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# The Distribution System in Sweden

**Sören Wibe**

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ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

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## THE DISTRIBUTION SYSTEM IN SWEDEN

This paper forms part of an OECD project which addressed the issue of the structure and change in the distribution systems of seven OECD countries.

The paper gives an overview of the distribution system in Sweden for the period 1970-88. Next, it addresses the question of the static and dynamic efficiency in the distribution sector, as well as its competitive structure. The latter aspect is illustrated by a set of market structure indicators.

\* \* \*

Ce document fait partie d'un projet de l'OCDE qui avait pour objet l'analyse de la structure et des changements dans les systèmes de distribution dans sept pays de l'OCDE.

Cette étude donne une vue d'ensemble du système de distribution en Suède pendant la période 1970-88. Ensuite, sont discutées les questions liées à l'efficacité du système en termes statiques et dynamiques, ainsi que le type de compétition. Ce dernier aspect est illustré par un ensemble d'indicateurs sur la structure de marché.

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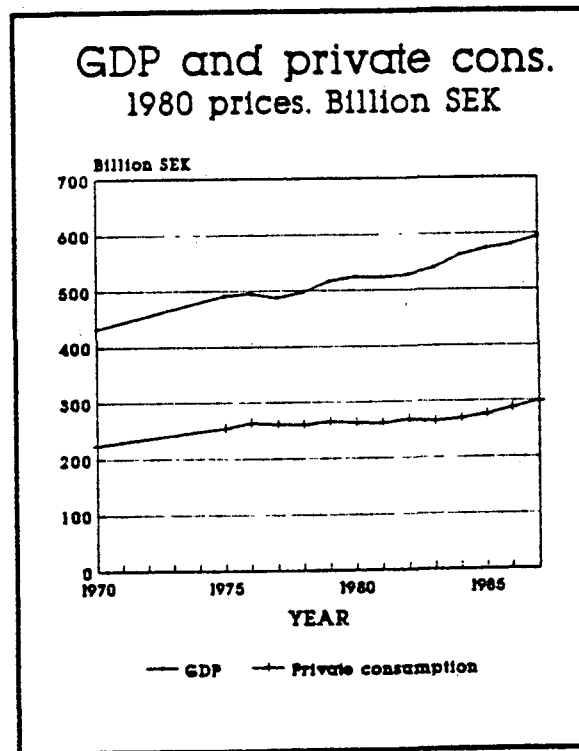


## CHAPTER I THE ECONOMIC AND DEMOGRAPHIC BACKGROUND

### I:1 GDP and private consumption

The growth of GDP and its components in Sweden (as in most OECD countries) was much slower in the 1970s and 1980s, compared with the earlier post-war period. Between 1970 and 1987 it grew by about 1.8 % per year, compared with about 4% annually in the 1960s. The growth of private consumption was considerably smaller and was lower than for GDP. In the period 1970 - 1987, private consumption grew by about 1.7% annually. Accordingly, private consumption's share of GDP declined from 52% to 50%, reflecting a more rapid growth in public consumption. The development between 1970 and 1987 is illustrated in the figure below:

Figure I:1. GDP and private consumption in Sweden, 1970-1987



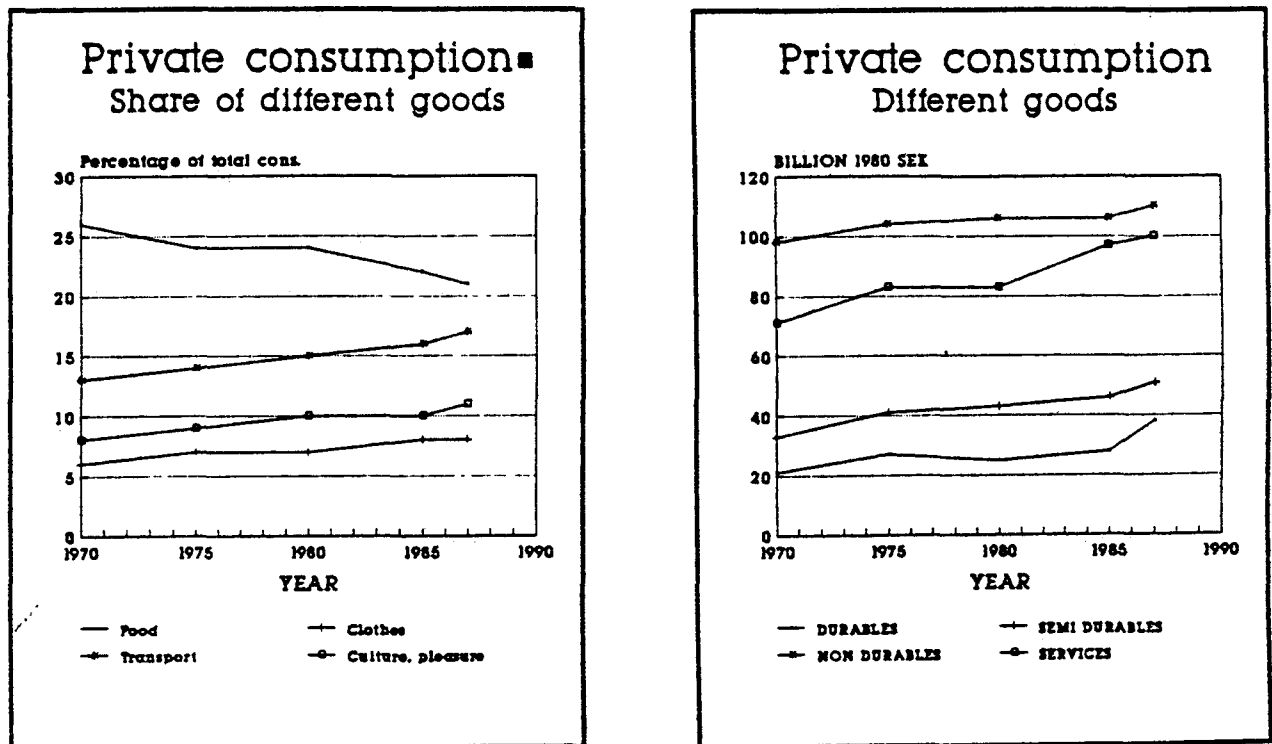
Source: Official Statistics.

The share of different goods in total consumption did not, of course, remain stable during the two time periods. A classification into durables, semi-durables, non-durables and services (see Figure 2a) shows that consumption in the period 1970-1987 rose particularly fast for durables and semi-durables; +75 percent and 48 percent respectively. The increases for non-durables and services were 12 and 42 percent.



In the case of specific commodity groups, the share for food declined from 26 to 21 percent of total consumption during the period. At the other end of the scale, the share for "Culture and Entertainment" and "Transport Services" both increased by about one percentage point per five-year period, reaching 12 and 17 percent respectively in 1987. (See Figure 2b).

Figure I:2a-2b. The share of different goods in private consumption, 1970-1987



Source: Official Statistics. (Statistiska meddelanden. Serie Nationalräkenskaper)

### I:2 Demographic factors.

The age structure of the Swedish population does not differ much from the OECD average. The population is divided into the three categories "youth", "economically active" and "old" people which are shown in the table below:

**Table I:1 The age structure of the Swedish population at December 31st 1986**

Age	- 17	18 - 64	65 -
Number	1 835	5 067	1 477
% of population	22	60	18

**Source: Official Statistics: Population.**

Sweden differs slightly from other countries by having an unusually large part of the population in the labour force: 85.9% of all men (and 80% of all women) between 16 and 64 are economically active. At the end of the eighties, 2.2 million men and 2 million women were classified as "employed".

Sweden also differs from many OECD countries in some other respects. The country is very sparsely populated, the population is, to a very high degree, concentrated in urban areas and finally, the country is very small in terms of GDP and population numbers. The table below shows population per km<sup>2</sup> in Sweden compared with that in other European countries.

**Table I:2 Population density in some European countries, 1986**

Sweden	19
Norway	13
Denmark	119
Belgium	325
France	100
Greece	75
Netherlands	355
Portugal	111
Spain	76
UK	230
Germany (FRG)	245
Austria	90
Italy	190
Western Europe	155

**Source: Official Statistics: Population.**

The low population density is of vital importance for the structure of distribution and trade in Scandinavia. The land area is great; population small and spread over vast territories. Accordingly, markets are small and transport costs high, a situation which, of course leads to high concentration (and a low degree of competition) in both production and trade.

