 | 54 | | 1,075 |

Transfers between industry segments are generally valued at standard cost.

It is not practicable to estimate what the impact might be upon the revenue or profitability of geographic areas or industry segments if transfers purchases had been made at the prevailing prices.

**T. CONTINGENT LIABILITIES** The Company and its subsidiaries are parties to a number of claims and lawsuits arising out of the normal course of business with respect to commercial matters including product liabilities, governmental regulation including environmental matters, and other actions. Certain of these actions purport to be class actions and seek damages in very large amounts. All such claims are being contested. The amounts of ultimate liability thereunder are not determinable at December 31, 1980, but in the opinion of management, resolution of these matters will not materially affect the consolidated financial position or results of operations of the Company and its subsidiaries.

The Company has contracted to purchase electricity and process steam from a nuclear power plant being constructed by Consumers Power Company at Midland, Michigan. If due to regulatory problems, (1) Consumers is unable to complete this plant prior to December 31, 1984, or (2) the Company terminates its purchase contract, the Company would be obligated to pay a termination fee, which as of December 31, 1980 is estimated at $218 million and $435 million, respectively.

A Canadian subsidiary has entered into an agreement to purchase substantially all of the output of an ethylene plant in the Province of Alberta. The owner of the plant, The Alberta Gas Ethylene Company, Ltd., has borrowed $257 million which has been guaranteed as to principal and interest by the Company.

In addition, the Company has guaranteed loans of related companies in the amount of $111 million.

**U. CONDENSED CONSOLIDATED FINANCIAL STATEMENTS OF DOW BANKING CORPORATION** During 1980, the Company reduced its holding in this Swiss subsidiary from 100 percent to 76 percent.

**Dow Banking Corporation**
**Consolidated Balance Sheet**
**December 31, 1980 and 1979**
(In millions)

| | 1980 | 1979 |
|---|---|---|
| Cash and due from banks | $ 442 | $ 469 |
| Marketable securities | 289 | 101 |
| Bills discounted | 57 | 84 |
| Loans and overdrafts | 424 | 432 |
| Other assets | 41 | 31 |
| Total assets | $1,253 | $1,117 |
| Demand and time deposits | $1,061 | $ 945 |
| Other liabilities | 37 | 33 |
| Stockholders' equity | 155 | 139 |
| Total liabilities and stockholders' equity | $1,253 | $1,117 |

**Dow Banking Corporation**
**Consolidated Statement of Income**
**Year Ended December 31**
(In millions)

| | 1980 | 1979 | 1978 |
|---|---|---|---|
| Operating income | $ 122 | $ 88 | $ 66 |
| Operating expenses | 112 | 76 | 53 |
| Loss (gain) on translation | 15 | (2) | (24) |
| Profit (loss) before taxes on income | (5) | 14 | 37 |
| Taxes on income | 2 | 2 | 4 |
| Net income (loss) | $ (7) | $ 12 | $ 33 |

**V. COMBINED FINANCIAL STATEMENTS OF 50% OWNED COMPANIES** The summarized financial statements shown below represent the combined accounts of principal companies in which Dow owns a 50 percent interest.

**Combined Balance Sheet**
**December 31, 1980 and 1979**
(In millions)

| | 1980 | 1979 |
|---|---|---|
| Current assets | $1,079 | $ 864 |
| Plant property — net | 1,800 | 1,359 |
| Other assets | 56 | 48 |
| Total assets | $2,935 | $2,271 |
| Current liabilities | $ 781 | $ 584 |
| Long-term debt | 420 | 279 |
| Other liabilities | 84 | 60 |
| Stockholders' equity | 1,650 | 1,348 |
| Total liabilities and stockholders' equity | $2,935 | $2,271 |

**Statement of Combined Income and Retained Earnings**
**Year Ended December 31**
(In millions)

| | 1980 | 1979 | 1978 |
|---|---|---|---|
| Sales | $2,447 | $1,800 | $1,433 |
| Cost of sales | 1,796 | 1,234 | 984 |
| Other expenses — net | 322 | 270 | 228 |
| Income before provision for taxes on income | 329 | 296 | 221 |
| Taxes on income | 128 | 109 | 97 |
| Net income | 201 | 187 | 124 |
| Retained earnings at beginning of year | 687 | 540 | 454 |
| Dividends declared | (53) | (40) | (38) |
| Retained earnings at end of year | $ 835 | $ 687 | $ 540 |

