Annual Report 1976

AKZO

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Translation

Annual meeting of stockholders to be held at the RAI Congress Center, Europaplein, Amsterdam, on Thursday, May 5, 1977, at 10.30 a.m.

Agenda

1 Opening

2 Report of the board of management for the financial year 1976

3 Approval of the balance sheet and statement of income, with notes; consideration of proposal to pass the dividend

4 Determination of the number of members of the supervisory council; appointment of members of the supervisory council

5 Determination of the number of members of the board of management; appointment of a member of the board of management

6 Annual decision concerning issues as required by the London Stock Exchange*

7 Any other business

Akzo N.V. common stock is listed on the following stock exchanges:

the Netherlands: Amsterdam
West Germany: Frankfurt, Düsseldorf and West Berlin
Belgium: Brussels and Antwerp
United Kingdom: London
France: Paris
Norway: Oslo
Austria: Vienna
Switzerland: Zurich, Basel and Geneva

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* annually recurring agenda item in re compliance with the requirements of the London Stock Exchange concerning the listing of Akzo shares on that stock exchange

Supervisory council and board of management

Supervisory council

J. R. M. van den Brink, chairman
H. M. van Mourik Broekman, deputy chairman
P. M. H. van Boven
P. M. van Doormaal
H. L. Merkle
Y. Scholten
Mrs. K. Schudel-van Zwanenberg
W. F. G. L. Starrenburg
F. H. Ulrich
L. Vaubel
J. de Vries
O. Wolff von Amerongen

Board of management

G. Kraijenhoff, president
S. C. Bakkenist, deputy president
H. J. Schlange-Schöningen, deputy president
A. G. van den Bos
H. van Doodewaerd
A. van Driel
H. Kramers
H. J. Kruisinga
J. Veldman
H. J. J. van der Werf
J. A. Wolhoff
H. G. Zempelin

Adviser: W. K. N. Schmelzer

Secretary

A. H. M. Wentholt

Akzo N.V., 82 IJssellaan, Arnhem, the Netherlands

Report of the supervisory council

At the annual meeting of stockholders held May 6, 1976, K. Soesbeek, W. F. G. L. Starrenburg and F. H. Ulrich, whose terms of office had ended, resigned from the supervisory council. Mr. Starrenburg and Mr. Ulrich were eligible for re-appointment and were re-appointed by the stockholders.

The resignation of Mr. Soesbeek, who had reached the retirement age, marked the end of an association with the company which had extended over a period of more than fifty years. Great appreciation was expressed for his capable and dedicated furtherance of the company's interests.

D. W. van Krevelen resigned from the board of management, having reached the retirement age. The meeting expressed gratitude for the able and inspiring manner in which he had for many years directed the company's research and development efforts.

H. J. J. van der Werf, president of Akzo Zout Chemie since January 1, 1976, was appointed to the board of management by the stockholders.

At the annual meeting of stockholders convened for May 5, 1977, P. M. van Doormaal, H. M. van Mourik Broekman and L. Vaubel, whose terms of office are due to end, will resign from the supervisory council. Having reached the retirement age, Mr. van Doormaal and Mr. van Mourik Broekman are not eligible for re-appointment.

Stockholders will be asked to appoint to the council S. C. Bakkenist, who will resign from the board of management having reached the retirement age. His proposed appointment will give the company the continued benefit of his wide-ranging experience and ability.

A proposal will be submitted to stockholders to reduce the council's membership to eleven.

At the end of the year under review, J. van den Driest and B. Zevenbergen, who had expressed a wish to resign, relinquished their seats on the board of management. Throughout their long careers, Mr. van den Driest and Mr. Zevenbergen made valuable contributions to the company.

Stockholders will be asked to appoint A. A. Loudon, now president of Akzo Ltda (Brazil) to the board of management. Mr. Loudon will be specifically charged with the conduct of social policy.

Effective May 5, 1977, the supervisory council has appointed A. G. van den Bos and J. A. Wolhoff deputy presidents of the board of management. As from the same date, the president and the three deputy presidents (Messrs. Kraijenhoff, van den Bos, Schlange-Schöningen and Wolhoff) will constitute an executive committee.

While the other members of the board will be charged with the management of divisions and Group companies or with the responsibility for functional activities within the Group, the members of the executive committee jointly will be in charge of overall Group policy and management. This change in the division of tasks within the board of management has our full approval.

In conformity with the arrangements made at the time of his appointment, G. Kraijenhoff will resign the presidency and membership of the board of management in May, 1978. We intend to appoint A. G. van den Bos to succeed him as president.

Considering the serious problems in the man-made fibers sector and their impact on the Group, additional consultations were again held with the board of management in the year under review.

We have approved the policy pursued by the board of management in this sector. We deem the new measures which are now the subject of consultation between Enka Glanzstoff and personnel representatives to be indispensable for a return to healthy conditions.

We herewith submit to you the financial statements, comprising the balance sheet and statement of income, with notes, inclusive of the consolidated statements of the Group, prepared by the board of management for the financial year 1976. These financial statements have been examined by Klynveld Kraayenhof & Co., *Registeraccountants*. Their report appears on page 50.

We approve these financial statements, which show a net loss, inclusive of extraordinary items, of Hfl 153 million, which has been charged against reserves.

The continued unsatisfactory development of business in the year under review has prompted a proposal by the board of management to pass the 1976 dividend.

We have no option but to agree to this proposal and, consequently, suggest that you also approve the financial statements, thus discharging the responsibility of the members of the board of management for their conduct of the business and of the members of the supervisory council for their supervision.

Arnhem, March 24, 1977

For the supervisory council,

J. R. M. van den Brink,
chairman

Financial highlights

on an historical-cost basis	1976	1975
in Hfl million		
sales	10,750	9,717
value added	3,679	3,145
operating income (loss)	305	(17)
net income (loss) before extraordinary items	6	(193)
net income (loss) after extraordinary items	(153)	(440)
funds from operations*	503	370
property, plant and equipment		
capital expenditures	413	745
depreciation	533	519
stockholders' equity	2,628	2,984
per share of common stock, par value Hfl 20 per share, in Hfl		
net income (loss) before extraordinary items	0.20	(6.53)
net income (loss) after extraordinary items	(5.16)	(14.86)
dividend	–	–
stockholders' equity	88.78	100.80

on a current-value basis (see pages 46 and 47)		
in Hfl million		
operating income (loss)	77	(315)
net income (loss) before extraordinary items	(125)	(342)
stockholders' equity	3,193	3,585
per share of common stock, par value Hfl 20 per share, in Hfl		
net income (loss) before extraordinary items	(4.22)	(11.56)
stockholders' equity	107.87	121.14

number of employees	91,100	98,200

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* total of Group income (loss) and charges to income not requiring funds; see page 40

Report of the board of management

General review

Lagging recovery

In retrospect, the year 1976 evokes mixed feelings. A gratifying feature was the distinct improvement in business compared with 1975, when heavy losses were sustained. However, income fell considerably short of our original expectations.

Sales increased 11% from Hfl 9,717 million to Hfl 10,750 million. Net income before extraordinary items was Hfl 6 million, compared with a net loss before extraordinary items of Hfl 193 million in 1975. The low level of income achieved in 1976, which we consider to be unsatisfactory, was caused by a net loss, before extraordinary items, of approximately Hfl 170 million suffered by our man-made fibers; the part of this loss that is attributable to operations within the EEC is approximately Hfl 150 million.

The rationalization measures in the man-made fibers sector announced in the fourth quarter of 1976 necessitated the formation of a Hfl 63 million special provision to meet the financial consequences of decommissioning of facilities and reductions in the number of jobs. Moreover, a further provision in the amount of Hfl 75 million was made to cover the risk of future additional write-downs, likewise in the fibers sector. These provisions are included in the extraordinary items shown in the statement of income.

The 1976 net loss amounts to Hfl 153 million (1975: Hfl 440 million), and is composed of a net loss of over Hfl 300 million for man-made fibers and net earnings of over Hfl 150 million for the two other main product groups.

We have included in the financial statements a section dealing with the effect of price rises on Group equity and income, as we did last year. If operating costs are recomputed at 1976 prices and deducted from sales, the result is a net loss, before extraordinary items, of Hfl 125 million.

In light of these results and of the extraordinary items mentioned above, we propose to pass the 1976 dividend.

Division of tasks within the board of management

In close consultation with the supervisory council, we have decided to change the division of tasks within the board of management, effective May 5, 1977. Although a number of board members were already specifically charged with the preparation and implementation of the Group's strategy, it was felt that this situation should be more clearly reflected in our organizational structure.

An executive committee will be constituted, composed of the president and the deputy presidents of the board, which will concentrate on overall Group policy and management. The other members of the board will remain specifically responsible for the management of divisions and Group companies or for functional activities within the Group.

We anticipate that this new division of tasks will enhance the efficacy of decision-making and strengthen the Group's structure, which is based on a high degree of delegation of powers to the managements of divisions and Group companies.

The section on management given on page 28 of this report represents the situation existing in March, 1977.

Rationalization of Enka Glanzstoff

The failure of business for textile fibers in Western Europe to pick up sufficiently has been a disappointment, especially so in the second half of the year, and has stood in the way of a significant recovery of the results of Enka Glanzstoff and British Enkalon.

Continued heavy losses were incurred on part of our textile filament yarns and staple fibers. This was notably the case for Enka Glanzstoff's polyamide (nylon) hosiery yarns, which have been unprofitable for years as a result of structural, as opposed to cyclical, problems. In the course of 1977, Enka Glanzstoff will therefore withdraw from this market. In certain other product sectors, additional measures will be taken.

The planning and the social impact of these measures, which will result in job losses in plants and central offices in the Netherlands and West Germany, have been the subject of very full consultation with personnel representatives. The mood of these consultations, which were still in progress at this writing, has so far been constructive. An important factor in this regard has been our conviction that ways and means can be found to mitigate the social consequences. Also helpful has been a general recognition that the aim of the surgery is to reinvigorate the basically healthy parts of Enka Glanzstoff.

In a joint move with other EEC man-made fiber producers undertaken at the end of the year, we once more called the European authorities' attention to the predicament of the man-made fiber industry, and of the textile and apparel industries. We renewed our plea for a realistic EEC policy that gives due weight to the great social and economic interests involved. Alarmed at the high erosion of employment in these industries, a number of Dutch unions have appealed to the European parliament.

Restructuring not confined to Enka Glanzstoff

Other Group fiber companies also had to take steps to meet the effects of market weakness for textile filament yarns and staple fibers.

The recession in 1975, and the slow growth of the economy since, have also made necessary a more critical appraisal of the performance of the non-fiber divisions and Group companies. So far, this has resulted in a modification of the expansion programs projected in the strategic plans, and in restructuring action designed to improve the pattern of costs and revenues. In some sectors the positive effects of these steps are already becoming apparent.

Financing and investments

By virtue of careful management we have been able in the year under review to secure a near-balance between expenditures for investments and funds from operations (Hfl 503 million). New funds raised totaled Hfl 496 million; redemptions on borrowings aggregated Hfl 446 million.

We succeeded in maintaining ample liquidity in the year under review.

Expenditures for property, plant and equipment (Hfl 413 million) were apportioned as follows: 43% related to chemical products, 32% to man-made fibers, and the remaining 25% to pharmaceuticals, consumer products and miscellaneous products.

For 1977, we expect expenditures for property, plant and equipment and for investments in non-consolidated companies to be up to about Hfl 600 million. These expenditures should lead to a further shift in the product range in favor of the non-fiber lines.

We do not anticipate that we will have to raise any substantial amount of new funds on the capital market in 1977.

Personnel

The radical measures a number of our companies have to take to remedy the present imbalance between costs and revenues lead to a reduction in the number of jobs and affect many of our personnel. We sincerely regret this and, within the limits of our means, endeavor to minimize the social consequences.

Understandably, many of our employees, particularly within the man-made fiber operations in the Netherlands and West Germany, have come to feel anxiety about their own future and that of the Group. The only way to end this uncertainty is through a restoration of profitability. We are making every effort to bring this about.

We pursue maximum openness in our coverage of developments, both in our internal and in our external communications, with a view to giving a full insight into our conduct of the business.

The present difficult situation makes heavy demands on our employees and requires more from them than would ordinarily be expected. We are grateful that so many of our personnel are prepared to make the extra effort. We are confident that this will be a major factor in the restoration of the Group's earning capacity.

Guidelines for multinational enterprises

In the year under review, the OECD* guidelines were adopted by nearly all OECD member states. We subscribe to the contents of the document.

Our annual reports for the last few years were already substantially in accord with the guidelines for the disclosure of information. The present annual report also incorporates an account of how we establish prices of goods and services in the event of sales made by one Group company to another (page 26); this is technically known as transfer pricing.

Research and development

In our 1975 annual report, readers were given full information on the function of Akzo's research and development, so that a few general observations should suffice here.

There are two factors which increase the necessity to conduct a selective research policy.

First of all, external demands in respect of the environment, product quality and product safety, together with restriction of energy and raw materials consumption, claim increasing attention and require significantly greater efforts per project, in terms of both quality and quantity, than was the case a number of years ago.

Secondly, costs per research worker are rising steadily.

In the coming years, changes in product strategy will lead to changes in research and development at the divisional and central levels. This is already to be seen in the textile fibers sector, where modifications of tasks and reductions in personnel strength are inevitable. In early 1977, a committee was set up possessing far-ranging powers in respect of research and development policy and coordination in the man-made fibers sector.

Expenditures for research and development in 1976 were up Hfl 20 million to Hfl 410 million. Further details regarding research operations will be found in the sections of this report dealing with the various product groups.

Engineering

The personnel and facilities of our central engineering department were fully utilized in 1976.

About two-thirds of its activities concerned sizable investment projects. Completed, or nearing completion, in the year under review were five chemical plants in the Netherlands and Belgium for the production of monochloroacetic acid, crop protection chemicals, rubber chemicals, organic peroxides and formaldehyde resins, the last of these being a joint project with DSM (the Netherlands). A large effluent purification plant serving the Obernburg manufacturing complex (West Germany) and surrounding

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* Organization for Economic Cooperation and Development, with a membership of 24 countries, mainly industrialized ones

municipalities was commissioned. A number of joint venture projects is in hand. These include a second methanol plant and an ethylene diamine plant at Delfzijl (the Netherlands), a plant for the production of nitrogen derivatives at Mons (Belgium), and a nylon tire yarn and fabric facility in Brazil.

The remaining third of the work of the engineering department includes consultancy activities, service to clients and participation in technical development projects.

Safety and the environment

A network of safety and environment officers of our Dutch plants and divisions has been set up, thus enhancing effective implementation of our policy, which is based on long-term plans. Our primary aim continues to be to promote good housekeeping.

To complement the systematic approach within the Group to safety and environmental problems, particularly with regard to new processes and products, we maintain intensive contacts at national and international levels. Such contacts enable us to more efficiently anticipate future developments and to plan our policy accordingly.

Prospects

In our policy we give priority to strengthening our position in the chemical, pharmaceutical and certain other non-fiber sectors. In order to utilize our financial resources as effectively as possible and to reduce financial risks, cooperation with others will be sought in appropriate projects. Instances of such cooperation are the facilities, now under construction, for the manufacture of methanol and its derivatives (the Netherlands), ethylene diamine (the Netherlands) and other nitrogen derivatives (Belgium), as well as monochloroacetic acid (Japan). The joint venture projects currently being executed have an aggregate worth of Hfl 700 million; our contribution will be limited to Hfl 90 million.

The expansion of our chemical operations will be largely contingent upon a broadening of our raw materials base. We continue to give a high priority to investigating possibilities in this regard.

Our pharmaceuticals sector is seeking to extend its product range, with particular emphasis on ethical drugs. The proposed acquisition of the RETI S.A. (France) pharmaceutical company constitutes a move in this direction.

We consider that, under today's changed conditions, further expansion of our operations in both Western Europe and the United States will strengthen the Group's competitive position and reduce risks. In light of the Group's present limited resources, concentration of investment activity in these areas appears to be indicated.

Complete restoration of the Group's earning capacity will take time. The future course of the world economy is still highly uncertain. The effect of the rationalization measures within the Group will be only partially felt in 1977, but should become fully evident over the next few years.

Much will depend on the policy of the European authorities as regards the man-made fiber industry and the textile and apparel industries.

As to expectations for 1977, uncertainty remains the keynote, particularly where developments in the textile fibers sector are concerned. In the United States, there are some indications of a gradual upturn in demand, with attendant firming of prices for certain products. In Europe, however, the textile fiber position will remain precarious in 1977. We anticipate that the rationalization measures in our Western European fiber companies will reduce losses.

For chemical products, the outlook is for a further recovery of income, albeit of modest extent.

For pharmaceuticals, consumer products and miscellaneous products, we expect to achieve at least the same level of income as for 1976.

These projections suggest that the Akzo group as a whole could close the books in 1977 with a profit, though of modest proportion.

The pharmaceutical industry in today's society

The pharmaceutical industry finds itself very much in the limelight at the present time. The criticism leveled at this industry has prompted us to devote a special section of the present annual report to this subject; see page 30 and following.

sults of operations

les, value added and operating income

he improvement in results in comparison with a very satisfactory 1975 is reflected in the figures given low.

Hfl million and in %	1976		1975	
ales	10,750	100	9,717	100
aw materials, supplies, energy and purchased services	(6,635)	(61.7)	(6,106)	(62.9)
depreciation	(533)	(5.0)	(519)	(5.3)
value added by the consolidated companies	3,582	33.3	3,092	31.8
salaries, wages and social charges	(3,277)	(30.5)	(3,109)	(32.0)
operating income (loss)	305	2.8	(17)	(0.2)

In the year under review, consolidated sales were up 11% to Hfl 10,750 million. About 7 percentage points of this increase was due to higher shipments.

Costs for raw materials, supplies, energy and services, plus depreciation, decreased in relation to sales. As a result, value added rose 16% in 1976 whereas sales increased 11%.

Average value added over the years 1969 through 1974 was 37.3% of sales. The 33.3% recorded for 1976 is still distinctly lower.

Salaries, wages and social charges in relation to sales fell from 32.0% in 1975 to 30.5% in 1976 due in part to a decrease in the number of employees of 7,100.

The 16% rise in value added and the relatively lower 5% increase in personnel costs led to an improvement in operating results from a Hfl 17 million loss in 1975 to a profit of Hfl 305 million in 1976. In spite of this improvement, operating income was only 2.8% of sales. For an adequate return on stockholders' equity this figure should have been approximately 10%, which implies a level of net income of approximately Hfl 400 million.

The following table shows the development of sales and operating income for the last two years, broken down by quarter.

in Hfl million	sales		operating income		operating income in % of sales	
	1976	1975	1976	1975	1976	1975
first quarter	2,821	2,313	129	(37)	4.6	(1.6)
second quarter	2,718	2,354	87	(15)	3.2	(0.6)
third quarter	2,507	2,377	35	(3)	1.4	(0.1)
fourth quarter	2,704	2,673	54	38	2.0	1.4
total	10,750	9,717	305	(17)	2.8	(0.2)

Sales and operating income by main product group

Consolidated sales developed as shown below:

in Hfl million and in %	1976		1975		1969	
man-made fibers for:						
textile uses	2,834	26	2,880	30	2,746	43
industrial uses	970	9	827	8	580	9
	3,804	35	3,707	38	3,326	52
chemical products:						
salt and heavy chemicals	1,722	16	1,428	15	627	10
specialty chemicals	1,061	10	824	8	315	5
coatings	941	9	836	9	340	5
	3,724	35	3,088	32	1,282	20
other products:						
pharmaceuticals	1,071	10	971	10	374	6
consumer products	789	7	779	8	747	12
miscellaneous products*	1,362	13	1,172	12	637	10
	3,222	30	2,922	30	1,758	28
total	10,750	100	9,717	100	6,366	100

* including plastics, technical products, leather, and various industrial products

Man-made fibers

Neither in Western Europe nor in the United States did shipments and price developments live up to expectations. A recovery of shipments in the first quarter gave way to a definite downturn in the following quarters, so that shipments for the full year failed to rise above the 1975 level.

