

BUSINESS MORTALITY
OF
ILLINOIS RETAIL STORES
FROM
1925 TO 1930

By PAUL D. CONVERSE

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PAUL D. CONVERSE



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1932

It is the purpose of the Bureau of Business Research of the University of Illinois—

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Department of Business Organization and Operation

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PREFACE

A preliminary study of this subject from the rating books of R. G. Dun and Company was made for the Mercantile Affairs Committee of the Illinois Chamber of Commerce. After the completion of this preliminary study, the Chamber of Commerce kindly permitted the Bureau of Business Research to use the data for a further investigation. The study was enlarged to include a greater number of towns and to cover a five-year period.

The data were carefully analyzed, classified, and retabulated in an attempt to discover the reasons for the various changes which had taken place in the period covered. Special attention was devoted to comparative statistics in regard to retail mortality in eleven selected trades and in towns in five size groups. The primary purpose of this study was to find the facts as to retail mortality, and a secondary purpose was to ascertain the causes of changes that have taken place. Some of the obvious factors are: the growth of chain stores; the building of a network of paved roads, and the adjustments in trading points resulting from these roads; the increased use of automobiles; the depression in the coal mining industry in Illinois; the farm depression; the large percentage of tenancy on Illinois farms; the decline of population in the rural districts and in many smaller towns and villages; and, during much of the period covered, prosperity in many of the manufacturing industries.

I am glad to acknowledge my indebtedness to the Illinois Chamber of Commerce for its generosity in permitting the use of its data, to R. G. Dun and Company for the use of their rating books, and to the staff of the Bureau of Business Research for compiling the tables and assistance in editing the manuscript.

P. D. CONVERSE

February, 1932

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I. INTRODUCTION

This study is based on the number of retail stores entering and quitting business as analyzed from the rating books of R. G. Dun & Company for eleven retail trades in 255 Illinois towns for the period from July, 1925 to July, 1930.

The study did not include chain stores except in so far as a chain was listed in one of the towns covered. In this case the chain was listed as one store. From this fact it is evident that so few chains were included in the study that the figures may be taken as referring primarily to independent stores.

The study measures the business turnover or length of life of retail concerns. The exit of a business does not necessarily indicate a failure in the sense that a failure means insolvency. There is no generally accepted definition of failure. The mercantile agencies define failure as cessation of business with a loss to creditors—in other words “insolvency.” According to the mercantile agencies, approximately 1 per cent of the business concerns in this country fail in this way each year. On the other hand, some consider an unprofitable business a failure. More than one-sixth of all business concerns quit business each year. The owners of some of these sell out with a profit, and others quit because of sickness, old age, etc. It appears, however, that a large majority quit because they fail to make profits with which they are satisfied.

In this study a concern was considered as remaining in business if it continued in business under the same or a similar name. To illustrate, suppose that a store was conducted in 1925 by John Jones and William Smith, in 1926 by John Jones, and in 1927 by John Jones and Richard Roe. Here it is regarded as the same concern. It would have been possible to follow the legal distinction; then in the illustration one store would have been considered as going out of business and another as entering business each year. The reason for choosing the former definition was that it was desired to measure the turnover of business concerns rather than the turnover of men in business. This difference in definitions should be borne in mind if the results of this study are compared with those of other studies, as it may cause some variation in the percentages of exits.

There were 9,718 retailers included in the tables for July, 1925. Of these, 4,502 went out of business by 1930; 4,281 new dealers were found in business in 1930. Thus there were 9,497 as of July, 1930.

A study of two typical towns shows that the number of dealers who entered business after July, 1925 and quit before July, 1930 was equivalent to 20.77 per cent of the number of dealers in business in 1925. Applying this same percentage to the 9,718 original retailers leads to the conclusion that approximately 2,018 dealers were included in the study who were not in business in either 1925 or 1930. The sum of the three figures shows that the study covered approximately 16,017 dealers in 11 trades. In addition, the detailed study of two typical towns included over 300 dealers in other trades.

The eleven trades selected for study were: furniture, grocery, meat, dry goods, hardware, drug, clothing, department, and general stores, restaurants, and garages (exclusive sales garages not included). These trades were selected to include some with a high rate of turnover, or short life, such as restaurants, garages, grocery and meat stores, and some with a low rate of turnover, or long business life, such as hardware, drug, clothing, dry goods, and furniture stores.

Five different groups of towns were selected for study. The first group included 100 towns with populations of less than 400. These are the small villages, some of them having only two or three stores. This group was selected in order to determine how the rural retailers are holding their own in this day of automobiles and paved roads. The second group included 75 towns with populations of between 400 and 1,000. This group comprises for the most part larger agricultural villages. Some of the towns in this group are secondary trading centers.

The third group included 50 towns with populations between 2,000 and 5,000, although a few were included with populations slightly outside these limits. This group was selected to represent typical "county seat" towns. Many of them are supported largely by trade from the surrounding districts, although some have factories or mines also. The fourth group included 25 towns with populations between 7,000 and 15,000. The fifth group included 5 towns with populations over 35,000. This group represented the larger cities of the state outside Chicago.

It was the intention to exclude purely suburban towns from the study. A few towns that might be considered as suburbs were covered, but their inclusion does not materially affect the total figures for their respective groups. Population figures are from the 1920 census.

In the tabulation which follows, the Illinois towns of various populations have been grouped so as to afford a comparison with the towns of similar size which were included in this study. The first group of towns, with population of less than 400, as given in Dun's rating books, includes all places (villages, crossroads, etc.) large enough to have a

store or other business concern. There were 1,478 such towns listed, of which 100, or 7 per cent, were covered by the study. In all, 12.4 per cent of the total towns of the selected sizes were studied, but if the towns below 2,000 population are omitted, the number of towns studied becomes 46 per cent of the total towns of similar size. Since there were 212 towns in Illinois of more than 2,000 population, the number of these included here (which is 80) is 38 per cent of the total. In the towns of over 35,000 population, there are several suburban towns, which were outside the field of this study. This fact accounts for the low percentage of such towns studied in this group.

NUMBER AND PERCENTAGE OF THE ILLINOIS TOWNS OF VARIOUS SIZES WHICH WERE INCLUDED IN THE STUDY

Size of Town (Population)	Source of Population Classification	Number of Towns Listed	Number of Towns Studied	Percentage of Towns Included in This Study
Under 400.....	Dun's Rating Book	1,478	100	7
400 to 1,000.....	Dun's Rating Book	398	75	19
2,000 to 5,000.....	1920 U. S. Census	121	50	41
7,000 to 15,000.....	1920 U. S. Census	38	25	66
35,000 and over.....	1920 U. S. Census	14	5	36
Total.....		2,049	255	12.4

II. STUDY OF MORTALITY IN TWO TYPICAL TOWNS

In order to ascertain whether the figures for the 11 retail trades selected for study were typical of conditions in all retail trades, two typical towns were selected for more intensive study. In the group of towns with population of 7,000 to 15,000, the typical town was selected as the one whose figures for dealer turnover and changes in number of dealers were closest to the average figures for the 25 towns in this group. In a similar way the typical town was selected in the group of towns of 2,000 to 5,000 population.