# Product Group Sales Analysis

| Chemicals/Metals Group | Uses | Approximate Sales (In millions) 1980 | 1979 | 1978 |
|---|---|---|---|---|
| *Inorganic Chemicals* | | $1,247 | $1,121 | $ 916 |
| *Major Products* | | | | |
| Caustic soda | Production of paper, alumina, rayon, petroleum products and industrial chemicals | | | |
| Chlorinated solvents | Metal cleaning, dry cleaning, paint removers | | | |
| Chlorine | Chemical intermediate, water treatment, paper | | | |
| Ethylene dibromide | Leaded gasoline, soil and grain fumigant | | | |
| *Organic Chemicals* | | 1,739 | 1,584 | 1,189 |
| *Major Products* | | | | |
| Acetone | Solvent, production of methyl methacrylate | | | |
| Ethylene glycol | Antifreeze, polyester fiber production, polyester bottles | | | |
| Glycerine | Alkyd resins, tobacco products | | | |
| Isocyanates and VORANOL polyglycols | Rigid, elastomeric and flexible urethane products and foams | | | |
| Phenol | Plastic resins and adhesives | | | |
| Propylene glycols | Polyester resins, pet food humectant | | | |
| *Metals* | | 350 | 321 | 291 |
| *Major Products* | | | | |
| Magnesium sheet, plate and extrusions | Commercial and military products | | | |
| Magnesium ingot | Aluminum alloys, steel processing | | | |
| *Functional Chemicals and Services* | | 1,018 | 765 | 663 |
| *Major Products & Services* | | | | |
| Calcium chloride | Highway deicing and dust control | | | |
| Dowell Division | Petroleum production services, industrial equipment cleaning | | | |
| *Hydrocarbons* | | 1,417 | 995 | 476 |
| *Major Products* | | | | |
| Ethylene/propylene | Chemical intermediate | | | |
| Naphtha | Petrochemical raw material | | | |
| Other petroleum products | Fuels, feedstocks | | | |
| Total sales | | $5,771 | $4,786 | $3,535 |
| **Plastics/Packaging Group** | | | | |
| *Molding Materials* | | $1,888 | $1,749 | $1,156 |
| *Major Products* | | | | |
| Acrylonitrile-butadiene-styrene (ABS)<br>DOWLEX linear low density polyethylene<br>High density polyethylene<br>Low density polyethylene<br>STYRON polystyrene | Used in injection molding, blow molding and extrusion processes for fabrication of articles and in the automotive, appliance, packaging, wire and cable, housewares, toy and construction industries | | | |

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| Plastics/Packaging Group (Cont.) | Uses | Approximate Sales (In millions) 1980 | 1979 | 1978 |
|---|---|---|---|---|
| *Coatings and Monomers* | | 1,410 | 1,301 | 970 |
| *Major Products* | | | | |
| Epoxy resins | Coatings, adhesives, laminates | | | |
| Styrene-butadiene latexes | Paper and carpeting | | | |
| Styrene monomer | Production of polystyrene plastic | | | |
| Vinyl chloride monomer | Production of polyvinylchloride plastic | | | |
| *Plastic Products* | | 428 | 408 | 353 |
| *Major Products* | | | | |
| Polyethylene film | Industrial packaging, agricultural use | | | |
| Polystyrene film | Functional and decorative packaging | | | |
| STYROFOAM polystyrene foam | Insulation, floral and craft uses | | | |
| SARAN film | Commercial packaging | | | |
| Total sales | | $3,726 | $3,458 | $2,479 |
| **Bioproducts/Consumer Product Group** | | | | |
| *Health Care Products and Services* | | $ 481 | $ 426 | $ 380 |
| *Major Products & Services* | | | | |
| Bio-Science Enterprises | Diagnostic services | | | |
| Diagnostic products and equipment | Medical laboratory tests | | | |
| NOVAHISTINE products | Cough and cold preparations | | | |
| RIFADIN and RIFOCIN antibiotics | Broad spectrum antibiotics used primarily for TB treatment | | | |
| LORELCO hypocholesterolemic | Cholesterol lowering drug | | | |
| *Agricultural Chemicals* | | 505 | 471 | 398 |
| *Major Products* | | | | |
| PLICTRAN miticide | Control of plant feeding mites | | | |
| DURSBAN insecticide | Broad range insecticide | | | |
| Phenoxy herbicides | Weed and brush control | | | |
| TORDON herbicide | Weed and brush control | | | |
| *Consumer Products* | | 143 | 114 | 96 |
| *Major Products* | | | | |
| DOW Bathroom Cleaner | Household use | | | |
| HANDI-WRAP plastic film | Household plastic film | | | |
| SARAN WRAP plastic film | Household plastic film | | | |
| ZIPLOC bags | Food storage | | | |
| Total sales | | $1,129 | $1,011 | $ 874 |