The small population is somewhat compensated by the high degree of urbanisation in Sweden. Over 83% of the population live in what are defined as localities, i.e. densely populated urban areas. However, these are, by international standards, very small. There is only one centre with around 1 000 000 inhabitants, another 4 have populations of between 100 000 and 500 000, and 13 between 50 000 and 100 000. The average population size for the 1 800 localities in the country is close to 4 000 persons. The exact distribution is shown in Table 3.

**Table I:3 Localities of different size in Sweden, end-1986**

Inhabitants	200 – 499	500 – 999	2000 – 9999	10000 – 49999	50000 – 1	All
No of localities	692	691	327	92	18	1820
Mean population	322	982	4308	20249	151994	3796
% of total population	3	8	17	22	33	83

Source: Official Statistics: Population.

Seventeen per cent of the population live in rural areas. Table 3 shows that close to 50% of the total population live in rural areas or in localities with less than 10 000 inhabitants. The figure 15 000 can perhaps be accepted as a mean figure and as the "average" locality in Sweden.

Finally, it must be remembered that Sweden is a very small country with about 8 million inhabitants. Even if GDP per head is fairly high, the economic density (measured for instance by purchasing power in ECU/km<sup>2</sup>) is low. Economically and demographically, Sweden is as big as Paris. Geographically, it is of the same size as Spain or France.

## CHAPTER II THE DISTRIBUTION SYSTEM IN SWEDEN

### II:1 Sectoral value added

Existing statistics do not allow us to calculate production (value added) for retail and wholesale separately. Added together, the trading sector grew parallel to GDP as indicated by the table below:

**Table II:1 Value added for retail and wholesale trade, 1970-1987**

	1970	1975	1980	1985	1987
Value added* Mill SEK 1980 prices	43 266	51 104	54 228	56 565	60 685
Per cent of GDP	15	15	14	15	15

\* Producers price

Source: Official Statistics, Statistiska meddelanden, serie Nationalräkenskaper.

The share of GDP has, as shown by Table 1, been remarkably stable during the last 20-year period; at around 15 %. This is, perhaps, not surprising considering the rather stable relationship between consumption and GDP. Historical data also confirm that the relationship has been stable, at least since the end of the Second World War. In the case of Sweden, it seems that the figure of 15% has the status of an economic "law", irrespective of changes in prices and technology.

## II:2 Retail trade

### II:2:1 Statistical sources

There are four different statistical sources for the retail trade sector: three in official statistics (Official Statistics "Enterprises", "Trade" and "National Accounts") and one private research institute, (HUI, The Trade Research Institute, Stockholm). Unfortunately, the figures published by the four sources are not identical. Consider, for instance, the figures for the number of outlets in retail trade.

**Table II:2 Number of outlets in retail trade according to different sources, 1989**

	SOURCE:		
	SOS T	SOS FA	HUI
No. of sales			45 500
Units	(62 210)*	76 250	(38 000)*
No. of firms		68 433	

SOS T = Official statistics Trade

SOS FA = Official statistics Enterprises

HUI = Private Research Centre (Handelns Utredningsinstitut)

\* = "proper retail trade" (see Table II:5).

The figures for the number of firms given by the official statistics are, in general, much higher than those given by the research institute, HUI. The main reason is that the official statistics include all registered firms, while HUI tries to calculate the number of operating firms. From the figures given by official statistics, HUI subtracts those with zero employees and zero (or less than zero) value added tax. As seen the difference is about 40%.

In this report, we will accept the figures given by HUI as the most representative figures. One problem is then that HUI figures exist only for the last few years, and when we want to illustrate longer time series, we have to recalculate the figures from official statistics.

Another problem is that statistics are not equally available for all levels of analysis. The situation in the case of retailing is much better than wholesaling. For retail trade, statistics cover five different levels which are described in the following table:

**Table II:3 Retail trade. Different statistical levels**

- (i) **Operating firms**
- (ii) **Proper retail (=i) minus public monopoly, car and gasoline trade, see Table II:5)**
- (iii) **Shops (=Sales from ordinary shops=(ii) minus sales from kiosks, local markets etc)**
- (iv) **Retail trade in everyday commodities**
- (v) **Grocery trade (= (iv) minus trading in clothes etc.).**

Existing statistics are most detailed for the grocery trade. In addition, there exist several special surveys of this sector. Interest in the food distribution system rose considerably in the late 1980s as a result of a lively debate on the causes of the high food prices in Sweden.

## **II:2:2 Sales, 1970-1989**

The share of different branches in 1989 and developments between 1976-1989 are shown in the table below. The increase in sales has been particularly rapid for "Bicycles and Sport Equipment", "Optics and Jewellery" and "Flowers". Sectors with a declining share of trade are "Tobacco and Newspapers", "Books and Magazines" and "Other clothing".

**Table II:4 Turnover in retail trade sectors 1976-1989. Index, 1970=100**

SECTOR		1976	1980	1989	MSEK 1989
No	Name				
1.	Food stores	175	253	559	109 130
2.	Perfume and personal care	156	259	659	1 196
3.	Tobacco and Newspapers	151	215	324	4 045
4.	Books and Magazine	155	243	485	4 203
5.	Flowers	211	331	806	3 386
6.	Ready made clothes	179	266	598	24 182
7.	Shoes	175	278	559	4 296
8.	Other clothing	177	245	450	4 674
9.	Furniture	188	259	632	16 422
10.	Radio/TV sets	212	261	611	9 617
11.	Domestic appliance	211	240	540	4 480
12.	Cameras and photo	236	382	862	2 207
13.	Bicycles and sport	220	393	994	9 522
14.	Optics and gold	224	365	927	5 456
15.	OTHER, incl. dept. stores	—	—	—	60 879
TOTAL		184	263	563	264 145

**Source: HUI. Detaljhandelns struktur och omsättning 1989.**

The largest single sector in 1989 was naturally the food trade with 40 % of total turnover. Clothes and shoes represent about 10% and furniture about 5%. The share for (non-specified) department store trade is only about 12%.

### **II:2:3. The number of shops**

If we accept the figures given by HUI (see earlier section) on the number of sales units, we have the following distribution for the different categories.

**Table II:5 The number of (operating) sales units in retail trade 1989 according to category**

	No of shops	Total Sales 1989 MSEK incl VAT	Sales per unit MSEK *
Public Retail Trade	1 196	28 383	23.7
Chemist's	854	10 631	12.4
Liquor stores	342	17 752	51.9
Non-public Retail Trade	44 304	364 874	8.2
Automobile trade	2 818	79 530	26.8
Fuel and gasoline	3 486	35 705	10.2
Proper retail trade	38 000	249 639	6.6
Total retail trade	45 500	393 257	8.6

\* 1MSEK  $\approx$  150 000 ECU

Source: HUI. *Detailhandels struktur och utveckling 1989.*

There is a great difference in sales per sales unit, from over 50 million SEK in the state liquor stores (the State has a monopoly in alcohol trade in all Scandinavian countries except Denmark) down to about 6-7 million SEK (1 million ECU) in "proper" retail trade stores. There is also a great difference with respect to numbers of sales units. According to the table, there are ten times as many outlets selling cars as there are shops selling alcohol. (Actually, there are another 4 000 units selling cars periodically; small repair shops etc.) Assuming that there are 1 800 localities in the country, there is one liquor store in every sixth and one drug store for every second settlement. For each locality there are two automobile shops and two gasoline stations. Finally, there are about 5 grocery stores and about ten other specialist shops.

In total, there is about 1 drug store per 10 000 persons, 1 liquor store per 25 000, 1 gasoline station per 2 500, and 1 grocery store per 1 000. Average turnover is around 1-1.5 million ECU per year, except for liquor stores where average sales are six times higher and the automobile trade where sales are three times as high. Of course, the figures give a very crude picture of retail trade in Sweden, but the core figures: 1 shop per 200 persons, yearly sales at 1 million ECU per year, are proper guidelines for international comparisons.

#### II:2:4 Firms and employees, 1970-1988

The total number of employees was shown in the preceding section. It is also possible to calculate the number of employees per sales unit (in retail trade) which is shown in Table II:6.

**Table II:6 Retail trade: No of employees per sales unit, 1970-1988**

		1970	1973	1983	1988
Retail trade	No of firms	28312	29042	44212	47161
	Employees per firm	10	10	6	6

**Source: Official Statistics: Enterprises.**

The table shows a drastic fall in the number of employees per sales unit in the late 1970s. The explanation for this is not, as is usually the case, a declining number of employees, but an increased number of firms. It is generally acknowledged that the statistics before and after 1983 are not perfectly comparable, but the trend towards more firms is visible in both series. The figures reflect an increased specialisation during the late 1970s and early 1980s and the tendency for immigrants to take over many small shops (especially in the grocery sector) that would otherwise have been closed down.