The study of these two typical towns indicates that the figures for the 11 trades are representative of all trades including such personal service trades as pressing shops, laundries, shoe repair shops, billiard halls, etc., in the 255 towns. When only those trades which sell goods are included, the 11 trades show a somewhat higher rate of turnover. The cause for this is the inclusion of a large number of high turnover dealers (grocers, restaurants, garages, and meat markets). The figures for the larger of the two towns are presented by way of illustration:

COMPARISON OF THE DEALERS IN 11 RETAIL TRADES WITH ALL RETAIL DEALERS IN A TYPICAL TOWN

A. Dealer Turnover

Trade Group	Number of Dealers in Business July, 1925	Cumulative Percentages of Dealers in Business July, 1925, Gone in July of Each Year				
		1926	1927	1928	1929	1930
11 Trades.....	97	11.3	26.8	29.9	40.2	43.3
All trades including personal services.....	212	10.4	26.4	33.5	40.1	43.4
All trades except personal services.....	190	9.0	24.8	30.6	39.6	41.2

B. Number of Dealers

Trade Group	Number of Dealers in Business July, 1925		Relative Changes in Number of Dealers in Business in July of Each Year (1925 = 100)				
	No.	Base = 100%	1926	1927	1928	1929	1930
11 Trades.....	97	100.0	103.1	100.0	95.9	94.8	94.8
All trades including personal services.....	212	100.0	106.1	100.0	101.9	94.8	96.7
All trades except personal services.....	190	100.0	106.3	100.5	102.6	95.3	97.4

The 11 trades include somewhat more than one-half of the dealers selling goods and somewhat less than one-half of all retail businesses

TABLE I
SOME FACTS ABOUT ALL RETAIL BUSINESSES IN TWO TYPICAL TOWNS,
1925 TO 1930

A. Number of Concerns Entering, and Number and Percentage of Concerns Quitting Business

Number (or percentage) of Concerns	1926	1927	1928	1929	1930	Average
In business in 1925: 313						
In business in 1925 quitting in:.....	44	40	24	20	13	28.2
New concerns entering business in:.....	61	43	50	34	33	44.2
New concerns (entering after 1925) quitting in:.....	..	17	25	33	20	23.8
Total number in business.....	330	316	317	298	298	312.0
Percentage of concerns in business in 1925 quitting in:.....	14.1%	12.8%	7.7%	6.4%	4.2%	9.0%
Percentage of concerns in business in each year quitting in: (Percentage of number in business the previous year).....	14.1%	17.3%	15.5%	16.7%	11.1%	15.1%

B. Life of New Concerns—Number and Percentage of New Concerns Quitting in the First Four Years

Number (or Percentage) of <i>New Concerns</i>	1927	1928	1929	1930
Entering business in 1926, quitting in:.....	17	9	8	2
Percentages.....	27.9%	14.7%	13.1%	3.3%
Entering business in 1927, quitting in:.....	..	16	9	2
Percentages.....	..	37.2%	20.9%	4.7%
Entering business in 1928, quitting in:.....	..	..	16	6
Percentages.....	..	..	32.0%	12.0%
Entering business in 1929, quitting in:.....	..	..	..	10
Percentage.....	..	..	..	29.4%
Cumulative percentages of new concerns quitting by the end of the first, second, and third years following that in which they entered business*.....		First Year 31.4%	Second Year 47.4%	Third Year 58.7%

C. Comparison of the 11 Selected Retail Trades with All Retail Trades

	1925	1926	1927	1928	1929	1930
11 Trades						
Number of concerns.....	137	140	141	133	136	132
Percentage change in number of concerns (1925 = 100).....	0%	+ 2.2%	+ 2.9%	- 2.9%	- 0.7%	- 3.6%
Percentage of concerns in business in 1925 gone in.....	..	12.4%	24.8%	30.6%	39.4%	43.8%
All Trades						
Number of concerns.....	313	330	316	317	298	298
Percentage change in number of concerns (1925 = 100).....	0%	+ 5.4%	+ 1.0%	+ 1.3%	- 4.8%	- 4.8%
Percentage of dealers in business in 1925 gone in.....	..	14.0%	26.8%	34.5%	40.9%	45.0%

*E.g., the percentage of dealers entering business between July, 1925, and July, 1926, out by July, 1927, etc.

(including such personal service businesses as pressing shops, laundries, shoe repairs, etc.)

Table I shows the facts about all types of retail businesses in the two typical towns. There were 313 independent retail business establishments in these two towns in 1925. By 1930, the number of inde-

pendent retail establishments had declined to 298. The number of new concerns entering business varied from 61 in 1926 to 33 in 1930. Although the number of new concerns entering business was irregular, the numbers in both 1929 and 1930 were much smaller than in the previous years. This supports the belief that the decline in the number of independent dealers was caused by fewer entrances rather than by an increased number of exits.

The percentage of concerns in business in 1925 quitting in each year from 1925 to 1930 declined steadily, because of the smaller number of such concerns left in business, and because of the probability that the weakest concerns had been eliminated in the first and second years. About 45 per cent of the concerns that were in business in 1925 had quit by 1930.

The last line in Part A shows the percentages of all dealers in business in any year quitting in the following year. The percentage of these exits was highest in 1927 and lowest in 1930; the average number of exits being 15.1 per cent each year.

Part B of the table shows the mortality of new concerns for the first few years in business. The figures show that a larger percentage of business concerns quit in their first year than in any later year. The percentage quitting in their second year declined materially. There is more marked decline after the end of the second year. It appears that the inefficient and poorly equipped dealers are largely eliminated in the first two years, and that those dealers who survive two years have a much longer expectancy of life than dealers just starting in business.

As a very large percentage of failures occurs in the first two years in business, it would seem desirable from the standpoint of those desiring to enter business as well as from a broad social standpoint, that some method be devised of preventing those who lack the minimum of ability or capital from entering business.

Part C of Table I compares the showing of the 11 retail trades upon which this study was largely based with all types of retail business in these two towns. It appears that the 11 trades make up somewhat less than half (approximately 44%) of all retail businesses including the various types of personal service establishments. The rate of mortality among dealers in the 11 trades corresponds very closely to the rate of mortality among dealers in all trades. This is significant as it shows that the averages for these 11 trades may be taken as fairly typical of the averages of all types of retail businesses.

