

# Market Evolution of the Soap and Detergent Industry within the Past Five Years in Western Europe

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#### ABSTRACT

Members of the Association Internationale de la Savonnerie et de la Détergence (AIS) have furnished statistical information on various products showing growth in volume in total and in each of the countries. On the whole, the situation is favorable. In general, the global growth of the market of synthetic detergents is about 6% in volume per year, but it may vary greatly from one country to another. There is some doubt, however, that this growth rate will continue at a similar pace in the future. Although soaps have continued to decline in favor of detergents, we observe a certain stability of this type of product as a whole. As for detergents, they are increasing with respect to synthetic liquid products and washing powders. Such is not the case for cleaning products and auxiliary products. It is true, however, that the greater part of the market is presently taken by fabric washing and dishwashing products. In several countries, an important market for fabric softeners is developing recently; however, we do not yet have detailed statistical data concerning this market. While the greater part of synthetic detergent consumption has to do with household uses, there are at present many other applications. Products designed for industrial uses are not in the AIS statistics and therefore are not covered in this study. Because the soap and detergent industry sells its products to the public, it pays close attention to the demands of the consumers, and we may expect it will continue to innovate and create new products. Within the framework of the AIS, we try to study market trends by presenting each year the statistical data of the preceding financial year (available from the AIS, 49 Square Marie Louise, Brussels). A retrospective study covering five years seemed to us interesting, and we venture to hope that the conclusions provided will serve to foresee the future.

#### INTRODUCTION

In preparing this report, we have used statistical data furnished by the member national associations of the AIS. The AIS is made up of nearly every country in Western Europe (Table I). We show in this study the evolution of the soap and detergent industry during the past five years, i.e., 1972 through 1976. The time period is interesting since it is in these years that the oil crisis occurred. Within that five-year period, the total population of the member countries grew from 328,360,117 in 1972 to 335,553,940 in 1976, an increase of 2.19%. The evolution of population

	1972	1976	Variation	Gross national product U.S. dollar <sup>a</sup>			
Countries	(1,000)	(1,000)	(%)	1972	1975		
AIS members							
Belgium/Luxembourg	10,041	10,240	+ 2.0	3,345	6,245		
Denmark	4,974	5,080	+ 2.1	3,670	7.010		
West Germany	61,281	61,513	+ 0.4	3,390	6,870		
Spain	33,800	35,800	+ 5.9	1,210	2.870		
France	51,487	52,988	+ 2.9	3.620	6,360		
Ireland	3,000	3,150	+ 5.0	1.580	2,480		
Italy	55,200	56,400	+ 2.2	1,960	3,080		
The Netherlands	13,267	13,800	+ 4.0	2,840	5,950		
Norway	3,919	4,035	+ 3.0	3,340	7,060		
Austria	7,457	7,514	+ 0.8	2,410	4,990		
Portugal	8,668	9,750	+ 12.5	780	1,550		
Switzerland	6,300	6,289	- 0.2	3,940	8,460		
Finland	4,665b	4,733	+ 1.5	2,810	5,650		
Sweden	8,115	8,235	+ 1.5	4,480	8,460		
United Kingdom	56,186	56,027	• 0.3	2,600	4,070		
-	328,361	335,554					
AIS nonmembers		(1975)					
Australia	12,959	13,502	+ 4.2	3,507	6,240		
Canada	21,848	22,831	+ 4.5	4,260	6,990		
U.S.	208,837	213,540	+ 2.3	5,056	7.090		
Greece	8,852 <sup>c</sup>	9,046	+ 2.2	1,460	2,320		
Iceland	209	218	+ 4.3	2,800	5,720		
Japan	106,960	110,990	+ 3.8	3,650	4,420		
New Zealand	2,917	3,104	+ 6.4	2,900	4,120		
Turkey	36,221	40,063	+ 10.6	370	880		
U.S.S.R.	247,460	254,382	+ 2.8	1,530	2,100		

TABLEI

<sup>a</sup>Data OECD 1975, per capita. <sup>b</sup>In 1973. <sup>c</sup>In 1971 per country is presented in Table I, which shows that between 1972 and 1976 only in Switzerland and in the United Kingdom has there been a decrease in population.

