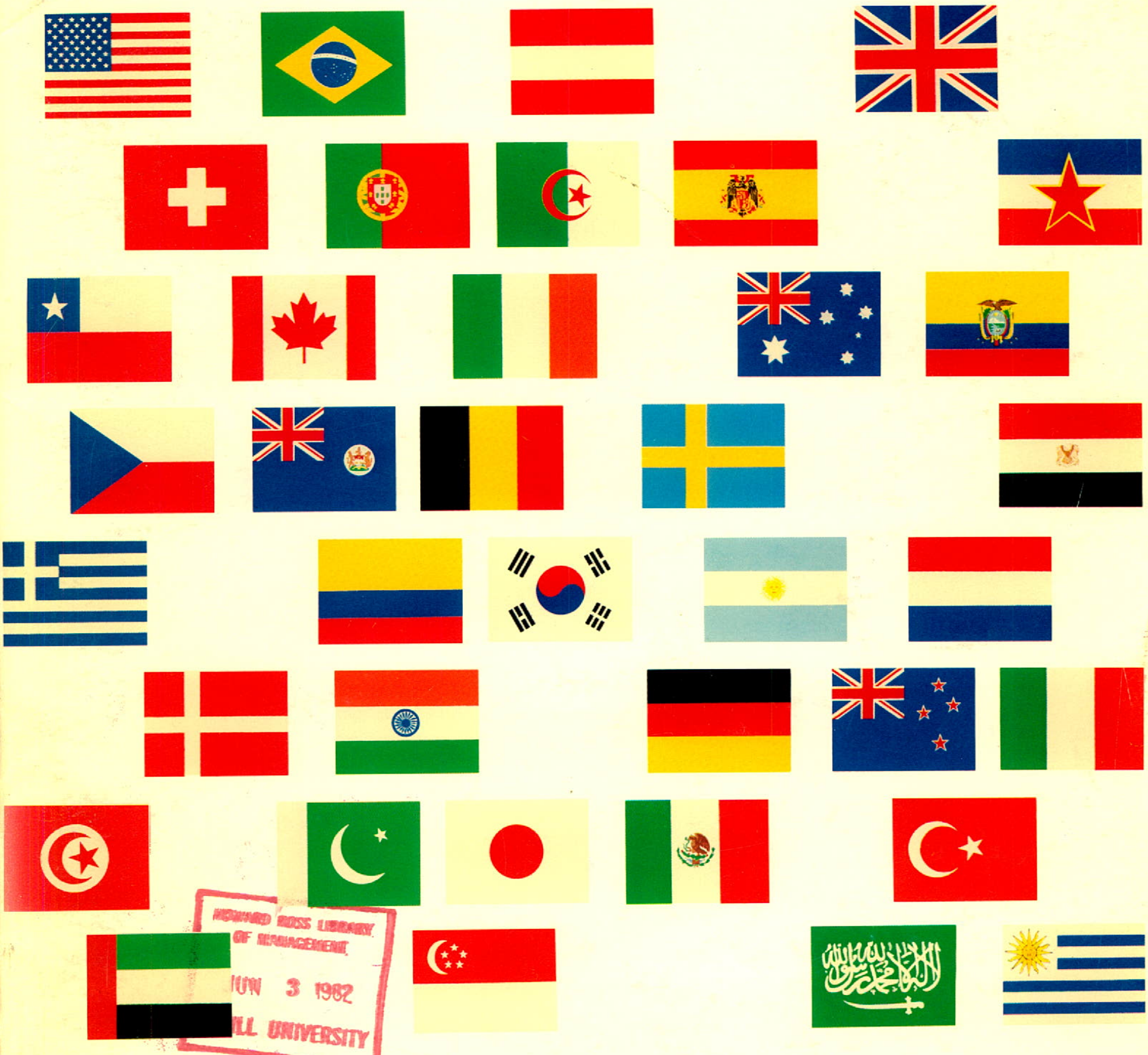
1981 Annual Report

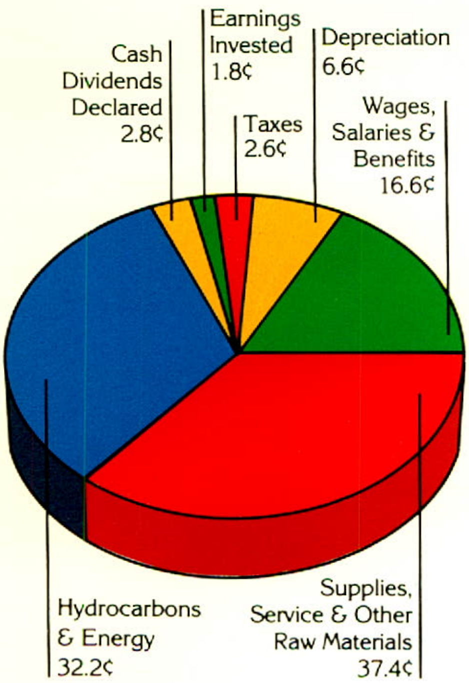


Highlights of the Year

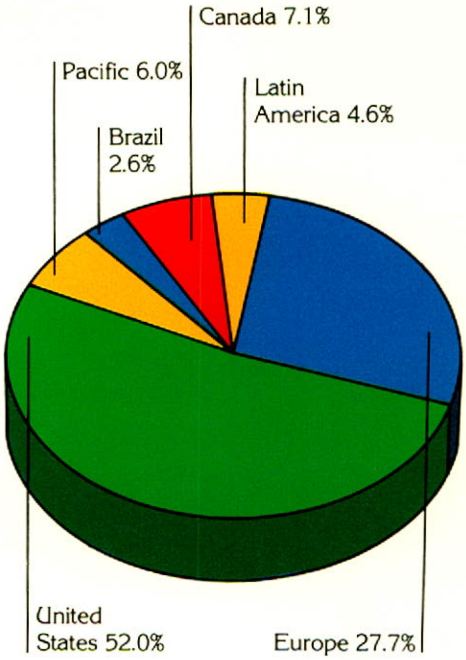
	1981	1980	% Change
	(In millions unless otherwise stated)		
Net sales	**$11,873**	$10,626	+11.7
U.S. and foreign income taxes	**176**	424	-58.5
Net income	**564**	805	-29.9
Net income per share (in dollars)	**3.00**	4.42	-32.1
Dividends paid per share (in dollars)	**1.80**	1.60	+12.5
Average shares outstanding	**188.0**	182.2	+ 3.2
Capital expenditures	**1,176**	1,184	- 0.7
Depreciation	**806**	728	+10.7
Research and development	**404**	314	+28.7
Wages, salaries and benefits	**2,036**	1,807	+12.7
Shareholders' equity at year-end	**4,891**	4,440	+10.2
Employees (in thousands at year-end)	**63.8**	56.8	+12.3

ON THE COVER are the flags of the 70 countries where Dow has plants, terminals and sales offices. A legend identifying the flags is located on the inside back cover of this report.

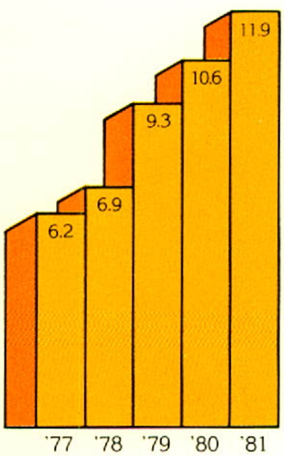
Distribution of the Income Dollar



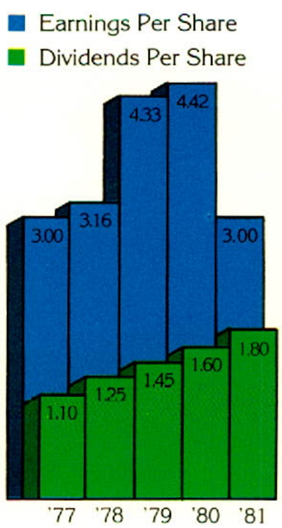
Area Sales



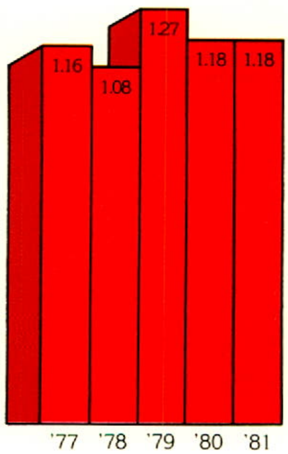
Sales
($ Billion)



Earnings Per Share and Dividends Per Share
(Dollars)

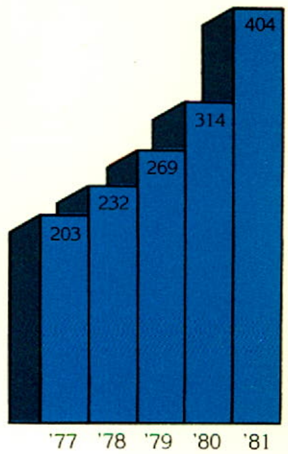


Capital Spending
($ Billion)



Research
($ Million)

R&D spending has increased for 22 consecutive years



To Our Stockholders

The Dow Chemical Company has always bet on its future, borrowing heavily to finance research and capital programs. Over the years, that strategy has proved sound. It has supported remarkable sales and profit growth and propelled the company into the very top rank of the world chemical industry.

But even the best of roads can have rocky spots, and we hit more than our share of bumps in 1981. A sagging worldwide economy and record high interest rates combined to make 1981 the most frustrating and difficult year for our company in my memory.

In past U.S. economic downturns, other parts of Dow's global business always did well and balanced the U.S. problems. It was that very prospect that led us to hedge our domestic bets with investments abroad. But this time, the recession hit everywhere at once, and there were no markets to take up the slack.

High interest rates coupled with our aggressive capital spending program over the past few years caused a significant increase in interest expense.

Moreover, we are paying a high price for a crude oil processing plant in Texas that we built as an "insurance policy" in the once likely event that natural gas would become unavailable through shortage or legislation. As things turned out, gas has continued to be available and we have been paying a "premium" for an expensive facility we do not now need. Much of that premium, I am happy to say, was paid in 1981.

On the other hand, Dow made significant headway in several other important areas. The company took a major stride forward in March, when it completed acquisition of the Merrell ethical pharmaceutical business from what is now the Richardson-Vicks Company. The merger made Dow's human health business 15th in sales in the United States and 20th worldwide. More important, it gave Dow a sufficient sales base to support the volume of research needed to compete in today's drug industry.

Merrell's sales force, product line and geographic mix dovetails nicely with Dow's. Consolidation of the two organizations is going smoothly and is well ahead of schedule.

The merger is important to Dow's future: in 1982 our pharmaceutical research expenditures will exceed $100 million, and we're working hard to make greater use of Dow's immense scientific know-how.

The merger also gives added impetus to Dow's continuing growth in specialties and services. Such businesses are contributing an increasing share of sales and profits. Sales of consumer products and agricultural chemicals increased 20 and 5 percent, respectively; profits in both groups rose at more than twice those rates. Calcium bromide experienced excellent growth as a well completion fluid in the oil and gas industry. Another popular product was ZETABON plastic cable sheathing — with sales up 27 percent.