### II:2:5 Size distribution

The size distribution with respect to the number of sales establishments and turnover are displayed in the table below.

**Table II:7 Number of sales establishments and share of turnover in different size classes, 1985 (See table II:2 for comparisons with other statistics.)**

Turnover MSEK						
Size Class	- 0.4	0.5-1.9	2.0-4.9	5.0-9.9	10-24.9	25 -
No of units	31 146	20 199	8 242	3 227	1 932	815
Turnover	5 132	21 309	25 642	22 466	29 663	44 081

**Source: Official Statistics: Trade.**

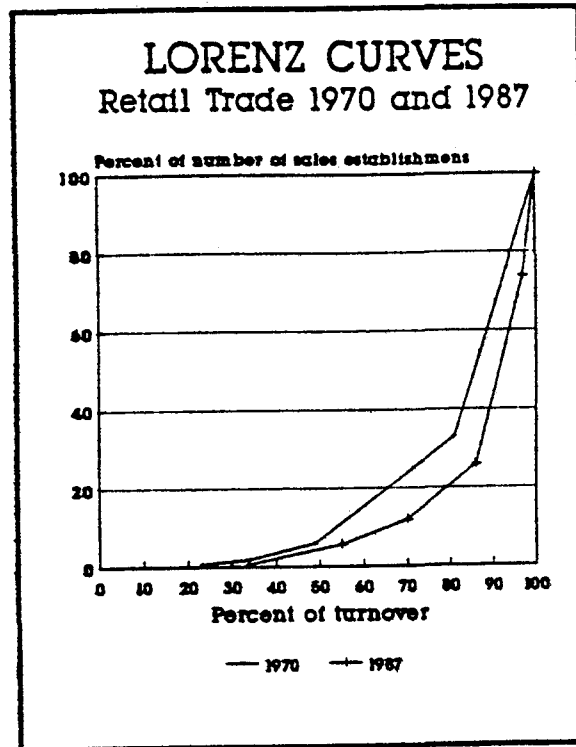
The size distribution is (as expected) very uneven. The majority of sales establishments are very small and two-thirds of the number of firms represent no more than 15% of turnover. The



smallest 40% represent 3% of total turnover whereas the largest establishments which account for 2% of the number of firms have together 30% of the sector's turnover.

It is an interesting question whether or not concentration has increased over the last decade. The development between 1970 and 1987 is illustrated in Figure II:1, where we have constructed Lorenz curves for the sector for two years:

**Figure II:1 Lorenz curves for retail trade, 1970 and 1987**



**Source: Official Statistics: Trade.**

There is a clearly visible shift of the curve, indicating increased concentration that affects all sizes of business. This process is evidently taken place despite an increase in the absolute number of firms.

#### **II:2:6 Forms of distribution.**

Although we tend to think of retail trade as shops, not all is in the form of "normal" shop trade. In addition, we have, for example "kiosks", local markets, mail order selling, etc. In Table 8, total sales in 1989 are classified according to these different forms of distribution.

**Table II:8 Forms of distribution in retail trade, 1989**

Category	Sales, 1989 MSEK incl. VAT	Percentage
<b>Shops</b>	<b>229 539</b>	<b>92</b>
<b>Kiosks</b>	<b>5 500</b>	<b>2.2</b>
<b>Local markets, etc.</b>	<b>2 800</b>	<b>1.1</b>
<b>Home sales</b>	<b>3 500</b>	<b>1.4</b>
<b>Mail order</b>	<b>6 500</b>	<b>2.6</b>
<b>Special trade</b>	<b>1 800</b>	<b>0.7</b>
<b>Total</b>	<b>249 639</b>	<b>100</b>

Source HUI: *Handelns struktur och utveckling 1989*.

The dominant form of distribution is, of course, shop trade. In Sweden, this accounts for over 90% of total sales in proper retail trade, with mail order and "kiosk-trade" as the only notable exceptions.

It is also possible to classify distribution according to whether it is a department store or other type store. The development of these two categories is shown below with respect to share of total sales.

**Table II:9 Total turnover classified according to forms of distribution, 1969-1987 (Percent)**

	1969	1973	1976	1983	1987
<b>Department stores</b>	<b>20</b>	<b>23</b>	<b>20</b>	<b>16</b>	<b>13</b>
<b>Other type stores</b>	<b>80</b>	<b>77</b>	<b>80</b>	<b>84</b>	<b>87</b>
<b>Everyday commodities</b>	<b>51</b>	<b>50</b>	<b>47</b>	<b>50</b>	<b>48</b>
<b>Infrequently bought commodities</b>	<b>29</b>	<b>27</b>	<b>33</b>	<b>34</b>	<b>39</b>

Source: Official Statistics: Trade.

The table shows the general tendency towards a smaller share for department stores which has diminished from about 20% to about 13%. The table is based on the official statistics, but the same general figures are given by the research organisation HUI. For 1989, they find the share of department stores (in the sales of retail shop trade) to be 7.1% and hypermarkets 5.6%. The

two categories (which in the official statistics are added together as "Department Stores") thus accounted for 12.7% of total retail shop trade in 1989.

For retail trade in everyday commodities, it is possible to take a step further and differentiate between hypermarkets, super stores etc. The table below presents developments since 1978.

**Table II:10 Retail trade in everyday commodities, 1978-1987 (1)**  
**Percent of total turnover**

	1970	1982	1987
Hyper markets > 2 500 (+ external location)	4.9	4.9	5.9
Other deparment stores 1 500 – 2500	15.3	12.7	8.5
Superstores 800 – 1500	12.5	13.4	15.6
Supermarkets 400 – 800	24.8	29.0	34.3
(All supermarkets	57.5	60.0	64.3)
Other grocery stores	42.5	40.0	35.7

1) The figure given in connection with category defines the object w.r.t. floor space in m<sup>2</sup>.

Source: HUI Detaljhandelns Struktur och Utveckling, 1989.

From this table it is evident that there is a declining share for the large or "traditional" supermarkets whereas there is an increase in the share for "hypermarkets", i.e. large and externally located supermarkets, and also for smaller supermarkets.

## II:2:7 Ownership

The forms of ownership of retail shops are shown in the table below.

**Table II:11 Retail trade ownership, 1989**

	Sales, 1989 MSEK incl. VAT	Percentage	No. of outlets 1989	Percentage
Consumer cooperatives	38 494	15.4	1 655	4
Other non-public firms	211 145	84.6	36 345	96
Franchise shops	2 000	0.8	700	25
Multiple shops	77 000	30.8	4 550	12
Chain shops	97 294	39.0	9 531	25
Owned by retail traders	93 834	37.6	8 881	23
Owned by wholesale traders	3 460	1.4	650	2
Other proper retail trade	34 851	14.0	21 564	57
<b>Total proper retail trade</b>	<b>249 639</b>	<b>100</b>	<b>38 000</b>	<b>100</b>

Source: HUI Detaljhandelns Struktur och Utveckling, 1989.

Consumers cooperatives own about 15% of firms (calculated by sales volume). The major part of other non-publicly owned shops are either connected to a larger chain or are owned by a bigger company. About 30% of the market is dominated by multiple shops, i.e. shops directly owned by larger companies and almost 40% by chain shops. In general, these shops are owned by the manager, but they are connected to other firms by name, wholesale organisation, advertising, assortment and -- in most cases -- also prices. Since the beginning of the 1970s, the share for the cooperatives has been declining whereas the share for retail-owned chain shops has increased and the share for multiple shops (owned by larger companies) has remained rather stable. The increased share for retail owned chain shops is due both to increased efficiency (due to a more efficient wholesale organisation) and to reduced competition due to increased market power.

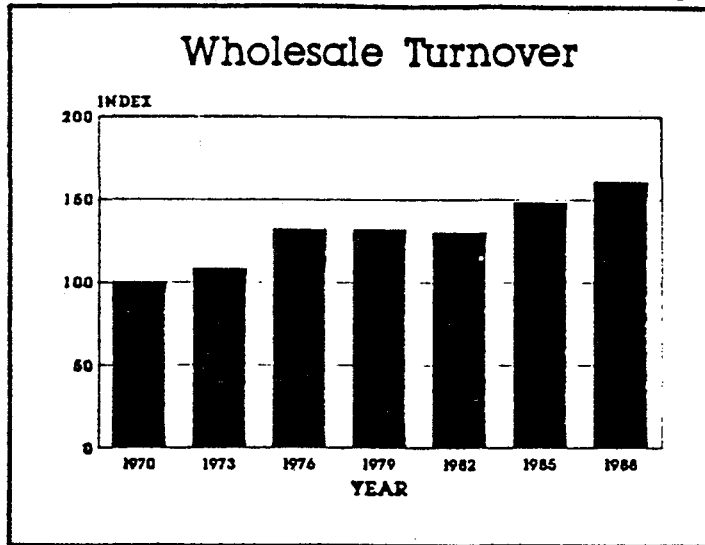
### II:3 Wholesale trade

The statistics available for the wholesale sector are much less reliable and have a more limited coverage than statistics for retail trade. Apart from the official statistics, information can be found in Jacobsson et al (1990), in some seminar papers and in reports from HUI.