Taking into account present demographic trends and the economic crisis which encourages the nations of Western Europe to restrict immigration, we should not expect to see marked increases in population over the years ahead. On the contrary, population in the AIS countries tends to become stable and indeed to diminish. As regards those industrialized countries that are not members of the AIS, we observe as a general rule a more noticeable increase in population during the past five years. Such is the case especially in Australia (4.19%), in Canada (4.49%), in the U.S. (2.25%), in Japan (3.76%), and in the U.S.S.R. (2.79%).

These data concerning population should enable interested persons to calculate the annual consumption of soaps or detergents and to make comparisons between countries. Such a study is most enlightening, but it will not be possible to develop this aspect here.

We have thought it useful to indicate the gross national product of each country in Table I. You will observe that consumption of detergents in general varies with living standards; however, there have been impressive developments in countries with smaller gross national products over the past five years, and every indication is that the gaps still existing between these countries and other industrial nations will close gradually in the years ahead.

# **REMARKS ON THE STATISTICAL DATA AVAILABLE**

We have grouped products according to their nature. Thus, the study shows the market evolution both in values and in quantities for any kind of toilet soap, including transparent, medicated and deodorant, shaving products, shampoos, and other toilet products. One section is devoted to household hard soaps and to other hard soaps such as chips and flakes. Industrial soaps also include soaps for fabric washing.

In addition, other tables will show the evolution of fatty acid and liquid soaps, special hand cleansers, soft soaps, fabric washing powders, auxiliary washing powders, synthetic liquid products, and scourers.

# SALES OF SOAPS AND DETERGENTS **BETWEEN 1972 AND 1976**

For comparative purposes, we have converted to Belgian francs the values expressed in national currencies. As compared to the 143,434,725,000 B.F. reported in 1972, in 1976 we find a global turnover of 179,782,765,000 B.F. for soaps and detergents, i.e., an increase of 25.3%. This figure is distributed by country as shown in Table II.

It is interesting to note important rates of increase in nearly every country, except Ireland and Finland. We will look in more detail at the increases in sales by product category: toilet products, household and industrial products, including soft soaps, washing, cleaning, and scouring products.

# **Toilet Products**

This section, shown in Table II, comprises toilet and beauty soaps, medicated soaps, shaving products (sticks, foams, and creams), and shampoos. As compared to 1972, we observe that in 1976 Ireland, Italy, and Finland have regressed. An important gain has been observed in Denmark, France, Spain, Norway, and Portugal. The increase for all the countries was 17.5%.

#### **Household and Industrial Products**

This section, also in Table II, comprises soaps for both household and industrial uses; it also includes soft and unnamed soaps. We observe that these products have increased