The greatest gains, though, were posted by the Dowell Division and by Dowell-Schlumberger Limited (50 percent owned by Dow). The two provide a broad range of services and products for oil and gas well production. Dowell alone had a sales increase of 35 percent, going over the $1 billion mark for the first time. Together, the two units contributed about 30 percent of the company's total profit.

We are broadening this area of our business. Dowell entered the drilling fluids business following acquisition of two "mud" companies, complementing its acidizing, cementing and fracturing businesses. The division also undertook a major expansion of its research and development facilities at Tulsa. Over the years, Dow's various laboratories have developed numerous products used by Dowell in the oil fields. We spend some $150 million a year to purchase the specialized equipment Dowell needs to serve the booming oil and gas industry.

So much for the past. What about 1982? From all indications, the job won't be easy. Most economic forecasters predict the current recession will last well into the year. This presents a great challenge — a challenge to take decisive actions which will help our profit performance in 1982 and beyond.

Dow has taken such actions and I want to comment on them:

First, we have cut our capital spending program in 1982 by almost $400 million from our original plan and expect to spend less than $1 billion worldwide.

Second, we have set a goal of reducing our debt level over the next few years from 48 percent of total capitalization, to about 40 percent. We made a significant step in that direction this month, when we issued 4 million shares of stock to redeem $137 million worth of heavily discounted bonds.

Third, we are exercising very tight control of receivables, payables, inventories and the like. All of our people are attacking that job as never before.

Fourth, we have delayed merit increases for our employees, including all management personnel. We have also frozen manpower levels and expect attrition to reduce the personnel count of our already lean work force in many areas. We made some progress on this front in 1981. Although our total number of employees rose by 7,000, this was due exclusively to the Merrell acquisition and the expansion of the Dowell Division. Excluding these two units, our work force actually declined last year.

Fifth, we have sharply reduced non-essential travel, meetings and other discretionary expenditures. We are saving *everywhere.* For example, this annual report is eight pages smaller and much more austere than originally designed. That's more than two million pages we don't have to buy, print and mail.

Longer range, the nature of Dow's business is changing rapidly. We intend to maintain our position as a world leader in basic chemicals and plastics, but much of our future growth will come from specialized products and services which can grow more rapidly and generate a better return. Dowell and Merrell Dow are two good examples of this shift. Furthermore, research on exciting new agricultural products, genetic engineering and other new chemical fields represent fertile opportunities for growth in profits.

The challenge before us is difficult. I expect no miracles. But I promise you the leanest and most dedicated work force in our business. That's the best hedge I know of.

Paul F. Oreffice
President

February 16, 1982

The Year In Review

United States

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

Record sales were achieved by Dow Chemical U.S.A. in 1981, accounting for more than half of Dow's total revenue. Dow U.S.A. sales were $6.2 billion, up 20 percent over 1980 sales of $5.1 billion.

Sagging demand for large-volume basic chemicals and plastics, coupled with a poor pricing environment and an escalation of energy and feedstock costs, resulted in a pretax margin decline of 21 percent. Profit before taxes slipped from $809 million in 1980 to $636 million in 1981.

The worldwide economic slump abroad resulted in a reduction of exports from the United States. The market value of exports in 1981 was $1.1 billion compared with $1.2 billion for 1980.

There were a number of bright spots in Dow U.S.A. business, however. The brightest was the continued rapid growth of the Dowell Division which is engaged in oil and gas well servicing. Dowell operations accounted for 17 percent of Dow U.S.A. sales.

While many basic large-volume chemicals experienced sales declines, one basic workhorse chemical, caustic soda, did well in 1981, especially in new applications in enhanced oil recovery.

Several product lines showed substantial increases. Among those above 1980 sales were Dowlex linear low density polyethylene resins used in wire and cable jacketing, packaging, household products and in construction. Sales of Dowlex resins were up 56 percent.

Styrene butadiene latexes enjoyed an exceptionally good year due in part to their acceptance as fillers to replace fiber in composite paper making. Sales of Dowex ion exchange resins were up, partly due to their successful use in the power generation and sugar industries. Also gaining was Trycite plastic film.

Sales of popular ABS resin, for strong, light-weight plastic components in the automotive market were up two and one half times over that of 1980 in spite of the automotive industry's dismal year. Products sold to the urethane foam market also did very well and epoxy resins experienced one of the best years ever.

Several agricultural products showed gains in spite of declining farmer incomes. Profits for Dursban and Lorsban insecticides exceeded expectations, and N-Serve nitrogen stabilizer made impressive gains.

Other products exhibiting increased volume include propylene oxide, Ethafoam polyethylene foam, chloroform and glycerine.

Products with potential are water absorbent laminates for personal care products, fumed silica for silicone applications and light-weight titanium for use in the aircraft, aerospace and chemical process industries.

Dow has made a strong commitment to genetic engineering research through the purchase of an equity interest in Collaborative Research, Inc., a highly-respected bio-technology research organization.

Dow U.S.A. continued to make headway in energy conservation. Since 1972, energy consumption has been reduced by 24 percent; the goal is a 35 percent overall reduction by 1985. Installation of new energy-saving generators is underway on the Gulf Coast.

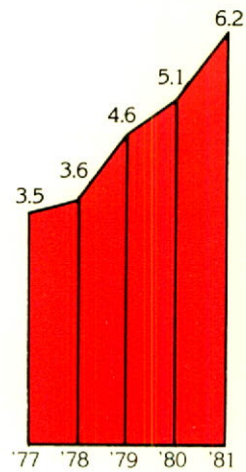
New terminals are under construction at Joliet, Illinois, and Bayonne, New Jersey, and a major expansion is underway at our terminal in Long Beach, California. These moves will assure continued rapid and efficient distribution to customers.

During the year, an aggressive inventory control program significantly reduced working capital, particularly through the reduction of crude oil and crude oil products inventories.

Dow employees in the United States completed the year with a frequency rate of 0.38 disabling injuries per million work hours, making the rate one of the lowest in the chemical industry, which itself is rated safest of all industries by the National Safety Council.

We derive no satisfaction from these statistics in view of the eight fatalities suffered during the year, six in a single accident. The company deeply regrets the loss of these eight men and is redoubling its efforts to prevent any accident which might cause injury or death.

United States Sales
($ Billion)



Europe

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

The depressed economic climate in Europe which began to affect Dow's performance in the second half of 1980 has exerted a marked influence in 1981.

Industrial production in the countries of the European Economic Community fell during 1981, the rate of unemployment has risen significantly and inflation continues at high levels across Europe. At the same time, very specific problems have had a substantial effect on the results of the major chemical companies operating in Europe, including Dow.

An inability on the part of producers to increase prices in the face of overcapacity continues to be the most significant factor affecting performance. In addition, the strengthened dollar adversely affected the translation of local European earnings into dollars.

Due primarily to these conditions, pretax profits for Dow Europe were held to $80 million on sales of $3.3 billion.

The acquisition of an ethylene cracker at Tarragona in Spain will provide both short- and long-term benefits to the company's operations. It will allow Dow direct access to raw materials, thus reducing manufacturing costs and establishing a competitive world-scale petrochemical plant in Southern Europe. By acquiring an already existing cracker, the company has gained the needed supply of ethylene quickly and without increasing capacity in the industry.

On the energy front, the Tarragona cracker and those at Terneuzen in The Netherlands are being modified to allow flexibility in the use of different feedstocks. Offshore, the company is involved in a consortium exploring for oil and gas in the North Sea.

Work has been going ahead on several capital investment projects, including the Dowlex linear low density polyethylene plant at Terneuzen, which is expected to begin operations in mid-1982. A Saranex film plant at Drusenheim, France, began operations in 1981.

Specialty chemicals now account for just over 30 percent of sales in Europe but contribute a larger proportion of profits. Among the star performers in the specialty area in 1981 were styrene butadiene latex used for coatings and backings, and Methocel cellulose ethers used in building materials and paint, among many other applications. This is not to mention the continuing success with Styrofoam plastic foam insulation products.

Industrial chemical business grew substantially in the Mid-East and Africa during 1981, particularly with urethane chemicals. In Europe, Dow has market leadership in propylene oxide, polyols and chlorinated solvents. Calcium bromides for use in oil well drilling applications have particular potential in the area serviced by Dow Europe.

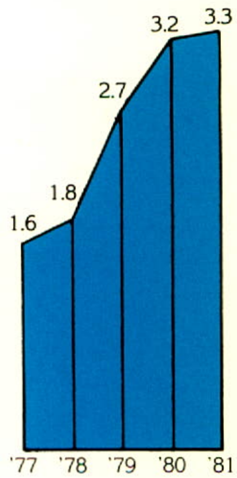
It was an excellent year for agricultural chemicals, which recorded particular success with the Lontrel and Dursban pesticides. Moreover, the company acquired Murphy Chemicals, an agricultural chemical distribution company in the United Kingdom, thus moving Dow closer to the end users.

Dow and the Saudi Basic Industries Corporation reached agreement on a joint venture, called Petrokemya, to be built at the new Jubail Industrial complex in eastern Saudi Arabia. Petrokemya will use the natural gas from the oil fields of Saudi Arabia as feedstock for a large scale petrochemical complex comprising an ethane cracker and downstream facilities.

The DINA joint venture in Yugoslavia is moving toward completion of its first phase — a low density polyethylene plant and a vinyl chloride unit. While an integrated complex remains the goal of the project, DINA's entry into olefins production will be timed to take account of developments in global supply and demand for petrochemicals.

In a major expansion, the Dow Banking Corporation's London subsidiary, Dow Scandia Banking Corporation, acquired Arbuthnot Latham Holdings, a public company which has had banking interests since 1833. This acquisition will allow Dow Scandia to extend the range of financial services which can be provided to customers around the world.

Europe Sales
($ Billion)



Canada

James M. Hay
President
Dow Chemical
Canada Inc.

In spite of slowed worldwide economic activity, sales grew to $837 million, up 15 percent from $731 million in 1980. Pretax profit was $67 million for 1981, a 14 percent increase from $59 million reported a year ago.

General operating performance exceeded that of 1980. Dow Canada exported about 30 percent of its chemical and plastic production in 1981. Worldwide marketing opportunities and the Canadian cost position made it possible to run Canadian plants at an average of 87 percent of capacity, up marginally from 1980.

Selling prices were under pressure for most products throughout 1981. Raw materials and energy costs continued to increase from Canada's low cost base. Weak worldwide vinyl chloride markets continued and this directly affected Dow Canada results. In addition, Canada's National Energy Program reduced profitability on Dowell operations there by about 50 percent.

The improvement in profit over 1980 is attributable primarily to oil and gas activities in Eastern and Western Canada. Dow Canada's chemicals and plastics business in total accounted for about the same level of profits as last year. Construction materials, pharmaceuticals and electrochemicals showed the best growth in volume and profits within this group. The profitability of the Alberta project was slightly over the breakeven point because of contributions from the Cochin Pipeline.