III. STUDY OF MORTALITY IN 255 TOWNS

RETAIL TURNOVER AND LENGTH OF BUSINESS LIFE

The facts regarding the percentages of retailers going out of business in each of the five years are shown in Table II. The dealers in business in any year include those who have just started and those who have been established for years. The total number quitting in any

TABLE II
TURNOVER OR MORTALITY OF RETAILERS IN 11 TRADES IN 255 ILLINOIS TOWNS,
ARRANGED ACCORDING TO SIZE OF TOWNS, 1925 TO 1930

Trade	Dealers in Business July, 1925		Cumulative Percentages of Dealers in Business in July, 1925, Gone in July of Each Year				
	No.	Percentage	1926	1927	1928	1929	1930
Group I—100 Towns with Population under 400							
Furniture.....	8	100	12.5	25.0	25.0	25.0	37.5
Grocery.....	85	100	29.4	42.4	48.2	50.6	57.6
Meat.....	27	100	11.1	22.2	33.3	44.4	44.4
Dry Goods.....	0	...	...	...	...	...	...
Hardware.....	51	100	5.9	21.6	31.4	37.3	41.2
Garages.....	136	100	22.1	33.8	40.4	47.8	53.7
Drugs.....	21	100	14.3	23.8	28.6	42.9	42.9
Department Stores.....	0	...	...	...	...	...	...
General Stores.....	229	100	11.4	22.3	26.6	31.0	35.8
Clothing.....	2	100	0.0	50.0	100.0	100.0	100.0
Restaurants.....	60	100	31.7	53.3	60.0	68.3	68.3
Total.....	619	100	17.8	30.7	36.8	42.6	47.2
Group II—75 Towns with Population of 400 to 1000							
Furniture.....	38	100	7.9	18.4	18.4	18.4	23.7
Grocery.....	176	100	17.6	28.4	42.0	50.6	58.0
Meat.....	65	100	20.0	33.8	46.2	53.8	63.1
Dry Goods.....	25	100	28.0	36.0	44.0	52.0	56.0
Hardware.....	91	100	4.4	9.9	13.2	20.9	26.4
Garages.....	213	100	21.6	29.6	39.4	43.2	49.3
Drugs.....	75	100	8.0	8.0	16.0	22.7	25.3
Department Stores.....	1	100	0.0	100.0	100.0	100.0	100.0
General Stores.....	225	100	14.2	18.7	26.7	33.3	38.7
Clothing.....	29	100	6.9	10.3	17.2	20.7	20.7
Restaurants.....	121	100	31.4	47.1	64.5	70.2	72.7
Total.....	1059	100	17.2	25.4	35.3	41.5	46.8
Group III—50 Towns with Population of 2,000 to 5,000							
Furniture.....	94	100	8.5	19.1	25.5	31.9	37.2
Grocery.....	654	100	16.7	30.7	36.4	43.9	49.7
Meat.....	117	100	18.8	28.2	37.6	45.3	48.7
Dry Goods.....	130	100	6.2	12.3	18.5	25.4	30.0
Hardware.....	124	100	5.6	12.1	14.5	21.0	25.0
Garages.....	378	100	16.9	30.7	35.7	42.3	47.9
Drugs.....	128	100	7.8	9.4	12.5	15.6	21.9
Department Stores.....	5	100	20.0	20.0	20.0	20.0	20.0
General Stores.....	145	100	11.0	24.1	31.7	37.9	43.4
Clothing.....	131	100	7.6	19.1	24.4	31.3	35.9
Restaurants.....	214	100	35.5	49.1	54.7	63.1	67.8
Total.....	2120	100	15.6	27.2	32.8	39.7	44.9

TABLE II (Concluded)

Trade	Dealers in Business July, 1925		Cumulative Percentages of Dealers in Business in July, 1925, Gone in July of Each Year				
	No.	Percentage	1926	1927	1928	1929	1930
Group IV—25 Towns with Population of 7,000 to 15,000							
Furniture.....	127	100	7.1	18.1	25.2	33.9	38.6
Grocery.....	1338	100	19.1	28.8	38.9	46.9	52.1
Meat.....	143	100	8.4	18.2	28.0	38.5	46.9
Dry Goods.....	103	100	6.8	16.5	28.2	35.9	40.8
Hardware.....	99	100	6.1	13.1	20.2	25.3	30.3
Garages.....	509	100	16.1	30.8	44.0	46.8	53.8
Drugs.....	157	100	4.5	10.8	15.3	18.5	22.3
Department Stores.....	17	100	11.8	17.6	23.5	35.3	47.1
General Stores.....	133	100	24.8	29.3	37.6	43.6	48.9
Clothing.....	201	100	7.0	16.9	24.9	29.9	38.3
Restaurants.....	284	100	29.9	43.0	54.9	61.6	67.3
Total.....	3111	100	16.5	26.9	36.9	43.5	49.3
Group V—5 Towns with Population Over 35,000							
Furniture.....	100	100	11.0	18.0	25.0	29.0	37.0
Grocery.....	1393	100	15.6	26.3	36.8	39.6	45.2
Meat.....	181	100	13.8	25.4	29.8	35.4	38.7
Dry Goods.....	46	100	4.3	10.9	19.6	28.3	28.3
Hardware.....	77	100	3.9	6.5	11.7	20.8	22.1
Garages.....	359	100	14.8	29.0	38.7	44.3	50.4
Drugs.....	150	100	7.3	13.3	19.3	22.0	25.3
Department Stores.....	8	100	0.0	12.5	12.5	12.5	25.0
General Stores.....	26	100	7.7	23.1	26.9	34.6	38.5
Clothing.....	170	100	12.4	18.2	28.2	31.2	35.9
Restaurants.....	299	100	20.4	39.8	46.2	52.5	56.2
Total.....	2809	100	14.5	25.7	34.6	38.7	43.7
Summary of Totals by Trade Groups—All Towns							
Furniture.....	367	100	8.7	18.5	24.5	30.2	36.2
Grocery.....	3646	100	17.5	28.5	38.0	43.8	49.5
Meat.....	533	100	14.1	25.0	33.2	41.1	46.3
Dry Goods.....	304	100	7.9	15.5	24.0	31.6	35.5
Hardware.....	442	100	5.2	12.0	17.0	23.8	27.8
Garages.....	1595	100	17.2	30.5	39.9	44.8	51.0
Drugs.....	531	100	7.0	11.3	16.4	20.3	24.3
Department Stores.....	31	100	9.7	19.4	22.6	29.0	38.7
General Stores.....	758	100	14.4	22.8	29.6	35.4	40.5
Clothing.....	533	100	8.8	17.6	25.7	30.4	36.2
Restaurants.....	978	100	28.5	44.5	53.7	60.6	64.7
Total.....	9718	100	15.9	26.7	35.2	41.0	46.3

year includes both old and newly established concerns. The summary at the bottom of the table, which is based on all the cities studied, shows that 29 per cent of the restaurants, 18 per cent of the grocery stores, 17 per cent of the garages, and 14 per cent of the meat and general stores in business in 1925 went out of business in the first year of the study. In the five-year period, 65 per cent of the restaurants, 51 per cent of the garages, 50 per cent of the grocery stores, 46 per cent of the meat stores, and 41 per cent of the general stores went out of business.