Overcapacity in the synthetic textile fibers sector was a major obstacle to improvement in price levels. In spite of explosive increases in oil prices and high rates of inflation in the last four years, 1976 prices for synthetic fibers in Western Europe remained at the 1972 level. Raw material and energy expenses, which now make up almost 50% of production costs, have risen more than 50% since the fall of 1973.

In the United States, prices for polyester textile filament yarns plummeted about 50% in the second quarter. Toward year's end there was a slight improvement.

For industrial yarns sales were 17% higher than in 1975, largely as a result of favorable business conditions in the automotive industry. Prices averaged out at roughly the same level as in 1975; for rayon yarn and steel cord for use in auto tires a modest price increase was realized.

The majority of our Western European fiber operations achieved better capacity utilization on average than in 1975, although in the second half of the year several Enka Glanzstoff textile filament plants were again on short time. In the year under review, the rationalization program introduced by Enka Glanzstoff toward the end of 1975 was already making a significant contribution to curtailment of losses.

As a result of all the factors mentioned above, the operating loss for man-made fibers in 1976 was Hfl 142 million compared with Hfl 326 million in 1975.

Chemical products

Sales of this main product group were up 21% in 1976, principally because of an increase in shipments.

About half the rise in sales was accounted for by the salt and heavy chemicals product group, and more specifically by vinyl chloride, electrolysis products and salt.

Sales of International Salt Company (Akzona) were up substantially. The underlying factors included a strengthening of the company's market position for highway de-icing salt, and harsh weather conditions in the United States and Canada.

Following a hesitant start, specialty chemicals continued their rebound from the 1975 low. Particularly process chemicals (initiators) and some of Armak Company's (Akzona) product classes recorded above-average sales increases.

Coatings showed a distinct and virtually across-the-board recovery; the rise in sales was mainly due to higher shipments.

As a result of the increase in shipments and the consequent improvement in capacity utilization levels, which improvement averaged 15% in our principal plants, operating income from chemical products was up from Hfl 80 million in 1975 to Hfl 182 million in 1976.

Pharmaceuticals, consumer products and miscellaneous products

In 1976, sales of this main product group increased 10%, principally due to higher shipments.

With the exception of crop protection products (AAgrunol), all product classes contributed to the 10% rise in sales of pharmaceuticals. The strongest growth areas were again hospital supplies (Organon Teknika) and pharmaceutical raw materials (Diosynth). Operating income from pharmaceuticals remained satisfactory.

Despite an increase in volume sales, money sales of consumer products remained virtually equal as a consequence of marked price drops for oils, fats and paper products. Business in the paper sector was heavily depressed as a result of overcapacity on the Western European market. Due to losses suffered in this sector, operating income from consumer products was below the 1975 level.

In 1977, the disposition of our interests in the paper sector will be completed.

Of our miscellaneous products, plastics (Akzo Plastics), machinery (Barmag), wire and cable (Brand-Rex), leather (Armira) and a number of other product lines recorded significant sales gains. Overall, operating income was up on 1975.

As a result of the developments outlined above, operating income from pharmaceuticals, consumer products and miscellaneous products increased from Hfl 229 million in 1975 to Hfl 265 million in 1976.

The table below summarizes the development of operating results of consolidated companies by main product group.

in Hfl million and in % of sales	1976		1975		1974	
man-made fibers	(142)	(3.7)	(326)	(8.8)	223	4.9
chemical products	182	4.9	80	2.6	317	9.3
pharmaceuticals, consumer products and miscellaneous products	265	8.2	229	7.8	232	8.2
total	305	2.8	(17)	(0.2)	772	7.2

Net income

It is evident from the following table that 1976 operating income was still inadequate to ensure a satisfactory level of net income.

Hfl million	1976	1975
perating income (loss)	305	(17)
terest	(249)	(234)
	56	(251)
axes on operating income less interest	(59)	58
equity in earnings of non-consolidated companies	24	13
Group income (loss) before extraordinary items	21	(180)
extraordinary items	(167)	(253)
minority interest	(7)	(7)
net income (loss)	(153)	(440)

In respect of taxes, an amount of Hfl 59 million has been reserved; for 1975, a prospective tax benefit of Hfl 58 million was included in the statement of income. In appraising the amount for taxes in relation to income (loss) before taxes, one must realize that the tax base is composed of earnings subject to taxes in some countries and of losses in other countries, notably the Netherlands and West Germany, against which no taxes could be offset. Additionally, in West Germany, taxes are also levied on capital and reserves.

Equity in earnings of non-consolidated companies was up from Hfl 13 million in 1975 to Hfl 24 million in the year under review. In the man-made fibers sector, higher income levels were achieved by Enka de Colombia and Century Enka (India). However, income at Fibras Químicas (Mexico) dropped sharply, principally due to a slump in prices of polyester textile filament yarns.

Silenka (glass fibers) again suffered a loss. In 1977, the financial basis of this joint venture with PPG Industries will be strengthened through participation by the Noordelijke Ontwikkelingsmaatschappij, which, in addition to taking a one-third holding in the company's capital stock, will grant a subordinated loan.

In the chemical products sector, income of Methanol Chemie Nederland showed a significant improvement.

In 1976, net income before extraordinary items was Hfl 6 million (see page 39). The new rationalization measures in our Western European fiber operations made it necessary to provide Hfl 63 million to cover losses due to write-offs in respect of decommissioning of facilities, as well as costs of staff relocations and termination of employment contracts. Moreover, a further provision in the amount of Hfl 75 million was made to cover the risk of future additional write-downs in the fibers sector. These provisions have been included in the statement of income under extraordinary items. The statement of income thus shows a net loss after extraordinary items of Hfl 153 million (1975: Hfl 440 million).

The above results have been computed on an historical-cost basis. If allowance is made for the effect of price rises to obtain results on a current-value basis (see pages 46 and 47), 1976 net income, before extraordinary items, of Hfl 6 million becomes a net loss of Hfl 125 million.

Many countries are now considering replacement of disclosure on the basis of historical cost by disclosure on the basis of current-cost accounting. This will permit the provision of more realistic information on income and capital and reserves. We include current-value information in our financial statements this year, as we did last year, and intend to present our entire financial statements on a current-value basis as soon as international developments in respect to annual reporting have reached the stage where standards for the determination of income and capital and reserves on a current-value basis have become generally accepted by industry and the capital markets.

Shares in value added

Total value added of Hfl 3,679 million, which represents the value added by consolidated companies plus equity in earnings of non-consolidated companies and some other items of income, was distributed as follows among employees, providers of capital, and governments:

in Hfl million and in %		1976			1975	
employees		3,277	89.1		3,109	98.8
providers of loans		310	8.4		270	8.6
governments		71	1.9		(54)	(1.7)
stockholders						
Akzo N.V. stockholders	–			–		
minority stockholders	18			21		
		18	0.5		21	0.7
		3,676	99.9		3,346	106.4
added to (deducted from) Group equity		3	0.1		(201)	(6.4)
total		3,679	100		3,145	100

In 1976, value added increased substantially. However, the level achieved was still too low; consequently, after deduction of personnel costs and interest, the 1976 figure leaves no scope for either dividend payments to stockholders or a strengthening of Group equity.

In view of their special nature, the extraordinary items have not been included in the calculation of value added.

Financing

Equilibrium in 1976

In 1976, funds from operations totaled Hfl 503 million (1975: Hfl 370 million). Expenditures for investments, including acquisitions and less disposal of participations, remained below this level.

New borrowings were undertaken in the aggregate amount of Hfl 496 million. Redemptions on borrowings aggregated Hfl 446 million.

This financing equilibrium permitted the Group to maintain satisfactory liquidity. At December 31, 1976, cash and marketable securities totaled Hfl 611 million (at December 31, 1975: Hfl 539 million). In addition, previously negotiated domestic and foreign credit facilities are open to us; at December 31, 1976, a total of about Hfl 1,000 million was still available under these facilities.

The table below presents a survey of financing in 1976 and 1975. For further details, see page 40.

in Hfl million	1976	1975
working capital at January 1	2,441	2,339
funds from operations	503	370
investments, including acquisitions, less disposal of participations	(464)	(791)
borrowings	496	826
redemptions on borrowings	(446)	(277)
other changes	(203)	(26)
working capital at December 31	2,327	2,441

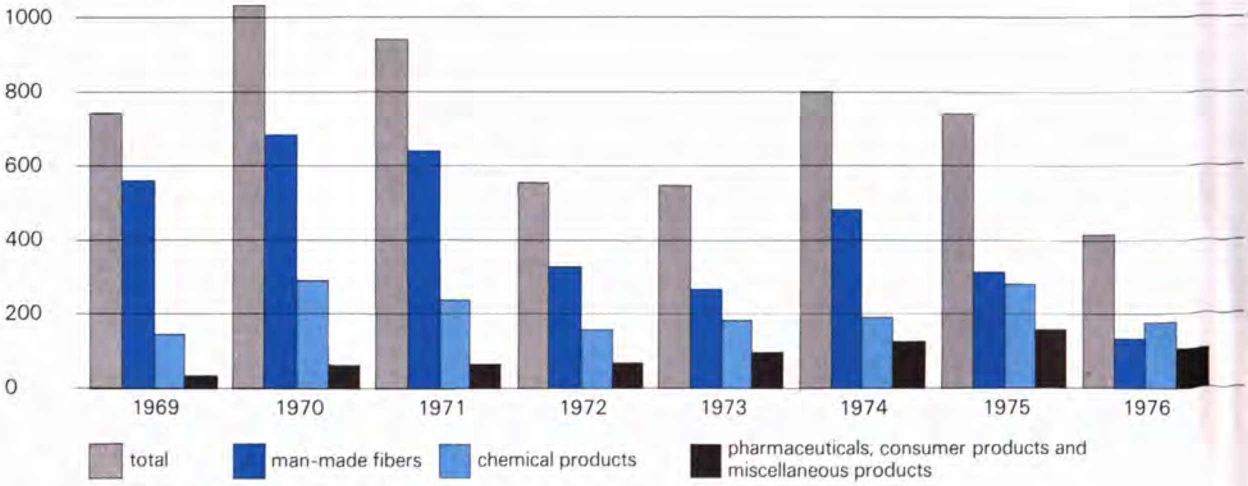
On balance, working capital decreased Hfl 114 million in 1976; this decrease was mainly due to the translation into guilders of the working capital of companies based outside the Netherlands at lower rates of exchange. This effect of changes in exchange rates is accounted for in the item 'other changes'.

Inventories and short-term receivables decreased Hfl 164 million and Hfl 118 million, respectively. We exercised stricter control over inventories and trade receivables. As a result, the ratio of inventories to sales decreased from 21.7% at December 31, 1975 to 18.1% at December 31, 1976, while the ratio of trade receivables to sales decreased from 19.3% at December 31, 1975 to 16.0% at December 31, 1976.

In 1976, capital expenditures were Hfl 413 million. The breakdown by main product group shows a continuing decrease, in both absolute and relative terms, in the share of our fiber operations.

in Hfl million and in %	1976		1975		1974	
man-made fibers	132	32	311	42	482	60
chemical products	176	43	278	37	192	24
pharmaceuticals, consumer products and miscellaneous products	105	25	156	21	125	16
total	413	100	745	100	799	100

Expenditures for property, plant and equipment, in Hfl million



Of aggregate 1976 borrowings of Hfl 496 million, approximately Hfl 375 million were accounted for by the following four items:

Akzo N.V.:
- DM 70 million $7\frac{3}{4}\%$ private borrowing, final maturity 1983;
- Hfl 125 million $9\frac{1}{4}\%$ debentures, final maturity 1986;
- Hfl 50 million 10% private borrowing, final maturity 1981;

Akzona Inc.:
- U.S. $ 50 million $9\frac{1}{4}\%$ private borrowing, final maturity 1997.

Interest on medium and long-term borrowings arranged in 1976 averaged 9.1% (1975: 9.1%). The average interest rate of debentures and private borrowings outstanding at December 31, 1976 was 7.9% (1975: 7.7%).

For 1977, the Group's financing is not expected to present any problems. We continue to give a high priority to maintaining and, where possible, improving our financial position. Hence, our policy is directed toward restricting 1977 expenditures for investments to a level of Hfl 600 million.

In light of our ample liquidity and the credit facilities open to us, we do not anticipate that we will have to make any arrangements for substantial new financing in 1977.

Foreign exchange

The abandonment in 1971 of fixed rates of exchange among most currencies has since created great uncertainty and has necessitated a policy aimed at reducing exchange risks and minimizing foreign exchange losses.

It is a fact, however, that we have production plants and sales organizations in a large number of countries and that, consequently, a substantial part of Group equity is employed outside the Netherlands. Due to the appreciation of the Dutch guilder, the annual translations into guilders in the period 1969–1976 of stockholders' equities of foreign Group companies resulted in a Hfl 505 million deduction from stockholders' equity; of this total, Hfl 213 million related to 1976.

To reduce exchange risks entailed by our investments in countries with weak currencies, we endeavor to meet our financing needs in these countries through borrowings in local currencies. This policy, however, requires a continual weighing of exchange risks against interest expenses.

The limited volume of the Dutch capital market forces the Group to raise funds in other countries as well. Although such operations entail exchange risks, the development of the rates of exchange in 1976 did not, on balance, lead to major foreign exchange losses.

In the operational area, we strive to reduce exchange risks principally by concluding forward transactions to fully or partially cover short-term currency positions.

Composition and financing of assets

in Hfl million and in %	Dec. 31, 1976		Dec. 31, 1975	
non-current assets	4,354	50	4,828	51
current assets	4,406	50	4,609	49
total	8,760	100	9,437	100
financed from:				
Group equity	3,114	35	3,525	37
long-term liabilities	3,568	41	3,745	40
current liabilities	2,078	24	2,167	23
total	8,760	100	9,437	100
Group equity : liabilities		0.55		0.60
Group equity : non-current assets		0.72		0.73
current assets : current liabilities		2.12		2.13

The ratio of Group equity to liabilities declined. This decline is due to the 1976 loss and to the effect of translation into guilders, at lower rates of exchange, of stockholders' equities of foreign Group companies.

Recomputed on a current-value basis, the ratio of Group equity to liabilities declined from 0.64 at December 31, 1975 to 0.61 at December 31, 1976.

Insurance

Buildings, machinery, equipment and inventories are insured against damage by such contingencies as fires, explosions, etc. Certain of the policies provide for a deductible of limited extent. The further effects of these contingencies are covered by consequential loss insurance.

The amount of insurance is regularly adjusted to the size of the risks concerned. The insured value of property, plant and equipment is almost entirely based on reinstatement value, and was Hfl 16,400 million at December 31, 1976.

Social policy and developments

Employment

Especially from a social viewpoint, the restoration of the Group's earning capacity is a painful process. The improvement in business conditions in 1976 has been insufficient, forcing us to make further adjustments, which will result in additional job losses.

From end-1974 to end-1976, the number of employees decreased 14,300 to 91,100. Of this decrease, 3,800 resulted from deconsolidation of companies, such as Fabelta (Belgium). The fibers sector accounted for the largest share (9,300) of the 10,500 jobs lost.

Although curtailments and shutdowns have reduced structural overcapacity in the man-made fiber industry in both Western Europe and the United States, this reduction has so far been insufficient. Notably in Western Europe, the situation is aggravated by increasing imports of textiles from low-wage countries. We were pleased to note that, through a well-argued memorandum, certain Dutch trade unions have solicited the Dutch and European authorities' attention to this untenable situation.

Preservation of employment within the Group is partly dependent on the maintenance of our international competitive position. This also holds good for those of our product groups which were able to record operating profits in 1976. Their competitive position will be jeopardized if funds available for investment should become insufficient. This will be the case if the earnings from profitable products must be used to absorb the losses incurred for man-made fibers. In time, such a situation cannot leave employment in the healthy sectors of the Group unaffected.

In this context, we wish to repeat our earlier statement that a recovery of the Group's profitability is not only an economic requisite, but a social necessity as well.

Social policy in retrenchment situations

If overcapacity is permanent, temporary solutions, such as short-time working programs and restrictions of overtime, are of no avail, and decisions to curtail or terminate certain unprofitable operations are unavoidable. Such curtailments or terminations involve destruction of capital and job losses in both the production and overhead sectors.

In these situations, particularly in the Netherlands and West Germany, we strive to prevent dismissals by:

- pursuing a highly restrictive hiring policy;
- minimizing the filling of vacancies arising from attrition as a result of voluntary resignation, retirement, disability or death;
- promoting relocations to other Group units in cases where the Group operates more than one establishment in a country and where the geographical distance between these establishments is not too great. In the Netherlands, we have succeeded in filling, through internal relocations, more than half of all vacancies which have arisen since mid-1975. Our Central Personnel Exchange, which was set up at that time, has contributed materially to this success;
- early retirement programs, which we implement on the basis of social plans agreed upon with personnel representatives or on the basis of statutory provisions.

Only when all these possibilities have been exhausted will we be forced to have recourse to dismissals. We will postpone them as long as we can, we will do everything within our power to stagger them, we will endeavor to cushion their impact through a social plan, but we will not always be capable of avoiding this ultimate measure and can hence never undertake to eliminate dismissals entirely.

Our continued concern with social policy is evident from the fact that we have realized the substantial reduction of the Group's workforce in the Netherlands and West Germany in consultation with personnel representatives and that we have succeeded in minimizing the number of dismissals and the social problems involved. It is not without a measure of pride that we record this fact.

Alternative employment

The loss of substantial numbers of jobs cannot but create social problems, especially in times and regions in which unemployment is high.

Demands from the trade unions for alternative employment, however desirable this may be from a social standpoint, cannot always be met.

In our 1975 annual report, we extensively discussed this subject, stating that it is only natural for large corporations to explore all possibilities of creating alternative employment. Under normal conditions of profitability, they will usually be successful.

For Akzo, however, the creation of alternative employment is hardly feasible, considering the inadequate level of profitability since the AKU-KZO merger in 1969 and the losses sustained in 1975 and 1976. These circumstances have forced the Group in the last few years to use its scarce financial resources primarily for its existing operations.

Under such conditions, demands made on the Group for alternative employment exceed the bounds of reason. In other words, the social responsibility of the Group has its limits. Within these limits, we do our utmost. We do so in gratitude to, and appreciation of, all those within the Group who help us bear this responsibility in today's difficult situation.

Inflation

It is increasingly recognized that there is a relationship between the intensity of inflation and the rate of unemployment, which in some countries is even higher than the official unemployment statistics show. Youth unemployment is a particularly ugly problem, and constitutes a further reason why inflation must be curbed.

It is heartening to note that certain countries are already making determined and successful efforts to restrain inflation. This is undoubtedly a prime condition for the revitalization of the economy. If we are to have lower inflation, wage increases in the coming period – including compensation for losses in purchasing power caused by inflation-induced price rises – should be quite modest, and the share of taxes and social charges in national income should be reduced. The latter reduction is to be accompanied by lower growth in government spending.

A few countries, such as the United States, West Germany and Switzerland, have already set the example. It is to be hoped that more countries will follow their lead, and that industry will be able and prepared to make its own contribution.

Furthermore, it is desirable that the labor organizations come to see that they do serve worker interests if they help combat inflation more effectively by exercising great restraint in the sphere of direct pay claims. After all, unemployment can only be made to retreat if investment activity grows. Such growth, however, depends on expectations of improving profitability.

Business climate

The economic stagnancy in the West has reduced the amount of new investment in a number of countries to a minimum. Investment decisions are highly complex and do not only depend on the economic outlook but are just as much affected by an assessment of the social climate. Thus, if there are a great many labor conflicts in a country, investment activity is bound to suffer. Italy and the United Kingdom are cases in point.

Another major influence is the attitude the government assumes toward business. In the principal countries where the Akzo group has operations – the Netherlands, West Germany and the United States – this attitude is traditionally constructive. These three countries are among the most advanced ones in the world, in terms of both industrial and social development. Apart from the similarities there are also large differences, however, notably as regards styles of dealing with labor-management relations. The common style in the United States is that of collective bargaining. In the past year we were confronted with a strike, which was basically over the theme of worker participation in appointment decisions. In West Germany and the Netherlands such issues tend to be dealt with through legislation, usually after extensive consultations with employer and employee associations.