Late in the year, Alberta and the Federal Government reached a compromise on energy pricing. This removes much of the uncertainty from the business climate and provides a competitive base for continued natural gas-based petrochemical industry growth in Canada.

Pacific

Andrew J. Butler
President
Dow Chemical
Pacific Limited

Australia had an excellent year but the major export-oriented economies of the Pacific, like most of the world, were depressed in 1981, taking selling prices downward and area profits with them. Sales increased slightly over 1980 to $711 million but pretax profits declined to $29 million.

Most affected by price erosion were the large-volume industrial intermediates such as ethylene dichloride, vinyl chloride, polyols and polystyrene. Specialty products continued to grow strongly. Buttressed by the acquisition of significant Merrell sales organizations in Australia, The Philippines and New Zealand, the pharmaceutical department registered good sales and profit gains.

During 1981 several steps were taken to strengthen the Pacific Area in the 1980s. The first wholly U.S.-owned chemical plant in Japan, Dow's Kinu Ura polyol plant, came onstream supplying raw materials to Japan's growing urethane foam industry. The Gotemba Research Laboratory was expanded to provide technical service to Dow polyol customers.

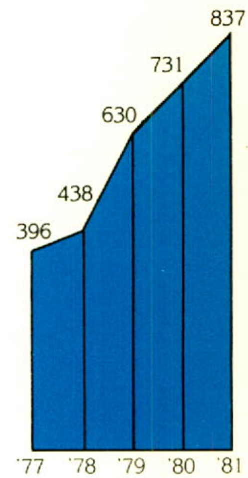
A major step was taken toward penetrating Japan's pharmaceutical market, second largest in the world, with an agreement for reciprocal joint ventures in the U.S. and Japan with Otsuka Seiyaku, a well-established Japanese drug manufacturer. Another joint venture with several Japanese companies for the manufacture of ethylene dichloride in Canada was close to signature at year-end.

During 1981, Styrofoam brand insulation was introduced to the Pacific in Hong Kong, Singapore and Australia.

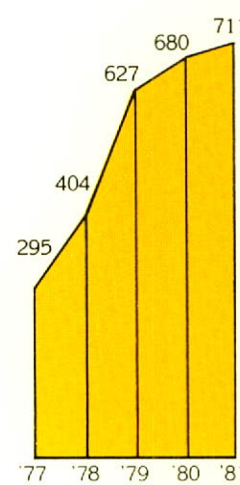
In Korea, more resources were deployed to marketing and technical service. Equipment was installed to provide hydrochloric acid to Korean customers.

Probing the vast, largely untapped potential market in The People's Republic of China, Dow personnel opened liaison offices in Beijing and Shanghai.

Canada Sales
($ Million)



Pacific Sales
($ Million)



Latin America

Enrique C. Falla
President
Dow Chemical
Latin America

In varying degrees, the Latin American economies turned sluggish at mid-year, dampened by inflation, high interest rates and a weak external sector. A strong U.S. dollar coupled with weak domestic markets prompted the reentry of European competitors into the Latin American markets early in the year. This increase in the level of competitive activity in a weakening market placed severe pressure on volume and prices.

Sales for the year were $545 million, down slightly from 1980. The area was able to attain a modest increase in prices, despite the fact that physical volume declined as a result of sluggish demand in basic chemicals and plastics. The increase in prices, however, was insufficient to offset increased costs. This, coupled with the reduction in physical volume, resulted in pretax profits declining to $53 million compared with $93 million in 1980.

Dow Latin America also succeeded in accelerating the growth and penetration of differentiated and higher value-added products. These chemical and plastic specialties, plus the major specialties in the pharmaceutical and agricultural businesses, rose significantly in sales and operating margin. They constituted about one-third of total sales, and have become the fastest growing segment of the area's business.

The agricultural business had an excellent year, doubling its pretax profits. Tordon herbicides continued in strong demand, and Lorsban insecticides penetrated into new geographical markets and new crop applications. A new Lorsban insecticide formulation for the cotton market was developed and successfully commercialized.

The area made good progress in strengthening its production base in specialty and semi-specialty products to satisfy local markets. On target for 1982 are the construction of a new Voranol polyols plant in Argentina, increased capacity for insecticide formulations in Colombia and additional agricultural chemical formulation facilities in Mexico.

Brazil

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

During 1981 Brazil recorded a negative industrial growth, an inflation of 97 percent and a devaluation of a like amount. The measures taken by the government to control the two major problems of the country, inflation and a negative trade balance, caused a severe recession throughout the majority of the economic sectors in Brazil, resulting in significant volume loss.

This reduced volume was the root cause of Dow Brazil's 1981 loss. Total yearly sales reached $306 million, compared to $300 million in 1980, with losses totaling $22 million against the past year's $13 million loss.

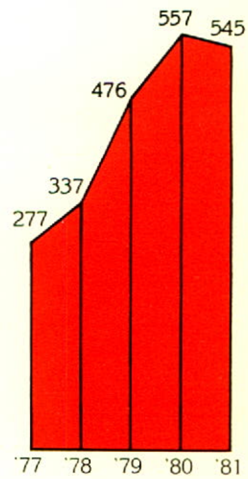
A significant portion of the 1981 loss occurred during the first six months of the year with the second half showing excellent improvement, which came as a result of the lifting of price controls on many items late in the first half.

In the industrial sector, the export of chlorinated compounds allowed an expansion of caustic soda sales. During the second half of the year, however, industries that use caustic soda, such as textiles, paper and aluminum, suffered a downturn, thus allowing the export of sizeable quantities of caustic. Some export sales of designed and plastic products helped to offset the 1981 versus 1980 volume drop of 30 to 35 percent in those products.

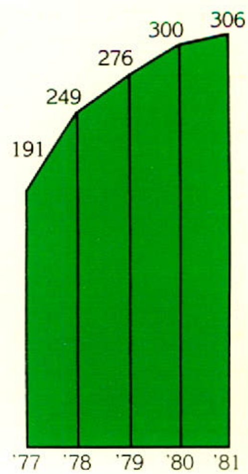
The sales of agricultural chemicals equaled the 1980 performance, but with a reduced profit margin. Lower volumes were partially offset by aggressive pricing.

The acquisition of the Brazilian subsidiary of AB Astra of Sweden provided Dow Brazil with much broader coverage of the country's pharmaceutical market by introducing a strong product line in cardiovasculars and anesthetics. These were added to Lepetit's traditionally strong antibiotic and antiemetic lines. These two lines coupled with the Merrell acquisition gave a combined sales total that placed Dow in the number one position in Brazil's pharmaceutical market.

Latin America Sales
($ Million)



Brazil Sales
($ Million)



Management Changes and Awards

The past year saw the following changes in the management of the company.

In an unprecedented move, the board of directors elected Carl A. Gerstacker a "director emeritus" on the occasion of his retirement from the board. Mr. Gerstacker had been a board member since 1948 and was chairman from 1960 to 1976.

Robert M. Keil, financial vice president, and David P. Sheetz, vice president and corporate director of research, were elected to the board of directors.

T. J. Walker, director of employee relations, was elected a vice president. He retains overall responsibility for employee relations.

Wayne M. Hancock was named general counsel of the company. He had been general counsel and a vice president of Dow Chemical Europe with overall responsibility for the Italian Region.

Roger L. Kesseler was named controller of the company. He had been manager of operations analysis.

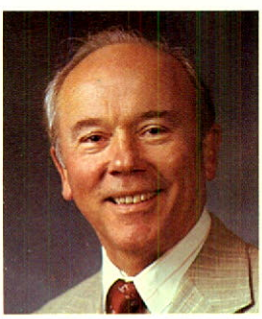
Several noteworthy honors were bestowed on Paul F. Oreffice, president and chief executive officer. The American Section of the Societe de Chimie Industrielle awarded him the International Palladium Medal in recognition of his many contributions in the United States and abroad in the furtherance of understanding and cooperation within the chemical professions and the chemical industries.

Earlier in the year, Mr. Oreffice was named the "CEO of the Year" in the chemical industry by Financial World magazine and by the Wall Street Transcript. He also was presented the Gold Knight of Management Award, one of the highest honors given by the National Management Association.


Carl A. Gerstacker


Robert M. Keil


David P. Sheetz


T.J. Walker


Wayne M. Hancock


Roger L. Kesseler

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

Liquidity and Capital Resources

The Consolidated Statement of Changes in Financial Position, included in the financial section of this report, has been changed from working capital to a liquid funds orientation. As a result, the movement in cash resources may be observed with greater ease and understanding.

Despite the reduction in funds provided from operations, which is a clear result of soft economic conditions worldwide, Dow remained amply liquid throughout 1981, and improved its liquidity base for the intermediate term. The company finished the year financially stronger than either 1980 or 1979, while continuing to implement its long-term programs during the year, which included capital spending of $1.2 billion, and an aggressive R&D program totaling $404 million.

Depreciation of $806 million and net income of $564 million amounted to 36 percent and 25 percent of funds provided in 1981. Depreciation, up 11 percent vs 1980 and 27 percent vs 1979, continues to be a significant factor in the company's liquidity, particularly in view of the decline in net income during 1981.

Several specific steps were taken during the year to insure liquidity for 1981 and for several years beyond. In the second half of 1981, Dow established an additional five-year revolving committed credit agreement of one billion dollars with a group of U.S. and foreign banks which provide a flexible medium term line of financing until such time as the credit market is conducive to a long-term bond issue. The debt can be prepaid and the agreement canceled by the company without penalty. Dow had committed credit facilities at December 31, 1981, totaling $2.9 billion. Of that amount, $2.3 billion was unused and available, up $548 million from the end of 1980 and $1.1 billion greater than 1979.

Based on projected internal cash generation, current levels of liquid assets and the credit capacity to support additional financing, the company expects to be able to competitively finance operating cash needs, planned capital expansions and dividend requirements throughout the foreseeable future.

Working capital as a percent of sales was 15 percent in both 1981 and 1980, but up from 12 percent in 1979. Despite poorer business conditions, days sales outstanding in receivables declined to 56 days at December 31, 1981 compared to 57 days in 1980 and 61 days in 1979. At December 31, current assets exceeded current liabilities by a ratio of 1.7, compared to ratios of 1.6 and 1.4 for 1980 and 1979, respectively.

Dow continues to search for opportunities to dispose of assets which are no longer productive or which do not fit its product strategies. Asset dispositions generated funds of $49 million in 1981, down from $103 million in 1980 and $166 million in 1979.