Product Sales in B.F. (x 106) in 1972/1976	Household and industrial products Washing, cleaning, scouring products   Toilet product sales (soft and unnamed soaps)	Variation Variation   1976 (%) 1972 1976 % Increase	+16.6 418 434 $+3.8$ 4,277 4,689	98 124 + 26,2 2,049 2,257	+ 32,4 1,503 1,791 + 19.1 34,252 41,205	- 50.0 88 29 - 67.4 506 517	+52.2 1,264 1,089 $-13.9$ 6,738 9,104	+77.4 1,686 1,778 $+5.5$ 16,772 22,758	- 44.3 1,067 1,767 + 65.6 15,624 20,550	+ 0.6 224 463 $+ 106.3$ 5,444 6,849	+66.0 149 154 $+3.4$ 1,235 1,821	69 62 -10.0 2,819 3,949	+112.6 660 794 +20.2 699 1,498 ]	+ 4.7 108 113 + 4.3 3,761 4,846	- 67.5 44 164 + 226.1 820 1,257	+ 81.9 122 227 + 86.0 2,844 3,885	<u>4,933</u> +31.6 <u>1,450</u> <u>1,215</u> -16.3 <u>12,869</u> <u>16,463</u> <u>27.9</u>	8,952 10,204 + 14.0 110,710 1
	d and industri t and unnamed	1976	434	124	1,791	29	1,089	1,778	1,767	463	154	62	794	113	164	227	1,215	10,204
72/1976	Househol (sofi	1972	418	98	1,503	88	1,264	1,686	1,067	224	149	69	660	108	44	122	1,450	8,952
F. (x 106) in 19	sales	Variation (%)	+ 16.6	+ 74.1	+ 32,4	- 50.0	+ 52.2	+ 77.4	- 44.3	+ 0°e	+ 66,0	I	+ 112.6	+ 4.7	- 67.5	+ 81.9	+ 31.6	+ 17.5
uct Sales in B.	oilet product s	1976	823	640	8,583	183	1,847	4,294	2,301	622	569	499	405	649	473	1,109	4,933	27,930
Prod		1972	706	368	6,481	372	1,213	2,420	4,131	618	343	499	190	620	1,453	609	3,749	23,773
	ints	Variation (%)	+ 10.1	+ 20.1	+ 22.1	- 24.5	+ 30.7	+ 38.1	+ 18.2	+ 26.2	+ 47.3	+ 33.2	+ 74.0	+ 24.9	- 18.3	+ 46.0	+ 25.1	+ 25.3
	Soaps and detergents	1976	5,947	3,022	51,579	729	12,040	28,831	24,619	7,933	2,545	4,511	2,696	5,607	1,894	5,221	22,611	179,783
	Sot	1972	5,402	2,515	42,237	965	9.214	20,878	20,823	6,287	1.728	3,387	1,550	4,489	2,317	3,575	18,069	143,435
		Countries	Belgium/Luxembourg	Denmark	West Germany	Ireland	Spain	France	Italy	The Netherlands	Norway	Austria	Portugal	Switzerland	Finland	Sweden	United Kingdom	

TABLE II

#### TABLE III

Production of Synthetic Detergents: Synthetic Surface-Active Agents and Washing Preparations
(in millions of U.S. dollars)

Country	1960	1965	1970	1971	1972	1973	1974
Austria	15	28	54	62	67	73	92
Belgium		38	82	96			
Bulgaria <sup>a</sup>			17	12	10	4	5
Cyprus			2	2	3	4	
Czechoslovakia <sup>a</sup>	42	52	52	55	60	56	
Denmark	8	15	40	48	53	63	85
Finland	6	12	15	15	16	18	
France			290	334	366	438	595
German Democratic Republica			165	169	207		
Germany, Federal Republic of <sup>b</sup>	142	272	379	462	486	571	694
Greecea			21	25			
Hungary	11	34	64	81	89	124	126
Icelanda				1	1		
Ireland <sup>a</sup>	7	8	11	12			
Italy	113						
Malta							
The Netherlands							
Norway		11	17	17	14	18	
Poland <sup>a,c</sup>			11	14	15	19	22
Portugal			13	18	14		
Romania <sup>a</sup>	1	4	8	9	11	14	16
Spain			72	94	162	236	255
Swedend	31	44	53	61	70	74	
Switzerland							
Turkey						2	6
U.S.S.R.d	23	144	470	494	534	610	656
Byelorussian SSR <sup>a</sup>		3	14	16	15	16	
Ukrainian SSR <sup>a</sup>		10	86	92	98	105	
United Kingdom <sup>e</sup>					248	265	375
Yugoslavia <sup>a</sup>	18	47	99	118	135	153	139
Canada							
United States	1,952	2,500	3,387		3,780		
Japan			352	426	486	582	759

<sup>a</sup>In thousand tons.

<sup>b</sup>Finished products only. In 1960 and 1965, figures include washing preparations containing soap.

c100% active agents. dFigures correspond to the whole SITC 554.2.

<sup>e</sup>Manufacturers sales.

#### TABLE IV

Quantitative Increases for Soaps and Detergents (1972/1976) (in 1,000 tons)