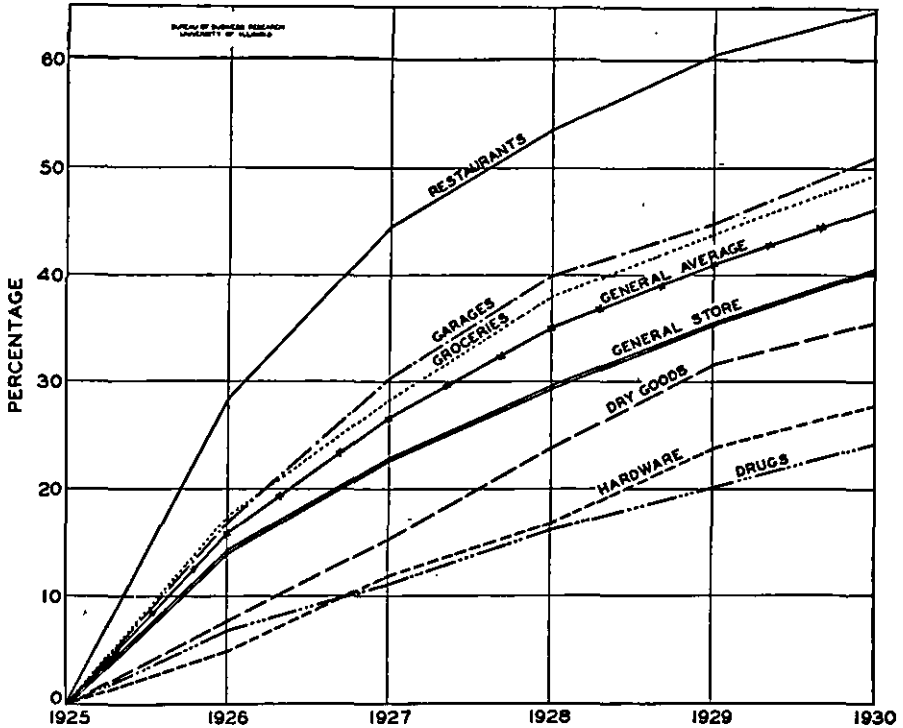


CHART 1—RETAIL STORE MORTALITY, 1925 TO 1930 (CUMULATIVE PERCENTAGES OF THE NUMBER OF RETAILERS IN BUSINESS IN 1925, GONE OUT OF BUSINESS IN SUCCESSIVE YEARS FROM 1925 TO 1930 IN 7 TRADES IN 255 ILLINOIS TOWNS—SEE TABLE II)

On the other hand, 5 per cent of the hardware stores, 7 per cent of the drug stores, 8 per cent of the dry goods stores, and 9 per cent of the furniture and clothing stores went out of business in one year. In the five-year period 24 per cent of the drug stores, 28 per cent of the hardware stores, 36 per cent of the dry goods, furniture, and clothing stores, and 39 per cent of the department stores went out of business.

The mortality of the dealers in seven of the trades is shown graphically in Chart 1. Meat stores are omitted as their mortality is about the same as that of grocery stores. The line in the chart for dry goods may be taken as typical of department, clothing, and furniture stores.

Table III shows the average length of life of these various stores expressed in number of years, based on the number of exits in a one-year period and in a five-year period.

TABLE III
AVERAGE LENGTH OF LIFE OF RETAIL STORES IN 11
TRADES IN 255 ILLINOIS TOWNS*

Trades	Based on Changes in One Year (1925-26)	Based on Changes in Five Years (1925-30)
	(Years)	(Years)
Restaurants.....	3.5	7.7
Garages.....	5.8	9.8
Grocery.....	5.7	10.1
Meat.....	7.1	10.8
General Stores.....	6.9	12.3
Department Stores.....	10.3	12.9
Clothing.....	11.4	13.8
Furniture.....	11.5	13.8
Dry Goods.....	12.7	14.1
Hardware.....	19.2	18.0
Drugs.....	14.3	20.6

*Assuming that the rate of turnover as found for the one year (1925-1926) continued the same in the future, the first column gives the average life of retail stores. Assuming that the rate of turnover as found for the five years (1925-1930) continued the same in the future, the second column gives the average life of retail stores.

It will be noted that the average life is much longer if based on the number of exits in the five-year period.¹ The shorter the period, the higher is the rate of turnover. Many dealers enter business and stay only a short time. Hence, the expectancy of a dealer who has been in business a year or two is greater than that of a new dealer. Therefore, a study based on a short period shows a much higher rate of turnover than one based on a long period. It is probable that many dealers stay in business less than one year. The writer knows of no study based on a period of less than one year. Such a study was considered, but was deemed impracticable because of the nature of the data available.

The figures for any year represent a cross section of dealers who have just entered business and of dealers who have been in business for some time. A study including only those dealers who have just entered business would show a much higher percentage of exits in the first year. A detailed study of the turnover of all dealers in two typical towns (see Table I, page 11), year by year, shows that 31 per cent of the new dealers starting in business quit in the first year;² that

¹This was true of all trades except hardware. The average life of a hardware store is longer when figured on a one-year period than when figured on a five-year period. This may be caused by the decrease in the number of hardware stores in 1929 and 1930. A new hardware store evidently has a greater expectancy of living one year than does a new store in any of the other ten trades. After the first year, however, drug stores have a greater expectancy of life than hardware stores.

²Quitting in the first year means that a concern started in one year and was out of business by the end of the following year.

TABLE IV
 TURNOVER OR MORTALITY OF RETAIL STORES IN 11 TRADES IN 255 ILLINOIS TOWNS,
 ARRANGED ACCORDING TO SIZE OF TOWNS, JULY, 1925, TO JULY, 1930

Town Groups by Population	Number of Towns Studied in Each Group	Dealers in Business July, 1925		Cumulative Percentages of Dealers in Business in July, 1925, Gone in July of Each Year				
		No.	Per- centage	1926	1927	1928	1929	1930
Under 400.....	100	619	100	17.8	30.7	36.8	42.6	47.2
400-1,000.....	75	1059	100	17.2	25.4	35.3	41.5	46.8
2,000-5,000.....	50	2120	100	15.6	27.2	32.8	39.7	44.9
7,000-15,000.....	25	3111	100	16.5	26.9	36.9	43.5	49.3
Over 35,000.....	5	2809	100	14.5	25.7	34.6	38.7	43.7
Total.....	255	9718	100	15.9	26.7	35.2	41.0	46.3

47 per cent quit in the first two years, and 59 per cent in the first three years. This indicates an average life of 3.2 years based on the number quitting in the first year, and assuming that the rate of turnover in the future would be the same as in the first year; an average life of 4.2 years, assuming a rate of turnover equal to that of the first two years; and an average life of 5.1 years based on the number quitting in the first three years, and likewise assuming that the rate of turnover in the future would be the same as in the first three years. In other words, a dealer entering business has two chances out of three of lasting one year, an even chance of lasting two years, and two chances out of five of lasting three years. These statements are based on figures covering dealers in all lines, as the data were not sufficient to permit a classification by trades. It is obvious, however, that the new dealers in some trades have a much longer expectancy of life than those in other trades.

The figures (see Table III) show that drug, hardware, dry goods, furniture, clothing, and department stores have very much longer business lives than do meat, general, and grocery stores, garages, and restaurants. The drug and hardware stores make the best showing of the eleven retail trades. Various reasons have been advanced to explain these differences. Perhaps the explanation that appears most logical is that education and capital are required to enter these trades. The druggist is the only retailer that has to pass an examination to enter business.³ Also, the lines of goods handled by the stores with the longest business lives, are varied and require considerable capital; the purchase and sale of these goods also require some technical knowledge. On the other hand, the goods sold by meat and grocery stores

³Since the druggist is a better educated man than most retailers, and since he has a longer life than the retailers in other trades, it might be inferred that education fitted men for the retail business.

TABLE V
COMPARISON OF TURNOVER OR MORTALITY FOR STORES WITH HIGH AND LOW RATES
OF TURNOVER IN 255 ILLINOIS TOWNS, 1925 TO 1930

Trades	Dealers in Business in July, 1925		Percentages of Dealers in Business July, 1925, Gone in July of Each Year				
	No.	Per-centage	1926	1927	1928	1929	1930
Group A—High Turnover Group [*]	6752	69.5	18.8	31.0	40.4	46.3	51.8
Group B—Slow Turnover Group [†]	2966	30.5	9.3	16.9	23.4	29.0	33.9
Both Groups.....	9718	100.0	15.9	26.7	35.2	41.0	46.3

^{*}Includes restaurants, garages, grocery, and meat stores.