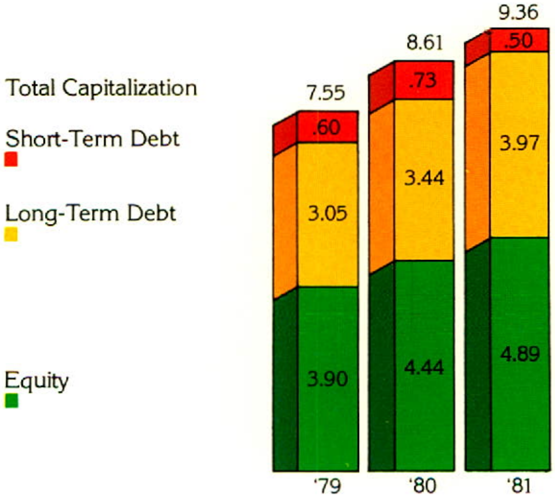
Financing

Dow believes in the appropriate use of leverage and makes every effort to maximize the return to its shareholders through the strategic use of debt, which increased during 1981 by $290 million, including $60 million acquired through the purchase of Richardson-Merrell Inc. The increase is down sharply from the $518 million added in 1980, but typical of years past.

Dow chose not to go to the long-term debt market with a major offering during the year. Financing was accomplished through the issuance of commercial paper and a drawdown of $500 million of the new one billion dollar revolving credit agreement.

In consideration of the current worldwide economic environment, particularly the high cost of money, Dow has chosen to implement several programs that will, over a period of time, appropriately reduce the company's leverage. The percentage of debt dropped to 47.5 percent from 48.2 percent of total capital in 1980, reflecting the initial impact of these programs.

Capitalization of the Company
($ Billion)



Management Discussion

The company issued 7.3 million shares of treasury stock, having a fair market value of $260 million, through a tax-free exchange for the purchase of the pharmaceutical business of Richardson-Merrell Inc.

Early in 1982, the company exchanged 4 million shares of its common stock for $137 million principal amount of long-term debt. In addition, two new long-term debt issues totaling approximately $140 million were completed in January 1982.

Plant Investments

Capital expenditures for plant totaled $1.2 billion in 1981, down slightly from each of the two prior years. The company's commitment to growth remains firm, but capital spending will most likely be less aggressive in the future as Dow shifts its product line toward less cyclical, less capital-intensive, high value-added products.

Results of Operations

A depressed worldwide economic environment, record high interest rates, strengthening of the dollar against foreign currencies and pressure on sales prices, combined to make 1981 an exceptionally difficult year. The downturn was particularly severe in the second half of the year and affected all of the major business segments, excepting the Dowell oil and gas well servicing division and the Bioproducts & Consumer Products business. Fourth quarter earnings suffered a steep decline from the combined effect of reduced operating rates and lower prices, particularly among such high volume plastics as polyethylene and polystyrene. Soft demand in major markets like automobiles and housing kept prices static despite the fact that the cost of raw materials continued to escalate; however, the growing emphasis on specialties and services helped cushion the effects of the sluggish business conditions.

Revenues and results of operations for 1981 reflect the acquisition of Richardson-Merrell Inc. effective March 10, 1981. Pro-forma results of operations, adjusted as though the acquisition had been effected as of January 1, 1980 are shown in note G on page 24. Also, 1981 included the effect of a realignment of last-in, first-out (LIFO) inventory pools for financial reporting purposes which provide for a better matching of costs and revenues, as described in note F, page 23, and the result of discontinuing the provision for deferred taxes on the 1981 earnings of the domestic international sales corporation (DISC) described in note E, page 22.

Sales

Net sales for 1981 of $11.9 billion were up 11.7 percent. Prices rose only 3.3 percent compared to a 14.2 percent increase in 1980, as weak economic conditions in most major industrial countries and the strengthening of the dollar against foreign currencies contributed to price declines, particularly in the European and Pacific Areas. Selling price changes for 1981 and 1980 were:

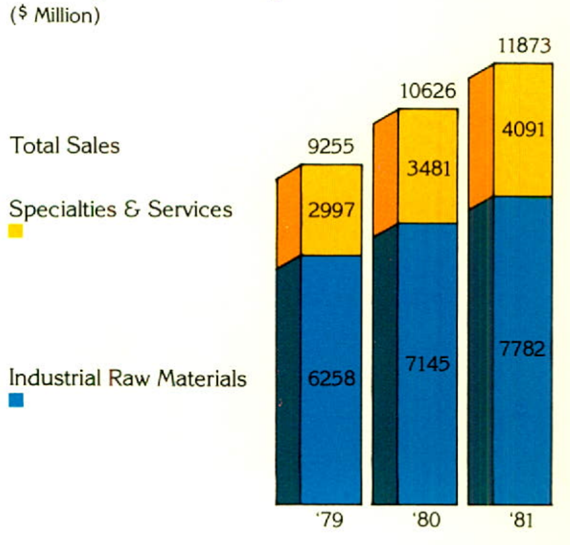
	Percent change from prior year	
	1981	1980
United States	9.2	16.8
Non-U.S.	(2.4)	11.9
Global	3.3	14.2

Industry segments, aggregating products on the basis of process technology, end-use markets and channels of distribution, were expanded to five in 1981 in recognition of the growing importance of the specialty products business and the petroleum production services of Dowell.

Shipments in terms of physical volume rose 8 percent for the year. The rise resulted from both a significant increase in sales of hydrocarbon feedstocks in Europe and products from the Crude Oil Processing Plant ("COPP") in the U.S., in combination with a general decline in many other product lines in the Industrial Chemicals and Plastics & Metals segments.

The newly acquired Merrell-Dow pharmaceutical business generated much of the gain in the Bioproducts & Consumer Products segment, and Dowell continued to experience outstanding sales growth throughout the year.

Sales by Product Group
($ Million)



Operating Income

The ratio of operating income to sales dropped to 7.7 percent in 1981 from 11.4 percent in 1980. Manufacturing cost increases exceeded selling price gains by $125 million, a significant factor in the profit margin decline. The change in some major costs were:

	Percent increase from prior year 1981	1980
Feedstocks and energy, per unit	11	34
Depreciation	11	15
Maintenance and repair	6	11
Research and development	29	17

Lower capacity utilization was also a negative factor in 1981 as plant operating rates dropped to 67 percent from 75 percent in 1980. The fourth quarter was a low point for the year when capacity utilization fell below 60 percent. The COPP unit at Oyster Creek, Texas, has been shut down and will be kept in a standby condition. The plant was constructed originally to supply the company's internal feedstock and fuel needs; however, the demand for ethylene has grown at a lower rate than forecasted several years ago. In addition, fuel oil demand is lower than anticipated due to the availability and competitive price of natural gas. When demand and economic conditions improve, the COPP unit will be available for operation; however, the company is actively continuing its effort to sell either all or a part of the COPP facility.

The unfavorable factors affecting operating income in 1981 impacted primarily the Industrial Raw Materials group. Industrial Chemicals operating income of $307 million in 1981 reflected a decline of $122 million. The Plastics & Metals segment sustained an operating income drop of $219 million to $67 million in 1981. The Specialty Products margin declined only slightly below the 1980 level; however, Dowell and Bioproducts & Consumer Products registered outstanding gains.

Operating statistics by industry segment and geographic areas are shown in greater detail in note R, page 28, and in the expanded commentary by areas on pages 4 through 7.

Net Income

Interest cost increased $149 million to $605 million in 1981, the result of higher interest rates and a substantial increase in the use of short-term debt throughout much of the year. Approximately $73 million of interest cost was capitalized in 1981 during construction of capital projects, compared to $71 million in 1980.

Sundry income for 1981 includes a pre-tax gain of $31 million, or $.11 per share, realized from the sale of stock in Magma Power Company when that firm was acquired by Natomas Corp., whereas 1980 included a pre-tax gain of $74 million, or $.28 per share from the sale of Wanda Petroleum Company, a wholly owned subsidiary.

The effective tax rate for 1981 was 23.7 percent compared to 34.3 percent in 1980. The difference was primarily due to increased investment tax credits, benefits from The Economic Recovery Tax Act of 1981, a greater share of pre-tax income from untaxed equity in companies consolidated on the equity basis, and from the change in DISC deferred tax accounting as explained in note E, page 22.

1980 Versus 1979

Sales in 1980 totaled $10.6 billion, an increase of 14.8 percent over 1979 sales of $9.3 billion. Higher prices accounted for 14.2 percent of the increase while volume remained at the 1979 level. Although business conditions were positive in early 1980 with demand strong, prices firm and plant utilization at a high level, mid-year saw resistance to needed price increases and a significant drop in sales. All geographic areas shared in the sales gain, however the Pacific and Brazilian Areas were limited to 8 percent and 9 percent, respectively.

Dowell sales experienced the largest growth by industry segment, up 45 percent. Industrial Chemicals gained 17 percent, primarily in hydrocarbon feedstocks, caustic soda, vinyl chloride, oxides and glycols. Both human health and consumer products realized substantial gains in the Bioproducts & Consumer Products segment.

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. Plastics & Metals operating income declined 30 percent following an outstanding year in 1979. Demand dropped sharply for polyolefins and styrene polymers as prices softened and costs continued to soar. Industrial Chemicals margin also declined due to unrecovered cost increases.

Additional borrowing and higher interest rates resulted in an increase in interest expense of $98 million to $456 million in 1980, of which $71 million was capitalized.

Net income for 1980 and 1979 each includes profit from the sale of hydrocarbon properties equal to $.28 per share.

QUARTERLY STATISTICS Unaudited results were as follows (in millions, except per share):

1981	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Year
Net sales	$2,897	$3,067	$2,924	$2,985	$11,873
Operating income	331	282	224	79	916
Net income	180	189	128	67	564
Earnings per common share	.98	1.00	.67	.35	3.00
Cash dividends paid per common share	.45	.45	.45	.45	1.80
Market price range of common stock:					
High	39.00	38.50	33.00	27.75	39.00
Low	32.13	31.63	23.63	23.38	23.38

1980	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Year
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

The first three quarters of 1981 have been restated to reflect the change in LIFO accounting and the change in DISC deferred tax accounting which were made in the fourth quarter, but effective for all of 1981.

SUPPLEMENTARY INFORMATION ON EFFECTS OF CHANGING PRICES Supplementary financial information, prepared in accordance with Financial Accounting Standards Board Statement No. 33, Financial Reporting and Changing Prices, shows certain income data presented in the historical cost income statement on page 17 adjusted to constant dollars and current costs expressed in dollar values generally at the average 1981 price level.

Consolidated Statement of Income Adjusted for Changing Prices
Year Ended December 31, 1981
(In millions)

	As Reported in the Financial Statements	Adjusted for General Inflation (Constant Dollars)	Adjusted for Changes in Specific Prices (Current Costs)
Net Sales	$11,873	$11,873	$11,873
Cost of sales, excluding depreciation	9,213	9,474	9,474
Depreciation expense	806	982	917
Interest expense—net	430	430	430
Other operating expense	684	684	684
Provision for taxes on income	176	176	176
	11,309	11,746	11,681
Income from continuing operations	$ 564	$ 127	$ 192
Purchasing power gain on net monetary liabilities held during the year		$ 393	$ 393

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, 1981, 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 $393 million.

Current Costs

Cost of sales was calculated by applying the last-in, first-out method to all inventories. The carrying value of $2,834 million for inventories at December 31, 1981 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 $9,789 million at December 31, 1981 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.