With regard to the situation in the Netherlands, we should like to make some additional remarks.

Fortunately, there is a growing conviction in financial and economic circles – a conviction shared by many political figures – that the rise in government expenditure and national insurance charges must be contained to repress inflation and restore profitability of Dutch industry, which is highly dependent on exports, to the level that will permit new investment activity. A changed system of wage indexation, on which employer and employee organizations will try to reach agreement, could make a substantial contribution in this regard.

The Dutch government's attitude over the solution of some of the Group's social problems, especially in the Emmen area, has been constructive.

The, largely politically inspired, urge for innovation in respect of the socio-economic structure is a matter of concern in that it tends to underrate what has been achieved or is in course of development. This is especially true of the proposed drastic change of the 1971 Works Councils law. Another, scarcely less drastic, proposed piece of legislation on excess profits sharing likewise concerns an issue which has aroused much controversy, not only in the Netherlands but also in other European countries.

A more sensible approach might be to seek solutions at the European level. This would at least reduce the risk of adverse economic consequences.

Our deepest misgivings are caused by the fact that there is still no agreement on these important measures between employers and employees, nor even among the employee organizations themselves. Fundamental changes of the kind discussed here should have wide support from all sections of society if they are to advance a harmonious development of labor relations.

Man-made fibers

in Hfl million	1976	1975	1974
sales: textile uses	2,834	2,880	3,386
industrial uses	970	827	1,142
total	3,804	3,707	4,528
operating income (loss)	(142)	(326)	223
operating income (loss), as percentage of sales	(3.7)	(8.8)	4.9

This main product group comprises filament yarns and staple fibers from polyamide, polyester and cellulose; it further includes steel cord.
Typical textile uses are: apparel, carpeting and other home furnishings, and household textiles.
Typical industrial uses are: auto tires, conveyor belts, safety belts, fishing nets, ropes, and building and construction materials.

The Hfl 97 million increase in sales to Hfl 3,804 million fell far short of expectations. The reduction in the operating loss from Hfl 326 million to Hfl 142 million was mainly due to the effects of rationalization measures and to improved capacity utilization levels.

World man-made fiber production

Following a decline in 1975, world production of man-made fibers was up again in 1976 and, at a volume of 12.3 million metric tons, topped the level reached before the energy crisis. However, as shown in the table below, production volumes in Western Europe, the United States and Japan did not rally back to the 1973 level. 'Other countries' have continued their unbroken rise in production and, since 1975, have achieved a 35% share in world output.

in millions of metric tons and in %	1976		1975		1973	
Western Europe	3.1	25	2.6	24	3.4	29
United States	3.3	27	3.0	28	3.5	30
Japan	1.6	13	1.4	13	1.8	16
other countries	4.3	35	3.7	35	2.9	25
total	12.3	100	10.7	100	11.6	100

Man-made fibers for textile uses

Further growth in the share of the 'other countries' is a strong probability. Several of these countries have created export-oriented textile and apparel industries which are often supplied with raw materials by man-made fiber plants located in the same areas. This has the effect of limiting man-made fiber exports from the industrialized world. In addition, the EEC countries, more than most other states, are faced with yearly mounting imports of textiles and apparel. It is estimated that, in 1976, such imports into Western Europe accounted for upwards of a quarter of total consumption. The result is that the textile and apparel industries in the EEC countries are becoming progressively smaller, with the further consequence that the man-made fiber industry loses sales opportunities in the home markets as well.

Consumption of *polyamide (nylon) textile filament* is stagnating or even declining in most countries of Western Europe. Since 1970, consumption for hose and pantyhose manufacture in West Germany and the Benelux countries has dropped over 20%. Furthermore, the hosiery industry in these areas has suffered from low-priced imports from Italy. With this industry getting smaller, Enka Glanzstoff's hosiery yarn business has been showing increasing losses.

This situation of structural losses, which had persisted for several years, prompted a plan providing for the discontinuation of polyamide 6.6 filament production in 1977 by terminating filament spinning in West Germany (Kelsterbach, Obernburg) and filament texturing in the Netherlands (Emmercompascuum).

For nylon specialty yarns, the pressure on prices was not as great. These specialties include our antistatic filament for lingerie, for which shipments were up distinctly in 1976 (e.g. Enka Glanzstoff's *Enka Comfort®* and American Enka's *Crepeset®*).

Business for *polyester textile filament* was very poor in 1976. Nevertheless, these yarns are structurally in a different position because they have a wider range of end-uses. Moreover, several of these end-uses are showing continued consumption growth.

Worldwide, capacity has been growing at a considerably higher rate than consumption – a development for which the arrival on the scene of new producers is partly to blame. Whereas shipments of textured filament to circular knitters were down, causing sharp price drops – especially in the United States – the level of shipments of filament for woven fabrics and sheer curtains was satisfactory.

Losses on polyester textile filament were nevertheless substantial. A program of action designed to reduce overheads has been established. Such action is necessary to maintain the Group's position among the leading suppliers of these yarns in Europe.

Rayon textile filament production at Arnhem was discontinued, thereby ending exports which were a drain on income. As a result, income from these yarns, which are used for lining fabrics, improved in the year under review. With product quality being high, this has created a basis for a satisfactory earnings performance.

The expected significant upturn in Enka Glanzstoff's shipments of *polyester staple* (cotton type) did not materialize. Very high cotton prices had seemed to favor a shift toward polyester staple. However, the existing strong preference for cotton and wool has retarded this shift. Moreover, growing imports into Western Europe of semi-finished and finished products made from polyester staple or from polyester staple/cotton blends further weakened our shipments. In the year under review, these developments again resulted in substantial losses for polyester staple.

Business for *rayon staple* (American Enka) was grati-

® indicates trademarks registered in one or more countries fying, with higher sales to the growing non-wovens industry a major factor.

In line with the picture for most of our textile fibers, business for *polyamide (nylon) filament* and *staple* for home furnishings, including carpets, was far from satisfactory. Losses were incurred for our Western European operations, while income at American Enka was slight. For these products, too, the market situation is characterized by overcapacity.

Our policy continues to be aimed at the development of specialties, which now make up a significant proportion of our range of carpet filament and staple.

Man-made fibers for industrial uses

This sector profited from the upswing in the economy, which manifested itself particularly in the automotive industry. Sales of industrial yarns, including steel cord, were up 17% compared with 1975, a rise to which *Cordenka® rayon tire yarns* and *fabrics* contributed strongly.

Capacity utilization in our industrial yarn plants reached an average level of approximately 85% (in 1975 this figure was about 60%). Consequently, operating income showed an improvement, although the figures attained were still modest.

In *steel cord (Ferenka®)*, we are still running at a loss, although in the year under review shipments rose and product quality was improved. Exports to tire companies in the United States felt the repercussions of a strike in the rubber industry lasting more than four months.

Polyamide (nylon) yarn business in Europe was in the main unsatisfactory. Our auto tire yarns in particular met with stiff competition, which put prices under strong pressure.

Industrial *polyester yarns (Diolen®)* recorded further gains, especially in the industrial fabrics sector.

Industrial fabrics offer ever-widening scope for new end-uses. In addition to their use in soil stabilization *(Stabilenka®)*, such fabrics were also successfully applied in the year under review as lining materials *(Hypofors®)* in dumps for the storage of waste harmful to the environment. In this way the ground water is effectively protected from pollution.

Our *Enkamat®* is finding increasing acceptance. This three-dimensional mat is used for erosion control, for playing-field construction and for cow mats and other applications.

In terms of size and know-how, the Akzo group, with Enka Glanzstoff as its principal fiber company, is the world's most important producer of industrial yarns; intensive research efforts will be required to maintain and strengthen this position.

The biochemical purification plant of Enka Glanzstoff's fiber complex at Obernburg (West Germany) came on stream in 1976. It can treat up to 2,500 m³/h of industrial effluent, plus 500 m³/h of domestic effluent from neighboring municipalities. (Photo: Enka Glanzstoff)

Research and development

In certain selected product and end-use areas, research and development activities will need to concentrate more and more on process technologies which will reduce costs while maintaining quality, and furthermore on the development of new product types and specialties.

In the *textile fiber* field, a number of specialties was developed in the year under review. Some of these are:

- *Diolen® CX*, a basic-dyeable textured polyester textile filament for piece-dyed men's fashion applications;
- *Print Lustre®*, a polyamide filament for printed carpets;
- *Phase 7®*, an improved polyamide carpet filament.

In *industrial yarns*, the development of new applications is being given a prominent place.

In the steel cord sector, better cord constructions were developed, while progress was made in improving the adhesion of rubber to steel.

The quality of our *Arenka®* aromatic polyamide yarn was raised. We plan to proceed with a vigorous development program for this extremely strong yarn for use in tires and other applications; pilot-plant capacity for this product will be extended.

An element of the tow connection, this so-called spring composed of polyamide (nylon) yarns serves to absorb shock loads. (Photo: Pim Korver, Rotterdam)

Chemical products

in Hfl million	1976	1975	1974
sales: salt and heavy chemicals	1,722	1,428	1,653
specialty chemicals	1,061	824	991
coatings	941	836	772
total	3,724	3,088	3,416
operating income	182	80	317
operating income, as percentage of sales	4.9	2.6	9.3

Salt and heavy chemicals

This product group includes:
salt, chlorine, alkali products, soda ash and vinyl chloride;
chloroacetic acid and derivatives, chlorinated hydrocarbons and crop protection chemicals;
acetic acid, acetyl and butyl chemicals;
methanol and derivatives.
It also includes industrial chemicals produced by Akzo Chemie, such as fatty acids, vegetable oils, fluorine compounds, bisphenol A, sulfuric acid, carbon disulfide and other sulfur compounds.

Sales were up Hfl 294 million to Hfl 1,722 million. This 21% rise was attributable largely to increased shipments, principally in the vinyl chloride, salt, and chlorine and alkali products sectors. The considerably greater increase in operating income was due principally to favorable business developments at International Salt (Akzona), which had a record year, and also to the increase in shipments and the accompanying higher levels of capacity utilization.

For *salt*, developments were on the whole satisfactory, despite continuing overcapacity. In Western Europe, shipments of salt to electrolysis plants were adversely affected by stagnations in the pulp, paper and other industries. Our CIRNE (Brazil) solar salt plant enlarged its production capacity and is considering further extensions to be able to exploit increasing opportunities for sales to the Brazilian soda industry.

The markets for *chlorine* and *alkali products* showed diverging development patterns in 1976. Chlorine made a fairly rapid recovery in Europe, principally because of growing demand for polyvinyl chloride and vinyl chloride. In *caustic soda* there were some surpluses, which, although slight, depressed prices markedly. This trend was strengthened by the slowness of the recovery in some markets, especially in the aluminum industry. The *sodium carbonate (soda)* market likewise recovered very slowly from the 1975 recession.

In a longer-term perspective, we see good sales possibilities for our chlorine and alkali products. Of importance here is the extent to which the Dutch government will be prepared to adjust energy prices to the lower levels in surrounding countries where, moreover, Dutch natural gas is available more cheaply.

Vinyl chloride production returned to the 1974 level. We consider the further prospects for the Western European market for PVC to be such that we have decided to advance the production capacity of our vinyl chloride plant, which has been running at full capacity for almost the entire year, by approximately 125,000 metric tons to approximately 475,000 metric tons per annum.

For our *petrochemicals* there was, on the average, only a slight recovery, consisting mainly of an increase in volume.

Shipments of products used either directly or indirectly for agricultural purposes – *herbicides* and *acetic acid derivatives* – decreased substantially as a result of drought conditions in Western Europe. Developments in the building market in particular are of importance for shipments of *methanol and its derivatives* and *vinyl acetate;* the decrease in housing starts was only partially compensated in the year under review by increased renovation and by continued growth in the do-it-yourself market.

Early in 1976 new production facilities for *acetic acid* and *monochloroacetic acid* were brought on stream; unfortunately, these could not be fully utilized because of market slackness. A monochloroacetic acid plant with an annual capacity of 20,000 metric tons is to be built in Japan in collaboration with Denki Kagaku Kogyo K.K., using know-how supplied by us. This joint venture (Denak) will concentrate on shipments for Japan and Southeast Asian countries.

The second methanol plant now under construction at Delfzijl (the Netherlands), which will have an annual capacity of 350,000 metric tons, has been incorporated

Signing of the agreement to incorporate Delamine B.V., a joint venture of Toyo Soda Manufacturing (Japan), Noordelijke Ontwikkelingsmaatschappij and Akzo Zout Chemie.
Delamine B.V. currently has a facility for the production of ethylene diamine and similar polyamines under construction at Delfzijl.
(Photo: Evert de Boer, Delfzijl)

as Methanor v.o.f. Companies participating in this operation are DSM and Akzo, through Methanol Chemie Nederland (55%), as well as Dyno Industrier A.S., Norway (40%) and KemaNord, Sweden (5%). The raw material used will be Norwegian natural gas from the Ekofisk fields.

The *dimethyl terephthalate (DMT)* plant at Delfzijl was shut down at the beginning of 1977 as a result of increasing losses caused by prices which were structurally too low (overcapacity) and the proportionally high level of costs associated with operating such a relatively small production unit. As far as possible, employees were offered alternative work in the Delfzijl area.

Akzo Chemie's industrial chemicals presented an uneven picture. Income from products based on *sulfur* and *sulfur compounds* was satisfactory, although sulfuric acid suffered the consequences of a downswing in the fertilizer industry. Income from *bisphenol A, fluorine compounds* and *silicates* reached a reasonable level, principally as a result of improved capacity utilization. To date, shipments of fluorine compounds have not been adversely affected by publications about the supposed harmful effects of these substances on the ozone layer. We are giving this question close attention.

Our research activities were again centered primarily on support of high-volume production processes. Emphasis was given to more efficient use of raw materials and energy as well as to quality control and the purification of effluent. The development of automatic analyzing equipment, and the use of mathematical techniques and mini-computers also received greater attention owing to the necessity for more accurate process control and other factors.

A special electrolysis process was developed for the removal of traces of metal from effluent.

A further major concern of research is the development of new processes for the manufacture of raw materials for *Arenka*®, an aromatic polyamide developed by Enka Glanzstoff.

Specialty chemicals

This product group comprises the products of Akzo Chemie, with the exception of the industrial chemicals included under salt and heavy chemicals, and also comprises the products of Armak (Akzona).

The principal products are:

process chemicals and additives for the polymer-manufacturing and polymer-processing industries, such as initiators, rubber chemicals and stabilizers;

organic chemicals (including surfactants), such as fatty acid esters, nitrogen derivatives, raw materials for the detergent industry, sequestering agents, disinfectants, gluconates and paper chemicals.

Sales in 1976 were up Hfl 237 million to Hfl 1,061 million as a result of higher shipments.

Although operating income fell short of expectations, there was a significant improvement over 1975. Initiators, in particular, developed favorably.

The loss situation in the recession year 1975 prompted Akzo Chemie to take a hard look at product range, organization and cost structure, and to take steps for a return to normal earnings performance. In 1976, certain operations were discontinued or sold; among them were textile chemicals, the sorption project, citric acid (fermentation), and titanium dioxide production, in which we had a share.

Internationalization of production and sales of strategically important product classes will be centered on Western Europe and North America; further focuses are Japan and Brazil.

First among such product classes are the *initiators (peroxides),* used especially in the plastics and rubber industries. A good one-third of the world market for this growth product now falls to us. A major topic of research and development is *peroxides* that will minimize environmental, safety and health hazards. One result of such work has been aqueous peroxide suspensions suitable for closed-system metering to PVC reactors. This new technique substantially reduces the risk of vinyl chloride gas leaks.

Another major product class is *surfactants,* for which we have built up a strong know-how position. After commissioning of the nitrogen derivatives plant now under construction at Mons (Belgium), we expect to be able to achieve a vigorous expansion of sales, which should strengthen our leading position in the world in this sector. Our research efforts are particularly directed toward a further extension of the scope of industrial uses. Some of the most common applications of our nitrogen derivatives are in laundry softeners *(Arquad®)*; in asphalt, permitting solventless cold asphalting; in lubricants; and in anti-corrosion agents.

With regard to the other organic chemicals, volume sales and earnings performance of *paper chemicals,* such as our *Cyclopal®* polyurethane-based synthetic size, were depressed by poor business conditions in the paper industry. Income from *gluconates,* which are manufactured and marketed by a joint venture with AVEBE, was up strongly.

Turning to *thermoplastics additives,* good progress was achieved on the further international introduction of our new, non-polluting *Stanclere®Estertin stabilizers* for the PVC-processing industry.

Income from *catalysts* was depressed by lower rates of exchange for the U.S. dollar and for sterling, and by the start-up expense of the molecular sieve manufacturing facility.

The new product 'N.A.S.' (a *sodium aluminum silicate*), which can replace phosphates in laundry detergents and thus reduce environmental pollution, is making rapid progress. Semi-commercial trial quantities have already been supplied to the detergent industry. The potential market for the product is vast; plant capacity can be rapidly expanded to meet the expected increase in demand.

Studying scale model of the technologically advanced nitrogen derivatives plant now being built at Mons (Belgium) are, from left to right: Messrs. Jellema, project manager; van den Bos, president of Akzo Chemie; and Snoeck, manager of the organic chemicals product group. (Photo: Serge Antoine, Brussels)

Coatings

This product group includes paints, stains, synthetic resins, adhesives and waxes for:
industrial markets, e.g. the road and rail vehicles, aircraft, metal products, wood products, furniture and packaging industries;
trade markets, e.g. auto refinishing, house building, road marking, shipbuilding and maintenance, and general construction;
the do-it-yourself market.

In 1976, sales rose Hfl 105 million to Hfl 941 million, principally because of an increase in shipments. The average increase in selling prices was insufficient to absorb the rises in costs.

Nevertheless, operating income more than doubled compared with the unfavorable preceding year. This gain was mainly attributable to significantly increased production and sales volumes for automotive coatings, higher capacity utilization, improvements in product mix, and a reduction in storage, distribution and other costs.

The automobile industry is increasingly using more durable coatings systems, a development warranted by the relatively high price level of automobiles. Initial experience in the use of non-polluting products in this industry has been favorable.

Besides the improvement in income from *automotive coatings,* the year under review saw a promising development for corrosion-resistant *steel coatings.* Our operations in this area are combined in Dacral, a joint venture with Diamond Shamrock (United States). Shipments of *coil coatings* continued to increase substantially, further strengthening our position as a major supplier on the French market.

Shipments of *auto refinishes* increased in most of the countries where we sell such products. Through the establishment of sales organizations in the United Kingdom and Italy, we expect to be able to increase our market shares in these countries. In West Germany, Lesonal improved opportunities for sales to the trade and do-it-yourself sectors by expanding its chain of retail centers.

Demand in Europe for our auto refinishes is increasing, stimulated by the color-mixing machine developed by us. The existing recipe books, which contain formulations for the color-mixing machine, are now being replaced by microfiches suitable for projection. One microfiche may contain approximately 6,000 formulations.

Shipments of *coatings for the building industry* were noticeably affected by diminished building construction and maintenance.

Overall, the development of the *do-it-yourself* market (paints, wallpaper, etc.) was slightly disappointing. Even so, the system of *Decorette*® shops has demonstrated its viability. In a short period, we have succeeded in expanding the *Decorette*® chain to include nearly 250 retailers in the Benelux. We hope to increase this number in the years ahead.

In 1976, we further improved our share in the international market for *aircraft coatings.* We successfully developed a highly flexible, erosion-resistant and anticorrosive system.

Our *synthetic resins* (Synthese) continued their favorable development on an international scale. This was particularly true of our specialty resins for the coatings and printing ink industries. Production capacity for acrylate resins will be expanded.

Considerations of efficiency prompted a decision to combine the operations of Lesonal KG and Sikkens GmbH in Deutsche Akzo Coatings GmbH.

Negotiations with Robert Bosch GmbH, our partners in Resicoat GmbH (powder coatings), resulted in a decision to sell to them our 50% holding in this joint venture.