[†]Includes general, department, furniture, clothing, dry goods, hardware, and drug stores.

and restaurants have a high stock turnover, so that relatively little capital is required. This is also true of garages unless they handle a complete stock of parts. People seem to feel that no special knowledge is required to enter these trades in spite of the fact that cutting meat, cooking, and repairing automobiles require considerable skill.

Table IV shows the mortality of the dealers summarized according to the sizes of the towns in which they are located.

Table V shows the turnover of retail trades grouped according to their length of life. Group A includes the high turnover trades,—restaurants, garages, grocery stores and meat stores, and Group B includes the slow turnover stores,—general, department, furniture, clothing, dry goods, hardware, and drugs. It is interesting to note that most of the exits in Group A, which cause the high rate of turnover, occurred in the first two years. In the first year, 18.8 per cent of the dealers in the fast turnover trades failed as compared with 9.3 per cent in the slow turnover trades. Thus, in the first year the high turnover trades showed double the mortality of the slow turnover trades. In the first two years, 31 per cent of the dealers in the fast turnover trades went out of business compared with 16.9 per cent in the slow turnover trades. In the last three years, however, 20.8 per cent of the dealers in the fast turnover trades went out of business, compared with 17 per cent of the dealers in the slow turnover trades. Although the number of exits in the last three years was somewhat higher for the fast turnover trades than for the slow turnover trades, there was not so great a difference as existed in the first two years. From this it appears that a dealer in one of the fast turnover trades who stays in business for two years has nearly as long an expectancy of life as does a dealer in a slow turnover trade who survives two years.

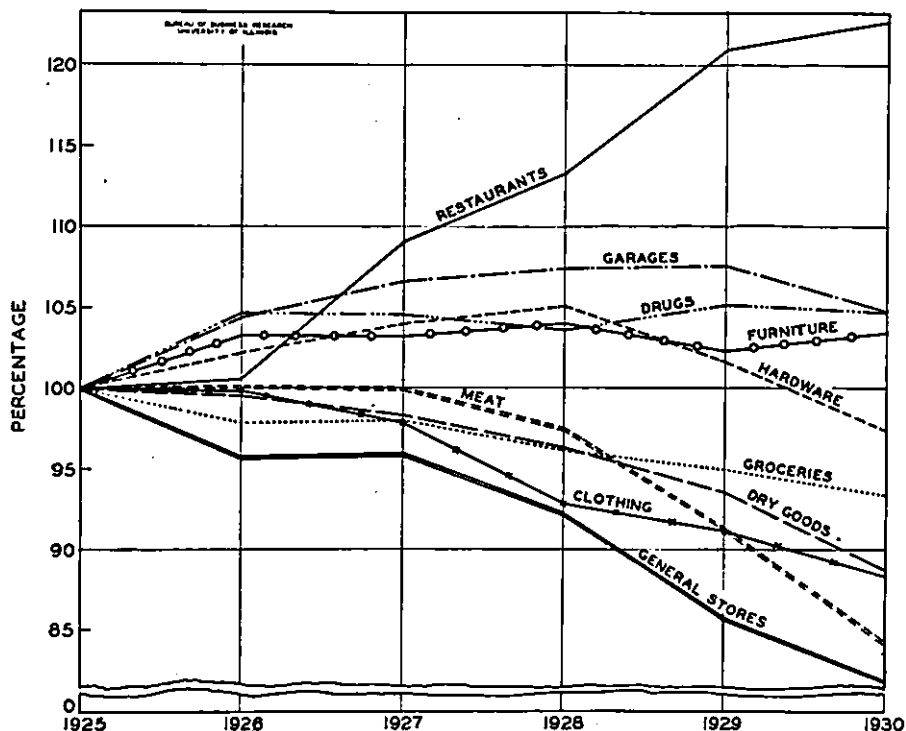


CHART 2—RELATIVE CHANGES IN THE NUMBER OF RETAIL STORES IN BUSINESS IN 10 TRADES IN 255 ILLINOIS TOWNS, 1925 TO 1930. 1925 = 100% (SEE TABLE VI)

CHANGES IN THE NUMBER OF RETAIL STORES

Table VI shows the number of retailers in business in the eleven trades in 255 towns at the end of each of the five years, expressed as percentages of the number in business in 1925. Table VIII, page 23, gives the same information summarized according to town groups. The number of dealers in six of the eleven trades decreased from 1925 to 1930. General stores showed the largest decrease, 18.1 per cent. Meat stores showed a decrease of 15.6 per cent; clothing stores, 11.6 per cent; dry goods stores, 11.2 per cent; grocery stores, 6.5 per cent; and hardware stores, 2.5 per cent. The number of dealers in five trades increased: furniture, 3.5 per cent; drug stores, 4.9 per cent; garages, 5 per cent; department stores, 6.5 per cent; and restaurants, 22.9 per cent. These changes are shown graphically in Chart 2.

There may be several reasons for these variations: first, changes in the demand for goods, either because of changes in the use of goods by the consumers or because of changes in population; second, changes

TABLE VI
RELATIVE CHANGES IN THE NUMBER OF RETAIL STORES IN 11 TRADES IN 255
ILLINOIS TOWNS FROM JULY, 1925, TO JULY, 1930,
EXPRESSED AS PERCENTAGES

Trade	Dealers in Business July, 1925		Percentages of Dealers in Business in July of Each Year (Number in Business in July, 1925 = 100 per cent)				
	No.	Per- centage	1926	1927	1928	1929	1930
Group I—100 Towns with Population Under 400							
Furniture.....	8	100	112.5	112.5	112.5	112.5	125.0
Grocery.....	85	100	94.1	81.2	94.1	97.6	90.6
Meat.....	27	100	103.7	100.0	92.6	96.3	96.3
Dry Goods.....	0	.....	.....	.....	.....	.....	.....
Hardware.....	51	100	105.9	102.0	98.0	94.1	96.1
Garages.....	136	100	98.5	97.8	95.6	100.0	92.6
Drugs.....	21	100	100.0	95.2	100.0	90.5	90.5
Department Stores.....	0	.....	.....	.....	.....	.....	.....
General Stores.....	229	100	94.3	92.1	90.4	86.9	83.0
Clothing.....	2	100	100.0	150.0	50.0	50.0	50.0
Restaurants.....	60	100	108.3	103.3	98.3	106.7	100.0
Total.....	619	100	98.4	94.7	94.0	94.8	90.5
Group II—75 Towns with Population of 400 to 1,000							
Furniture.....	38	100	102.6	94.7	100.0	102.6	97.4
Grocery.....	176	100	97.7	101.7	103.4	98.3	94.9
Meat.....	65	100	100.0	98.5	89.2	83.1	70.8
Dry Goods.....	25	100	88.0	80.0	88.0	88.0	68.0
Hardware.....	91	100	98.9	101.1	102.2	102.2	93.4
Garages.....	213	100	94.4	105.6	105.6	108.5	105.2
Drugs.....	75	100	97.3	98.7	96.0	92.0	89.3
Department Stores.....	1	100	100.0	0.0	0.0	0.0	0.0
General Stores.....	225	100	96.0	95.6	87.6	87.1	82.2
Clothing.....	29	100	93.1	93.1	96.6	93.1	96.6
Restaurants.....	121	100	92.6	106.6	105.8	105.0	107.4
Total.....	1059	100	96.1	100.2	98.5	97.4	93.1
Group III—50 Towns with Population of 2,000 to 5,000							
Furniture.....	94	100	104.3	102.1	101.1	96.8	101.1
Grocery.....	654	100	99.2	94.5	93.7	91.9	87.0
Meat.....	117	100	91.5	94.9	93.2	88.0	81.2
Dry Goods.....	130	100	99.2	99.2	96.9	93.1	88.5
Hardware.....	124	100	102.4	108.1	109.7	104.8	101.6
Garages.....	378	100	105.3	110.8	111.1	113.8	113.5
Drugs.....	128	100	100.8	102.3	102.3	103.9	103.1
Department Stores.....	5	100	80.0	100.0	100.0	120.0	120.0
General Stores.....	145	100	99.3	99.3	95.9	82.8	82.1
Clothing.....	131	100	100.0	98.5	92.4	90.8	90.1
Restaurants.....	214	100	90.2	106.1	110.3	117.3	119.2
Total.....	2120	100	99.5	101.1	100.5	99.3	97.1