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	$171	$759	$ 930
Less — General inflation	241	794	1,035
Net	$ (70)	$ (35)	$ (105)

Comments on Inflation Accounting Results

Under both constant dollar and current cost methods, income from continuing operations is lower than that determined under the historical cost method. The principal reasons for the lower income are: (1) the worldwide use of double declining balance method of depreciation fell short in providing sufficient funds to replace capital assets using either constant dollar or current cost; and (2) the current cost of LIFO inventories liquidated in 1981 due to the substantial reduction in crude oil and refined petroleum product inventories. In addition, no tax reduction has been recognized for the effects of the reduction in real income before income taxes.

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.

Comparison of Selected Financial Data in Historical Dollars, Constant Dollars and Current Cost

(Dollars in millions, except per share data, all constant dollar and current cost data in average 1981 dollars)

	1981	1980	1979	1978	1977
Sales					
Historical dollars	$11,873	$10,626	$ 9,255	$ 6,888	$ 6,234
Constant dollars	11,873	11,728	11,597	9,602	9,357
Income from Continuing Operations					
Historical dollars	$ 564	$ 805	$ 784	$ 575	$ 554
Constant dollars	127	690	905		
Current costs	192	715	872		
Earnings per Share from Continuing Operations					
Historical dollars	$ 3.00	$ 4.42	$ 4.33	$ 3.16	$ 3.00
Constant dollars	.68	3.79	5.00		
Current costs	1.02	3.93	4.81		
Effective Income Tax Rate					
Historical dollars	23.7%	34.3%	39.2%	39.7%	40.0%
Constant dollars	57.3	40.1	41.2		
Current costs	47.3	39.2	42.0		
Gain Attributable to Holding Net Monetary Liabilities	$ 393	$ 519	$ 545		
Earnings per Share Including Gain Attributable to Holding Net Monetary Liabilities					
Historical dollars	$ 3.00	$ 4.42	$ 4.33	$ 3.16	$ 3.00
Constant dollars	2.77	6.64	8.01		
Current costs	3.11	6.78	7.83		
Excess of Constant Dollar over Current Cost Increase in value of inventories and net plant and properties	$ 105	$ 776	$ 444		
Stockholders' Equity at Year End					
Historical dollars	$ 4,891	$ 4,440	$ 3,897	$ 3,395	$ 3,097
Constant dollars	8,438	8,237	7,914		
Current costs	8,930	8,865	8,860		
Debt Ratio (%) at Year End					
Historical dollars	47.5%	48.2%	48.2%	49.7%	49.3%
Constant dollars	33.8	34.7	35.2		
Current costs	32.5	33.1	32.7		
Dividends Declared per Common Share					
Historical dollars	$ 1.80	$ 1.65	$ 1.50	$ 1.30	$ 1.15
Constant dollars	1.79	1.80	1.86	1.80	1.71
Market Price per Common Share at Year End					
Historical dollars	$ 26.25	$ 32.13	$ 32.13	$ 24.88	$ 26.75
Constant dollars	25.40	33.87	38.06	33.40	39.15
Average Consumer Price Index (1967 = 100)	272.4	246.8	217.4	195.4	181.5

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 Company in accordance with generally accepted accounting principles. The Board of Directors, through its Audit Committee, assumes an oversight role with respect to the preparation of 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 BOARD OF 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, 1981 and 1980, 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, 1981. 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, 1981 and 1980, 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, 1981, in conformity with generally accepted accounting principles consistently applied during the period except for the changes, with which we concur, in the accounting for interest cost and in the method of stating inventories as described in Notes B and F, respectively, to the financial statements.

Deloitte Haskins & Sells

Midland, Michigan
February 15, 1982

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 non-productive 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.

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

	Year Ended December 31		
	1981	1980	1979
		(In millions)	
Net Sales	$11,873	$10,626	$9,255
Operating Costs and Expenses			
Cost of sales	10,019	8,649	7,231
Selling and administrative	938	765	690
	10,957	9,414	7,921
Operating income	916	1,212	1,334
Other Income (Expense)			
Equity in earnings:			
Nonconsolidated subsidiaries (excluding translation)	13	24	18
Gains (losses) on translation for non-consolidated subsidiaries	(2)	(14)	2
20%-50% owned companies	132	127	103
Interest income	102	87	86
Interest and amortization of debt discount and expense	(532)	(385)	(358)
Gains (losses) on exchange and translation for consolidated subsidiaries	7	31	(8)
Sundry income — net	108	156	136
Income Before Provision for Taxes on Income	744	1,238	1,313
Provision for Taxes on Income	176	424	515
Income Before Minority Interest	568	814	798
Minority Interests' Share in Income	4	9	14
Net Income	$ 564	$ 805	$ 784
Earnings per Common Share	$ 3.00	$ 4.42	$ 4.33

See Accounting Principles and Notes to Financial Statements

Consolidated Balance Sheet

ASSETS

	December 31 1981	1980
	(In millions)	
Current Assets		
Cash	$ 26	$ 25
Marketable securities and interest-bearing deposits (at cost, approximately market)	67	143
Accounts and notes receivable:		
Trade (less allowance for doubtful receivables — 1981, $53; 1980, $56)	1,671	1,660
Other	608	499
Deferred income tax benefits	26	129
Inventories:		
Finished and work in process	1,438	1,415
Materials and supplies	675	519
Total Current Assets	4,511	4,390
Investments		
Capital stock of related companies — at cost plus equity in accumulated earnings:		
Banking and insurance subsidiaries	182	166
Associated companies (50% owned)	783	690
20%-49% owned companies	130	110
Other investments (at cost)	156	86
Noncurrent receivables	176	175
Total Investments	1,427	1,227
Plant Properties	10,984	9,873
Less — Accumulated depreciation	4,810	4,201
Net Plant Properties	6,174	5,672
Goodwill	228	109
Deferred Charges and Other Assets	156	140
TOTAL	$12,496	$11,538

See Accounting Principles and Notes to Financial Statements

LIABILITIES

	December 31 1981	1980
	(In millions)	
Current Liabilities		
Notes payable	$ 448	$ 617
Long-term debt due within one year	48	119
Accounts payable:		
Trade	983	974
Other	345	209
United States and foreign taxes on income	69	215
Accrued and other current liabilities	795	669
Total Current Liabilities	2,688	2,803
Long-Term Debt	3,968	3,438
Deferred Credits and Other Liabilities		
Deferred income taxes	840	745
Deferred employee benefits	65	68
Minority interests in subsidiary companies	44	44
Total Other Liabilities	949	857
Stockholders' Equity		
Common stock (authorized 500,000,000 shares of $2.50 par value each; issued 1981, 203,340,584; 1980, 202,076,376)	509	505
Additional paid-in capital	538	516
Retained earnings	4,090	3,868
Total	5,137	4,889
Less — Treasury stock, at cost (1981, 13,947,509; 1980, 19,374,411 shares)	246	449
Net Stockholders' Equity	4,891	4,440
TOTAL	$12,496	$11,538

See Accounting Principles and Notes to Financial Statements

Consolidated Statement of Additional Paid-In Capital

	1981	Year Ended December 31 1980 (In millions)	1979
Balance at Beginning of the Year	$516	$480	$447
Add (Deduct):			
Excess of selling or market price over par value of common stock issued to employees	31	32	30
Income tax benefit realized from sale of common stock to employees	1	4	3
Excess of cost over market value of treasury shares issued in acquisition of Richardson-Merrell Inc.	(10)		
Balance at End of the Year	$538	$516	$480

Consolidated Statement of Retained Earnings

	1981	Year Ended December 31 1980 (In millions)	1979
Balance at Beginning of the Year	$3,868	$3,365	$2,859
Add (Deduct):			
Net income	564	805	784
Adjustments related to subsidiary companies			(6)
Cash dividends declared (per share — 1981, $1.80; 1980, $1.65; 1979, $1.50)	(342)	(302)	(272)
Balance at End of the Year	$4,090	$3,868	$3,365

See Accounting Principles and Notes to Financial Statements

Consolidated Statement of Changes in Financial Position

	Year Ended December 31 1981	1980	1979
		(In millions)	
Funds Provided By:			
Net income	$ 564	$ 805	$ 784
Charges (credits) to income not requiring outlay of funds:			
Depreciation	806	728	634
Equity in net income of nonconsolidated companies, less dividends received	(104)	(99)	(92)
Deferred income taxes	218	169	106
Funds from operations	1,484	1,603	1,432
New long-term debt	628	650	317
Increase (decrease) in short-term debt and current portion of long-term debt	(272)	135	141
Increase in current payables and accruals	49	53	523
Sale of common stock to employees	35	40	37
Disposition of property and noncurrent investments	49	103	166
Common stock issued in acquisition of Richardson-Merrell Inc.	260		
Total Funds Provided	2,233	2,584	2,616
Funds Used For:			
New plant properties	1,176	1,184	1,268
Cash dividends declared	342	302	272
Purchase of treasury stock	67		40
Reduction in long-term debt	158	267	199
Increase in current accounts and notes receivable	44	106	405
Increase in inventories	110	621	314
Increase in noncurrent receivables and sundry assets	113	127	58
Investment in related companies	16	61	207
Acquisition of businesses (less cash and securities of $32):			
Plant properties	128		
Goodwill	128		
Other assets — net	26		
Total Funds Used	2,308	2,668	2,763
Net Decrease In Funds	(75)	(84)	(147)
Cash and marketable securities, beginning of year	168	252	399
Cash and marketable securities, end of year	$ 93	$ 168	$ 252

See Accounting Principles and Notes to Financial Statements

Notes to Financial Statements

A. SUBSEQUENT EVENTS The Company entered into an Exchange Agreement and Plan of Reorganization with Salomon Brothers Inc dated February 16, 1982 to issue 4,000,000 shares of its stock in exchange for Dow bonds owned by Salomon Brothers Inc having a face value of $137 million. This exchange of long-term debt for equity resulted in an extraordinary gain of $57 million, or $.30 per common share. In addition, $500 million of long-term debt was retired subsequent to year-end and two new long-term debt issues aggregating approximately $140 million were completed in January 1982.

Maligne Resources Limited, a wholly-owned subsidiary of Dow Chemical Canada Inc., has agreed to purchase from Dome Energy Limited a 12-1/2 percent interest in certain oil and gas properties of Hudson Bay Oil and Gas Company Limited ("HBOG") located in western Canada for approximately 220 million Canadian dollars ($186 million at December 31, 1981 exchange rates) in cash. In addition, the agreement requires additional payments over a five-year period based on revaluation of the properties to reflect changing prices, royalties and taxes. If current assumptions regarding future escalation of energy prices prove true, the additional payments would be in the order of 240 million Canadian dollars ($202 million at December 31, 1981 exchange rates). Funds for the initial purchase amount will be obtained through loans from a group of banks and will be collateralized by existing properties of Maligne and the HBOG properties to be acquired.