Our cooperation with Ivanow S.A., a Spanish coatings producer 50%-owned by La Seda de Barcelona S.A., was given further substance in the year under review, especially in the automotive coatings field.

Of our affiliates outside Europe, our establishments in Africa continued to develop favorably, as did Montesano in Brazil. In Abidjan (Ivory Coast), a new facility is under construction; Montesano will expand production capacity. In Argentina (Miluz), a return to more normal conditions seems under way.

Our research and development helped reduce production costs through improvement of raw materials efficiency; in addition, product properties were optimized.

The cooperation with the Corporate Research departments, which is of growing significance, has provided us with an entirely new technology base for high-solids products. The development of these non-polluting, energy-saving and labor-saving coatings systems is especially important for the industrial market, where medium and high-solids products, water-borne systems and electrodeposition coatings are used.

In a number of European countries, approval was obtained for the use of our special coatings systems on steel and concrete in nuclear power stations.

In the important area of resins, we are successfully working on the development of systems for coatings and printing inks suitable for radiation curing.

In view of the results of our research efforts, we are pursuing a more active patent policy.

Resin manufacturing facility of the fast-growing Brazilian coatings company Montesano commenced operations in early 1977. (Photo: Ulrick Svitek, São Paulo)

Pharmaceuticals, consumer products and miscellaneous products

in Hfl million	1976	1975	1974
sales: pharmaceuticals	1,071	971	819
consumer products	789	779	679
miscellaneous products	1,362	1,172	1,319
total	3,222	2,922	2,817
operating income	265	229	232
operating income, as percentage of sales	8.2	7.8	8.2

Pharmaceuticals

This product group includes:
ethical drugs, such as anabolics, oral contraceptives, corticoids, sex hormones and diagnostics;
non-prescription drugs, such as tonics, vitamins, pain-killers, cough remedies, sweetening agents and diagnostics;
hospital supplies, such as infusion liquids, blood fractions, diagnostics and medical equipment;
raw materials for the pharmaceutical industry;
veterinary products, such as vaccines and hormone preparations;
crop protection products.

Sales increased Hfl 100 million to Hfl 1,071 million. With the exception of crop protection products, all product sectors contributed to this rise. Operating income remained satisfactory, despite rises in costs which could not be fully offset by price adjustments.

Generally, Organon *(ethical drugs)* developed as planned and recorded continued sales gains.

In the area of *vasodilators*, we introduced *Fludilat*® in Italy and *Sensit*® in Brazil and Mexico. Together with the introduction of our *antidepressant Bolvidon*® (GB 94) in the United Kingdom, this constituted a further step toward our goal of internationalizing new products. Our experience has again been that the increasing strictness of the requirements for health registration tends to delay introduction.

We continued to extend our range of *oral contraceptives*. In the Netherlands, we introduced *Ministat*®, a combination-type mini-pill in which the estrogenic and progestogenic content has been reduced. Introduction in other countries is being prepared.

Organon Teknika *(hospital supplies)* continued to internationalize its operations. This product sector set up offices in Greece and Finland to complete its sales organization, which is mainly centered on Europe. Additionally, operations were started in the United States and preparatory steps were taken toward establishing operations in Japan.

The product range was extended through introduction of several new products, including the *Echo cardio Visor*® 03, which by increase of the video line density gives improved images. The mobile *Echo cardio Visor*® 'Single Element' permits examination without the necessity of moving the patient. The possibilities of extension offered by this apparatus present hospitals with a basis for the use of total echocardiography.

Nephross® 16F160, a new type of artificial kidney, permits improved dialysis in which the quantity of blood outside the patient's body is kept to a minimum, while being brought into contact with a maximum dialysis surface.

The line of diagnostics was extended through introduction of *Hepanostika*®, a non-radioactive alternative to the most sensitive test available so far for the detection of hepatitis B-antigen in blood serum or plasma.

The Organon Teknika facilities in the Netherlands were extended through addition of a new warehouse at Boxtel.

For Chefaro *(non-prescription drugs)*, 1976 was a successful year. Through positive action, we succeeded in strengthening and extending the existing product range in the countries where we sell our products, thus consolidating Chefaro's recently acquired position in the international marketplace. Generally, however, the lack of clear directives, nationally and even more so at the European level, concerning the development of new and safe preparations for self-medication is felt to handicap the development of this industry.

For our *Sucrosa*® and *Sukrettine*® *sweetening agents*, substantial improvements were achieved as regards both product composition and design.

Diosynth *(pharmaceutical raw materials)* again recorded gratifying gains. All its product classes contributed to this growth.

In the *alkaloids* sector, high levels of production and shipments were maintained. For this sector, we have planned a significant investment in extraction facilities to ensure the availability of adequate processing capacity for the years ahead.

The *biochemicals* sector strengthened its position on the raw materials market. Production capacity for heparin was expanded.

Raw materials supply for *pharmaco-chemical basic products* was hampered by politico-economic and financial difficulties in Mexico, a major raw materials supplier. However, a provisional solution for these problems was achieved by the end of the year under review. Development of alternative raw materials has been started and is progressing satisfactorily.

Intervet *(veterinary products)* recorded satisfactory results for 1976, although a large portion of its operations is in countries with relatively weak currencies. A test to detect antibiotics residues in milk was granted official approval in the United Kingdom, where it is now finding widespread application.

The development of AAgrunol *(crop protection products)* was progressively unsatisfactory. Sales and income fell short of expectations, for which the extremely dry weather was partly to blame. In addition, increasingly strict environmental and safety standards, which also affect transport and storage, are giving rise to ever greater operational problems. A development plan which provides for essential investments and leaves scope for a

The main thrust of development work on artificial kidneys is toward simplification and shortening of the dialysis process. In 1976, Organon Teknika introduced the Nephross® *16F160 artificial kidney. (Photo: Jan Kemper, Eindhoven)*

Some specialty hormone preparations from Intervet's line of veterinary products (Photo: Henk van Mierlo, Ootmarsum)

different location of the company is currently being discussed with the Noordelijke Ontwikkelingsmaatschappij and the Dutch Ministry of Economic Affairs; the aim of these talks is to obtain the necessary backing for the implementation of the plan.

AAgrunol remains in need of a partner with a complementary production capability that could ensure the company's long-term continuity.

Our research and development continues to concentrate on the areas of fertility control, sex hormones, psychotropic drugs, treatment of inflammation, and diagnostics.

We attach great significance to the EIA (Enzyme Immuno Assay) systems developed by us. These systems will enable laboratories to detect the presence of extremely small quantities of, for example, hormones, viruses and antibodies against pathogens. This development may prove to be of fundamental importance for diagnosis, for monitoring the course of a disease or for checking the results of a specific therapy.

Consumer products

This product group includes:
detergents and cleaning products;
paper products for household use;
health and body-care products, such as fragrances and cosmetics;
foodstuffs, such as oils and fats, sauces, soups, preserves, party snacks and various food specialties.

At Hfl 789 million, sales were on a level with 1975. Operating income was substantially lower, however. This decline was largely attributable to depressed business in the paper sector, which more than canceled the effect of improved earnings performance in the three other product sectors.

The *foodstuffs* sector recorded a significant upturn in income. This upturn was due to major cost reductions resulting from the 1975 changes in the structure of the Dutch operations (the Duyvis group), and to successful introduction of new products (including new party snacks).

In a move to strengthen the earnings position, we will concentrate production of oils and fats at the Vlaardingen site; this means that the obsolete refinery at Koog aan de Zaan will be closed down. The Wilco cannery at Assen found itself in a serious structural loss situation, which necessitated drastic rationalization measures. The assets of Van Vollenhoven B.V. (Emmen), a manufacturer of convenience foods, were sold to Fine Food Fabrieken B.V.

Income of Mayolande S.A. (France) was considerably higher. The market position of the *Bénénuts*® and *Bénédicta*® products was further strengthened.

The sector of *health and body-care products* also had a satisfactory year, notably because of the continued favorable development of Recter (Veenendaal). New items were added to the existing product range.

In 1977, Koninklijke Eau de Colognefabriek J. C. Boldoot B.V. will be relocated from Amsterdam to our Apeldoorn site.

In the *detergents* sector, *Biotex*® consolidated its market position, while *Dobbelman®-gezinswasmiddel* made a further advance. A/S Blumøller (Odense) commissioned a new detergents plant and acquired the market share and the spray-drying plant of Darenas, a company of the ISS group. As a result of these developments, the scope of operations in Denmark was substantially broadened.

In the year under review the depression in the *hygienic paper products* sector, which was in part due to overcapacity in this branch of industry, became more acute.

In mid-1976, negotiations with Norrlands Skogsägares Cellulosa AB (Ncb) of Sweden resulted in the sale of 49% of our Edet stock to this cooperative of forest owners, which operates its own pulp and paper plants. At the end of 1976, we agreed to sell our remaining stock in Edet to Ncb; the sale will be made effective in 1977.

The principal objectives of research and development were improvement of existing products and development of new ones. Much attention was given to problems in the area of environmental control.

Fruits of our increasing concentration on efficiency and cost effectiveness of our organization and operations have become especially evident in the year under review. This gives us confidence in the feasibility of expanding our European interests, where desirable in cooperation with others.

Photo: Cor de Jong, Amsterdam

Miscellaneous products

Miscellaneous products include:
plastics, film, adhesive tape and cellulose-based industrial colloids (CMC);
technical products, such as wire and cable for electrical and electronic end-uses, machinery and equipment for the man-made fiber and plastics industries, special pumps and hydraulic equipment;
leather, non-wovens, shammies and sponges;
dialysis membranes.

Sales increased Hfl 190 million to Hfl 1,362 million. The principal contributions to this rise, which was largely due to higher shipments, came from Akzo Plastics and Barmag Barmer Maschinenfabrik. Income gains were recorded for such products as dialysis membranes and non-wovens (Colbond), as well as for the machinery products of Barmag.

Akzo Plastics (Enka Glanzstoff) is investigating possibilities of cooperation with others for commercial-scale production and sale of *Arnite® thermoplastic polyester* bottles for carbonated beverages. An agreement was concluded with Mitsubishi Rayon, giving this Japanese company access to our *Arnite®* know-how. Interest in Japan in the use of polyester for bottles is growing.

We succeeded in further strengthening the position of *AKU-CMC®* and *Staflo®* (drilling-mud additives). Our *Peridur®*, an ore pelletizing agent, is meeting with increasing market interest.

Our adhesives operations, combined in Strucol B.V., were sold to Delft-National Chemie B.V.

In the course of 1977, the seat and operations of Akzo Plastics will be relocated from Zeist to Arnhem.

Barmag Barmer Maschinenfabrik (Enka Glanzstoff) experienced a favorable year. Unlike the situation in prior years, however, the company's order backlog at end-1976 was below annual sales. Nevertheless, Barmag has confidence in its ability to maintain its position among the technical and commercial leaders in the world market for high-quality machinery and equipment for the man-made fiber and plastics industries. Barmag bases this confidence in part on the results of its intensive research and development efforts. Within the company's product range, *special pumps* for the automobile and other industries, and *hydraulic equipment* are of growing significance.

Brand-Rex (Akzona) suffered a setback due to lower investments by several users of *wire and cable*, including telephone companies. Additionally, income was depressed by a fairly large write-down of inventories reflecting a sharp fall in copper prices.

For Armira (Akzona), 1976 was an excellent year thanks to brisk demand for *leather* for personal leather goods and boots. Leather exports also contributed to the rise in income.

Enka Glanzstoff's production of *synthetic leather,* which was still in the pilot-plant stage, was discontinued for the time being in view of the unsatisfactory development of business.

Following a development stage extending over several years, Colbond, an Enka Glanzstoff product group engaged in the production and sale of synthetic *non-wovens*, succeeded in achieving profitable operation. This breakthrough to profitability was accomplished for both *Colback®*, a high-grade backing material for tufted carpets, and *Colbond®*, whose uses are mainly in technical sectors, where it is employed as a base material for floor and roof coverings and as a reinforcing material in road construction and hydraulic engineering.

Favorable prospects for both of these products have prompted a decision to expand production capacity.

Dialysis membranes (Enka Glanzstoff) continued to develop satisfactorily. To meet the strong demand for hollow fibers for use as dialysis membranes in artificial kidneys, production capacity for these fibers will be expanded. We are now testing adsorption membranes, which, alone or in combination with normal membranes, show substantial promise of a further improvement in blood dialysis.

The TR-400 toll restrictor, a Brand-Rex telephony product, limits choice of dialings to prevent unauthorized calling. (Photo: Richard Alcorn, New York)

Operations by region

General

The shifts in the geographical pattern of sales, invested capital and personnel strengths of consolidated companies which occurred in 1976 are shown in the tables below.

The greater part of the decrease in the number of employees was due to reductions in the Netherlands and West Germany; these reductions mainly concerned adjustments in the man-made fibers sector. The decrease in the other EEC countries was caused by the deconsolidation of Fabelta (Belgium).

The table opposite illustrates that the Hfl 322 million improvement in operating results was principally due to the European establishments. Results in North America were lower on account of the slump in business for man-made fibers. The gain for the 'rest of the world' was for the most part attributable to our Brazilian operations.

in Hfl million and in % of sales	1976		1975		1974	
EEC countries	146	2.0	(187)	(2.7)	474	6.3
rest of Europe	16	2.2	10	1.4	68	9.8
total Europe	162	2.0	(177)	(2.4)	542	6.6
North America	53	2.5	103	5.4	166	7.7
rest of the world	90	19.9	57	16.5	64	15.6
total	305	2.8	(17)	(0.2)	772	7.2

The table on page 26 shows that, in 1976 as in previous years, more than 70% of capital expenditures related to Europe.

	sales by area of destination			
in Hfl million and in %	1976		1975	
the Netherlands	1,295	12	1,218	12
West Germany	2,056	19	1,939	20
other EEC countries	2,198	21	2,020	21
total EEC countries	5,549	52	5,177	53
rest of Europe	1,646	15	1,432	15
total Europe	7,195	67	6,609	68
North America	2,292	21	2,018	21
rest of the world	1,263	12	1,090	11
total	10,750	100	9,717	100

	sales by area of origin			
in Hfl million and in %	1976		1975	
the Netherlands	3,706	35	3,237	34
West Germany	2,727	25	2,547	26
other EEC countries	1,003	9	994	10
total EEC countries	7,436	69	6,778	70
rest of Europe	712	7	685	7
total Europe	8,148	76	7,463	77
North America	2,147	20	1,909	20
rest of the world	455	4	345	3
total	10,750	100	9,717	100

	invested capital			
in Hfl million and in %	Dec. 31, 1976		Dec. 31, 1975	
the Netherlands	2,497	39	2,417	35
West Germany	1,588	25	1,761	25
other EEC countries	262	4	503	7
total EEC countries	4,347	68	4,681	67
rest of Europe	403	6	500	7
total Europe	4,750	74	5,181	74
North America	1,423	22	1,543	22
rest of the world	221	4	239	4
total	6,394	100	6,963	100

	employees			
in numbers and in %	Dec. 31, 1976		Dec. 31, 1975	
the Netherlands	27,600	31	29,700	30
West Germany	23,800	26	26,000	26
other EEC countries	11,000	12	13,400	14
total EEC countries	62,400	69	69,100	70
rest of Europe	7,600	8	7,800	8
total Europe	70,000	77	76,900	78
North America	15,500	17	16,100	16
rest of the world	5.600	6	5,200	6
total	91,100	100	98,200	100

in Hfl million and in %	capital expenditures 1976		1975		1974	
EEC countries	259	62	481	65	510	64
rest of Europe	36	9	76	10	69	8
total Europe	295	71	557	75	579	72
North America	103	25	134	18	165	21
rest of the world	15	4	54	7	55	7
total	413	100	745	100	799	100

In the case of the non-consolidated companies (participation of 50% or less), the 'rest of the world' – and particularly Latin America – is rather more prominent.

The following table illustrates the size and geographical distribution of the Group's non-consolidated operations (1975 figures restated for comparison).

in Hfl million/ numbers	sales* 1976	sales* 1975	invested capital** 1976	invested capital** 1975	employees** 1976	employees** 1975
EEC countries	1,160	1,050	550	520	6,700	6,500
rest of Europe	220	200	170	160	700	700
total Europe	1,380	1,250	720	680	7,400	7,200
North America	50	40	10	10	100	100
rest of the world	700	590	650	610	9,400	9,200
total	2,130	1,880	1,380	1,300	16,900	16,500

* by area of origin

** at December 31

Sales of non-consolidated companies in 1976 broke down into 51% for man-made fibers, 35% for chemical products, and 14% for other products.

The table below presents a survey of the geographical distribution of sales, invested capital and number of employees of all consolidated and non-consolidated companies of the Group.

in Hfl million/ numbers	sales* 1976	sales* 1975	invested capital** 1976	invested capital** 1975	employees** 1976	employees** 1975
EEC countries	8,596	7,828	4,897	5,201	69,100	75,600
rest of Europe	932	885	573	660	8,300	8,500
total Europe	9,528	8,713	5,470	5,861	77,400	84,100
North America	2,197	1,949	1,433	1,553	15,600	16,200
rest of the world	1,155	935	871	849	15,000	14,400
total	12,880	11,597	7,774	8,263	108,000	114,700

* by area of origin

** at December 31

Intra-Group deliveries

The decentralized structure of the Group implies a high degree of delegation of powers to Group companies and to product divisions which operate independently and internationally. Within the broader Group strategy, they are thus largely responsible for attaining agreed targets, such as the realization of adequate returns on invested capital.

The commercial relations between the divisions and Group companies are fundamentally the same as those with others outside the Group – that is, prices and other terms for the supply of goods and services are negotiated directly and on an arm's-length basis by the contracting parties.

The principle governing such transactions is that the terms shall not be less favorable than those applying to similar transactions with a third party.

The value of deliveries between Group companies of different divisions was Hfl 310 million in 1976 (1975: Hfl 315 million), or 3% of total consolidated sales. In relative terms, such intra-Group deliveries are therefore not of major significance.

Trade with companies in which we have less than majority interests is of even less importance.

A substantial portion of deliveries between companies of the same division crosses national frontiers. Over the years, consistent procedures have been evolved within the Group in regard to transfer pricing for such deliveries; these procedures make due allowance for the pertinent tax, currency and pricing regulations in force in the countries concerned.

Europe

In Europe, the dominant feature of the year under review was the difficult situation of Enka Glanzstoff and British Enkalon. The rationalization measures have already significantly curbed losses in the two companies, however. At the end of 1976, Enka Glanzstoff had achieved cost reductions worth Hfl 120 million annually. The situation for British Enkalon deteriorated in the fourth quarter as a result of the plunge of sterling.

In 1976, La Seda de Barcelona recorded an improvement in operating income. The prospective development toward a more open Spanish economy will not leave the company's position unaffected.

The European picture for the other divisions and Group companies in the year under review was briefly as follows: in the chemical products sector, production and shipments were up but prices failed to improve adequately; in the other sectors gains were achieved, except for paper products.

We further intensified trade with state trading nations. In 1976, exports to these countries totaled Hfl 506 million (1975: Hfl 435 million). We now have overall agreements with five East bloc countries. These agreements mainly pertain to the regulation and further development of trade relations.

North America

The picture in this geographical area was dominated by American Enka, which suffered a loss, mainly due to drops in prices and shipments of polyester textile filament yarns. An additional factor which contributed to this loss was an eight-week strike at a major location.

American Enka acquired Fibron Inc., a company holding rights to a proprietary method of manufacturing fibrillated slit film (polypropylene).

Armak had a good year, insofar as sales performance was concerned, but income was hurt by strikes at a number of plants and start-up problems at the Bayport (Texas) catalyst plant in the first half of the year, among other factors. The company stepped up its research and development efforts, giving particular emphasis to polymer developments.

In 1976, Armira again recorded excellent results; the company commissioned a new liquid waste treatment system, which represents one of the most modern and efficient of its type within the leather tanning industry.

Brand-Rex was confronted with diminished growth in a number of markets, including the telecommunications industry. The company seeks to boost income through greater penetration of the domestic market and utilization of export opportunities.

International Salt enjoyed a record year, due in part to the cost reduction programs and rationalization investments started in 1972. In 1976, the number of employees was more than 20% below the 1971 level.