		Total produ	ction		Aj	parent const	n	Consumption per capita				
Countries	1972	1976		riation (%)	1972	1976	Va	riation (%)	1972 (kg)	1976 (kg)	Va	riation (%)
Belgium/Luxembourg	220	269	+	22.4	202	223	+	10.3	19.9	21.7	+	9.1
Denmark		79			82	80	-	2.8	16.3	15.7	-	4.1
West Germany	1,310	1,518	+	15.9	1,283	1,481	+	15.4	20.8	24.0	+	15.9
Ireland	24	28	+	16,8	24	28	+	16.8	8.2	8.9	+	9.4
Spain	384	474	+	23.5	382	466	+	21.9	11.2	13.0	+	15.9
France	878	981	+	11.7	877	1,016	+	15.9	16.9	19.2	+	13.6
Italy	721	844	+	17.2	738	845	+	14.4	13.6	15.0	+	10.4
The Netherlands	240	276	+	15.1	232	260	+	12.2	17.4	18.9	+	7.9
Norway	53	56	+	6.0	67	74	+	10.6	17.0	18.4	+	8.2
Austria	91	110	+	21.5	110	118	+	7.2	14.6	15.7	+	7.0
Portugal	104	141	+	35.4	104	137	+	31.9	11.9	14.1	+	18.3
Switzerland	127	128	+	0.5	128	129	. +	0.7	20.0	20.5	+	2.5
Finland	52	37	-	28.4	51	45	-	12.1	11.0	9.5	-	13.8
Sweden	88	88	-	0.3	112	116	+	3.7	13.8	14.1	+	2.3
United Kingdom	936	1,004	+	7.4	872	920	+	5.6	15.6	16.4	+	5.0
5	5,226	6,035	+	15.5	5,263	5,937	+	10.9	16.0	17.7	+	10.5

in eleven countries, and particularly in The Netherlands and in Finland, while they declined more or less markedly in four countries. On the whole, this section shows an increase of 14.0%.

# Washing, Cleaning, Scouring Products

This category comprises products for heavy and light laundry as well as auxiliary washing products, cleaners, and scourers. It is particularly interesting since it represents by itself 78.8% of the total sales. Over the five-year period the growth rate has not been as pronounced as in the 1960s. The increase, however, remains important: 27.9%. The most striking gains are to be found in the Mediterranean countries. No country has shown a decrease in this product category.

#### **Comparisons with Other Countries**

A group from the United Nations issued a report expressed in U.S. dollars of the market changes in the *produc*tion of soaps and detergents between 1960 and 1975. Over a period of 15 years, it is interesting to notice a sharp increase in the production of household cleaning products in all countries studied. Table III, which unfortunately stops at the year 1974, facilitates comparison with other

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Summary Table (in 1,000 Tons)

	Total pr	oduction	Exp	oorts	Imp	oorts	Apparent c	onsumption
	1972	1976	1972	1976	1972	1976	1972	1976
Toilet products								
Toilet soaps	298.0	349.2	61.4	77.2	22.0	29.6	262.2	301.6
Shaving products	16.1	14.9	1.7	3.2	1.7	3.1	16.2	14.8
Shampoos	58.6	96.4	6.4	18.6	9.0	13.3	63.1	91.0
Other toilet products	12.9		4.3		2.5		11.2	
Total	385.6	460.5	73.8	99.0	35.2	45.0	352.7	407.4
Household and industrial soaps								
Household hard soaps	323.1	269.7	21.0	14.8	2.6	3.8	304.8	258.7
Other hard soaps	36.5	29.6	2.1	3.2	1.1	7.4	36.5	33.8
Industrial soaps	48.7	32.6	3.6	2.0	2.4	1.5	48.2	32.1
Fatty acid liquid soaps	37.7	46,1	4.1	2.2	3.1	2.4	37.5	46.3
Special hand cleansers	63.9	58.4	0.6	1.1	0.9	0.8	65.4	58.1
Soft soaps	64.0	55.5	6.3	3.9	4.5	4.5	64.4	56.1
Total	573.9	491.9	37.8	27.2	14.6	20.4	556.8	485.1
Washing, cleaning and scouring prod	lucts							
Washing powders	2,538.4	2,976.1	149.6	226.2	136.1	164.8	2,569.7	2,914.7
Cleaning powders	95.9	75.6	3.1	2.5	16.0	16.2	116.4	89.4
Auxiliary washing products	178.1	45.0	9.4	5.2	14.1	15.2	191.3	54.9
Synthetic liquid products	1,104.5	1,656.3	54.5	94.8	65.9	97.6	1,123.4	1,659.1
Scouring products	350.1	329.7	14.3	16.6	15.4	13.6	353.0	326.7
Total	4,267.0	5,082.7	230.9	345.3	247.5	307.4	4,353.8	5,044.8
General totals	5,226.5	6,035.1	342.5	471.6	297.4	373.8	5,263.3	5,937.3

in The Netherlands

56,108 tons, a decline of 12.9%.