Dow Chemical Iberica, S.A., a Spanish subsidiary, has entered into an agreement with Empresa Nacional del Petroleo, S.A. ("Enpetrol"), to purchase an olefin steam cracker presently owned by Enpetrol. The acquisition cost of approximately 14.4 billion pesetas ($147 million at December 31, 1981 exchange rates) will be guaranteed by the Company. The purchase is expected to be completed in the first quarter of 1982.

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 1981 and 1980 was $605 million and $456 million, respectively, of which $73 million was capitalized in 1981 and $71 million was capitalized in 1980. The effect of the change was to increase earnings per common share in 1981 and 1980 by approximately $.20 each year.

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

	Year Ended December 31		
	1981	1980	1979
	(In millions)		
Royalty income	$ 28	$ 24	$ 21
Gain on sale of hydrocarbon properties		74	85
Profit on securities	33	18	6
Profit on redemption of long-term debt	14	14	3
Other — net	33	26	21
Total	$108	$156	$136

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 common 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 common share.

D. SUPPLEMENTARY INCOME STATEMENT INFORMATION

	Year Ended December 31		
	1981	1980	1979
	(In millions)		
Maintenance and repairs	$633	$597	$537
Depreciation and depletion of plant properties	806	728	634
Research and development	404	314	269
Taxes, other than U.S. and foreign taxes on income:			
Property & other taxes	145	126	113
Payroll taxes	144	129	120
Provision for doubtful receivables	12	15	18

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		
	1981	1980	1979
	(In millions)		
Domestic	$ 526	$ 849	$ 851
Foreign	218	389	462
Income before tax	$ 744	$1,238	$1,313

This classification of profit before tax will differ from note R, page 28, which presents revenue and profits allocated by geographic area in accordance with area management organization.

The provision for taxes on income consisted of:

(In millions)	Federal	State and Local	Foreign	Total
1981				
Current ...	$(103)	$(1)	$ 62	$(42)
Deferred ..	200	—	18	218
Total ...	$ 97	$(1)	$ 80	$176
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

The current tax provision was reduced by investment tax credits of $115 million in 1981, $94 million in 1980 and $98 million in 1979.

Deferred tax provisions related to the following:

	1981	1980	1979
	(In millions)		
Tax effects of foreign exchange transactions	$(44)	$ (9)	$ 49
Excess of depreciation and depletion claimed for tax purposes over book amounts	137	125	113
Undistributed earnings of foreign subsidiaries deemed not to be permanently invested	4	13	11
Income of export and shipping companies operating outside the United States	8	29	2
Difference between LIFO method claimed for tax purposes and book amounts	108	(2)	(39)
Other—net	5	13	(30)
Total	$218	$169	$106

Prior to 1981, the Company provided taxes on the full earnings of its domestic international sales corporation (DISC), including deferred taxes of $198 million which remain accrued at December 31, 1981. The Company has determined that commencing with the year ended December 31, 1981, the tax deferred earnings of the DISC will be permanently invested and that under present statutes no tax on those earnings will be payable.

The effect of this change in estimate was to increase net income for the year ended December 31, 1981 by $17 million and increase earnings per common share by $.09.

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

	Percent 1981	1980	1979
Statutory rate	46.0	46.0	46.0
U.S. investment credits	(11.8)	(6.1)	(6.3)
Taxes on income of foreign operations at tax rates different from U.S. statutory rate (including DISC)	(7.6)	(2.4)	0.7
Untaxed equity in income of companies whose accounts are not consolidated	(5.9)	(2.9)	(3.5)
State and local income taxes (net of federal tax)	0.3	0.5	0.6
Other	2.7	(0.8)	1.7
Effective rate	23.7	34.3	39.2

Unremitted earnings of subsidiary and 50%-owned companies which are deemed to be permanently invested amounted to approximately $1.5 billion, $1.3 billion and $1.2 billion at December 31, 1981, 1980 and 1979, respectively.

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

F. INVENTORIES Beginning in 1974, inventories have been valued, for both tax and financial reporting purposes, under the last-in, first-out method (LIFO) using inventory pools corresponding to business segments. In 1981, the Internal Revenue Service changed its requirement that inventories be the same for both tax and financial reporting. As a result of that modification, the Company realigned its LIFO inventory pools for financial reporting purposes to correspond to product groups rather than business segments, thereby achieving, in the opinion of management, a better matching of cost and revenue. The change was made effective January 1, 1981. The effect of the change was to increase net income for the year ended December 31, 1981 by $101 million and increase earnings per common share by $.54. Pro forma amounts for retroactive application or the cumulative effect of this change are not determinable.

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, 1981 and 1980 was $713 million and $799 million.

Notes to Financial Statements

G. ACQUISITIONS Under the terms of an Agreement and Plan of Reorganization with Richardson-Merrell Inc. (RMI), the Company acquired the ethical pharmaceutical business of RMI in exchange for approximately 7.3 million shares of Dow common stock having a fair market value of $260 million. The acquisition was accounted for as a purchase, and, accordingly, revenues and results of operations since March 10, 1981 are included in the Consolidated Statement of Income. The excess of the purchase price over the fair value of the net assets acquired of $119 million is being amortized on a straight-line basis over 40 years. Pro-forma results of operations, adjusted as though the acquisition had been effected as of January 1, 1980, are as follows (in millions, except per share data):

	1981	1980
Net sales	$11,928	$10,918
Net income	$ 566	$ 806
Income per common share	$ 2.99	$ 4.26
Common shares outstanding	189.5	189.5

During 1981, the Company acquired three small subsidiaries, each of which was accounted for as a purchase. The effect of these acquisitions on the results of operations for the current and prior year was not material.

H. NOTES PAYABLE Notes payable at December 31, 1981 and 1980 included commercial paper in the amounts of $155 million and $320 million, respectively. Substantially all of the remainder were obligations due banks with a variety of interest rates and maturities.

I. PLANT PROPERTIES Plant properties consisted of the following:

	December 31 1981	December 31 1980
	(In millions)	
Land	$ 191	$ 163
Land and waterway improvements	341	285
Buildings	866	751
Machinery and equipment	7,933	7,243
Wells and brine systems	329	269
Office furniture and equipment	182	153
Oil and gas land and leaseholds	129	132
Other	120	74
Construction in progress	893	803
Total	$10,984	$9,873

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

	December 31 1981	December 31 1980
	(In millions)	
Land	$ 1	$ 1
Buildings	2	2
Machinery and equipment	144	155
Office furniture and equipment	7	7
Total	154	165
Less—Accumulated depreciation	104	104
Net	$ 50	$ 61

Minimum lease commitments at December 31, 1981 were as follows:

	Capital Leases	Operating Leases
	(In millions)	
1982	$ 14	$ 98
1983	13	103
1984	13	94
1985	12	82
1986	12	73
1987 and thereafter	80	518
Total minimum lease payments	144	$968
Less—Estimated executory costs	1	
Net minimum lease payments	143	
Less—Amounts estimated to represent interest	56	
Present value of net minimum lease obligations	87	
Less—Current accounts payable	8	
Long-term capital lease obligations	$ 79	

Minimum operating lease commitments have not been reduced by minimum sublease rentals of $2 million due in the future under noncancelable subleases.

Rental payments under operating leases charged to expense were:

	Year Ended December 31 1981	1980	1979
	(In millions)		
Minimum rentals	$147	$108	$92
Contingent rentals	11	10	8
Less—Sublease rentals	(4)	(1)	(3)
Net	$154	$117	$97

K. 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 (in millions):

Aggregate amount of capitalized costs at December 31:	
1981	$704
1980	604
Accumulated depreciation and depletion at December 31:	
1981	142
1980	114
Expenditures for property acquisition and development during:	
1981	109
1980	194
Exploration and production (lifting) costs during:	
1981	129
1980	81
1979	51
Present value of estimated future net revenues (unaudited) at December 31:	
1981	775
1980	535
Estimated quantities of proved oil and gas reserves (unaudited) at December 31 were:	
Crude oil, condensate and natural gas liquids (millions of barrels):	
1981	40.5
1980	32.4
Natural gas (billions of cubic feet):	
1981	702.5
1980	656.0

L. RETIREMENT PLANS The Company and its subsidiaries have several retirement plans covering substantially all of their employees, including certain employees in foreign countries. The cost of all retirement plans was $121 million in 1981, $127 million in 1980 and $115 million in 1979. The Company makes annual contributions to the plans equal to the amounts accrued for pension expense, as determined by the aggregate cost method of valuation. A comparison of accumulated plan benefits and plan assets for the Company's domestic defined benefit plan, representing approximately 90 percent of accumulated pension plan benefits for the Company and its consolidated subsidiaries, follows:

	January 1 1982	January 1 1981
	(In millions)	
Actuarial present value of accumulated plan benefits:		
Vested	$ 887	$ 894
Nonvested	188	184
	$1,075	$1,078
Net assets available for benefits	$1,026	$1,044

Effective January 1981, the Company changed its investment return assumption for the domestic defined benefit plan from 6.5 percent to 8.0 percent and changed its pay increase assumption from 3 percent to 6 percent. These changes were adopted to reflect assumptions which will more clearly match anticipated future experience and are reflected in the actuarial present value of accumulated plan benefits at January 1, 1982. The net effect of the changes was to reduce pension expense by $16 million and increase net income by $9 million, or $.05 per common share. Actuarial assumptions include an average retirement age of 62 and turnover based on experience.

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 January 1, 1981 and 1980, available assets in other plans exceeded vested benefits by approximately $65 million and $50 million, respectively.

M. 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 $11 million in 1981, $14 million in 1980 and $7 million in 1979 were offset in income tax expense by an equivalent amount of investment tax credit.

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

	December 31 1981	1980
	(In millions)	
Promissory notes:		
12.85%, final maturity 1985	$ 150	$ 150
8.00%, final maturity 1986	120	120
4.50%, final maturity 1990	60	65
5.00%, final maturity 1991	52	56
Debentures:		
8.78%, final maturity 1987, Canadian dollar	213	212
4.35%, final maturity 1988	35	40
6.70%, final maturity 1998	60	60
7.75%, final maturity 1999	59	64
8.85%, final maturity 1999	60	
8.875%, final maturity 2000	89	104
8.90%, final maturity 2000	94	103
7.40%, final maturity 2002	71	74
7.625%, final maturity 2003	71	76
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	400
Bonds:		
8.50%, final maturity 1989, Swiss franc	33	34
9.625%, final maturity 1994	197	198
Other—Various rates and maturities:		
Foreign currency loans	109	93
Brazilian U.S. dollar loans	163	215
Other U.S. dollar loans	607	100
Pollution control/Industrial revenue bonds	231	175
Capital lease obligations	79	85
	3,978	3,449
Less—Unamortized debt discount	10	11
Total	$3,968	$3,438

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

The average interest rate on long-term debt was 9.2% in 1981 compared to 9.1% in 1980.

Annual installments on long-term debt and capital lease obligations for the next five years are as follows (in millions): 1982, $48; 1983, $144; 1984, $185; 1985, $332; 1986, $749.