At Organon Inc., income was depressed through such factors as sharp price competition for heparin and low profitability levels for diagnostics. The acceptance of Organon Inc.'s disposable clinical thermometers (e.g. *Tempa-DOT®*) was gratifying.

Rest of the world

Our interests outside Europe and North America are mainly centered on Latin America. To a large extent, these interests concern minority participations in man-made fiber companies in Mexico, Brazil, Colombia, Ecuador and Argentina. Prospects for the growth of man-made fiber consumption in these countries are generally favorable, though not to the extent that Group participation in new fiber operations is likely. Our task will rather consist of giving active support to the further development of our present affiliates.

Our establishments in Brazil represent virtually all product groups. Many years ago, Organon set up an independent unit in Brazil for the production and sale of pharmaceuticals. In addition to such man-made fiber producers as Polyenka and COBAFI, which has a manufacturing facility for industrial yarns and fabrics under construction, our affiliates in that country include companies engaged in the production of coatings (Montesano), salt (CIRNE) and chemical products (Poliquíma). Opportunities for participation in new or existing companies are under study; among the projects considered is the construction of a facility for the manufacture of fatty acids and fatty acid derivatives based on Armak's know-how.

Enkador S.A. is Ecuador's first producer of synthetic fibers. (Photo: Leonardo Serrano, Quito)

The variety of our operations in Brazil and the opportunities for expansion necessitate coordination as well as centralization of certain service activities. These tasks have been entrusted to Akzo Ltda, which was established in 1973.

Japan is another center of Akzo's interests, though not on the same scale as Brazil. Our 50/50 joint ventures with Japanese companies are mainly active in specialty chemicals and pharmaceuticals. In the year under review, construction was started of a monochloroacetic acid plant. Akzo's interests in Japan are coordinated by Mercator Internationaal.

Arnhem, March 24, 1977

the board of management

Management

March, 1977

Akzo N.V. is the Group's holding company with direct and indirect participations in a number of companies. Together they constitute the Akzo group.

Board of management of Akzo N.V.

A number of board members are primarily charged with the preparation of Group policy and with the day-to-day management of Akzo N.V.

G. Kraijenhoff	general affairs; pharmaceutical interests
S. C. Bakkenist	social policy, public affairs, organization, internal auditing, insurance; consumer product interests
H. J. Schlange-Schöningen	man-made fiber interests; economic relations with state trading nations
H. Kramers	research and development, engineering, environmental and safety affairs
H. J. Kruisinga	financial, accounting, fiscal and legal policies; automation affairs
J. A. Wolhoff	Group strategy; chemical product interests

The other board members are specifically charged with the management of Group units.

A. G. van den Bos	Akzo Chemie
H. van Doodewaerd	Akzo Consumenten Produkten
A. van Driel	Akzo Coatings
J. Veldman	Akzo Pharma
H. J. J. van der Werf	Akzo Zout Chemie
H. G. Zempelin	Enka Glanzstoff

The secretary of the board of management is A. H. M. Wentholt, who is also responsible for the staff departments of Strategic Planning and Economic Affairs.

Acting as adviser to the board of management is W. K. N. Schmelzer, specifically in relation to international affairs and issues of a general social nature.

Management of central staff departments

M. W. Arts	Internal Auditing
A. M. van Haastrecht	Organization
T. Herrema	Personnel Affairs; Public Affairs
J. M. Hessels	Financial Affairs
C. Hoek	Legal Affairs
H. S. Jongepier	Environmental and Safety Affairs
J. K. G. Meijnen	Insurance Affairs
S. Minnema	Economic Relations with State Trading Nations
K. J. Mulder	Economic Affairs
O. H. Nijman	Fiscal Affairs
R. J. Ovezall	Accounting and Management Information
P. J. S. Th. Stehouwer	Research and Development
T. M. Tieleman	Strategic Planning
A. W. Zijlker	Computer Affairs

Other staff officers

Mrs. M. A. van Damme-van Weele	Chemical Development
B. Klaverstijn	Information
E. W. Meier	International Relations

Management of Akzo Engineering

J. R. Eppenga

Managements of Group companies and divisions in which Akzo N.V. holds an interest of 95% or more

Enka Glanzstoff

H. G. Zempelin	president
J. R. Hutter	deputy president
H. Stöhr	
G. Tückmantel	
J. Verhaar	

A. Bendziula
D. Sorgdrager

Akzo International

H. G. Karus	president
G. G. Cerutti	
H. W. Muzerie	
A. F. J. C. Zillikens	

Akzo Zout Chemie

H. J. J. van der Werf	president
M. Boogaerdt	
J. H. Dijkema	
G. H. W. Meeder	

Akzo Chemie

A. G. van den Bos	president
J. C. P. van Oosterom	
M. D. Westermann	

M. E. Hartman
D. B. Kagenaar
P. W. Pfeiffer
H. A. Praetorius

Akzo Coatings

A. van Driel	president
R. de Bonneval	
O. Daum	
C. P. B. Littooy	
W. L. W. Ludekens	
G. Macovich	
H. van Prooyen, Sr.	
C. Zaal	

Akzo Pharma

J. Veldman	president
J. H. H. Florax	
C. P. Spoel	

B. H. van Dommelen
H. M. Schut
F. L. Vekemans
A. G. Vermeeren

Akzo Consumenten Produkten

H. van Doodewaerd	president
W. P. Boerma	
M. A. Hoolboom	
P. B. van Hulst	
H. B. Jacobs	
A. M. van der Linden	
R. S. Schortinghuis	
J. E. H. Sikkink	

Managements of national organizations

Akzo Nederland

W. J. Wolff	president

Akzo België

C. Vlug	president

Akzo Ltda, Brazil

A. A. Loudon	president

Mercator Internationaal, Japan

T. A. Townsend	managing director

The pharmaceutical industry in today's society

Notably among social critics, politicians, consumers and governments, an increasing interest is perceptible in health care and related problems, and more specifically in the question of costs, which in the Netherlands amounted to Hfl 18,000 million in 1975. While it is true that this interest is in the health care area as a whole, a considerable amount of critical attention is being focused on the pharmaceutical industry.

Akzo Pharma believes that expenditures of this order, which are at a similarly high level in practically all the industrialized countries, should indeed be subjected to critical review. Akzo Pharma also believes that for itself and other pharmaceutical companies criticism can be both corrective and constructive. However, the bona fide pharmaceutical company is all too often the subject of unfounded criticism.

Akzo Pharma therefore welcomes this opportunity to draw attention to certain situations and trends which, if aggravated, could be detrimental to the continuity of its innovative pharmaceutical business, whose research and production facilities are for the most part established in the Netherlands.

Akzo Pharma has annual sales of more than Hfl 1,000 million. Its activities cover research, manufacture, sales and services in the following areas:
- ethical proprietary drugs for human use
- non-prescription proprietary drugs for human use
- diagnostics
- medical equipment and instruments
- veterinary products.

These products are used for the prevention, diagnosis and treatment of diseases in men and animals. Akzo Pharma is furthermore engaged in the manufacture and sale of pharmaceutical raw materials. Notably in the Netherlands, its activities also embrace crop protection products.

Akzo Pharma has a total of about 8,800 employees, approximately 3,700 of whom are in the Netherlands and 2,400 in other Common Market countries. Personnel costs amount to about 28% of sales, i.e. an average of Hfl 33,000 per employee. About 1,100 employees are engaged in research, 85% of these in the Netherlands. Many are highly qualified research workers.

Among the first preparations introduced by Organon (established in 1923) was Insuline-*Organon®*, used principally in the treatment of diabetes mellitus. In a highly purified form, this product is still manufactured by Organon. The thirties were extremely important years. Among the successes achieved was the production for medical use of the female hormones estrone and progesterone and the male hormone testosterone; the original method was extraction from animal organs, chemical synthesis being adopted later. We should particularly like to mention here our research on the adrenal cortex, which led to the production of *Doca®*, the first synthetic form of one of the corticoids. This period also produced *Pregnyl®*, prepared from a hormone (gonadotrophin) obtained from the placenta. In these years, the foundations were laid for a large part of Organon's product range; of course, the products have been adapted over the years to changing health requirements.

The summary below shows the most important drugs and diagnostics developed since the Second World War by the Akzo Pharma research laboratories, which for the most part come under Organon, one of its operating companies.

1947	Organon first to synthesize vitamin A
1953	Organon first to market an intrinsic factor preparation *(Bifacton®)* for the treatment of certain forms of anemia
1956	Organon first to market an anabolic preparation *(Durabolin®)*; this product has a protein-sparing and protein-building effect
1960	Organon introduces *Gestanon®* (allylestrenol), the first oral hormone preparation for the maintenance of pregnancy
1961	Organon introduces its first oral contraceptive *(Lyndiol®)*, or 'the pill', based on an original Organon substance called lynestrenol
1962	Organon enters the diagnostics field with its *Pregnosticon®* pregnancy test
1963	Organon launches *Humegon®*, a preparation for the treatment of certain forms of sterility
1966	Extension of the Organon diagnostics range with *Pregnosticon Planotest®* and *Rheumanosticon®* (a test for the detection of the rheumatoid factor)
1968	Organon introduces *Cortrosyn®* and *Cortrosyn Depot®*; these are preparations based on a synthetic substance whose action corresponds with that of natural ACTH (which stimulates the production of hormones in the adrenal cortex)
1968	Introduction of *Pavulon®*, a muscle relaxant based on a non-hormonal steroid, having special applications in surgery

1969 Organon introduces *Ovanon*®, an alternative oral contraceptive whose action closely approximates the natural cycle of the female

1970 Organon markets the hormone preparation *Synapause*®, representing a new approach in the prevention and treatment of post-menopausal complaints

1972 The Organon diagnostics range is supplemented by *Hepanosticon*®, used in the detection of the hepatitis B-antigen

1973 Introduction of *FSH-Nosticon*®, a diagnostic for the detection of the hormone which promotes the growth of the ova

1975 Organon introduces *Tolvon*®, thereby entering the field of drugs for the treatment of depression

1976 Introduction of the first diagnostic for the detection of hepatitis, based on an enzyme immuno-assay technique.

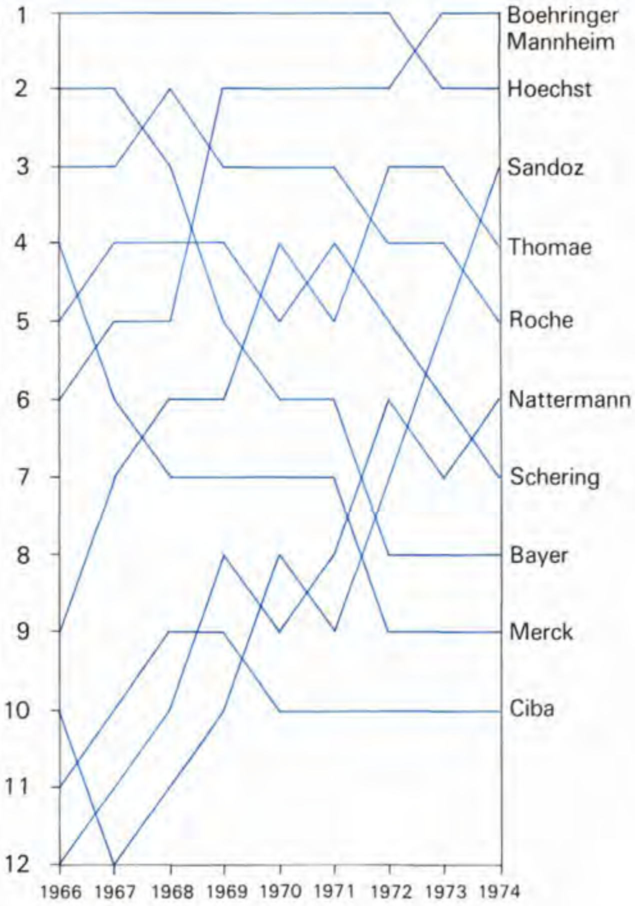
The above summary bears testimony to the capabilities of an innovative pharmaceutical enterprise such as Akzo Pharma. It is worth mentioning here that 90% of the new drugs of the last three decades were developed in the research laboratories of the pharmaceutical industry. In the period 1961–1973, 95% of the new drugs developed by this industry were contributed by companies in Western Europe, North America and Japan*; this clearly illustrates the stimulus to creativity that is provided by free enterprise.

Pharmaceutical products have a relatively short life cycle and are rapidly superseded by new and better products. Critics censure the pharmaceutical industry on this account. They should reflect, however, that there is an urgent demand for new therapies and for heightened drug efficacy or improved safety.

There is lively competition between the innovative pharmaceutical companies and market positions can change quickly. In their study entitled 'Arzneimittelmarkt und Wettbewerb' (Frankfurt, 1975), Rahner and Teichner show what the consequences of competition can be. They give the following graph showing the sharp fluctuations in order of market position, undergone by various manufacturers of pharmaceutical products in West Germany.

Obviously, there is no question of a rigidly-defined market situation!

New drugs, which are capable of ensuring the profitability and, hence, the continuity of the industry, require heavy research expenditures. At the same time, they provide a basis for better health care. Numerous disorders and complaints are now things of the past or can be adequately treated, thanks to the availability of suitable drugs. The proportion of patients who are ambulatory and leading normal lives has increased dramatically.



Organon, Akzo Pharma's main operating company, now spends the equivalent of some 12% of its sales on research into, and development of, new drugs and diagnostics. Moreover, the average period for development and health registration of a new drug is 10 years, so that the time for which the producer effectively enjoys the benefit of patent protection is substantially shortened. Research expenditures for a new drug now vary from Hfl 40 million to Hfl 60 million.

A substantial portion of these expenditures is necessary to ensure product safety, a factor which is at least as important as product efficacy. The establishment of safety requires many years of research and development work so as to meet our own standards as well as those of the health authorities. Any new drug to be marketed must

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* taken from Drug Data 1976, published by the Bundesverband der pharmazeutischen Industrie

be approved by these authorities, who meticulously test the development records against the official standards.

The fact that a costly research project may have to be abandoned without accomplishing its objective naturally constitutes a major risk for the company.

To permit the vital development of new products and enable the associated high costs to be met, adequate funds for that specific purpose must become available from sales of existing products.

To safeguard continuity, it is further necessary that the value of the capital entrusted to the company to carry on its operations be maintained, and that the providers of that capital be adequately rewarded.

Circumstances and business have so far been such that the conditions outlined above could be satisfied.

However, as observed in our introductory statement, the pharmaceutical industry today is exposed to a great deal of unjust criticism. Such criticism tends to become the basis for a redefinition of official attitudes and, hence, may lead to restrictive measures on the part of the authorities and the medical care insurance funds, which could be crippling to the industry and, by implication, to Akzo Pharma.

A development of this kind is especially evident in Western Europe; since Akzo Pharma's interests, as regards sales and income as well as employment, are mainly in this area, it is followed with concern and, where necessary, publicly opposed.

Before we turn to a consideration of the criticisms made, it should be made clear that, like its research, Akzo Pharma's production of raw materials and of finished products is in significant measure concentrated in the Netherlands.

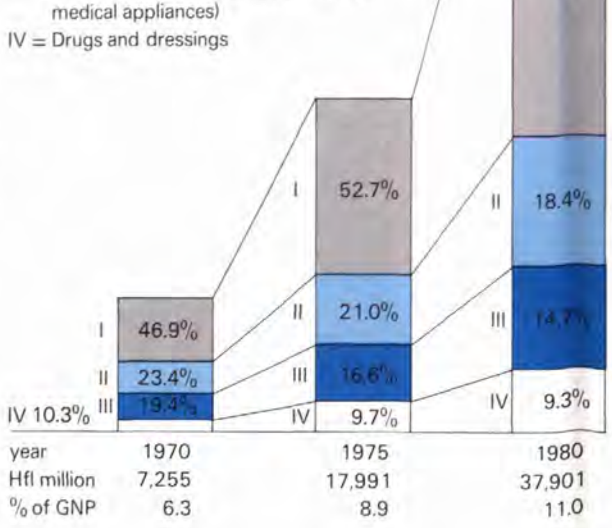
Our sales, however, must be made internationally, the home market absorbing only 8% of our drugs and pharmaceutical raw materials. These sales depend on goods (our products) and services (research) which are largely of Dutch origin and which, in foreign currency terms, are becoming ever more expensive as a result of the strong position of the guilder. Selling prices in foreign currencies cannot be sufficiently raised to allow for this, so that profit margins are under pressure.

The cost explosion in health care

In health care, the principal concern of the growing public interest and criticism, and the one to which we will restrict ourselves in this section, is with the explosive increase in expenditure. The chart opposite shows actual costs for the years 1970 and 1975, with projected costs for 1980, based on the Dutch National Health Council's 1976 report dealing with an approximation of the development of the cost of health care in the Netherlands. Most industrialized countries show a similar development.

In 1953, the cost of health services in the Netherlands was 3.8% of gross national product. The chart shows that this figure was up to 8.9% in 1975 and that it is estimated to grow to 11% in 1980. This would seem an unduly high level. Ways to restrain this development should therefore be explored; some suggestions on this matter will be given below.

Not all sectors contribute equally to this development. The share of category IV (drugs and dressings) has gone down from 10.3% in 1970 to 9.7% in 1975 and is expected to decrease further to 9.3% in 1980. The shares of categories II and III should likewise decrease. By contrast, the share of category I (hospitals, etc.), which was already 46.9% in 1970, should grow further to 57.6% in 1980. It is clearly in this sector that the principal causative factors for the overall rise in costs are to be found, and it is here that one should first look for potential economies. Soaring personnel costs (salaries and social charges) in this labor-intensive field are to a large extent to blame for the cost explosion; it may perhaps be


Cost of health care in the Netherlands
(partly based on extrapolation)

possible to reduce costs through improvements in efficiency.

Upon analysis, the causes of the absolute increase in the cost of drugs and dressings are found to be of two kinds. Under (A), two causes are discussed which Akzo Pharma feels admit of corrective action. Under (B), a number of unrelated causes are described which have to do with the growth in prosperity and with inflation.

A (i) Extension of range of services beyond the strictly medical

A recent study of the British Office of Health Economics* gives as the principal reason for the overwhelming demand for health services the fact that 'both the medical profession and the public have developed unrealistic expectations of what can be achieved by health care'. The authors are highly critical of the tendency to turn social problems over to the medical sector where they cause an escalation of costs. A redefinition of standards and a different approach to social problems could do much to cut costs.

(ii) Excessive use of free health care

The fact that in the industrialized countries, health services are available free of charge to a large part of the population has helped create excessive demand. Viewed in this light, payment of a socially acceptable contribution by the patient himself could promote a more rational use and so reduce costs.

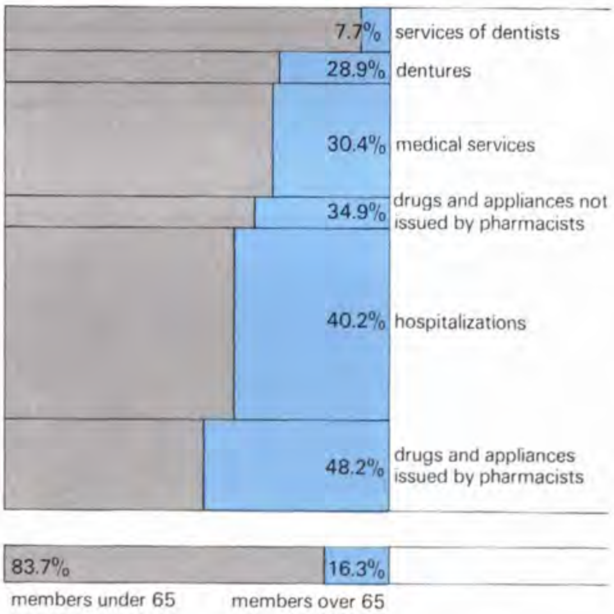
B (i) Legitimate increases in the use of drugs

Legitimate increases in the use of drugs have resulted from the following factors:

- better diagnosis and better preventive care;
- new therapies for diseases that used to be untreatable;
- changed yardsticks for 'being sick', 'not feeling well' and 'wanting to do something about it'.