in the prosperity of the communities studied; third, changes in the types of stores; fourth, an increase or a decrease in the sales of chain stores; fifth, the passage of zoning laws which limit the growth of neighborhood stores.⁴ There may be other reasons also.

⁴It has been supposed that the enforcement of zoning laws would limit the growth of neighborhood stores. Relatively few of the towns studied had zoning ordinances enforced during the period covered. The information on this point is therefore too meager to support any conclusions. It was observed, however, that some towns having zoning ordinances showed an increase in the number of retailers.

TABLE VI (Concluded)

Trade	Dealers in Business July, 1925		Percentages of Dealers in Business in July of Each Year (Number in Business in July, 1925 = 100 per cent)				
	No.	Per-centage	1926	1927	1928	1929	1930
Group IV—25 Towns with Population of 7,000 to 15,000							
Furniture.....	127	100	107.1	103.9	103.1	100.8	96.1
Grocery.....	1338	100	97.9	99.0	93.6	90.0	86.8
Meat.....	143	100	102.8	102.1	97.9	86.7	74.8
Dry Goods.....	103	100	98.1	96.1	93.2	93.2	88.3
Hardware.....	99	100	99.0	101.0	100.0	94.9	87.9
Garages.....	509	100	108.4	105.9	106.9	102.2	95.1
Drugs.....	157	100	107.0	105.1	102.5	104.5	101.9
Department Stores.....	17	100	100.0	94.1	100.0	111.8	105.9
General Stores.....	133	100	93.2	97.7	100.0	82.7	77.4
Clothing.....	201	100	100.5	98.0	92.0	86.6	80.6
Restaurants.....	284	100	107.4	116.9	112.7	115.8	112.0
Total.....	3111	100	101.6	102.2	98.9	95.2	90.5
Group V—5 Towns with Population of Over 35,000							
Furniture.....	100	100	97.0	106.0	109.0	109.0	116.0
Grocery.....	1393	100	97.7	99.4	99.2	101.0	102.9
Meat.....	181	100	103.3	106.6	104.4	99.4	97.2
Dry Goods.....	46	100	110.9	110.9	106.5	95.7	97.8
Hardware.....	77	100	107.8	106.5	113.0	110.4	109.1
Garages.....	359	100	106.4	107.5	110.3	111.7	114.5
Drugs.....	150	100	110.0	110.7	110.7	116.0	119.3
Department Stores.....	8	100	100.0	100.0	112.5	112.5	112.5
General Stores.....	26	100	103.8	107.7	92.3	96.2	92.3
Clothing.....	170	100	100.6	97.6	94.1	97.1	95.3
Restaurants.....	299	100	103.7	106.4	122.4	138.5	146.8
Total.....	2809	100	101.2	102.8	104.6	107.3	109.6
Summary of Totals by Trade Groups—All Towns							
Furniture.....	367	100	103.3	103.3	104.1	102.5	103.5
Grocery.....	3646	100	98.0	98.1	96.2	95.1	93.5
Meat.....	533	100	100.2	101.5	97.7	91.4	84.4
Dry Goods.....	304	100	99.7	98.4	96.4	93.7	88.8
Hardware.....	442	100	102.3	104.1	105.2	101.8	97.5
Garages.....	1595	100	104.5	106.7	107.5	107.7	105.0
Drugs.....	531	100	104.7	104.7	103.8	105.3	104.9
Department Stores.....	31	100	96.8	93.5	100.0	109.7	106.5
General Stores.....	758	100	95.9	96.0	92.3	85.8	81.9
Clothing.....	533	100	100.0	97.9	92.9	91.2	88.4
Restaurants.....	978	100	100.7	109.2	113.4	121.2	122.9
Total.....	9718	100	100.2	101.5	100.5	99.8	97.7

Some factors affected certain trades more than others. The increase in the number of restaurants is probably due to the increased custom of eating outside the home. The number of restaurants increased in towns of all sizes except those of less than 400 population, and they held their own in these small towns.

The number of drug stores increased in all sizes of towns except those of less than 1,000 population. This may be due to the fact that drug stores sell an increasing variety of goods. It also indicates that the chains did not cut seriously into the business of the independent stores during the period covered in this study.

TABLE VII
PERCENTAGE CHANGES IN THE NUMBER OF RETAILERS GROUPED ACCORDING TO
CHANGES IN THE POPULATION OF THEIR TOWNS*

Population Changes from 1920 to 1930	Number of Towns in Each Group	Percentage Change in Population per Group (1920 to 1930)	Dealers in Business in 1925		Per- centage of Dealers in Business in 1925 Gone in 1930	Percentage Change in Number of Dealers in Business in 1930 Com- pared with 1925
			No.	Percentage		
Towns with 400-1000 Population						
Decrease 20% or over...	10	-27.0	120	100.0	45.0	-12.5
Decrease 10.0-19.9%....	16	-15.0	229	100.0	46.3	-10.0
Decrease 0-9.9%.....	20	- 5.3	278	100.0	43.9	- 2.9
Increase 0-9.9%.....	12	+ 4.1	182	100.0	52.2	-11.5
Increase 10% or over...	16	+43.2	241	100.0	46.5	- 0.4
Total.....	74†	+ 2.5	1050	100.0	46.6	- 6.5
Towns with 2,000-5,000 Population						
Decrease 10% or over...	8	-15.4	338	100.0	45.6	-17.2
Decrease 0-9.9%.....	8	- 4.9	298	100.0	45.0	- 9.4
Increase 0-9.9%.....	14	+ 3.6	530	100.0	47.4	- 1.1
Increase 10.0-19.9%....	8	+13.6	389	100.0	41.1	- 7.2
Increase 20.0-29.9%....	5	+25.0	252	100.0	44.8	+ 8.7
Increase 30% or over...	7	+73.8	313	100.0	44.7	+ 9.3
Total.....	50	+15.3	2120	100.0	44.9	- 2.9
Towns with 7,000-15,000 Population						
Decrease 0-29.9%.....	6	- 9.0	654	100.0	48.8	-12.5
Increase 0-9.9%.....	7	+ 5.7	834	100.0	48.9	-11.3
Increase 10% or over...	12	+31.6	1623	100.0	49.8	- 7.5
Total.....	25	+15.0	3111	100.0	49.3	- 9.5
Towns over 35,000 Population						
Quincy.....	1	+ 9.1	317	100.0	38.2	+ 2.2
Springfield.....	1	+21.4	724	100.0	47.7	-10.9
Rockford.....	1	+30.8	572	100.0	43.0	+35.0
Decatur.....	1	+31.2	422	100.0	38.4	+28.7
Peoria.....	1	+37.9	774	100.0	45.6	+ 2.6
Total.....	5	+28.0	2809	100.0	43.7	+ 9.6