Unused and available credit facilities from various United States banks totaling $675 million at December 31, 1981 required the retention of average cash balances aggregating approximately $39 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 $1.1 billion at December 31, 1981 required the payment of commitment fees.

Both of these groups of facilities, totaling $1.8 billion, are available in support of commercial paper borrowing or long-term financing arrangements.

Additional unused credit facilities totaling $544 million at December 31, 1981 are available for use by foreign subsidiaries.

O. RELATED COMPANY TRANSACTIONS
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 nonconsolidated subsidiaries and companies which are 20%-50% owned at December 31, 1981 and 1980 were $406 million and $379 million, respectively.

Noncurrent receivables at December 31, 1981 and 1980 included $42 million and $47 million, respectively, from 20%-50% owned companies.

Dividends received from related companies were $39 million in 1981, $38 million in 1980 and $31 million in 1979.

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

P. 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:

	1981	1980	1979
Beginning of the year	202,076	200,555	199,082
Sold to employees	1,265	1,519	1,463
Conversion of debentures	—	2	10
End of the year	203,341	202,076	200,555

At December 31, 1981, 1980 and 1979, shares of common stock (in thousands) outstanding were 189,393; 182,702 and 181,181, after deducting

13,948; 19,374 and 19,374 shares of treasury stock, respectively.

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

	Shares 1981	1980	1979
Stock option and award plans	8,544	9,354	9,969
Employees' stock purchase plan	698	1,135	1,194
Conversion of debentures	12	12	14
Total shares reserved	9,254	10,501	11,177

Retained earnings of the Parent company were approximately $1,650 million at December 31, 1981, and there were no significant restrictions limiting the availability for dividend purposes.

Retained earnings includes approximately $1,751 million of undistributed earnings of consolidated subsidiaries, of which $181 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 $689 million and $587 million at December 31, 1981 and 1980, 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.

Q. STOCK OPTION AND AWARD PLANS

Stock option plans and management incentive awards related to consolidated net income are described in the Company's Proxy Statement of March 1982. Options under all plans are granted at market price of the shares on the date of the grants. A summary of transactions during the last two years for such plans is as follows:

	1981 Deferred Stock (In thousands)	1981 Dividend Units (In thousands)
Granted during year	70	5
Outstanding at December 31	521	349
Available for grant at December 31	1,694	1,483

	1980 Deferred Stock (In thousands)	1980 Dividend Units (In thousands)
Granted during year	14	6
Outstanding at December 31	475	369
Available for grant at December 31	1,762	1,488

Shares of common stock under option for all plans were:

	1981 Number of Shares (In thousands)	1981 Option Price Range
Outstanding at December 31	4,238	$22.14 - $41.875
Granted during year	884	$25.50 - $36.125
Exercised during year	168	$22.14 - $37.00

	1980 Number of Shares (In thousands)	1980 Option Price Range
Outstanding at December 31	3,990	$22.14 - $53.09
Granted during year	835	$32.25
Exercised during year	215	$22.14 - $37.00

	1981 (In thousands)	1980
Options expired or terminated during year	468	532
Options exercisable at December 31	3,372	3,166
Options available for grant at December 31	2,056	3,075

Aggregate amounts charged to expense for all plans were $1 million in 1981, $10 million in 1980 and $12 million in 1979.

The Company made offerings of common stock to its employees, excluding directors, in 1981 and 1980 at $30.40 per share and $27.60 per share, respectively, payable generally through payroll deductions. Unfilled subscriptions (in thousands), cancelable at the option of the employee, were 698 and 1,135, respectively, at December 31, 1981 and 1980. Partial payments on these subscriptions aggregating $14 million and $20 million at December 31, 1981 and 1980, respectively, are included in current liabilities.

R. 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 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	Consoli-dated
Year ended December 31, 1981:								
Sales to unaffiliated customers	$6,182	$3,292	$ 837	$ 711	$ 545	$306		$11,873
Transfers between areas	924	241	192	1	9	44	$(1,411)	
Operating income	680	135	110	42	56	7	(114)	916
Profit (loss) before tax	636	80	67	29	53	(22)	(99)	744
Identifiable assets	6,793	2,530	1,513	626	397	533	104	12,496
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
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

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

Aggregation of products into industry segments is generally made on the basis of process technology, end-use markets and channels of distribution. Principal industry segments were expanded to five in 1981 in recognition of the growing importance of the specialty products business and the petroleum production services of Dowell. Segment results for 1980 and 1979 were restated to provide consistency between periods. The Industrial Chemicals segment embodies commodity chemicals and hydrocarbon intermediates. The Plastics and Metals segment includes large volume polyethylene and polystyrene products and the Company's magnesium business. The Specialty Products segment is comprised of functional chemicals and a variety of plastic coatings, films and foams. Petroleum production services and industrial equipment cleaning are in the Dowell segment. The Bioproducts and 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):

	Industrial Chemicals	Plastics & Metals	Specialty Products	Dowell	Bioproducts & Consumer Products	Elim. and Corp. Items	Consolidated
Year ended December 31, 1981:							
Sales to unaffiliated customers	$5,673	$2,109	$1,605	$1,031	$1,455		$11,873
Intersegment transfers	1,994	163	414		8	$(2,579)	
Operating income	307	67	238	205	99		916
Identifiable assets	5,900	1,800	936	720	1,607	1,533	12,496
Depreciation	496	117	69	57	67		806
Additions to property	676	179	112	127	82		1,176
Year ended December 31, 1980:							
Sales to unaffiliated customers	$4,921	$2,224	$1,567	$ 762	$1,152		$10,626
Intersegment transfers	1,666	118	272		8	$(2,064)	
Operating income	429	286	256	167	74		1,212
Identifiable assets	5,746	1,672	903	587	1,152	1,478	11,538
Depreciation	443	117	66	45	57		728
Additions to property	745	180	95	95	69		1,184
Year ended December 31, 1979:							
Sales to unaffiliated customers	$4,201	$2,057	$1,435	$ 527	$1,035		$9,255
Intersegment transfers	1,415	91	218		7	$(1,731)	
Operating income	532	407	238	93	64		1,334
Identifiable assets	5,162	1,517	776	443	1,011	1,343	10,252
Depreciation	375	114	57	35	53		634
Additions to property	894	138	96	76	64		1,268

Transfers between industry segments are generally valued at standard cost. The effect of the LIFO accounting change discussed in note F is reflected in the segment operating income for 1981; however, the determination of the impact on individual segment results is not practicable.

S. COMMITMENTS AND 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, 1981, 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 process steam from a nuclear power plant being constructed by Consumers Power Company at Midland, Michigan. If the Company terminates the contract due to circumstances specified in the contract, Consumers may claim that the Company is obligated to pay a termination fee, which as of December 31, 1981 was estimated to be either $280 million or $560 million depending upon the circumstances giving rise to the termination.

As a general partner of several partnerships, the Company may be liable for any deficiencies which may arise in meeting the terms of loan obligations incurred by the partnerships. Assets of the partnerships which have been pledged as security for these loans are currently in excess of the loan obligations.

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 $243 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 $207 million.

A subsidiary of the Company and Saudi Basic Industries Corporation jointly organized Arabian Petrochemical Company ("Petrokemya"), a limited liability partnership which will produce ethylene, linear low density and high density polyethylene and ethylene glycol at Al-Jubail, Saudi Arabia. The Company's capital investment is estimated at $215 million and Petrokemya will borrow 70 percent of the $1.4 billion project cost from institutions in Saudi Arabia.

T. CONDENSED CONSOLIDATED FINANCIAL STATEMENTS OF DOW BANKING CORPORATION The Company reduced its holding in this Swiss subsidiary from 100 percent to 76 percent in November 1980.

Dow Banking Corporation
Consolidated Balance Sheet
December 31, 1981 and 1980
(In millions)

	1981	1980
Cash and due from banks	$ 571	$ 442
Marketable securities	269	289
Bills discounted	120	57
Loans and overdrafts	598	424
Other assets	96	41
Total assets	$1,654	$1,253
Demand and time deposits	$1,447	$1,061
Other liabilities	54	37
Stockholders' equity	153	155
Total liabilities and stockholders' equity	$1,654	$1,253

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

	1981	1980	1979
Operating income	$ 178	$ 122	$ 88
Operating expenses	171	112	76
Net operating income	7	10	12
Loss (gain) on translation	2	15	(2)
Profit (loss) before taxes on income	5	(5)	14
Taxes on income	2	2	2
Net income (loss)	$ 3	$ (7)	$ 12

U. COMBINED FINANCIAL STATEMENTS OF PRINCIPAL 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, 1981 and 1980
(In millions)

	1981	1980
Current assets	$1,155	$1,079
Plant property — net	1,985	1,800
Other assets	84	56
Total assets	$3,224	$2,935
Current liabilities	$ 943	$ 781
Long-term debt	409	420
Other liabilities	92	84
Stockholders' equity	1,780	1,650
Total liabilities and stockholders' equity	$3,224	$2,935

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

	1981	1980	1979
Sales	$2,536	$2,447	$1,800
Cost of sales	1,821	1,796	1,234
Other expenses — net	373	322	270
Income before provision for taxes on income	342	329	296
Taxes on income	118	128	109
Net income	224	201	187
Retained earnings at beginning of year	835	687	540
Dividends declared	(59)	(53)	(40)
Retained earnings at end of year	$1,000	$ 835	$ 687

Geographic Results
(Unaudited)

		1981	1980	1979
			(dollars in millions)	
Sales	United States	$ 6,182	$ 5,133	$ 4,583
	Europe	3,292	3,225	2,663
	Canada	837	731	630
	Pacific	711	680	627
	Latin America	545	557	476
	Brazil	306	300	276
	TOTAL	$11,873	$10,626	$ 9,255
Operating Income	United States	$ 680	$ 741	$ 725
	Europe	135	341	382
	Canada	110	95	78
	Pacific	42	74	118
	Latin America	56	90	108
	Brazil	7		23
	Unallocated	(114)	(129)	(100)
	TOTAL	$ 916	$ 1,212	$ 1,334
Profit (Loss) Before Tax	United States	$ 636	$ 809	$ 689
	Europe	80	312	348
	Canada	67	59	144
	Pacific	29	75	124
	Latin America	53	93	102
	Brazil	(22)	(13)	(3)
	Unallocated	(99)	(97)	(91)
	TOTAL	$ 744	$ 1,238	$ 1,313
Gross Plant Properties	United States	$ 6,687	$ 6,057	$ 5,488
	Europe	2,064	1,855	1,631
	Canada	1,312	1,158	1,059
	Pacific	299	273	243
	Latin America	138	97	82
	Brazil	484	433	406
	TOTAL	$10,984	$ 9,873	$ 8,909
Capital Expenditures	United States	$ 711	$ 754	$ 748
	Europe	212	235	126
	Canada	149	113	292
	Pacific	30	33	58
	Latin America	38	15	8
	Brazil	36	34	36
	TOTAL	$ 1,176	$ 1,184	$ 1,268
Employees (thousands)	United States	38.6	34.8	34.1
	Europe	13.0	11.3	11.4
	Canada	4.4	4.0	3.8
	Pacific	2.1	2.0	1.9
	Latin America	2.5	2.5	2.5
	Brazil	3.2	2.2	2.2
	TOTAL	63.8	56.8	55.9