A further important cause is the disproportionate and still ancreasing consumption of care by the group of people who are over 65. In no sector of health care is this disproportion more striking than for drug consumption, as illustrated by the following chart. Based on data for 1975 published by the association of German medical care insurance funds, it shows that old-age pensioners, though accounting for only 16.3% of the insured total, cause upward of 48% of all expenditures for drugs and appliances issued by German pharmacists. The practice of 'easing' life in old age by means of drugs is gaining acceptance.

Share of old-age pensioners in medical care insurance fund expenditures in West Germany (1975)



(ii) Price rises

In absolute terms, expenditures for drugs and dressings increased, partly due to a modest price rise. Data provided by the Dutch Central Bureau of Statistics indicate that, in the Netherlands, prices of drugs obtainable from pharmacies went up 28% over the period 1964–1975, whereas, in the same period, the cost of living rose over 100%. Some instances of price rises recorded for this period are: premium gasoline 92%, public transport fares 133%, bread 135%, footwear 147%, books, dailies and weeklies 198% and letter postage rates 285%.

Although it is sufficiently clear from the foregoing that allegations that drug prices are too high and that research and development work is lacking in effectiveness are groundless, it may be illuminating to take a look at the price structure of a drug.

Generally, only one half of the price paid by the consumer for a drug goes to the producer. From this half, the producer must cover the costs of both his existing drug production and sale and his development of new drugs, and must derive his profit in order to ensure continuity. Of the 50% of this profit remaining after income taxes, two-thirds are usually employed to finance the company's further development, while one-third is used for the payment of dividend to stockholders.

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* The Health Care Dilemma: 'Am I kranken, Doctor?', Office of Health Economics, London, 1975

The charts opposite show a typical breakdown of prices for the products of an international pharmaceutical enterprise such as Organon.

In chart B, the 24% composed of advertising and publicity, profit and corporation income tax is shown as one item. As a rule, this item breaks down as follows: one-third for advertising and publicity, one-third for profit and one-third for tax.

Worldwide, price levels for Organon's products must permit the generation of sufficient funds to cover the items presented in chart B. However, prices differ widely from one country and from one product to the next as a result of divergent local conditions, such as competition, wages and spending power, market volume, available distribution channels, fiscal regulations, and the presence or absence of government price controls.

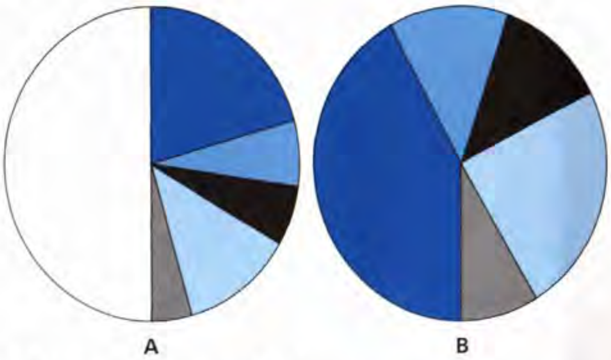
We note this fact since there is an increasing trend to make international price comparisons from which the industry's critics take the lowest price and use it as proof for their claim that prices for the same drug in other countries are too high. This may occasionally be true; however, as a general statement, it is certainly incorrect and, moreover, dangerous for the continuity of companies like Akzo Pharma. It would be justified only if conditions in the countries concerned were the same. Since this is clearly not the case, such comparisons are misleading, the more so as they fail to provide the background necessary for correct interpretation.

Due to government price controls and currency depreciation in France and Italy and to the decrease in the value of sterling in the United Kingdom, prices for drugs in these countries are substantially lower than in the Netherlands and West Germany. This involves the danger that the lower price levels in the former countries could become a standard for the entire Common Market. In this context, it is worth mentioning that the government price controls in France and Italy have led to the bankruptcy of a large number of pharmaceutical companies in these two countries, while the continued existence of many others is imperiled on account of low or zero profitability.

The authorities charged with the control of the health care and medical care insurance budgets in the Netherlands and West Germany rightly keep prices under vigilant scrutiny. However, a reduction in expenditure through lower drug prices would have serious consequences for the innovative pharmaceutical companies in these countries and would present a threat to their continuity, with all its potential social and economic effects. Health care itself would suffer even more, as such a development is in time bound to result in a lack of adequate drugs.

It is thus with great concern that Akzo Pharma views the so-called parallel imports of drugs – especially those from the United Kingdom – which contribute to the dangerous development outlined above. These imports are freely allowed under the EEC treaty and under a recent ruling of the European Court.

Price structure of a drug



A. Breakdown of consumer price

⬜ 50%: wholesale trade + pharmacist's margin + sales tax

🟦🟦⬛🟦▩ 50%: gross revenue to producer

B. Breakdown of gross revenue to producer

🟦 42%: production, quality control and logistics (transport, distribution)

🟦 13%: scientific information to physicians and pharmacists

⬛ 12%: research and development

🟦 24%: advertising and publicity + profit + corporation income tax

▩ 9%: overheads and administrative expenses

Free drug trade within the Common Market – a logical consequence of the EEC Treaty and favored by Akzo Pharma – is liable to be counterproductive unless there is harmony among the various member states in respect of the factors which influence prices.

One major factor in this regard is the rates of exchange among the various Common Market currencies. The following may serve to illustrate this point.

Over the last few years, the wide fluctuations in exchange rates have given rise to substantial differences in price levels among a number of Common Market countries. The consequences of these differences for a Dutch-based company are indicated in the graph on page 35. The graph assumes a uniform price, at January 1, 1970, in the United Kingdom, West Germany, France and Italy; this price represents the equivalent of Hfl 10, *Effect of fluctuations in exchange rates on guilder sales (1970 = 100)*

expressed in the local currencies. For the period following this basic date, the price levels in local currencies have been translated into Dutch guilders at the rates of exchange in force in this period. The graph shows, for instance, that in the United Kingdom a constant local price representing an amount of Hfl 10 in 1970 had a value of merely Hfl 4.77 at end-1976.

It is evident from the graph that guilder proceeds from sales effected in the United Kingdom, Italy and France are becoming increasingly lower. It should be repeated that, for companies which operate from, and have their manufacturing and research facilities in, the Netherlands, these changes in exchange rates lead to substantial reductions in sales and profit margins if the price rises necessary to offset them cannot be effected in the countries concerned. Moreover, international price comparisons made after currency devaluations in certain countries are apt to lead to unjustified conclusions and thus entail a risk in that they make it impossible to realize vital price increases in other countries.

As we have seen, the factors which influence drug price levels in the individual EEC member states still show major differences from one country to the next. Especially notable are the price controls or even price freezes in Italy, France and Belgium, which have so far been highly arbitrary and have lacked a sound economic basis. With one minor exception, the Italian government has not allowed any price increases for drugs since 1963. In France, a general price freeze was in force until 1968; the occasional price increases which have since been authorized for certain products have been insufficient to effect any substantial change in the unfavorable overall scene, the more so as prices of some other products have been forced down by government measures. In Belgium, price adjustment has been virtually impossible for years.

Future

The chapter of this annual report dealing with pharmaceuticals shows that results for 1976 were satisfactory. Nevertheless, we are concerned about the future on account of certain developments and conditions, some of which have been outlined above. The explosive rise in costs of health care and the ensuing criticism, which is particularly directed at free enterprise in the pharmaceutical area, have unfortunately tended to lead to unjustified conclusions and measures affecting the pharmaceutical industry – measures as regards pricing as well as other measures which have hampered the industry in developing new or improved drugs, in providing scientific information to physicians and pharmacists and in adequately publicizing the merits of its products. A large part of such criticism stems from a lack of knowledge about the essence and operation of the innovative pharmaceutical industry. To some extent, this has been due to a failure on the part of this industry to provide the public with adequate information on these aspects. For this reason, Akzo Pharma has initiated a program to make people within and outside of the company acquainted with its objectives as an innovative industry and with the conditions essential for its proper functioning. It is hoped that this will also convince governments of the necessity to refrain from measures that could endanger the continuity of the pharmaceutical industry, which is of major significance to society.

The Dr. Saal van Zwanenberg Auditorium (Akzo Pharma, Oss) was inaugurated in 1976. Besides three smaller conference rooms, it houses a theater with a seating capacity of 200 for scientific and other meetings and congresses. (Photo: Dieter Jausovec, Oss)

Financial statements

Principles of consolidation

The consolidated financial statements include Akzo N.V. and all companies in which Akzo N.V. or any of its majority subsidiaries has an interest, directly or indirectly, of more than 50% of the outstanding capital stock. 100% of the assets, the liabilities and the results of the consolidated companies are included. Minority interest in Group equity and in Group income (loss) is shown separately. The principal affiliated companies are listed on page 56 and following. A list of names and registered offices of affiliates, drawn up in conformity with article 2 : 320, paragraph 2, and using paragraph 3, subpara a, of the Dutch Civil Code, has been filed at the Trade Registry of Arnhem.

Principles of valuation and determination of income

The valuation principles for property, plant and equipment, investments in non-consolidated companies, other non-current assets, inventories, securities included in cash and marketable securities, and provisions are stated separately in the notes to the consolidated balance sheet.

Receivables, cash and liabilities are stated at face amounts, less such provisions for receivables as are deemed necessary.The parts of long-term receivables and long-term debt becoming due within one year are included under short-term receivables and other current liabilities, respectively.

Discount on borrowings is included under prepaid expenses and is charged against income over the period elapsing until maturity of the borrowings.

Intangible assets, which include exploitation rights, are not capitalized; they are charged against operating income. Paid goodwill is charged directly against Group equity.

In the consolidated balance sheet, amounts in foreign currencies have been translated into guilders at rates virtually equal to the rates of exchange in force at year's end, except for the U.S. dollar convertible debentures, whose valuation in guilders is based on a rate of U.S. $ 1 = Hfl 3.60. In the consolidated statement of income, foreign currencies have been translated into guilders at rates of exchange fixed for each quarter as typical of the rates then applicable.

Foreign exchange differences are included in operating income, except for foreign exchange differences resulting from translation into guilders, at changed exchange rates, of stockholders' equities of companies outside the Netherlands; the latter differences are directly added to, or deducted from, Group equity.

Effect of price rises on Group equity and income

The principles of valuation and determination of income used in the consolidated financial statements shown on pages 38 through 45 are based on historical cost. The effect of price rises on Group equity and income is shown on pages 46 and 47.

Net income (loss) per share of common stock

Net income per share of common stock is calculated by dividing net income, less the part thereof distributed in the form of dividends on priority and cumulative preferred stock and the bonuses to the members of the supervisory council, by the number of shares of common stock outstanding at December 31.

Net loss per share of common stock is calculated by dividing net loss by the number of shares of common stock outstanding at December 31.

Consolidated balance sheet of the Akzo group

after allocation of loss; see notes on pages 41 through 44

in Hfl 1,000	December 31, 1976		December 31, 1975	
non-current assets				
property, plant and equipment	3,904,035		4,396,410	
investments in non-consolidated companies	288,008		307,211	
other non-current assets	162,513		124,725	
		4,354,556		4,828,346
current assets				
inventories	1,949,045		2,113,053	
short-term receivables	1,787,427		1,905,459	
prepaid expenses	58,664		51,022	
cash and marketable securities	610,627		538,883	
		4,405,763		4,608,417
total assets		8,760,319		9,436,763
Group equity				
Akzo N.V. stockholders' equity	2,628,111		2,983,975	
minority interest in Group equity	485,624		541,168	
		3,113,735		3,525,143
long-term liabilities				
provisions	942,581		1,051,316	
long-term debt	2,625,720		2,693,122	
		3,568,301		3,744,438
current liabilities				
bank borrowings and overdrafts	310,031		308,491	
other current liabilities	1,768,252		1,858,691	
		2,078,283		2,167,182
total Group equity and liabilities		8,760,319		9,436,763

Consolidated statement of income of the Akzo group

see notes on pages 44 and 45

in Hfl 1,000		1976		1975
sales		10,749,783		9,716,865
operating costs				
salaries, wages and social charges	3,277,117		3,109,080	
depreciation	533,132		518,867	
other costs	6,634,693		6,106,211	
		10,444,942		9,734,158
operating income (loss)		304,841		(17,293)
interest		249,397		234,236
		55,444		(251,529)
taxes on operating income less interest		58,553		(58,448)
		(3,109)		(193,081)
equity in earnings of non-consolidated companies		24,185		12,686
Group income (loss) before extraordinary items		21,076		(180,395)
extraordinary items		(166,897)		(252,562)
Group income (loss)		(145,821)		(432,957)
of which minority interest		6,945		6,693
Akzo N.V. net income (loss)		(152,766)		(439,650)
net income (loss) before extraordinary items		5,771		(193,246)
extraordinary items	(166,897)		(252,562)	
of which minority interest	(8,360)		(6,158)	
		(158,537)		(246,404)
Akzo N.V. net income (loss)		(152,766)		(439,650)

net income (loss) before extraordinary items, per share of common stock, par value Hfl 20 per share, in Hfl	0.20	(6.53)
net income (loss) per share of common stock, par value Hfl 20 per share, in Hfl	(5.16)	(14.86)

Consolidated statement of changes in financial position of the Akzo group

see notes on page 45

in Hfl million		1976		1975
working capital (excess of current assets over current liabilities) at January 1		2,441		2,339
source of funds				
Group income (loss)		(146)		(433)
charges to income not requiring funds:				
depreciation	533		519	
disinvestments	151		151	
provisions	(51)		95	
retained earnings of non-consolidated companies	(4)		12	
sundries	20		26	
		649		803
funds from operations		503		370
disposal of participations	40		3	
borrowings	496		826	
issuance of stock by Group companies	1		14	
		537		843
		1,040		1,213
application of funds				
expenditures for property, plant and equipment		413		745
new participations	11		51	
working capital of new participations	3		7	
		8		44
investments in non-consolidated companies		42		48
other non-current assets		41		(43)
		504		794
redemptions on borrowings		446		277
dividends paid to minority stockholders of Group companies		18		21
miscellaneous		186		19
		1,154		1,111
working capital at December 31		2,327		2,441
increase (decrease) in components of working capital:				
inventories	(164)		(449)	
short-term receivables	(118)		74	
prepaid expenses	8		(5)	
cash and marketable securities	72		15	
increase (decrease) in current assets		(202)		(365)
bank overdrafts	2		(102)	
other current liabilities	(90)		(365)	
increase (decrease) in current liabilities		(88)		(467)
increase (decrease) in working capital		(114)		102

Notes to the consolidated financial statements of the Akzo group

Consolidated balance sheet

Changes in consolidated companies

At January 1, 1976, the Fabelta company (Belgium) was deconsolidated. There were no other material changes in consolidation in 1976.

Property, plant and equipment

Land is stated at cost with a revaluation, however, at January 1, 1969, of approximately Hfl 70 million for land acquired long ago. Other property, plant and equipment are stated at cost, less depreciation.
Depreciation is calculated by the straight-line method based on estimated life. In cases where the book value calculated in this way exceeded the value to the business, additional write-offs were made. Furthermore, a provision of Hfl 75 million was deducted from the book value to cover the risk of future additional write-downs in the man-made fibers sector.

in Hfl 1,000	cost of acquisition	book value
situation at December 31, 1975:		
land	234,465	234,465
buildings	2,063,972	1,198,361
plant equipment and machinery	7,486,325	2,837,242
means of transport	126,459	46,326
assets not used in the production process	201,952	80,016
	10,113,173	4,396,410
changes in 1976, due to:		
acquisition and disposal of consolidated companies	(124,482)	(13,034)
capital expenditures	413,314	413,314
disinvestments	(216,355)	(150,909)*
depreciation	–	(533,132)
foreign exchange differences	(419,643)	(234,474)
other changes	4,669	25,860
	(342,497)	(492,375)

* including the provisions for additional write-offs and future additional write-downs in the amount of Hfl 112 million mentioned on page 45

in Hfl 1,000	cost of acquisition	book value
situation at December 31, 1976:		
land	220,316	220,316
buildings	2,001,330	1,125,609
plant equipment and machinery	7,187,506	2,521,105
means of transport	119,951	39,135
assets not used in the production process	241,573	72,870
	9,770,676	3,979,035
provision for future additional write-downs	–	(75,000)
	9,770,676	3,904,035

projects under construction, included in cost of acquisition and book value:

at December 31, 1975	528,894
at December 31, 1976	254,431

purchase commitments (not included in consolidated balance sheet):

at December 31, 1975	226,014
at December 31, 1976	128,433

Investments in non-consolidated companies

This item includes the non-consolidated companies and the loans to these companies. Investments in non-consolidated companies are stated at the amount of Akzo's share in stockholders' equity, less provisions in the amount of Hfl 7 million (December 31, 1975: Hfl 18 million).
The calculation of stockholders' equity has been based as much as possible on the Akzo principles of valuation.

in Hfl 1,000	
situation at December 31, 1975	294,714
changes in participation	17,159
equity in 1976 earnings	34,189
dividends received	(30,533)
foreign exchange differences	(60,507)
other changes	8,651
situation at December 31, 1976	263,673
loans at December 31, 1976 (at December 31, 1975: 12,497)	24,335
	288,008

Other non-current assets

This item includes mainly long-term receivables and other assets that are not directly realizable. The latter are stated at cost or estimated value, whichever was lower.

Inventories

Inventories are stated at cost or market value, whichever was lower. Provisions have been made for obsolescence and other risks.
In the valuation of inventories, profits arising as a result of transactions between consolidated companies have been eliminated.

in Hfl 1,000	Dec.31,1976	Dec.31,1975
raw materials and supplies	653,603	701,953
work in process	467,175	537,487
finished goods	828,267	873,613
	1,949,045	2,113,053

Short-term receivables

in Hfl 1,000	Dec.31,1976	Dec.31,1975
trade receivables	1,716,141	1,876,837
receivables from non-consolidated companies	42,386	48,921
other receivables	301,943	298,594
	2,060,470	2,224,352
of which discounted	273,043	318,893
	1,787,427	1,905,459

Prepaid expenses

This item includes Hfl 11 million in respect of discount on borrowings (at December 31, 1975: Hfl 9 million).

Cash and marketable securities

With few exceptions, securities included in this item are listed on stock exchanges. They are stated at cost or market value, whichever was lower.
The securities include 83,750 shares of Akzo N.V. common stock, which are stated at market value at December 31, 1976.

in Hfl 1,000	Dec.31,1976	Dec.31,1975
securities	61,651	22,086
short-term investments	397,548	298,844
cash on hand and in banks	151,428	217,953
	610,627	538,883

Group equity

in Hfl 1,000	capital stock	capital surplus, paid in	retained earnings	other reserves	stock-holders' equity	minority interest	Group equity
situation at December 31, 1975	592,680	657,991	1,526,169	207,135	2,983,975	541,168	3,525,143
issuance of stock of Group companies to third parties						1,238	1,238
goodwill resulting from acquisitions of companies*			(3,785)		(3,785)	(231)	(4,016)
1976 Group loss			(152,766)		(152,766)	6,945	(145,821)
dividends paid to minority stockholders of Group companies						(17,836)	(17,836)
change in exchange rates				(212,715)	(212,715)	(67,647)	(280,362)
other changes				13,402	13,402	21,987	35,389
situation at December 31, 1976	592,680	657,991	1,369,618	7,822	2,628,111	485,624	3,113,735

* including restatements for prior years

At least Hfl 210 million of the capital surplus, paid in (at December 31, 1975: Hfl 210 million), can be considered free from income tax within the meaning of the Dutch 1964 Income Tax Law ('Wet op de Inkomstenbelasting 1964').

Provisions

This item comprises provisions which do not refer to specific assets.

in Hfl 1,000	Dec.31,1976	Dec.31,1975
deferred taxes	336,278	382,697
pension rights	298,503	287,183
other provisions	307,800	381,436
	942,581	1,051,316

Provisions for deferred taxes

This item comprises the tax liabilities, less the part expected to be settled in 1977. These liabilities have in general not been discounted to present value.
See also the notes to taxes on income (page 45).