#### II:3:1 Sales

The development of total turnover in the sector has been very rapid as illustrated by the figure below:

Figure II:2 Turnover in the wholesale sector in Sweden. Fixed prices (Index)

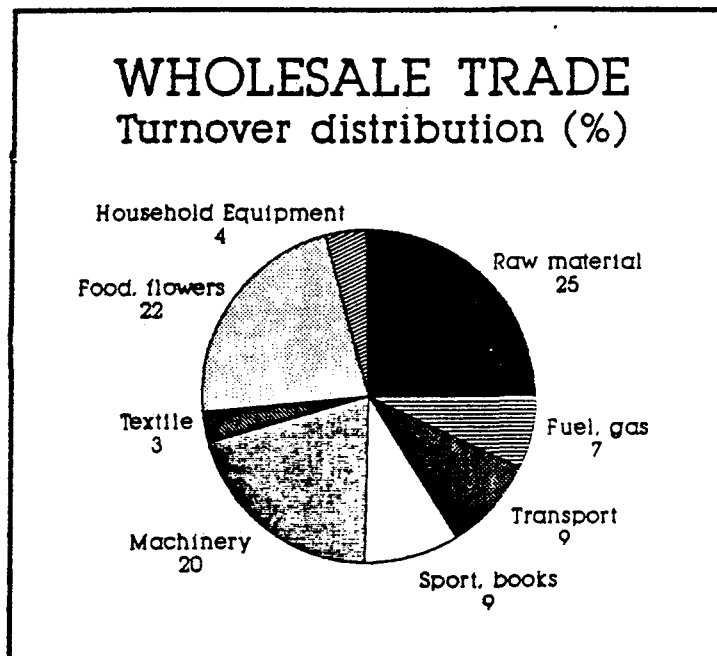


Source: Jacobsson et al (1990).

Turnover has increased by almost 60% since 1970, which is far more than, for instance, private consumption. It can be observed, however, that total turnover stagnated completely between 1976 and 1983. (It can also be pointed out that turnover stagnated in 1990 and 1991.)

The distribution according to different goods categories is shown in the figure below:

Figure II:3 Distribution of turnover in wholesale trade, 1988.



Source: Jacobsson et al. (1990).

Almost 3/4 of turnover consists of raw materials, machinery and food. The largest group is raw material which is sold to industry. The group "machinery" and parts of the groups "transport" and "fuel" are also delivered to industry. Accordingly, deliveries to industry constitute 50-60% of total sales in the sector. The rest, 40-50%, is sold to the retail trade sector.

The distribution of the number of firms and turnover according to different size classes is shown below:

**Table II:12 Size of the wholesale sector classified according to the number of employees, 1988**

No of employees	0 - 4	5 - 19	20 - 49	50 -	Total
No of firms	29 538	4 370	952	526	35 384
No of employees	18 531	39 459	28 214	94 023	180 227
% of total firms	83	12	3	3	100
% of total employees	10	21	16	52	99
% of total turnover	11	18	12	58	99

\* Total turnover = 438 TMSEK

Source: Official Statistics: Trade.

The majority of firms have, as was the case in retail trade, no employees (20 000 of 35 000). While most firms are small, the sector as a whole is dominated by around 500 very big enterprises with more than 50 employees. These firms, comprising 2% of all firms in the sector, account for 52% of all sectorial employment and close to 60% of total sales.

### II:3:2 Ownership

Wholesale trade occupies a position between the producer and the retail trader. It is a frequently debated issue whether there are any tendencies, either from the producer or the retailer, to take over wholesale trade. We are not in a position to be able to comment on the long-term trends here because we lack data on ownership, except for the years 1984 and 1987. We can, however, analyse developments between these years, which are hopefully representative of longer periods.

**Table II:13 Ownership of the wholesale sector, 1987**

<b>Owners</b>	<b>Number of firms</b>	<b>Number of employees (1 000)</b>
<b>Foreign</b>	<b>1 011</b>	<b>33</b>
<b>Firms belonging to groups</b>		
<b>Industry</b>	<b>490</b>	<b>12</b>
<b>Retail trade</b>	<b>135</b>	<b>2</b>
<b>Wholesale trade</b>	<b>2 592</b>	<b>42</b>
<b>Hotels</b>	<b>82</b>	<b>7</b>
<b>Transport</b>	<b>66</b>	<b>3</b>
<b>Financial firms</b>	<b>830</b>	<b>23</b>
<b>Others</b>	<b>288</b>	<b>3</b>
<b>Independent firms</b>	<b>28 302</b>	<b>50</b>
<b>Total</b>	<b>33 796</b>	<b>175</b>

**Source: Jacobsson et al. (1990).**

About half of the trade (measured by number of employees) is owned either by independent firms or by groups operating only within the wholesale sector. Some 5% of the firms are owned by industrial combines and some 10% by financial enterprises. Retail trade owns a very small fraction of the sector.

The changes between 1984 and 1987 are illustrated in the table below:

Table II:14 Wholesale trade: changes in ownership between 1984 and 1987

Owners	Change:	
	% Firms	% Employees
Foreign	-7.3	+2.3
Firms belonging to groups		
Industry	+23.2	+0.8
Retail	+23.9	-8.1
Wholesale	+38.9	-8.2
Financial	+75.5	+35.5
Others	-4	-5.1
Independent firms	+2.5	+7.5
Total	+5.6	+3.3

Source: Jacobsson et al. (1990).

The total number of employees rose by 3.3% between 1984 and 1987 and the number of firms rose by 5.6%. Compared to these figures, we see that industry accounts for a declining share of the number of employees and an increasing share of the number of firms. The same is true for retail trade, where ownership measured by the share of employees is rapidly declining. The share of employees is rising only for financial institutions and private companies. The table does not support the hypothesis that producers and/or retailers are taking over the wholesale sector. On the contrary, both producers' and retailers' shares of the sector are declining.

It is also possible to test the opposite hypothesis, i.e. that the wholesale sector is trying to integrate backwards to the producer or forwards to the retailer. In the table below, we have indicated firm ownership by the wholesale sector together with percentage changes from 1984 to 1987.



**Table II:15 Ownership by the wholesale sector and changes between 1984 and 1987.**

SECTOR	No of firms	Employees 1000	Change	
			% Firms	% Employees
Industry	950	70	+ 28	+ 28
Retail	370	7	+ 20	+ 12
Whole sale	2813	55	+ 34	- 7
Financial	314	3	+ 92	+ 47
Other	296	6	+ 56	+ 36
Total	4743	141	+ 36	+ 11

**Source: Jacobsson et al. (1990).**

The table shows firstly that ownership (outside the wholesale sector) by wholesale firms are concentrated to industry, second that there was a significant increase in integration both backwards and forwards by the sector. During the three years between 1984 and 1987, the number of employees in industrial firms owned by wholesale firms rose by 28%. The corresponding figure for financial institutions was 47% and for other sectors 36%. It is possible that this tendency towards integration is due to the strategic position held by the wholesale sector. Located between retailer and producer, it is in a very good position to collect information on changes in habits, taste and technology, all pieces that are vital to predict the development of future markets.

## **CHAPTER III STATIC AND DYNAMIC EFFICIENCY**

### **III:1 Static efficiency**

Efficiency is a word that is easy to use but hard to give a precise quantitative meaning, at least when comparisons are made with other sectors and firms within the same country. For both retail and wholesale trade, wages and returns to capital are of the same size as for the rest of the Swedish economy. Wages in general are lower than average, but when corrected for sex (i.e. discrimination), age and education, the difference disappears. (See Löfström 1989).

For comparisons with other countries, we can use physical efficiency measures, such as sales per employee and sales per m<sup>2</sup> of floor space allocated to sales. These two figures are presented in the following tables for the 14 different sectors in retail trade. (See the next two tables.)