*Changes in population figures are based on a ten-year period, 1920 to 1930, whereas changes in number of dealers are based on a five-year period, 1925 to 1930. Consequently the results for the five towns with population of over 35,000 as given in the table cannot be directly compared with those given in Table XI B.

†Population figure for one of the 75 towns in this group was not available.

The number of hardware stores decreased in towns of less than 1,000 population. This decrease was probably caused by a decrease in the use of horse-drawn vehicles and implements, and a decline in farm population. The hardware dealers may have let the automotive dealers cut into their businesses. The number of hardware stores increased in towns of from 2,000 to 5,000 population and in towns of more than 35,000. The stores in towns of 2,000 to 5,000 may have benefited by a concentration of rural trade in such towns. In towns of more than 35,000 the hardware stores increased, perhaps because of an

TABLE VIII
RELATIVE CHANGES IN THE NUMBER OF RETAIL STORES IN 11 TRADES IN 255
ILLINOIS TOWNS, CLASSIFIED BY SIZE OF TOWN, FROM
JULY, 1925, TO JULY, 1930

Town Groups by Population	Number of Towns Studied in Each Group	Dealers in Business July, 1925		Percentages of Dealers in Business in July of Each Year (Number in Business, July, 1925 = 100 per cent)				
		No.	Per- centage	1926	1927	1928	1929	1930
Under 400.....	100	619	100	98.4	94.7	94.0	94.8	90.5
400-1,000.....	75	1059	100	96.1	100.2	98.5	97.4	93.1
2,000-5,000.....	50	2120	100	99.5	101.1	100.5	99.3	97.1
7,000-15,000.....	25	3111	100	101.6	102.2	98.9	95.2	90.5
Over 35,000.....	5	2809	100	101.2	102.8	104.6	107.3	109.6
Total.....	255	9718	100	100.2	101.5	100.5	99.8	97.7

increase in population or in the variety of goods sold, (e.g., electrical merchandise, sporting goods, toys, radios, dishes.)

The number of dry goods and clothing stores decreased by more than 11 per cent. It is possible that this decrease was caused in part by the growth of chains of apparel stores.

The number of meat stores decreased 15.6 per cent. This may have been caused by the substitution of *food* stores for stores selling only meat. The decline of 6.5 per cent in the number of grocery stores was probably due, at least in part, to the increased number of chain grocery stores.

The decline in the number of general stores probably arose from the fact that the general store is not well adapted to present day needs. The general store carries so many lines of merchandise that it apparently finds it very difficult to carry complete assortments. It seems to be losing ground to the specialty stores.

Changes in Population.

Table VII shows the changes in the number of retailers expressed in percentages and grouped according to changes in the population of the towns in which they are situated. The figures in this table indicate that there is a fairly close relationship between changes in population and changes in the number of retail dealers. A study of the table shows that the number of dealers usually decreased in towns losing population, and usually increased in towns gaining population. In the small towns the number of dealers decreased even though the population increased. As a rule, however, the percentage of decrease in the number of dealers was less in towns with an increasing population. A few irregularities occur in the table but these appear to be due to other factors, such as the industrial prosperity of certain groups of towns.

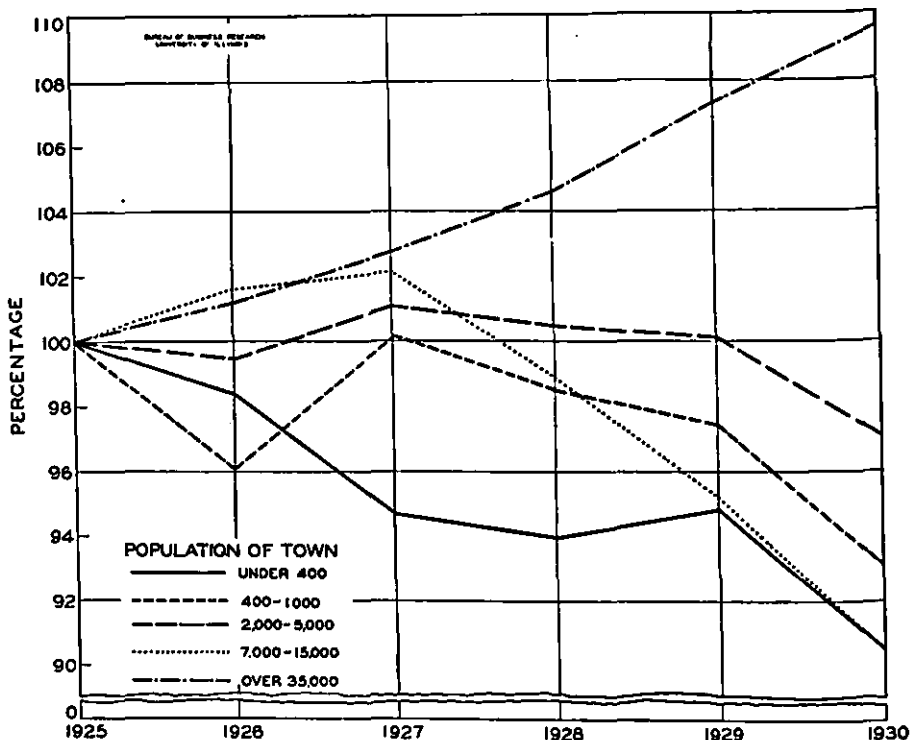


CHART 3—RELATIVE CHANGES IN THE NUMBER OF RETAIL STORES IN 11 TRADES ACCORDING TO THE SIZE OF TOWN IN WHICH THEY WERE LOCATED, 1925 TO 1930. 1925 = 100% (SEE TABLE VIII)

Changes in Towns of Various Sizes

Table VIII shows the changes in the number of retailers doing business in the various groups of towns. The number of dealers decreased in all sizes of town groups except in the group of more than 35,000 population. The towns of less than 400 population, and those between 7,000 and 15,000 population showed the largest decreases, 9.5 per cent in each case. These changes are shown in graph form in Chart 3. In the case of the very small towns, the assumption is that the automobile has been shifting trade into larger towns. This, with the relatively low prices of many farm crops, and the decreasing rural population, probably accounts for the decreased number of dealers.

Relationship between Number of Retail Dealers and Industrial Conditions

The poorer showing of the towns of 7,000 to 15,000 appears to be due to the dependence of some of these towns upon coal mining.