191,341 tons to 54,933 tons.

1,659,075 tons in 1976.

326,741 tons.

countries.

liauids.

countries, notably those of Eastern Europe.

# QUANTITATIVE EVOLUTION

# **Overall Situation**

Table IV shows the quantitative change in soap and detergent production and consumption between 1972 and 1976. For the member countries of the AIS as a whole, total production shows an increase of 15.5%. The increase is especially important in Portugal (35.4%) and in Spain (23.5%). Note that production represents quantities produced by national manufacturers. Apparent consumption is obtained by subtracting exports from production and by adding imports.

The evolution of per capita consumption is quite suggestive. The almost general growth reflects in part the increase in purchasing power of the population, but also the new improvements in sanitary conditions for both body and household care.

Before turning to the study of the situation per product, it is interesting to note that substitution of soaps by synthetic products continued during the 1970s but has not grown at the spectacular rate of the 1960s. Today, synthetic products represent 85.0% of the total market.

# COMPARATIVE STUDY OF PRODUCTS IN TERMS OF QUANTITIES

We shall analyze briefly product consumption in Table V.

Apparent consumption of *toilet soaps* of any kind rose from 262,168 tons in 1972 to 301,634 tons in 1976, i.e., an increase of 15% for the five-year period. Shaving products have slightly regressed within the past five years, dropping from 16,224 tons in 1972 to 14,800 tons in 1976. On the other hand, there has been a sharp increase of 44.2% in shampoos which went from 63,075 tons in 1972 to 90,980 tons in 1976.

Hard soaps which still reached 341,274 tons in 1972 totaled only 292,460 tons in 1976, a decline of 14.3%. Hard soaps are still important in Spain (1.6 kg/capita), in Italy (1.4 kg/capita), and in Portugal (5.8 kg/capita). They are almost insignificant in Denmark, in West Germany, and The Group of Experts appointed by the Economic and Social Council of the United Nations and responsible for the periodic study of the chemical industry issued a comparative study of the evolution of the production of household cleaning products between 1960 and 1975 (Table VI).

Industrial soaps, fatty acid liquid soaps, and special hand cleaners totaled 151,067 tons in 1972. The same products

Soft soap consumption remains important in Belgium (0.590 kg/capita), in Norway (1.063 kg/capita), in Finland

(0.626 kg/capita), and in Sweden (0.595 kg/capita). For the

AIS countries as a whole, soft soaps still totaled 64,398

tons in 1972 whereas today this type of soap totals only

2,569,722 tons to 2,914,691 tons in 1976, an increase of

13.4%. Included in these figures are dishwashing powders

which totaled 210,486 tons. The gain in dishwashing pow-

ders is directly linked to the increasing numbers of dish-

washers. Auxiliary washing powders suffered a sharp de-

cline of 71.3% in the past five years, tumbling from

also by a new classification of products on the domestic

level. It is evident that there are products today that work

both as auxiliary products and as washing products. These

products have met with great success in some European

number of different products in the form of powders or

dishwashing, fabric rinsing, and surface rinsing products in-

creased sharply (47.7%) from 1,123,412 tons in 1972 to

country to country and is sometimes difficult to interpret.

On the whole, the market declined 17.4% over the five-year

period. In 1972, the apparent consumption had risen to

325,995 tons, while today these products total only

Synthetic liquid products comprising fabric washing,

The performance of scourers varies considerably from

*Powdered surface cleaners* have declined noticeably, falling 23.2% from 116,407 tons in 1972 to 89,383 tons in 1976. Products used for cleaning comprise quite a varied

We may wonder whether this phenomenon is not caused

Fabric washing and dishwashing powders climbed from

reached only 136,483 tons in 1976, a decline of 9.66%.