**Table III:1 Annual sales per employee in retail trade sectors (1989 excl. VAT)**

(Thousands SEK)

SECTOR			
No	Name	< 20 employees	> 20 employees
1.	Food stores	1265	1413
2.	Perfume and personal care	527	—
3.	Tobacco and Newspapers	491	—
4.	Books and Magazine	632	1045
5.	Flowers	435	—
6.	Ready made clothes	846	1106
7.	Shoes	644	955
8.	Other clothing	586	932
9.	Furniture	1002	1978
10.	Radio/TV sets	985	1326
11.	Domestic appliance	489	1322
12.	Cameras and photo	641	—
13.	Bicycles and sport	721	1090
14.	Optics and gold	648	—

**Source: HUL. Kostnads- och effektivitetsdata för 1989.**

**Table III:2. Sales per m<sup>2</sup> of total floor space in retail sectors, 1989**  
(Thousands SEK)

SECTOR No	Name	SMALL FIRMS < 20 employees
1.	Food stores	25
2.	Perfume and personal care	15
3.	Tobacco and Newspapers	15
4.	Books and Magazine	12
5.	Flowers	6
6.	Ready made clothes	11
7.	Shoes	12
8.	Other clothing	14
9.	Furniture	4
10.	Radio/TV sets	17
11.	Domestic appliance	11
12.	Cameras and photo	16
13.	Bicycles and sport	7
14.	Optics and gold	22

**Source: HUL. Kostnads- och effektivitetsdata för 1989.**

Naturally, there are great differences between sectors and between units of different sizes. Table III:1 shows that sales per employee increase rapidly with size, as do sales per floor space unit. The figures in Tables 1 and 2 can not be used for efficiency comparisons between sectors since production conditions differ considerably. They can, however, be used for efficiency analyses of the same sector in different countries.

### **III:2 Scale economies**

There is some evidence of considerable scale economies in the retail sector. For instance, from Table III:1, we can calculate that average sales per employee (1989) was 708 000 SEK for stores with less than 20 employees. The corresponding figure for outlets with more than 20 employees was 1 240 000 SEK. (If we count only those sectors where both figures are given, the average

for the former group is 796 000 SEK.) Accordingly, labour productivity is 50% higher in large stores, provided of course that sales is an appropriate measure for output.

Perhaps the best calculation of scale economies was given in a recent report by Eliasson and Julander (1991). Their calculation, based on a large sample of firms, resulted in the equation  $Q/L=A_0*Y^{0.127}$ , which is a numerical representation made by the author based on Figure 5.1 p. 260 in Eliasson and Julander (1991). Q/L is sales per working hour and Y is floor space in m<sup>2</sup>. Accordingly, an increase in floor space by 1% increases sales per employee by 0.127%.

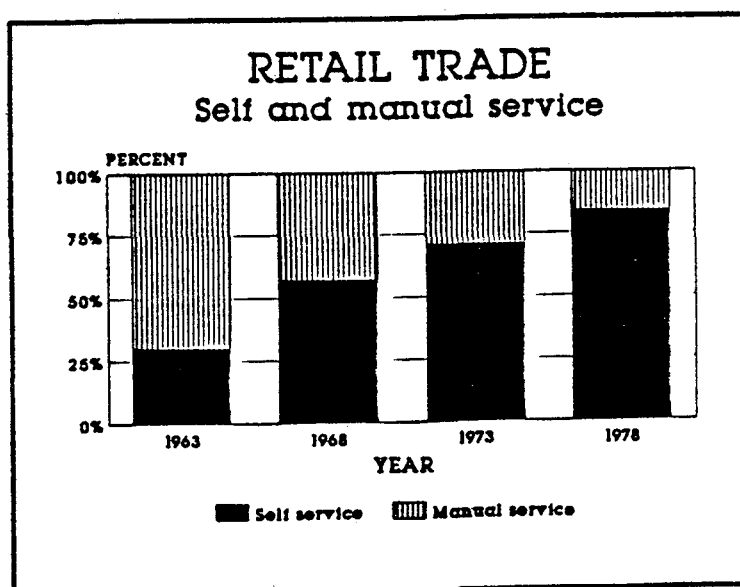
The evidence presented above is incomplete in the sense that only single-factor productivity is calculated: labour productivity. However, the table can be completed with figures of "floor space productivity" given in the publication HUI "Branschfakta" 1990. Size classes are annual sales 0.1, 1-3 and 3-5 MSEK. An average for sectors where figures for all three classes are given results in "Annual sales per m<sup>2</sup>" of 12, 20 and 26 thousand SEK respectively.

Both labour and "floor space" productivity indicate the existence of strong economies of scale. This tendency is, however, in most cases counteracted by the distance to the average customer and a calculation based on private total cost (including travel cost) leads to an "economically optimal size" being considerably smaller than the "technically optimal size" of outlet.

### III:3 Innovation and technical progress

The technical standard in Swedish shops is probably close to the average for Northern Europe. For instance, the degree of self-service in food stores is close to 90% today, with a small number of manual service shops remaining in the countryside. The substitution of self-service for manual service shops began early in the 1960s, as indicated by the figures below:

Figure III:1 Self service vs. manual services in retail trade in Sweden. Percent of total market



Source: Official Statistics, Enterprises.

There are also other indicators that the technical standard of Swedish shops is fairly high. For instance, it was estimated that the number of EDI systems (per capita) was (together with Norway) the highest in Europe in 1988 (Jacobsson p. 53).

As indicated earlier, there is also a tendency to stop building large department stores and to concentrate on supermarkets. This is clearly indicated in the figure below, where department stores and supermarkets are classified according to the year of establishment. 80% of all department stores were established before 1970 and 80% of all supermarkets after.

**Table III:3 Existing stock of department stores and supermarkets organised after the year of establishment, 1990**

YEAR	— 1939	40–49	50–59	60–69	70–79	80–89
Department stores	14	5	16	110	20	7
Supermarkets	1	0	8	7	32	18

Source: HUI. Detaljhandelns struktur och utveckling 1990.

The absence of statistics on value added makes it impossible to calculate the development of productivity as measured by value added per employee in the retail and wholesale sectors separately. It is, however, possible to calculate total (gross) sales per employee in the different branches and this is shown in the table below for 1980-1988:

**Table III:4 Turnover per employee in retail, wholesale and manufacturing, 1980-1987  
1980 = 100**

	80	81	82	83	84	85	86	87	88
Retail trade	100	99	90	117	126	131	136	145	156
Retail food	100	94	105	110	110	110	111	114	121
Wholesale trade	100	94	104	110	120	124	125	133	140
Manufacturing	100	96	103	110	117	199	121	127	133

Source: SOU 1990:25 Konkurrensen inom livsmedelsektorn.

Productivity development, as measured by sales per employee, does not appear to be particularly slow in the retail or wholesale sectors. On the contrary, for the retail sector as a whole, sales per employee grew faster than for manufacturing during the decade.

The study referred to above is unclear with respect to the data base, but the results can be compared to those of other studies. In Eliasson and Julander (1991) a calculation of the development of labour productivity (sales per working hour) results in the following series: 1970=100, 1980=110, 1989=112 (p. 245). The difference with respect to the results presented in the table above is striking. Eliasson and Julander find that labour productivity increased by 2% between 1980 and 1989, whereas the state commission reports an increase of about 60% for the same period. The difference between the denominators ("employees" and "labour hours") cannot explain more than a fraction of the difference. Without having access to the original data bases, it is impossible to explain this difference. A study by Löfgren and Wibe (1991) based on National Income data results in a third estimate of the innovation rate. For the combined trade sector (wholesale and retail), labour productivity was estimated as: (1970=100): 1980=115, 1987=131. The increase was accordingly about 1% annually in the 1970s and 2% in the 1980s.

In sum then, the estimates indicate that the rate of productivity growth is (roughly) of the same magnitude as in other sectors of the economy. Despite this, we must admit that the data presented above do not allow a definite judgement of the static and dynamic efficiency of the distribution system. One aspect is (of course) that the size distribution of outlets is far from optimal from a technical point of view. All of the static efficiency measures (such as sales per unit of floor space, sales per employee and the rate of turnover of inventories) increase with size (at least for retail trade) which, of course, indicates lower unit costs. But these measures neglect the transport time for consumers. Unfortunately, we have no statistics on this which means that we cannot, with full confidence, make any statement of the total efficiency of the sector.