Provisions in respect of pension rights

With due observance of the statutory regulations and customs in the countries concerned, most Group companies have arranged appropriate pension schemes for their employees.
The present value of the ensuing liabilities is largely covered by:

- provisions, in the aggregate amount of Hfl 299 million, made by Group companies in their balance sheets;
- the funds accumulated in independent pension funds through payment of contributions.

The present value of the pension benefits not yet covered is approximately Hfl 190 million (at December 31, 1975: approximately Hfl 120 million).

Other provisions

This item includes provisions for liabilities whose extent cannot be ascertained with accuracy, and provisions for various operating risks, including self-insurance. The amounts of the provisions are fixed in relation to the liabilities and risks concerned.

Long-term debt

in Hfl 1,000	Dec.31,1976	Dec.31,1975
convertible debentures	252,000	252,000
other debentures	595,643	497,949
private borrowings	1,840,268	1,872,459
installment buying and leasing arrangements	51,705	38,572
other long-term debts	207,527	313,125
	2,947,143	2,974,105
part becoming due within one year	321,423	280,983
	2,625,720	2,693,122

Private borrowings and other long-term debts have been secured to an aggregate amount of Hfl 411 million (at December 31, 1975: Hfl 489 million) by means of mortgages, etc.
The average interest rate of the debentures and private borrowings is 7.9% (1975: 7.7%).

Redemption on the other debentures and private borrowings will occur:

in 1977	Hfl 266 million
during the years 1978 through 1982	Hfl 1,184 million
during the years 1983 through 1987	Hfl 657 million
after 1987	Hfl 329 million
	Hfl 2,436 million

The breakdown by country of the other debentures and private borrowings is shown in the following table.

in Hfl 1,000	situation at Dec. 31, 1975	increase	decrease*	situation at Dec. 31, 1976
Group companies in:				
the Netherlands	1,368,942	250,167	160,978	1,458,131
West Germany	280,394	5,731	28,329	257,796
United States	465,062	139,425	143,283	461,204
other countries	256,010	58,184	55,414	258,780
	2,370,408	453,507	388,004	2,435,911

* including the effect of changes in exchange rates

Convertible debentures	*in Hfl 1,000*
U.S. $ 70 million principal amount of 4¾% debentures Akzo N.V. 1969 convertible into Akzo N.V. common stock. These debentures mature not later than 1989. The conversion price is Hfl 127.10 per share of Hfl 20 par value, based on an exchange rate of U.S. $1 = Hfl 3.60. The valuation of these debentures in guilders is based on the same exchange rate. Redemption at par occurs in 10 equal annual installments, which will become due in the years 1980 through 1989. Full or partial accelerated redemption is permitted. This borrowing includes the debentures held available for exchange of the remaining 4¾% convertible debentures Zout-Organon B.V. of U.S. $ 1,000 each; 69 of these debentures have not been exchanged.	252,000

Other debentures	*in Hfl 1,000*
Currently outstanding principal amount of 4½% debentures Akzo N.V. 1962. These debentures are redeemable in 13 equal annual installments, the first of which became due on July 1, 1968. Accelerated redemption is permitted.	5,484
Sfr 50 million principal amount of 5½% debentures Akzo N.V. 1967. These debentures are redeemable in 5 equal annual installments, the first of which will become due on July 31, 1978. Accelerated redemption is permitted.	50,100
Sfr 60 million principal amount of 6¾% debentures Akzo N.V. 1970. These debentures are redeemable in 6 equal annual installments, the first of which will become due on September 15, 1980. Accelerated redemption is permitted.	60,120
Currently outstanding principal amount of 11¼% debentures Akzo N.V. 1974. These debentures are redeemable in 10 approximately equal annual installments, the first of which became due on November 1, 1975. Accelerated redemption is not permitted.	59,990
Sfr 60 million principal amount of 7¾% debentures Akzo N.V. 1975. These debentures will be redeemed in 7 annual installments of Sfr 2 million each in the years 1979 through 1985 and in 4 annual installments of Sfr 4 million each in the years 1986 through 1989. The remaining principal amount will be redeemable at May 9, 1990. Accelerated redemption is permitted as from May 9, 1981.	60,120
Hfl 125 million principal amount of 9¼% debentures Akzo N.V. 1976. These debentures are redeemable in 5 approximately equal annual installments, the first of which will become due on July 15, 1982. Accelerated redemption is not permitted.	125,000
Profit-sharing employee debentures Akzo N.V.	4,178
Total other debentures Akzo N.V.	364,992
Currently outstanding principal amount of 6% debentures Koninklijke Zout-Ketjen 1965. These debentures are redeemable in 10 equal annual installments, the first of which became due on December 1, 1971. Accelerated redemption is permitted through 1979.	20,000
to be carried forward	384,992

carried forward	384,992
Currently outstanding principal amount of 4½% debentures Akzo Pharma B.V. 1961. These debentures are redeemable in 15 annual installments of Hfl 1 million each, in the years 1967 through 1981. Accelerated redemption is permitted.	5,000
Other debentures issued by consolidated companies	205,651
	595,643

Other current liabilities

in Hfl 1,000	Dec.31,1976	Dec.31,1975
suppliers	703,433	716,379
non-consolidated companies	24,972	23,978
taxes on income*	37,439	49,814
redemptions on borrowings	321,423	280,983
pensions	3,466	8,821
other liabilities and accrued charges	677,519	778,716
	1,768,252	1,858,691

- less tax receivables of Hfl 25 million (at December 31, 1975: Hfl 10 million)

Liabilities not shown in the balance sheet

With regard to non-consolidated companies and third parties, guarantees were given and liabilities contracted to an aggregate amount of Hfl 351 million (at December 31, 1975: Hfl 241 million), of which Hfl 235 million (at December 31, 1975: Hfl 185 million) direct by Akzo N.V.
In respect of leasehold, rent, etc., liabilities have been contracted for a number of years to an amount of approximately Hfl 30 million (at December 31, 1975: approximately Hfl 31 million) per year.

Consolidated statement of income

Sales

This item includes the total of amounts invoiced to third parties in respect of goods supplied and services rendered, less sales taxes and excise duties.

in Hfl million	1976	1975
man-made fibers	3,804	3,707
chemical products	3,724	3,088
pharmaceuticals, consumer products and miscellaneous products	3,222	2,922
	10,750	9,717

Depreciation

in Hfl 1,000	1976	1975
buildings	67,793	63,756
plant equipment and machinery	443,456	434,487
means of transport	15,774	16,054
assets not used in the production process	6,109	4,570
	533,132	518,867

For the method of calculation of depreciation, see page 41.

Operating income (loss)

in Hfl million	1976	1975
man-made fibers	(142)	(326)
chemical products	182	80
pharmaceuticals, consumer products and miscellaneous products	265	229
	305	(17)

Interest

in Hfl 1,000	1976	1975
interest paid	309,985	270,197
interest received, including income from securities, etc.	60,588	35,961
	249,397	234,236

Taxes on income

The taxes on earnings included in this item comprise current and deferred tax liabilities. From the losses incurred, taxes have been deducted to the extent that they can be offset against taxes charged to income in previous years. As a consequence, no deduction for taxes could be made in respect of losses in the amount of approximately Hfl 250 million (1975: approximately Hfl 290 million).
The taxes included in the statement of income break down as follows:

in Hfl 1,000	1976	1975
taxes on operating income less interest	58,553	(58,448)
taxes on equity in earnings of non-consolidated companies	12,471	4,424
taxes included in extraordinary items	(1,141)	(6,566)
	69,883	(60,590)

Equity in earnings of non-consolidated companies

Under this heading are included the Group's equity in earnings of non-consolidated companies and interest received on loans granted to these companies, taking into account taxes on these items.

Extraordinary items

This item comprises important but isolated gains and losses not relating to normal operations; the taxes concerned have been taken into account.
See also the note to taxes on income.

in Hfl 1,000	1976	1975
extraordinary gains	34,085	12,512
extraordinary losses	200,982	265,074
	(166,897)	(252,562)

The 1976 extraordinary losses comprise Hfl 185 million for the formation of provisions for rationalization of operations, including:

- a Hfl 63 million provision to cover the costs of decommissioning of facilities as well as social costs resulting from the rationalization measures in the man-made fibers sector announced in 1976;
- an extra provision of Hfl 75 million to cover the risk of future additional write-downs, likewise in the man-made fibers sector.

In respect of these provisions, no taxes have been deducted.
Of the amount of Hfl 185 million, Hfl 112 million has been deducted from the book value of property, plant and equipment, while Hfl 73 million has been added to other provisions.

Consolidated statement of changes in financial position

In addition to the items specifically recognized under source of funds and application of funds, the changes in non-current assets, Group equity and long-term liabilities comprise:

- the effect of consolidation or de-consolidation of existing interests as a result of changes in participation;
- valuation differences arising from translation into guilders of the 1975 and 1976 year-end balance sheet amounts of foreign companies at the rates of exchange in force at December 31 of the years concerned.

The effect of these factors on working capital is accounted for in the item 'miscellaneous'. In 1976 and 1975, it reduced working capital by Hfl 138 million and Hfl 18 million, respectively.

The statement separately shows funds relating to new participations and disposal of participations.

Effect of price rises on Group equity and income

Due to continued inflation in virtually all countries, the current value of property, plant and equipment and of investments in non-consolidated companies, and therefore of Group equity, is higher than is shown in the consolidated balance sheet. Operating income and net income are lower if operating costs are determined in relation to current prices. To date, no generally accepted method is available to show the effects of price rises on Group equity and income. We have calculated these effects in the manner set forth on page 47.

Condensed consolidated balance sheet

in Hfl million	December 31, 1976 on the basis of historical cost	December 31, 1976 on the basis of current value	December 31, 1975 on the basis of historical cost	December 31, 1975 on the basis of current value
property, plant and equipment	3,904	5,024	4,396	5,696
investments in non-consolidated companies	288	378	307	357
other non-current assets	162	162	125	125
non-current assets	4,354	5,564	4,828	6,178
current assets	4,406	4,406	4,609	4,609
total assets	8,760	9,970	9,437	10,787
Akzo N.V. stockholders' equity	2,628	3,193	2,984	3,585
minority interest	486	571	541	640
Group equity	3,114	3,764	3,525	4,225
provisions	942	1,502	1,052	1,702
long-term debt	2,626	2,626	2,693	2,693
current liabilities	2,078	2,078	2,167	2,167
total Group equity and liabilities	8,760	9,970	9,437	10,787

Current value has been calculated at 1976 and 1975 prices, respectively.

Changes in stockholders' equity

in Hfl million		1976		1975
stockholders' equity on a current-value basis at January 1		3,585		3,928
net loss before extraordinary items	(125)		(342)	
extraordinary items	(159)		(246)	
goodwill resulting from acquisitions of companies	(4)		(28)	
increase in value of inventories	56		77	
revaluation of property, plant and equipment and of investments in non-consolidated companies, and effect of changes in exchange rates	(160)*		196	
		(392)		(343)
stockholders' equity on a current-value basis at December 31		3,193		3,585

* on balance, this amount is negative because of the substantial decrease in value in 1976 of a large number of foreign currencies in respect of the guilder, and because of the valuation of property, plant and equipment, mainly in the textile fibers sector, at lower value to the business

Operating income (loss) and
Akzo N.V. net income (loss) before extraordinary items

in Hfl million	1976 operating income (loss)	net income (loss) before extraordinary items	1975 operating income (loss)	net income (loss) before extraordinary items
income (loss) on the basis of historical cost	305	6	(17)	(193)
difference between current cost and historical cost in respect of:				
inventories	(83)	(56)	(148)	(77)
depreciation on property, plant and equipment	(145)	(62)	(150)	(65)
equity in earnings of non-consolidated companies		(13)		(7)
income (loss) at 1976 and 1975 prices, respectively	77	(125)	(315)	(342)

Financial ratios

	1976 on the basis of historical cost	on the basis of current value	1975 on the basis of historical cost	on the basis of current value
Group equity : liabilities	0.55	0.61	0.60	0.64
stockholders' equity per share of common stock, par value Hfl 20 per share, in Hfl	88.78	107.87	100.80	121.14
net income (loss) before extraordinary items:				
per share of common stock, par value Hfl 20 per share, in Hfl	0.20	(4.22)	(6.53)	(11.56)
as percentage of stockholders' equity	0.2	(3.9)	(6.5)	(9.5)
operating income (loss) as percentage of sales	2.8	0.7	(0.2)	(3.2)

Method of calculation

The current value of land has generally been approximated on the basis of appraisals.
To calculate the current value of buildings, machinery and equipment, indexes from external sources in the principal countries of establishment were used. Additionally, a decrease in value as a result of technological advances was taken into account; this decrease was estimated at an average of 1% annually for buildings and of 2% annually for machinery and equipment.
In cases where the current value thus calculated exceeded the value to the business, the latter value was used. One consequence was that a major part of buildings, machinery and equipment in the EEC for the production of man-made fibers for textile uses was not revalued, neither at December 31, 1976 nor at December 31, 1975.
The current values in foreign currencies have been translated into guilders at rates virtually equal to the rates of exchange in force at year's end.

For non-consolidated companies, an overall revaluation was made on the basis of the estimated current value of their property, plant and equipment.

For inventories, no revaluation was made, as the value shown in the consolidated balance sheet does not differ materially from the current value of inventories.

Stockholders' equity on a current-value basis has been determined by adding to stockholders' equity as shown in the consolidated balance sheet, the amount of the revaluation of property, plant and equipment and of investments in non-consolidated companies, less the relevant deferred taxes and minority interest.

Operating income (loss) at current prices has been calculated by deducting from (adding to) the operating income (loss) shown in the consolidated statement of income:
- the inventory profits relating to the normal inventory level;
- the increase in the amount of depreciation, if depreciation is calculated on the current value of property, plant and equipment.

Net income (loss) before extraordinary items, at current prices, has been calculated by deducting from (adding to) the net income (loss) before extraordinary items shown in the consolidated statement of income:
- the afore-mentioned inventory profits and the increase in depreciation, less the relevant taxes and minority interest;
- the effect of the increase in depreciation on property, plant and equipment on equity in earnings of non-consolidated companies.

Akzo N.V. balance sheet

after allocation of loss; see notes on page 50

in Hfl 1,000	December 31, 1976		December 31, 1975	
affiliated companies				
consolidated companies	2,859,546		3,189,617	
non-consolidated companies	99,516		121,816	
loans to affiliated companies	865,794		1,057,854	
		3,824,856		4,369,287
short-term receivables and prepaid expenses				
receivables from affiliated companies	200,304		50,719	
other receivables	52,190		43,798	
prepaid expenses	15,620		14,538	
		268,114		109,055
cash and marketable securities				
marketable securities	2,393		3,642	
short-term investments	337,727		232,895	
cash on hand and in banks	37,282		47,047	
		377,402		283,584
total assets		4,470,372		4,761,926
stockholders' equity				
common stock	591,872		591,872	
cumulative preferred stock	760		760	
priority stock	48		48	
capital stock	592,680		592,680	
capital surplus, paid in	657,991		657,991	
retained earnings	1,369,618		1,526,169	
other reserves	7,822		207,135	
		2,628,111		2,983,975
borrowings				
convertible debentures	252,000		252,000	
other debentures	364,992		254,232	
private borrowings	890,826		886,862	
borrowings from affiliated companies	224,906		233,986	
		1,732,724		1,627,080
current liabilities				
amounts due to affiliated companies	60,901		81,133	
other liabilities and accrued charges	48,636		69,738	
		109,537		150,871
total stockholders' equity and debts		4,470,372		4,761,926

Akzo N.V. statement of income

see notes on page 50

in Hfl 1,000	1976	1975
net income (loss) before extraordinary items	5,771	(193,246)
extraordinary items	(158,537)	(246,404)
net income (loss)	(152,766)	(439,650)

The 1976 net loss has been charged against the retained earnings account.

Arnhem, March 24, 1977

the board of management:	the supervisory council:
G. Kraijenhoff	J. R. M. van den Brink
S. C. Bakkenist	H. M. van Mourik Broekman
H. J. Schlange-Schöningen	P. M. H. van Boven
A. G. van den Bos	P. M. van Doormaal
H. van Doodewaerd	H. L. Merkle
A. van Driel	Y. Scholten
H. Kramers	K. Schudel-van Zwanenberg
H. J. Kruisinga	W. F. G. L. Starrenburg
J. Veldman	F. H. Ulrich
H. J. J. van der Werf	L. Vaubel
J. A. Wolhoff	J. de Vries
H. G. Zempelin	O. Wolff von Amerongen

Notes to Akzo N.V. balance sheet and statement of income

General

The investments in affiliated companies, as well as the other assets and liabilities, have been valued, and income has been determined, in accordance with the principles of valuation and determination of income mentioned on page 37. Thus stockholders' equity and net income (loss) are equal to stockholders' equity and net income (loss) as shown in the consolidated financial statements on pages 38 and 39.

Non-consolidated companies

in Hfl 1,000

situation at December 31, 1975	121,816
changes in participation	6,495
equity in 1976 earnings	7,437
dividends received	(7,979)
foreign exchange differences	(32,819)
other changes	4,566
situation at December 31, 1976	99,516

Capital stock

Authorized capital stock of Akzo N.V. is Hfl 1,030,048,000 and consists of 48 shares of priority stock, par value Hfl 1,000 per share, 30,000 shares of cumulative preferred stock, par value Hfl 1,000 per share, and 50 million shares of common stock, par value Hfl 20 per share.

Outstanding capital stock consists of 48 shares of priority stock, 760 shares of cumulative preferred stock and 29,593,586 shares of common stock (of which 81,832 shares of common stock are held by the company).

The priority stock is held by 'Akzostichting' (Akzo Foundation), which is controlled by the members of the supervisory council and the board of management. The meeting of holders of priority stock has the right to draw up binding short lists of nominees for appointment to the supervisory council and the board of management.

The accrued and unpaid dividends on the priority and cumulative preferred stock for the years 1975 and 1976 total Hfl 96,960.

Borrowings

For information on the convertible and other debentures, see the notes to the consolidated financial statements (pages 43 and 44). The redemption plan for the private borrowings (average interest rate: 8.7%) is as follows:

in 1977	Hfl 96 million
during the years 1978 through 1982	Hfl 496 million
during the years 1983 through 1987	Hfl 271 million
after 1987	Hfl 28 million
	Hfl 891 million

Borrowings from affiliated companies have no fixed redemption plan.

Remuneration of supervisory council

For 1976, the members of the supervisory council were paid a total of Hfl 239,792 (1975: Hfl 273,750), which consisted entirely of fixed remuneration.

All members receive a remuneration.

At end-1976, the council numbered 12 (end-1975: 13) members.

Auditors' report

We have examined the foregoing 1976 financial statements of Akzo N.V., Arnhem. For the purpose of our examination we also have made use of the reports of other independent auditors with respect to a number of subsidiaries.

In our opinion, these financial statements present fairly the financial position of Akzo N.V. at December 31, 1976, and the results of operations for the year then ended.

Arnhem, March 24, 1977

Klynveld Kraayenhof & Co.