Product Group Sales Analysis

Principal Products and Services

	Uses	Approximate Sales (In millions) 1981	1980	1979
Industrial Chemicals Group				
Inorganic Chemicals		$1,637	$1,648	$1,483
Caustic soda	Production of paper, alumina, rayon, petroleum products and industrial chemicals			
Calcium chloride	Road deicing and dust control			
Chlorinated solvents	Metal cleaning, dry cleaning, paint removers, paints and electronics			
Chlorine	Chemical intermediate, water treatment, paper			
Ethylene dibromide	Soil fumigant and lead scavenger			
Vinyl chloride monomer	Production of polyvinylchloride			
Organic Chemicals		1,914	1,857	1,723
Acetone	Solvent, production of methyl methacrylate			
Ethylene glycol	Antifreeze, polyester fiber production			
Glycerine	Alkyd resins, tobacco products			
VORANATE isocyanates and VORANOL polyols	Flexible foam and rigid, elastomeric urethane products and foams			
Phenol	Plastic resins and adhesives			
Propylene glycols	Polyester resins, pet food humectant			
Styrene monomer	Production of polystyrene plastic			
Hydrocarbons		2,122	1,416	995
Ethylene/propylene	Chemical intermediate			
Naphtha	Petrochemical raw material			
Other petroleum products	Fuels, feedstocks			
Total sales		$5,673	$4,921	$4,201
Plastics and Metals Group				
Plastic Materials		$1,761	$1,888	$1,749
Acrylonitrile-butadiene-styrene (ABS) DOWLEX linear low density polyethylene High density polyethylene Low density polyethylene STYRON polystyrene	Used in injection molding, blow molding and extrusion processes for fabrication of articles and in the automotive, appliance, dairy, food packaging, wire and cable, housewares, toy and construction industries			
Metals		348	336	308
Magnesium sheet, plate and extrusions	Commercial and military products			
Magnesium ingot	Aluminum alloys, steel processing			
Total sales		$2,109	$2,224	$2,057
Total Industrial Raw Materials		**$7,782**	**$7,145**	**$6,258**

	Uses	Approximate Sales (In millions) 1981	1980	1979
Specialty Products Group				
Functional Chemicals		$ 345	$ 334	$ 292
Ion exchange resins	Water purification			
METHOCEL cellulose ethers	Building materials, paint, pharmaceuticals			
SEPARAN flocculant	Mining, pulp and paper industries, enhances oil recovery			
Plastic lined piping products	Handling corrosive fluids			
Coatings		849	834	735
Epoxy resins	Coatings, adhesives, laminates			
Styrene butadiene latexes	Paper and carpeting			
Plastic Products		411	399	408
Polyethylene film	Industrial packaging, agricultural use			
TRYCITE polystyrene film	Window envelopes, functional and decorative packaging			
STYROFOAM polystyrene foam	Insulation, buoyancy, floral and craft uses			
SARAN film	Commercial packaging			
Total sales		$1,605	$1,567	$1,435
Dowell Group				
Dowell services	Petroleum production services, equipment cleaning, mining products and services	$1,031	$ 762	$ 527
Bioproducts and Consumer Product Group				
Human Health		$ 723	$ 481	$ 426
Bio-Science Enterprises	Laboratory products and services			
CĒPACOL products	Oral hygiene			
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		533	506	471
DURSBAN insecticide	Industrial uses			
LORSBAN insecticide	Agricultural uses			
N-SERVE nitrogen stabilizer	Fertilizer supplement			
Phenoxy herbicides	Weed and brush control			
TORDON herbicide	Weed and brush control			
Consumer Products		199	165	138
DOW Bathroom Cleaner	Household cleaner			
DOWGARD antifreeze	Automotive use			
HANDI-WRAP plastic film	Household plastic film			
SARAN WRAP plastic film	Household plastic film			
ZIPLOC bags	Food storage			
Total sales		$1,455	$1,152	$1,035
Total Specialties and Services		**$4,091**	**$3,481**	**$2,997**

Ten-Year Summary of Selected Financial Data

(In millions, except per share)

	1981	1980
Summary of Operations		
Net sales	$11,873	$10,626
Cost of sales	10,019	8,649
Selling and administrative	938	765
Operating income	916	1,212
Investment and sundry income — net	258	324
Interest expense — net	(430)	(298)
Income before provision for taxes	744	1,238
Taxes on income	176	424
Minority interests' share in income	4	9
Income before extraordinary items and cumulative effect of accounting change	$ 564	$ 805
Per share of common stock (in dollars) (*):		
Income before extraordinary items and cumulative effect of accounting change	$ 3.00	$ 4.42
Cash dividends paid per share	$ 1.80	$ 1.60
Average common shares outstanding (thousands) (*)	187,961	182,162
Year-End Financial Position		
Total assets	$12,496	$11,538
Working capital	1,823	1,587
Property, plant and equipment — gross	10,984	9,873
Property, plant and equipment — net	6,174	5,672
Long-term debt	3,968	3,438
Total debt	4,464	4,174
Shareowners' equity	4,891	4,440
Financial Ratios		
Research and development expense as percent of sales	3.4%	3.0%
Income before provision for taxes as percent of sales	6.3%	11.6%
Return on average shareholders' equity	12.1%	19.3%
Book value per common share (*)	$ 26.02	$ 24.30
Borrowings as a percentage of total capital invested	47.5%	48.2%
General		
Capital expenditures	$ 1,176	$ 1,184
Depreciation	806	728
Research and development expenses	404	314
Taxes (major)	465	679
Wages and salaries paid	1,675	1,468
Cost of employee benefits	361	339
Number of employees at year-end (thousands)	63.8	56.8
Market price of common stock (*)		
High	$ 39.00	$ 39.25
Low	23.38	28.25
Close on December 31	26.25	32.13

* Adjusted for stock splits.

(a) Extraordinary items, net of tax, were an addition to net income of $12, or $.06 per share, in 1974, and $4, or $.02 per share, in 1973.

(b) Accounting changes were a reduction of net income of $42, or $.22 per share, in 1974, and $6, or $.03 per share, in 1972. If the accounting change is applied retroactively, pro forma net income before extraordinary items would be: 1974, $3.03; 1973, $1.40; 1972, $.98.

1979	1978	1977	1976	1975	1974	1973	1972
$9,255	$6,888	$6,234	$5,652	$4,888	$4,939	$3,068	$2,404
7,231	5,284	4,734	4,125	3,398	3,395	2,227	1,758
690	552	480	431	413	406	330	286
1,334	1,052	1,020	1,096	1,077	1,138	511	360
251	153	131	104	141	41	58	58
(272)	(237)	(220)	(161)	(108)	(90)	(93)	(93)
1,313	968	931	1,039	1,110	1,089	476	325
515	384	372	420	474	523	199	130
14	9	5	7	6	6	9	8
$ 784	$ 575	$ 554	$ 612	$ 630	$ 560(a)(b)	$ 268(a)	$ 187(b)
$ 4.33	$ 3.16	$ 3.00	$ 3.30	$ 3.40	$ 3.03(a)(b)	$ 1.46(a)	$ 1.02(b)
$ 1.45	$ 1.25	$ 1.10	$ .90	$ .73	$ .55	$ .48	$ .45
181,149	182,091	184,354	185,412	185,205	185,022	184,228	182,648
$10,252	$8,789	$7,752	$6,944	$5,942	$5,193	$3,993	$3,408
1,138	1,165	874	744	766	605	549	379
8,909	8,038	7,158	6,171	5,104	4,239	3,439	3,105
5,236	4,762	4,277	3,649	2,885	2,334	1,875	1,745
3,055	2,937	2,473	1,998	1,684	1,427	1,340	1,202
3,656	3,398	3,056	2,506	2,042	1,706	1,599	1,514
3,897	3,395	3,097	2,847	2,432	1,939	1,523	1,326
2.9%	3.4%	3.3%	3.3%	3.4%	3.0%	3.8%	4.4%
14.2%	14.1%	14.9%	18.4%	22.7%	22.0%	15.5%	13.5%
21.5%	17.7%	18.6%	23.2%	28.8%	30.6%	19.1%	14.3%
$21.51	$18.74	$16.95	$15.35	$13.12	$10.49	$ 8.25	$ 7.23
48.2%	49.7%	49.3%	46.4%	45.2%	46.3%	50.5%	52.6%
$1,268	$1,075	$1,163	$1,200	$ 935	$ 890	$ 415	$ 359
634	562	493	420	364	343	275	235
269	232	203	188	167	149	118	105
748	572	550	597	636	614	314	218
1,301	1,113	976	888	791	739	612	516
297	263	224	205	171	149	102	85
55.9	53.5	53.2	53.0	53.1	53.3	49.8	48.8
$34.88	$30.88	$43.50	$57.25	$47.75	$34.75	$33.94	$26.69
24.38	22.00	25.25	38.38	26.88	24.94	23.25	19.50
32.13	24.88	26.75	43.38	45.81	27.50	28.75	25.38

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Of Special Interest to Stockholders . . .

Annual Meeting

The 1982 Annual Meeting of Stockholders will be held at 2 p.m. (EDT) Friday, May 14 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.

Transfer Agents

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

The Royal Trust Company
P.O. Box 7500, Station A
Toronto, Ontario, Canada M5W 1P9

Registrars

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

Montreal Trust Company
15 King Street West
Toronto, Ontario, Canada M5H 1B4

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.

Cassette Tapes Available

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.

Corporate Headquarters

The Dow Chemical Company
2030 Dow Center, Midland, Michigan 48640
Tel: 517-636-1000

ON THE COVER are the flags of countries where Dow has facilities. Shown below are the names of the countries in the order they appear on the cover.

Philippines	Ivory Coast	Finland	Poland	
United Republic of Cameroon	Malaysia	Indonesia		
Dominican Republic	Sudan	Norway	Iraq	
Thailand	Republic of South Africa	Peru	France	
Taiwan	Hungary	Mozambique	Angola	
Venezuela	Kuwait	People's Republic of China	Bulgaria	Morocco
Costa Rica	German Democratic Republic (East Germany)	Guatemala		
Romania	Zimbabwe	Senegal	Union of Soviet Socialist Republics	Nigeria

United States	Brazil	Austria	United Kingdom	
Switzerland	Portugal	Algeria	Spain	Yugoslavia
Chile	Canada	Ireland	Australia	Ecuador
Czechoslovakia	Hong Kong	Belgium	Sweden	Egypt
Greece	Colombia	Republic of Korea	Argentina	Netherlands
Denmark	India	German Federal Republic (West Germany)	New Zealand	Italy
Tunisia	Pakistan	Japan	Mexico	Turkey
United Arab Emirates	Singapore	Saudi Arabia	Uruguay	

The Dow Chemical Company
Midland, Michigan 48640