#### **III:4 An international price comparison**

The overall efficiency of the sector is, of course, reflected in prices. When corrected for differences in input prices (and for differences in market situation), prices of goods should reflect the efficiency of, in this case, the distribution system. There exists one recent comparative study of retail prices in Sweden and other countries: "Dagligvarupriser i Europa- En studie i fem europeiska städer 1990" (Retail prices for everyday commodities in Europe -- A study of five European cities, 1990) by HUI. In the study, a comparison was made of prices for 43 different commodities. These were divided into six groups with the following composition:

- 1. Dairy products, eggs and fish.**
- 2. Beef and pork**
- 3. Bread, grain and flour**
- 4. Fruit and vegetables**
- 5. Coffee, tea, sugar, ketchup, salt, ice-cream, marmalade, sweets and soft drinks.**
- 6. Soap, kitchen rolls, toothpaste and washing powder.**

The cities investigated were Stockholm, Amsterdam, Hamburg, Copenhagen and Basel.

The results are shown in the table below:

**Table III:5 Retail prices, 1990 (excl. VAT)**

	Stock- holm	Copen- hagen	Hamb- urg	Amster- dam	Basel	Average
1. Dairy...	93	88	95	79	145	100
2. Beef ...	99	77	69	70	184	100
3. Bread ...	148	82	79	69	120	100
4. Fruit ...	97	93	84	72	154	100
5. Coffee ...	107	90	103	67	133	100
6. Soap ...	110	97	87	78	129	100
7. Total	104	86	86	73	151	100
8. Total incl VAT	117	94	85	70	136	100

Source: "Dagligvarupriser..." (1990).

The table shows that Stockholm, next to Basel, has the highest prices among the selected cities. By far the cheapest city is Amsterdam, followed by Hamburg and Copenhagen. When VAT is included, Swedish relative prices become still higher.

The important question is whether the observed variations are due to an efficiency factor in distribution or to input costs. The study does not allow us to answer this question fully. However, a partial investigation of the difference in food prices in Sweden and Denmark has been carried out (Dagligvarubutikerna i Sverige och Danmark- en studie av kostnader och effektivitet 1990; "Retail shops for everyday commodities in Sweden and Denmark, a study of costs and efficiency 1990"). The main results are summarized in the table below:

**Table III:6 Cost items for everyday commodities in Sweden and Denmark**

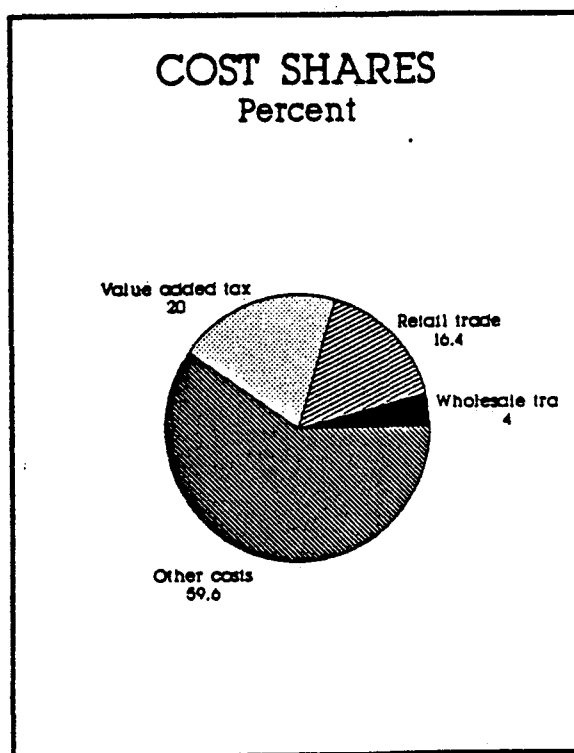
	Sweden	Denmark	Difference Sweden- Denmark
Retail price	100	80	20
Vat	20	14.40	5.60
Labour input	8.20	7.35	0.85
Other inputs	8.20	8.00	0.20
Price to shop	63.60	50.25	13.35

Source: "Dagligvarubutikerna...." (1990).

Whereas hourly labour costs (incl. social benefits) are 37% higher in Sweden than in Denmark, the observed difference in actual labour input costs is only 10-12%. Taking account of the fact that other (i.e. non-labour) costs are also considerably higher in Sweden, the observed actual difference of only 2-3% also indicates an efficiency advantage for Swedish shops. Thus, the overall conclusion is that dearer prices in Sweden are due to higher input costs, and not to lower efficiency.

International comparisons could also be made using information on the overall cost structure of the sector. This was calculated for everyday commodities and presented in a study from 1990: (Grossistens roll i dagligvaruhandeln; "The role of wholesalers in trade in everyday commodities", 1991). The following cost picture emerged:

**Figure III:2 Average cost shares for everyday commodities in ICA chain stores**



**Source: HUL "Grossistens roll i dagligvaruhandeln" (1991).**

(The ICA supermarket chain is the largest food chain in Sweden with a market share of around 30%. The greater part of total sales (80-90%) comes from foodstuffs.)



The picture shows that distribution (wholesale and retail) accounts for about 20% of total costs, 16% for retail trade and 4% for wholesale trade. It should, however, be noted that the margin is considerably higher in other branches. For instance, in optical goods, the gross margin (i.e. the difference between purchasing and sale price) is close to 50%, in flowers 42%, shoes 29% etc. In fact, by far the lowest margin exists for grocery stores.

## **CHAPTER IV    COMPETITION INDICATORS**

### **IV:I Market concentration**

#### **IV:1:1 Retail trade**

Concentration of production is generally very high in Sweden. In industry, the average share for the four largest firms was over 60% at the end of the 1980s, with many sectors having a figure of 90% or more. Partly, this is a result of the size of the market: given specific technical scale advantages, a smaller market is of course more easily dominated by one or a few firms. To some extent, this concentration tendency is counterbalanced by the openness of the economy and the large shares of exports and imports.

Retail and wholesale trade are no exceptions to the rule of high concentration in Sweden. For the retail sector, the market shares (of the total national market) of the largest, the five largest and the ten largest firms are given in the table below:

**Table IV:1 Market shares in retail trade, 1989**  
**Percent**

SECTOR		Largest	5 largest	10 largest
No	Name			
1.	Food stores	26	31	34
2.	Perfume and personal care	20	43	—
3.	Tobacco and Newspapers	63	65	—
4.	Books and Magazine	17	41	47
5.	Flowers	35	51	—
6.	Ready made clothes	15	42	53
7.	Shoes	19	38	47
8.	Other clothing	4	9	12
9.	Furniture	23	53	60
10.	Radio/TV sets	16	66	85
11.	Domestic appliance	19	51	55
12.	Cameras and photo	29	43	47
13.	Bicycles and sport	9	27	32
14.	Optics and gold	10	35	45

**Source: HUI Kostnads- och effektivitetsdata 1989.**

The figures above include voluntary chains (except for food stores) and the whole chain is then registered as only one firm. The average figure for the five largest is close to 50% and for the ten largest around 60%. Although this must be regarded as very high in an international perspective, it is important to recognise the smallness of the economy and that the number of competing small firms is very great in every sector. For instance, in the Radio and TV sector, the ten largest firms and chains have 85% of market sales. But together, these firms represent no more than 532 out of 2279 shops. Even if we exclude firms with 0 employees, the ten largest firms cannot represent more than -- at most -- 30% of all sales units. It is hard to avoid the conclusion that competition is rather sharp despite the heavy concentration in sales.

#### IV:1:2 Wholesale trade

The lack of statistics for the sector makes any analysis difficult. As was the case for the retail sector, conditions are best known in the grocery trade. This sector is dominated by three groups, directly associated with the three retail-trade chains:

Table IV:2 Market shares for wholesale in food

	1978	1983	1988
ICA	29.9	34.4	36.1
KF	23.3	23.2	18.4
Dagab	17.3	17.1	17.2
Total	70.5	74.7	71.7

Source: Official Statistics: "Konkurrensen inom livsmedelssektorn", SOU 1990:25.

The share of the three groups is above 70%, i.e. the market is definitely an oligopolistic market. Furthermore, the remaining 30% consists mostly of traders with a specialist assortment. The only full-assortment wholesale trader outside the "big three" is a local company with a market share of 1.4%. It is fair to say that the big three have complete domination over wholesale trade for the sector.

Apart from the food sector, we have data only for two separate branches: Water & Sanitary goods and Electrical goods. Concentration is high in both sectors. In the Water & Sanitary (W&S) sector, three firms have over 90% of the market. (AhlSELL VVS AB, Fosselius och Alpen AB and Skoogs VVS AB). There is no other European country with such high concentration. For instance, in Germany there are over 600 wholesale traders, the largest having no more than 5% of the market.