Eight-year financial review

The figures set forth below are based on historical cost;
for figures based on current value, see page 53

consolidated balance sheet at year's end	1976	1975	1974	1973*	1972*	1971	1970*	1969
in Hfl million								
property, plant and equipment	3,904	4,396	4,322	4,235	4,250	4,274	4,280	3,745
investments in non-consolidated companies	288	307	285	282	341	335	306	315
other non-current assets	162	125	175	155	130	140	143	124
non-current assets	4,354	4,828	4,782	4,672	4,721	4,749	4,729	4,184
inventories	1,949	2,113	2,562	1,641	1,615	1,664	1,581	1,458
short-term receivables	1,787	1,906	1,831	1,954	1,728	1,590	1,563	1,369
prepaid expenses	59	51	56	52	54	56	61	38
cash and marketable securities	611	539	524	840	645	616	493	656
current assets	4,406	4,609	4,973	4,487	4,042	3,926	3,698	3,521
total assets	8,760	9,437	9,755	9,159	8,763	8,675	8,427	7,705
capital stock	593	593	593	562	542	542	521	514
capital surplus, paid in	658	658	658	689	710	710	730	703
retained earnings	1,369	1,526	1,993	1,652	1,412	1,340	1,218	1,139
other reserves	8	207	230	384	401	400	649	625
stockholders' equity	2,628	2,984	3,474	3,287	3,065	2,992	3,118	2,981
minority interest in Group equity	486	541	565	573	570	610	536	503
Group equity	3,114	3,525	4,039	3,860	3,635	3,602	3,654	3,484
provisions	942	1,052	958	991	809	725	857	809
long-term debt	2,626	2,693	2,124	2,047	2,407	2,402	2,198	1,729
long-term liabilities	3,568	3,745	3,082	3,038	3,216	3,127	3,055	2,538
bank borrowings and overdrafts	310	308	410	162	223	273	270	237
other current liabilities	1,768	1,859	2,224	2,099	1,689	1,673	1,448	1,446
current liabilities	2,078	2,167	2,634	2,261	1,912	1,946	1,718	1,683
total Group equity and liabilities	8,760	9,437	9,755	9,159	8,763	8,675	8,427	7,705
invested capital**:								
of consolidated companies	6,394	6,963	6,836	6,616	6,510	6,394	6,403	5,707
in non-consolidated companies	288	307	285	282	341	335	306	315
total	6,682	7,270	7,121	6,898	6,851	6,729	6,709	6,022
property, plant and equipment								
capital expenditures	413	745	799	549	555	943	1,035	742
depreciation	533	519	531	540	527	526	472	397
ratios								
sales : invested capital	1.68	1.40	1.57	1.42	1.26	1.26	1.13	1.12
Group equity : liabilities	0.55	0.60	0.71	0.73	0.71	0.71	0.77	0.83
Group equity : non-current assets	0.72	0.73	0.84	0.83	0.77	0.76	0.77	0.83
current assets : current liabilities	2.12	2.13	1.89	1.98	2.11	2.02	2.15	2.09

development of stockholders' equity, 1969–1976 (in Hfl million)	1969–1976	1976	1975	1969–1974
stockholders' equity at January 1	2,519	2,984	3,474	2,519
issuance of stock, including capital surplus	405			405
stock dividends	208			208
retained earnings	463	(153)	(440)	1,056
goodwill resulting from acquisitions of companies	(415)	(4)	(27)	(384)
change in exchange rates	(505)	(213)	(48)	(244)
other changes	(47)	14	25	(86)
stockholders' equity at December 31	2,628	2,628	2,984	3,474

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* based on a cash dividend

** Group equity plus long-term liabilities

consolidated statement of income	1976	1975	1974	1973	1972	1971	1970	1969
in Hfl million								
sales	10,750	9,717	10,761	9,418	8,235	8,056	7,249	6,366
salaries, wages and social charges	*3,277*	*3,109*	*3,144*	*2,764*	*2,478*	*2,354*	*2,073*	*1,670*
depreciation	*533*	*519*	*531*	*540*	*527*	*526*	*472*	*397*
other costs	*6,635*	*6,106*	*6,314*	*5,350*	*4,645*	*4,535*	*4,064*	*3,498*
operating income (*loss*)	305	*17*	772	764	585	641	640	801
interest	*249*	*234*	*147*	*147*	*172*	*165*	*112*	*61*
taxes on operating income less interest	*59*	58	*226*	*283*	*181*	*238*	*259*	*375*
equity in earnings of non-consolidated companies	24	13	42	42	29	23	31	28
Group income (*loss*) before extraordinary items	21	*180*	441	376	261	261	300	393
extraordinary items	*167*	*253*	8	*3*	7	4	19	*5*
Group income (*loss*)	*146*	*433*	449	373	268	265	319	388
of which minority interest	*7*	*7*	*69*	*82*	*51*	*56*	*58*	*64*
net income (*loss*)	*153*	*440*	380	291	217	209	261	324
profit available for allocation	–	–	210	241	188	184	241	308
distributed income	–	–	118	107*	97*	98	104*	102
common stock, in thousands of shares of Hfl 20 par value	29,594	29,594	29,594	28,062	26,989	26,989	25,958	25,590
number of employees	91,100	98,200	105,400	105,800	101,000	104,500	100,800	100,300
per share of common stock, par value Hfl 20 per share, in Hfl								
net income (*loss*) before extraordinary items	0.20	*6.53*	12.55	10.48	7.70	7.62	9.22	12.80
net income (*loss*) after extraordinary items	*5.16*	*14.86*	12.83	10.37	8.02	7.72	10.01	12.65
profit available for allocation	–	–	7.08	8.59	6.94	6.81	9.24	12.02
dividend	–	–	4.00	3.80	3.60	3.60	4.00	4.00
of which, at stockholder's option, in common stock				2.60	2.40		2.80	
number of shares entitling holder to one new share				18	25		25	
stockholders' equity	88.78	100.80	117.36	117.08	113.49	110.78	120.06	116.40
ratios								
operating income (*loss*) as percentage of sales	2.8	*0.2*	7.2	8.1	7.1	8.0	8.8	12.6
personnel costs as percentage of sales	30.5	32.0	29.2	29.3	30.1	29.2	28.6	26.2
net income (*loss*) before extraordinary items, as percentage of stockholders' equity	0.2	*6.5*	10.7	9.0	6.8	6.9	7.7	11.0
net income (*loss*) after extraordinary items, as percentage of stockholders' equity	*5.8*	*14.7*	10.9	8.9	7.1	7.0	8.4	10.9

* of which Hfl 35 million (1973), Hfl 33 million (1972) and Hfl 32 million (1970) in cash

consolidated statement of changes in financial position	1976	1975	1974
in Hfl million			
working capital (excess of current assets over current liabilities) at January 1	2,441	2,339	2,226
source of funds			
funds from operations	503	370	1,024
borrowings	496	826	422
funds retained through payment of Akzo N.V. final 1973 dividend in stock			72
miscellaneous	41	17	20
	1,040	1,213	1,538
application of funds			
expenditures for property, plant and equipment	413	745	799
new participations	8	44	41
investments in non-consolidated companies	42	48	24
other non-current assets	41	(43)	20
redemptions on borrowings	446	277	306
dividends paid to stockholders of Akzo N.V.	–	–	118
miscellaneous	204	40	117
	1,154	1,111	1,425
working capital at December 31	2,327	2,441	2,339
changes in working capital:			
inventories	(164)	(449)	921
short-term receivables	(118)	74	(123)
prepaid expenses	8	(5)	4
cash and marketable securities	72	15	(316)
bank overdrafts	2	(102)	248
other current liabilities	(90)	(365)	125
increase (decrease) in working capital	(114)	102	113

figures on a current-value basis	1976	1975	1974
Group equity, in Hfl million	3,764	4,225	4,559
stockholders' equity, in Hfl million	3,193	3,585	3,928
Group equity: liabilities	0.61	0.64	0.74
stockholders' equity, per share of common stock, in Hfl	107.87	121.14	132.73
operating income (loss)			
in Hfl million	77	(315)	402
as percentage of sales	0.7	(3.2)	3.7
net income (loss) before extraordinary items			
in Hfl million	(125)	(342)	211
per share of common stock, in Hfl	(4.22)	(11.56)	7.13
as percentage of stockholders' equity	(3.9)	(9.5)	5.4

main product group statistics*	1976	1975	1974	1973	1972	1971	1970	1969
in Hfl million								
man-made fibers								
sales to third parties								
textile uses	2,834	2,880	3,386	3,497	3,060	3,069	2,851	2,746
industrial uses	970	827	1,142	901	738	771	710	580
total	3,804	3,707	4,528	4,398	3,798	3,840	3,561	3,326
operating income (loss)	(142)	(326)	223	390	231	371	325	549
as percentage of sales	(3.7)	(8.8)	4.9	8.9	6.1	9.7	9.1	16.5
chemical products								
sales to third parties								
salt and heavy chemicals	1,722	1,428	1,653	1,204	1,147	1,030	973	627
specialty chemicals	1,061	824	991	753	645	622	403	315
coatings	941	836	772	638	575	535	524	340
total	3,724	3,088	3,416	2,595	2,367	2,187	1,900	1,282
operating income	182	80	317	168	172	136	201	152
as percentage of sales	4.9	2.6	9.3	6.5	7.3	6.2	10.6	11.9
pharmaceuticals, consumer products and miscellaneous products								
sales to third parties								
pharmaceuticals	1,071	971	819	706	624	579	471	374
consumer products	789	779	679	539	490	502	596	747
miscellaneous products	1,362	1,172	1,319	1,180	956	948	721	637
total	3,222	2,922	2,817	2,425	2,070	2,029	1,788	1,758
operating income	265	229	232	206	182	134	114	100
as percentage of sales	8.2	7.8	8.2	8.5	8.8	6.6	6.4	5.7

* consolidated companies

geographical statistics*	1976	1975	1974	1973
in Hfl million				
EEC countries				
sales by area of destination				
the Netherlands	1,295	1,218	1,302	1,126
West Germany	2,056	1,939	2,115	1,925
other EEC countries	2,198	2,020	2,229	1,904
total	5,549	5,177	5,646	4,955
sales by area of origin				
the Netherlands	3,706	3,237	3,554	2,903
West Germany	2,727	2,547	2,819	2,520
other EEC countries	1,003	994	1,124	1,093
total	7,436	6,778	7,497	6,516
invested capital				
the Netherlands	2,497	2,417	2,268	2,235
West Germany	1,588	1,761	1,856	1,811
other EEC countries	262	503	595	593
total	4,347	4,681	4,719	4,639
number of employees				
the Netherlands	27,600	29,700	30,600	29,700
West Germany	23,800	26,000	28,800	28,500
other EEC countries	11,000	13,400	14,700	14,400
total	62,400	69,100	74,100	72,600
rest of Europe				
sales by area of destination	1,646	1,432	1,531	1,302
sales by area of origin	712	685	691	617
invested capital	403	500	475	438
number of employees	7,600	7,800	8,100	8,200
North America				
sales by area of destination	2,292	2,018	2,318	2,182
sales by area of origin	2,147	1,909	2,163	2,008
invested capital	1,423	1,543	1,392	1,326
number of employees	15,500	16,100	17,100	20,100
rest of the world				
sales by area of destination	1,263	1,090	1,266	979
sales by area of origin	455	345	410	277
invested capital	221	239	250	213
number of employees	5,600	5,200	6,100	4,900

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* consolidated companies

Principal companies of the Akzo group

December 31, 1976

The operating companies are listed by division or Group company. Percentages of participation are only stated for companies in which Akzo N.V. holds a direct and/or indirect interest of less than 95%.

	Enka Glanzstoff, Arnhem/Wuppertal	**Netherlands/ W. Germany**
	man-made fibers, non-wovens, plastics, dialysis membranes, film, machinery and various industrial products	
	Enka Glanzstoff B.V., Arnhem	Netherlands
	Akzo Plastics B.V., Zeist	Netherlands
	Enka Glanzstoff AG, Wuppertal	W. Germany
	Barmag Barmer Maschinenfabrik AG, Remscheid-Lennep	W. Germany
	with establishments in Switzerland, U.S.A. and Brazil	
49[a] –	Fabelta N.V., Brussels	Belgium
93 –	Ferenka Ltd, Limerick	Rep. of Ireland
	Italenka S.p.A., Milan	Italy
93 –	Erste Österr. Glanzstoff-Fabrik AG, Vienna	Austria

	Akzo International, Arnhem	**Netherlands**
	chiefly man-made fibers	
62 –	British Enkalon Ltd, Leicester	U.K.
37[b] –	Brand-Rex Ltd, Glenrothes	U.K.
58 –	La Seda de Barcelona S.A., Barcelona	Spain
45 –	Cyanenka S.A., Prat de Llobregat	Spain
40 –	Fibras Químicas S.A., Monterrey	Mexico
40 –	Petroquímica Sudamericana S.A., Buenos Aires	Argentina
40 –	Hilanderías Olmos S.A., Buenos Aires	Argentina
40 –	Hilanderías Beccar S.A., Buenos Aires	Argentina
51 –	Polyenka S.A., Indústria Química e Têxtil, São Paulo	Brazil
45 –	COBAFI Companhia Bahiana de Fibras S.A., Rio de Janeiro	Brazil
49 –	Enka de Colombia S.A., Medellin	Colombia
49 –	Enkador S.A., Quito	Ecuador
44 –	Century Enka Ltd, Calcutta	India
29 –	Nichemtex Industries Ltd, Lagos	Nigeria

	Akzo Zout Chemie, Hengelo (O)	**Netherlands**
	salt, chlorine, alkali products, petrochemicals	
	Akzo Zout Chemie Nederland B.V., Hengelo	Netherlands
	Ned. Soda-industrie B.V., Delfzijl	Netherlands
	Zoutchemie Botlek B.V., Rotterdam	Netherlands
50 –	Methanol Chemie Ned. v.o.f., Delfzijl	Netherlands
35 –	Delamine B.V., Delfzijl	Netherlands
	Norddeutsche Salinen GmbH, Stade	W. Germany
50 –	Elektro-Chemie Ibbenb. GmbH, Ibbenbüren	W. Germany
	Konezo, div. of Akzo België N.V., Brussels	Belgium
50 –	Dansk Salt I/S, PR Mariager	Denmark
50 –	Greek Salt Industrial Commercial Ltd, Piraeus	Greece
87 –	Companhia Industrial do Rio Grande do Norte (CIRNE), Macau	Brazil
50 –	Denak K.K., Tokyo	Japan
42 –	Holland Electro Chemical Industries (Pty) Ltd, Johannesburg	South Africa

	Akzo Chemie, Amersfoort	**Netherlands**
	process chemicals and additives for the polymer-manufacturing and polymer-processing industries, organic chemicals, industrial chemicals	
	Akzo Chemie Nederland B.V., Amersfoort	Netherlands
60 –	Ketjen Carbon B.V., Rotterdam	Netherlands
50 –	Cyanamid-Ketjen Katalysator B.V., Amsterdam	Netherlands
	Akzo Chemie GmbH, Düren	W. Germany
	Woermann Chemische Baustoffe GmbH, Salzkotten	W. Germany
	with establishment in Switzerland	
67 –	Carbosulf Chemische Werke GmbH, Cologne	W. Germany
67 –	Rhodanid Chemie GmbH, Cologne	W. Germany
	Akzo Chemie, division of Akzo België N.V., Mons	Belgium
50 –	Stikstofderivaten N.V., Mons	Belgium
	Akzo Chemie France S.à.r.l., Compiègne	France
	Akzo Chemie Italia S.p.A., Arese	Italy
	Akzo Chemie U.K. Ltd, London	U.K.
	Interstab Chemicals Inc., N. Brunswick, New Jersey	U.S.A.
48 –	Poliquíma Indústria e Comércio S.A., São Paulo	Brazil
50 –	Nippon Ketjen K.K., Tokyo	Japan
50 –	Kayaku Noury K.K., Tokyo	Japan
50 –	Japan Interstab K.K., Tokyo	Japan
50 –	Lion Akzo Co. K.K., Tokyo	Japan
50 –	Akulu Chemicals (Pty) Ltd, Isithebe	South Africa

	Akzo Coatings, Amstelveen	**Netherlands**
	paints, stains, synthetic resins, adhesives and waxes	
	Sikkens B.V., Sassenheim	Netherlands
	Kon. Talens B.V., Apeldoorn	Netherlands

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[a] participation 49.6%

[b] affiliate of British Enkalon Ltd (60%) and Brand-Rex Co. (40%); total participation of Akzo N.V.: 63%

[c] participation less than 95%

	Kunstharsfabr. Synthese B.V., Bergen op Zoom	Netherlands
	Syntac B.V., Voorburg[1]	Netherlands
	Sikkens GmbH, Emmerich[2]	W. Germany
	K. G. Lesonal-Werke Chr. Lechler & Sohn Nachf., Stuttgart[2]	W. Germany
	with establishment in Austria	
50 -	Resicoat GmbH, Reutlingen[3]	W. Germany
	Akzo Coatings Belgium N.V., Ternat	Belgium
	Astral S.A., Paris	France
	with establishments in Morocco[c], Tunisia, Senegal[c], Ivory Coast[c] and Cameroun[c]	
48 -	Dacral S.A., Paris	France
	Vercolac S.p.A., Milan and Florence	Italy
	Sikkens S.p.A., Dormeletto	Italy
	Colorificio Linvea S.p.A., Naples	Italy
29 -	Ivanow S.A., Barcelona	Spain
49 -	Miluz S.A.I.C.I.F., Buenos Aires	Argentina
	Companhia de Tintas e Vernizes R. Montesano S.A., São Paulo	Brazil
55 -	Metropolitan Paint Factory Ltd, Bangkok	Thailand

Akzo Pharma, Oss **Netherlands**

ethical drugs
(Organon International B.V., Oss),
non-prescription drugs
(Chefaro International B.V., Rotterdam),
hospital supplies and equipment
(Organon Teknika B.V., Oss),
raw materials for the pharmaceutical industry
(Diosynth B.V., Oss),
veterinary products
(Intervet International B.V., Boxmeer),
crop protection products
(AAgrunol B.V., Groningen)

Sales offices or production plants of one or more of the above companies are established in:

- the Netherlands, West Germany, Belgium, France, Italy, United Kingdom, Republic of Ireland, Denmark, Norway, Sweden, Finland, Switzerland, Spain, Portugal, Greece, Turkey
- Mexico, Argentina, Brazil, Colombia, Ecuador, Venezuela
- Lebanon, Iran[c], India[c], Thailand, Indonesia, Philippines, Hong Kong, Japan[c]
- Australia, New Zealand
- Morocco, Zaire, South Africa[c]

Akzo Consumenten Produkten, The Hague **Netherlands**

detergents and cleaning products, paper products, health and body-care products, foodstuffs

	Kortman & Schulte B.V., Dordrecht	Netherlands
	Otarès B.V., Enschede	Netherlands
50 -	Grada Produkten B.V., Amsterdam	Netherlands
	Recter B.V., Veenendaal	Netherlands
	Aerofako B.V., Apeldoorn	Netherlands
	Kon. Eau de Colognefabriek J. C. Boldoot B.V., Amsterdam	Netherlands
	Kon. Fabr. T. Duyvis Jz. B.V., Zaanstad	Netherlands
	Kortman, division of Akzo België N.V., Brussels	Belgium
50 -	Mayolande S.A., Seclin	France
50 -	Papeteries de Buxeuil S.A., Buxeuil[4]	France
	A/S Blumøller, Odense	Denmark
	Tomten A/S, Sandvika	Norway
51 -	Lilla Edets Pappersbruks AB, Lilla Edet[4]	Sweden
	with establishments in the Netherlands, West Germany, United Kingdom and Denmark	

65 - **Akzona Inc., Asheville, North Carolina** **U.S.A.**

man-made fibers, salt, specialty chemicals, pharmaceuticals, wire and cable products, leather, foodstuffs and various industrial products

American Enka Co., Enka, North Carolina	U.S.A.
Armak Co., Chicago, Illinois	U.S.A.
with establishment in Canada	
Armira Corp., Sheboygan, Wisconsin	U.S.A.
Brand-Rex Co., Willimantic, Connecticut	U.S.A.
with establishments in United Kingdom[b] and Canada	
International Salt Co., Clarks Summit, Pennsylvania	U.S.A.
with establishments in Canada and the Netherlands Antilles	
Organon Inc., West Orange, New Jersey	U.S.A.
with establishment in Canada	

Other companies

50 -	Silenka B.V., Hoogezand (glass fibers)[5]	Netherlands
19 -	N.V. Verenigde Instrumentenfabrieken Enraf-Nonius, Delft (medical equipment, etc.)	Netherlands
	Akzo Engineering B.V., Arnhem	Netherlands
	Feldmühle A.G., Rorschach (adhesive tape)	Switzerland

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1) will be sold in 1977

2) to be included in Deutsche Akzo Coatings GmbH in 1977

3) sold to Robert Bosch GmbH at January 1, 1977

4) sale to Ncb (Sweden) to become effective in 1977

5) participation of Akzo N.V. to be reduced to 33⅓% on account of participation by N.V. Noordelijke Ontwikkelingsmaatschappij

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