TABLE V	
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Production of Household	<b>Cleaning Products</b>	(in 1,000 tons)
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				-				
Countries	1960	1965	1970	1971	1972	1973	1974	1975
West Germany	331	490	752	818	1,001	1,054	1,232	1,195
Austria	355	52	60	63	74	81	85	84
Belgium/Luxembourg	73	84	142	152	146	196	233	228
Denmark <sup>a</sup>				58	62	67	64	67
Spain		123	229	238	262	305	324	346
Finland					32	31	31	29
France	301	400	604	638	731	768	815	805
Ireland						18	19	18
Italy	112	310	520	547	506	605	653	601
Norway			25	27	42	44	43	44
The Netherlands	99	112	199	190	200	225	221	230
Portugal		11	33	40	40	57	47	53
United Kingdom		501	653	620	759	735	825	804
Sweden			67	67	72	67	67	67
Switzerland	41	60	84	90	111	118	116	106

<sup>a</sup>Apparent consumption.

		Exports	5		Import	s
Countries	1972	1976	Variation (%)	1972	1976	Variation (%)
Belgium	75.9	117.1	+ 54	57.7	70.6	+ 22
Denmark	75.9					
West Germany	56.7	100.9	+ 78	30.2	63.9	+112
Ireland						
Spain	3.6	10.0	+ 205	1.6	2.5	+ 55
France	60.8	72.5	+ 19	59.2	107.6	+ 82
Italy	18.6			36.1		
The Netherlands	35.9	50,6	+ 41	27.4	34.2	+ 24
Norway	3.8	5.3	+ 42	18.0	23.5	+ 31
Austria	2.0	14.0	+ 609	21.3	21.7	+ 2
Portugal		3,9			.2	
Switzerland	.7	.9	+ 26	1.7	2.1	+ 26
Finland	8.9	2.0	- 87	8.7	10.2	+17
Sweden	11.9	9.3	- 22	35.7	37.4	+ 5
United Kingdom	63.8	84.0	+ 32			-
	342.5	471.6	+ 38	297.4	373.8	+ 26

#### TABLE VII

Per capita, consumption of soaps and detergents increased from about 16 kg in 1972 to 17.5 kg in 1976, while it totaled barely 10 kg in 1960.

#### **INTERPENETRATION OF MARKETS**

Foreign trade statistics remain difficult to analyze mainly because of the discordance existing between the AIS headings and those decided upon at the national level. However, we have attempted in this study to stress the most significant elements. Table VII below shows that exports accounted for 6.5% and imports for 5.4% of total production. Both imports and exports have noticeably increased within the past five years. However, it is important to notice that, with a few exceptions, foreign trade is relatively small compared to domestic consumption. Trade between the EEC countries, on the one hand, and the EFTA, on the other, accounts for nearly all of foreign trade. Moves toward the abolition of tariffs in Western Europe have no doubt helped this intra-European trade.

#### **RAW MATERIALS**

There are three classes of synthetic surface-active agents: anionic, nonionic, and cationic. Each class comprises a considerable number of principal synthetic surface-active agents: anionic agents may be represented by alkylbenzene linear sulfonates (ABS) principally, nonionic agents by ethoxylates of linear alcohols (AE) or alkylphenols (APE), and cationic agents, by long chain quaternary compounds.

As the group of U.N. experts responsible for the periodic study of the chemical industry observes, synthetic surfaceactive agents are used as household detergents principally, but an important part of these substances is used by industry. The latter utilizes nearly 25% of the anionic agents and nearly 50% of the nonionic agents. However, the use of nonionic agents has increased considerably for the past few years, especially in front-loading washing machines much used in Europe. Today, most European countries have made the use of biodegradable surfactants mandatory and all anionic agents used today have this capability.

Within the EEC and in other European countries, proposals for establishing regulations concerning the biodegradability of nonionic surface-active agents are at the discussion stage at the present time. It appears that the regulations adopted will be similar to those regulating anionic surfaceactive agents.

It is clear, however, that the anionic surface-active agents account for the biggest portion of the total market for synthetic surface-active agents. Next in order of importance comes the group of nonionic agents which show the highest rate of growth up to 1975. Cationic surface-active agents account for only a small part of the total market and are used as softeners in household products. For the past few years, the softener market has developed quite rapidly in several countries but there are striking differences in their consumption per capita in the various European countries. Statistics expressed in metric tons on European deliveries, exports, and imports are not available at the present time.