In the electricity market, four firms -- AB Asea Skandia, AB SELGA, AhlSELL EL AB and Skoogs EL AB -- have together about 80% of the Swedish market. AB Asea Skandia has 30, SELGA 20 and the two other 15% each. There is no similar concentration in the large countries within, for instance, the Common Market, and there is only one firm larger than the biggest in Sweden, AB Asea Skandia (source: Guinchard *et al.*, 1991).

All our data thus indicate that the wholesale markets are also highly concentrated, probably more concentrated than retail trade.

## IV:2 Entry and exit

Another indication of the pressure of competition is entry and exit rates for firms. Such data exist only for the retail trade and are illustrated in the table below:

**Table IV:3 Bankruptcies in the retail trade, 1986-1990**

SECTOR		% of total no of firms	% of total employers 1990
No	Name		
1.	Food stores	10.4	3.7
2.	Perfume and personal care	7.3*	8.7
3.	Tobacco and Newspapers	5.8*	2.7
4.	Books and Magazine	5.8*	2.8
5.	Flowers	7.3	4.8
6.	Ready made clothes	15.3	6.1
7.	Shoes	12.9	5.8
8.	Other clothing	6.9	9.7
9.	Furniture	11.3	5.3
10.	Radio/TV sets	15.9	9.9
11.	Domestic appliance	10.2	5.9
12.	Cameras and photo	8.4	3.0
13.	Bicycles and sport	11.3	12.1
14.	Optics and gold	5.2	3.0

\* Estimate based on 3-year average, 1986-88.

Source: HUI Kostnads- och effektivitetsdata 1990.

The figures above are constructed by adding annual percentage and number figures for the years 1986-1990. The mean value for the first figure (for the number of firms) is 9.6 which means that the number of bankruptcies per year on average equals 2% of the number of existing firms. Observe, however, that this does not mean that 10% of all firms existing one year will go

bankrupt within the coming five. A large proportion of the bankruptcies are firms that have entered the market the same year, or one or two years earlier. The stability of the existing structure is therefore greater than what is indicated by the figures above.

Since the total number of firms did not decline during the period, we conclude that the figures indicate that the existing structure is under constant pressure from new entrants. The overall picture is accordingly that the market is stable in terms of the largest enterprises, that the market is highly concentrated, but that the structure is under constant attack by new firms trying to enter. The entry and exit figures do not support the view that the sector is stagnating and monopolised.

#### IV:3 Rates of return

In theory, a monopoly could earn a higher rate of profit as compared to a firm operating in a competitive market. As indicated by the table below, there is no indication of abnormally high profit rates in retail or wholesale.

**Table IV:4 Rate of return on capital, 1980-1988**  
Percent

	80	81	82	83	84	85	86	87	88
Retail trade	7.0	8.0	8.6	8.9	9.3	9.6	10.5	10.4	9.6
Retail food	10	10.3	11.1	13.0	11.5	9.8	10.3	10.5	9.8
Wholesale trade	8.0	7.8	7.9	9.0	9.0	8.5	7.4	8.0	8.7
Manufacturing	8.0	7.7	8.2	9.4	9.8	9.4	8.7	9.7	9.5

#### 1) Median values for all firms.

Source: Official Statistics SOU 1990:25 p 181.

The table above does not support the hypothesis of higher-than-normal profit rates in the distribution sector, possibly with the exception of grocery stores. Of course, this does not prove that the sector isn't monopolised, since a firm could waste its monopoly position on inefficiency. Taken together with the data presented above, it is, however, an indication that the market is fairly competitive.

#### IV:4 Foreign ownership

Yet another indication of competitive pressure is the extent of foreign ownership. The Swedish economy is, to a large extent, internationalised: Over 60% of industrial production is exported

and over 50% of industrial investments are made abroad. Between 30 and 40% of all employees working in Swedish firms work outside Sweden. The reason for this development is, of course, that Sweden is a very small economy compared with the continental market.

The distribution system is very internationalised as far as wholesale is concerned. Retail trade is, on the other hand, almost totally dominated by domestic firms, as shown in the table below:

**Table IV:5 Foreign ownership in Sweden, 1989**

	1989 No. of firms	No. of employees	Employees in % of total
<b>Agriculture and forestry</b>	109	7 941	3
<b>Mining and manufacturing</b>	637	121 149	14
Food, drink, tobacco	49	14 146	19
Textiles, clothing, leather	21	1 474	5
Wood and wood products	25	1 447	2
Pulp, paper and paper products	58	9 219	8
Chemicals	103	15 188	22
Minerals and coal	34	7 618	34
Base metal industries	8	3 668	9
Engineering	321	67 655	15
<b>Wholesale trade</b>	1 056	37 296	20
<b>Retail trade, hotels and restaurants</b>	108	6 207	2
<b>Transportation</b>	157	12 724	5
<b>Banking and insurance</b>	372	9 933	4
<b>Other services</b>	65	5 902	5
<b>Total</b>	2 513	201 970	9

Source: Official Statistics, Statistiska Meddelanden Ser F No 18 1989.

Unfortunately, it is not possible to distinguish between employment in hotels, restaurants and retail trade, but it can be safely assumed that retail trade does not represent more than half of the

number of employees in Table IV:5, the rest being employed in the great hotel chains. This implies that foreign ownership of Swedish retail trade is very small, and embraces only about one per cent of the total number of employees.

The situation is radically different when it comes to wholesale trade, where 20% of the Swedish employees work in foreign-owned firms. Apart from the manufacturing of non-metallic products, this makes the sector the most foreign-dominated in Sweden. It is not possible to go beyond the statistics reported in the table above, but experts state that foreign domination is greatest in areas such as petroleum, cars and textiles. The investing countries can also be identified, and this is done in the table below:

**Table IV:6 Employees in foreign-owned firms by sector and country, 1989**

	<b>Total</b>	<b>Whole- sale</b>	<b>Manufac- turing</b>
USA	27 875	8 395	15 527
Germany (FRG)	10 442	5 644	4 058
UK	20 814	3 440	10 935
Switzerland	13 589	3 255	7 828
Norway	14 464	2 626	10 384
Netherlands	19 274	2 461	16 257
Denmark	15 336	1 995	4 025
Finland	21 550	1 624	17 562
France	4 812	1 593	2 594
Japan	1 611	1 155	24
Belgium	1 567	144	861
Others	2 895	1 202	838
<b>Total</b>	<b>154 229</b>	<b>33 534</b>	<b>90 893</b>

**Source: Official Statistics Same as Table IV:5.**

As illustrated in the table, the greater part of employees in the wholesale sector come from four countries: USA, (West-) Germany, UK and Switzerland. Together, these countries account for about 65% of total employees.

It is not possible to obtain reliable statistics of Swedish ownership in other countries. It is well known that some firms, e.g. IKEA (furniture), H&M (clothing), GULINS (clothing) have invested heavily abroad, but it is not possible to quantify their engagement in terms of the number of employees or the size of turnover.

It is possible, however, to analyse the development of foreign investment by Swedish firms, but only for the combined sector Retail, Wholesale, Hotels and Restaurants. These figures can, furthermore, be compared with the Swedish domestic investment figures.

**Table IV:7 Foreign investment by the sector Trade, Hotels and Restaurants, 1980-1990**

	81	82	83	84	85	86	87	88	89	90
% of all Swedish foreign investment	3	4	3	4	10	3	7	4	4	2
% of domestic sectorial investment	4	5	4	6	11	6	11	12	11	5

**Source: Statistics from the Swedish National Bank.**

In comparison with other Swedish sectors, Trade and Hotel has not been very involved in foreign investments. The share of total Swedish engagements abroad is -- on average for the 1980s -- around 5%, which should be compared with its share of GDP which is 15%. The relationship between foreign and domestic investments in the sector is also -- by Swedish standards -- fairly low, and centres around 10% for the decade as a whole.

#### **IV:5 Tariffs and legislation**

With the exception of agricultural products, there are virtually no tariffs on imported goods in Sweden. However, some studies have confirmed the existence of non-formal agreements in the form of export quotas, especially in the textile sector.

As in most European countries, there are several import barriers to trade in food and agricultural products and the importance of tariffs for the price of food is considerable. For instance, the tariff on imported cheese was 30-60% of the importation value, on beef and pork 40-90%. Tariffs constituted around 15% of the (consumer) price of imported bread, 25% of imported cheese and beef and 35% of imported pork. The whole meaning of the tariff system is, of course, to protect the agricultural sector from competition from abroad.