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Assistant Treasurer

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Assistant Secretary

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Hunter W. Henry
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L. C. Friedrich

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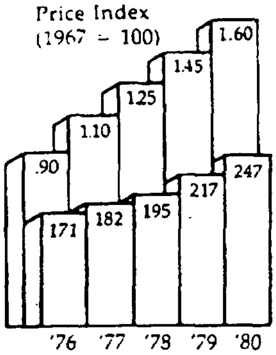
# Of Special Interest to Stockholders . . .

**Dow Dividends vs. Inflation**

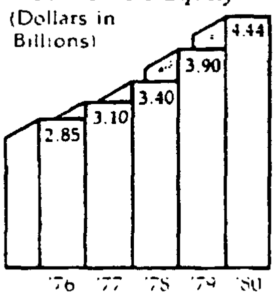
Dividends paid per share (Dollars)

U.S. Consumer Price Index (1967 = 100)




**Stockholders Equity**

(Dollars in Billions)

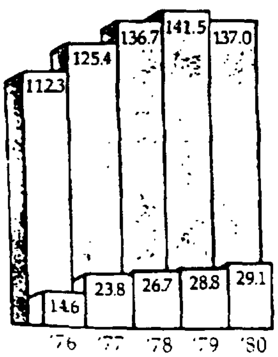



**Number of Stockholders and Participants in the Dividend Reinvestment Plan**

(Numbers in thousands)

Number of Stockholders

Participants in Dividend Reinvestment Plan




**Annual Meeting**

The 1981 Annual Meeting of stockholders will be held at 2 p.m. (EDT) Friday, May 8 in the Midland Center for the Arts, Midland, Michigan. A formal notice of the meeting, with a proxy statement and proxy form, will be mailed to each stockholder separately from this report.

**Form 10-K**

A copy of the company's annual report to the Securities and Exchange Commission on Form 10-K will be provided without charge to any stockholder requesting it in writing. Please address: Corporate Secretary, The Dow Chemical Company, 2030 Dow Center, Midland, Michigan 48640.

**Exchange Listings**

NYSE Symbol: DOW
New York, Midwest, Pacific, Amsterdam, Antwerp, Basel, Brussels, Dusseldorf, Frankfurt, Geneva, Hamburg, Hanover, London, Paris, Tokyo, Toronto, Zurich.

**Transfer Agents**

The AmeriTrust Company
P.O. Box 6477
Cleveland, Ohio 44101

The Royal Trust Company
P.O. Box 7500, Station A
Toronto 116, Ontario, Canada

**Registrars**

The AmeriTrust Company
P.O. Box 6477
Cleveland, Ohio 44101

Montreal Trust Company
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**Dividend Reinvestment Plan**

An automatic dividend reinvestment plan is available to all Dow stockholders. Information can be obtained by writing to: AmeriTrust Company, P.O. Box 6477, Cleveland, Ohio 44101.

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Cassette tapes for the blind of this report and quarterly reports can be obtained by writing: Financial Communications Manager, The Dow Chemical Company, 2030 Dow Center, Midland, Michigan 48640.

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