There are several legal problems facing an investor in Sweden. Most of them are general in the sense that they are the same for all lines of business. (We will return to these in the last chapter) However, there are some specific problems associated with investment in the distribution sector. The most important (legislative) barrier is probably the "Plan and Building" law. In short, this



law gives the local municipalities the right to decide on the use of land: for housing, industry, shopping, leisure etc. Plans are drawn up several years before a new area is to be built and decisions are taken in the local municipal council. In principle, the use of land for a certain purpose is decided when the plan is accepted.

There are two problems associated with this. First, when an area is planned, a specific amount of space is allocated for trade, eg. food stores. When this area is occupied by shops, there is no physical space left for potential competitors since, in principle, a normal house can not be converted into a shop. This problem is most important for grocery stores in parts of cities at some distance from the town centre. In most instances, the planning authorities assume (or at least they have so far often assumed) that two food stores are enough and when these two have been established, there is no room for a new entrant. This is, in fact, the existing situation in very many districts in Swedish towns; two food stores completely dominate the market.

The problem is aggravated for two reasons. Firstly, the local municipality is in most cases the owner of the land and has to choose two among many applicants for the shop. Usually, one shop is "given" to the consumers co-operatives and the other to a representative for the largest retail chain "ICA". In city districts located at some distance from the city centre and built after 1960, there are usually two food stores; one ICA and one COOP. If the district is small, and the authorities believe that there is only a market for one shop, they usually give the rights to the COOP half of the time and to ICA on the remaining occasions.

The second factor aggravating the situation is that there is a paragraph in the building law stipulating that retail trade in food can (and sometimes must) be regulated in such a way that a ceiling is fixed for total floor space in shops. The logic behind this paragraph is that the community wants to prevent a development where all food trade is located to supermarkets outside the towns. (The problems with this are evident, at least for elderly people.)

In essence then, the "Plan-law" contains several elements that constitute barriers to competition. The law clearly is a barrier to potential entrants and as such is a factor limiting competition. However, its importance should not be overestimated. The law also clearly states that the municipality should not plan in such a way that competition, for instance in the form of new entrants to the market, is limited. In addition, there is no reason to assume other than that the municipalities are acting in the interest of their inhabitants and that competition is encouraged whenever it is possible. But conflict is sometimes inevitable. When space is only allocated for two shops, competition is clearly limited.

It should finally be mentioned that this problem is probably only serious for food retail trade. Other lines of business -- clothing, radio etc. -- do not need to be located in all city districts and there is usually enough space to allow for several competitors within close proximity of each other. Wholesale trade is usually classified as "Industry" and there is almost never any problem in acquiring land for this purpose.

## CHAPTER V SUMMARY AND CONCLUSIONS

The analysis in the preceding sections has demonstrated that there are several problems with the competitive structure of retail and wholesale trade in Sweden, although it is hard to prove the existence of large-scale inefficiency. One great source of concern is the very high concentration ratios in large parts of the system; retail trade, wholesale trade and production.

Concentration is especially high in food distribution, where three wholesale and retail chains have almost complete domination of the market. Furthermore, these organisations are tied to each other in one wholesale and one retail chain, so it is correct to speak of three groups dominating overall food distribution.

In addition, the different retail stores are closely tied to the parent organisation through various legal obligations. For instance, all cooperative shops in a district are owned by the same membership society and can not be sold separately. This means that all cooperative shops (in a town or a district) have (almost) identical prices, organise the same advertising campaigns, have (more or less) the same assortment etc. Similar conditions exist for shops belonging to the ICA chain. When a new shop is built, it is owned almost 100% by the ICA wholesale organisation. The retail owner buys the shop share by share as he/she can afford it. However, the central organisation always keeps one share in the firm. In addition, to become a member of the chain, the retail owner has to sign a contract which binds him to sell the shop back to the central organisation if he wishes to dispose of his shares. Accordingly, it is impossible for another food chain, or another independent owner, to buy an existing ICA shop, unless the central organisation permits it. This clearly limits potential competition. (It should, however, be added that a parliamentary commission on issues concerning competition has recently suggested that such contracts should be declared illegal according to the new and stricter competition law. Naturally, this section of the suggested law has met with great opposition from ICA.)

A specific feature of cooperation between wholesale and retail traders is "recommended retail prices" which the wholesale trader passes on to the retail trade. This is common practice in food trade, but studies have shown that it is very common in other branches as well. These recommendations lead to little variation in prices between shops, because owners and managers know what the "normal" market price is. The system also implies little resistance to price increases; if the wholesale trader feels that he needs to increase his price, he also raises the recommended retail price. The shop owner accepts this without protest since he (rightly) believes that all his competitors will also follow the recommendation and increase the price. If he lowers the price, no one will follow. Accordingly, market behaviour is like the reversed "kinked demand". Price sensibility to cost will be great, and in general, we will have low incentives to prevent increases in cost. To this it should also be added that the parliamentary commission on competition has suggested that price cooperation in this form should be declared illegal if the market share (on the "relevant market") is over 20%. In effect, this means that most cooperation between ICA chain shops is illegal. However, it now (June 1992) seems that the government will allow price-cooperation between ICA shops.

It is also easy to identify problems associated with the legislation that prevents competition in the sector. One example is the general "Planning Act", that gives local municipalities full right to decide on the use of land in cities and villages. In practice, this means that the use of land (for industry, trade, housing etc) is (almost) fixed for towns and the surrounding areas. Sometimes, and especially in the case of food stores in suburban areas, this can lead to a situation where there is no land available for potential traders. The existing firms then have a monopoly position which can be used to earn monopoly profits on trade. The problem exists, but should not be exaggerated; it is of importance only for grocery stores.

Of greater consequence are perhaps the laws that prevent foreigners from doing business within the country. These apply to all sectors, and not just to firms in the distribution system. There are five different laws regulating conditions for foreigners wanting to do business in Sweden. These are:

- (i) **Residence permit.** Needed by all non-Nordic citizens who wish to stay in Sweden more than 3 months.
- (ii) **Working permit.** Required by all non-Nordic citizens.
- (iii) **Business permit.** Needed by all foreigners not possessing a permanent residence permit. This is mandatory for a foreign firm or company and also for all foreigners who are not registered in a parish in the country.
- (iv) **Acquisition permit.** Needed to buy shares (over a certain amount, specific for different firms) in Swedish firms.
- (v) **Permit to become a member of the board in a shareholding company.** In general, this is required by all non-Nordic citizens.

The five laws listed above are, of course, not all the legislation faced by a person or company wanting to start a firm in Sweden. In addition there are Acts concerning the environment, occupational safety and health, taxes etc which in most cases require special permits before starting. The total sum of these laws is in many cases seen as a severe obstacle to investment; there is simply too much trouble involved in learning all the details and national peculiarities. Probably, the total sum of these laws is the most effective barrier to investment by foreigners. Many of these restrictions will, however, disappear when Sweden signs the European Economic Agreement or becomes a member of the EC.

A core question is whether the distribution system is in itself a barrier to international trade. This question can not be answered by this type of aggregate analysis. An indication is, however, given by figures on international competitive pressure which numerically can be defined as:

$$\text{International competitive pressure} = \frac{\text{Import}}{\text{Production} - \text{Export} + \text{Import}}$$

i.e. as imports divided by apparent consumption. For tradable goods, this figure is normally high due to the small size of the economy, normally 40-50%, except of course for goods where

Sweden has a comparative advantage such as wood and timber products. Due to tariffs and subsidies, the figures for food are considerably lower than this.

The above analysis has demonstrated that the distribution system in Sweden is highly concentrated, has a high degree of collusion between the actors and is heavily regulated. All of this indicates that the sector should be very inefficient. We have not, however, found any proof of this inefficiency in more direct analyses. Both the level and growth rate of labour productivity (such as sales per employee or sales area) are generally high, and rates of profit are comparable to the ones prevailing in industry. The system is also characterised by high entry and exit rates, so the existing structure is under constant attack from new competitors. In addition, analysis of retail price differences between Sweden and Denmark indicates that high input prices and taxes explain the whole difference.

Taking all factors into account, there are some strong indications that competitive pressures in the food sector of the distribution system are weak. Here high tariffs, low import figures and high market concentration severely limit competition. This tendency is reinforced by existing laws and regulations; in particular, the existing Plan and Building law. For this sector there seems to be great opportunities for improving productivity by amending laws, lowering tariffs, etc. For other sectors, the indications are less clear-cut and evidence contradictory. On the one hand, we have a high degree of market concentration and small shops, despite the existence of considerable scale effects. On the other hand, we have strong international competition and high import figures in combination with reasonable productivity growth and static efficiency. Technically and economically, these sectors seem to be reasonably effective, but only deeper international comparisons can give definite proof of this.

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