TABLE IX
CHANGES AMONG RETAILERS IN TOWNS OF 7,000 TO 15,000 POPULATION, ARRANGED ACCORDING TO THE IMPORTANCE OF COAL MINING TO THESE TOWNS

A. Cumulative Percentages of Retailers in Business in July, 1925,
Gone in July of Indicated Years

Town Group	1926	1927	1928	1929	1930
4 Coal Towns.....	28.1	35.9	44.8	52.5	55.9
5 Semi-Coal Towns.....	16.2	27.8	37.5	45.6	50.9
16 Other Towns.....	13.3	24.0	34.5	40.3	47.0

B. Percentage of the Total Number of Retailers in Business from 1926 to 1930 as
Compared with the Number in Business in 1925
(Number in 1925 = 100%)

Town Group	1926	1927	1928	1929	1930
4 Coal Towns.....	91.1	87.8	85.6	74.0	71.9
5 Semi-Coal Towns.....	100.3	96.8	97.7	92.2	87.1
16 Other Towns.....	104.9	108.0	103.1	102.2	96.8

Table IX shows the towns in this group divided on the basis of their dependence on coal. In four of these towns, coal was reported as the main industry. These four towns showed a decrease of 28.1 per cent in the number of dealers, and a dealer mortality of 55.9 per cent in five years. In five of the towns, coal was reported as an important industry but not as predominant. These towns, called semi-coal towns in the table, showed a decrease of 12.9 per cent in the number of dealers, and a mortality of 50.9 per cent in five years. In the other sixteen towns, coal was not the leading industry, although several of these towns had coal mines. These sixteen towns showed a decrease in dealers of 3.2 per cent, and a mortality of 47 per cent in the five years. These sixteen towns have a showing substantially the same as that of the group of towns from 2,000 to 5,000 population, in which the number of dealers decreased 2.9 per cent, and the mortality was 44.9 per cent for the five-year period.

A notable relationship between the number of dealers and the degree of industrial prosperity was evident in the coal towns. Table X shows the changes among the retailers in a group of fifteen towns in which coal mining was reported as the most important industry. This group of towns included more than 10 per cent of all the dealers covered in the study. The figures in this table indicate how adversely business was affected in the towns largely dependent upon the coal mining industry. The percentage of dealers quitting business was 25.9 per cent in one year, and 53.8 per cent in five years. These percentages compare with the average of 15.9 per cent in one year, and 46.3 per cent in five years for the 11 trades in all the 255 towns studied.

TABLE X
CHANGES AMONG RETAILERS IN 15 COAL TOWNS, 1925 TO 1930

	1925	1926	1927	1928	1929	1930
A. Cumulative Percentages of Dealers in Business in 1925—Gone in indicated years.....	.....	25.9	34.1	41.9	49.1	53.8
B. Percentages of the Total Number of Dealers in Business as Compared with 1925 (Number in 1925 = 100%).....	100	91.2	89.8	84.9	76.4	73.3

The number of dealers in these fifteen coal towns declined 8.8 per cent in one year compared with an average increase of 0.2 per cent for all of the towns studied. In five years, the number of dealers in the coal towns decreased 26.7 per cent, compared with an average decrease for all the towns of 2.3 per cent.

The Relation of the Number of Stores to Population

Table XI shows the relation between the number of stores and the population of the towns in which they were located in 1925 and 1930. The 1925 population figures were computed on the assumption that the population increased regularly between 1920 and 1930. That is, the 1925 population is taken as being half-way between the census figures for 1920 and 1930. As population figures were not available for the smaller towns for these years, towns of less than 400 population are omitted from this table.

The figures show that the small towns have a much larger number of dealers in relation to population than do the larger towns. This is probably because the small towns cater primarily to the trade of the farmer. The total number of dealers for each 10,000 people decreases as the population of towns increases. This is probably because the rural trade is relatively less important in the larger towns. It is possible, of course, that the average size of the stores is larger in the larger towns.

The number of grocery, clothing, meat, general, hardware, and dry goods stores for 10,000 people decreased in all four groups. The number of restaurants and garages for 10,000 people increased in all four groups except the group of towns with populations of from 7,000 to 15,000, in which the garages decreased. This indicates the importance of these businesses to present day life. The number of drug and furniture stores for 10,000 people decreased in towns of under 35,000 and increased in towns of over 35,000. The number of department

TABLE XI

A. Average Number of Retail Stores for Each 10,000 People in 1925 and 1930 for 11 Retail Trades in 154 Illinois Towns

Trades	Town Groups									
	Averages All Towns		400-1000* Population		2,000-5,000 Population		7,000-15,000 Population		Over 35,000 Population	
	1925	1930	1925	1930	1925	1930	1925	1930	1925	1930
Grocery.....	43.3	37.3	33.1	31.2	38.8	31.5	47.7	38.8	43.5	39.9
Garages.....	17.7	17.3	40.5	41.9	22.4	23.8	18.2	16.1	11.2	11.4
Restaurants.....	11.2	12.8	23.0	24.4	12.7	14.1	10.1	10.6	9.4	12.2
Clothing.....	6.5	5.3	5.5	5.2	7.8	6.5	7.2	5.4	5.3	4.5
General Stores.....	6.4	4.8	41.6	34.4	8.6	6.6	4.8	3.4	0.8	0.7
Drugs.....	6.2	6.0	14.3	12.6	7.6	7.3	5.6	5.3	4.7	5.0
Meat.....	6.1	4.7	12.2	8.6	6.9	5.3	5.1	3.6	5.7	4.9
Hardware.....	4.7	4.3	17.3	16.0	7.4	7.0	3.5	2.9	2.4	2.3
Furniture.....	4.4	4.1	7.2	7.0	5.6	5.3	4.5	4.1	3.1	3.2
Dry Goods.....	3.7	3.0	4.8	3.2	7.7	6.4	3.7	3.0	1.4	1.2
Department Stores.....	0.4	0.4	0.2	0.0	0.3	0.3	0.6	0.6	0.3	0.3
Total.....	110.6	100.0	199.7	184.5	125.8	114.1	111.0	93.8	87.8	85.6

B. Number of Retail Stores in 11 Trades for Each 10,000 People in the Five Larger Towns Included in the Study in 1925 and 1930

City	1925	1930
Quincy.....	84.3	82.6
Decatur.....	83.3	94.4
Springfield.....	110.5	89.8
Rockford.....	75.5	89.9
Peoria.....	85.5	75.6
Average.....	87.8	85.6

C. Number of Retail Stores in All Trades for Each 10,000 People in Two Typical Illinois Towns

1925.....	260.6
1930.....	232.8

*Population data for one town were not obtainable.

stores was too small to warrant comment. The changes in the number of stores for each 10,000 population are shown graphically in Chart 4.

The total number of dealers for every 10,000 people decreased in all four town groups. The largest relative decrease came in towns from 7,000 to 15,000 and the smallest relative decrease in towns of over 35,000.

In towns of more than 2,000 people, the decline in grocery and meat stores accounts for most of the decrease. In towns of less than 1,000 population, the general stores show the largest relative decrease, and meat, dry goods, drug, and grocery stores also show substantial declines.

The decline in the number of grocery, meat, dry goods, and clothing stores indicates that much of the decrease in the number of stores for 10,000 people in towns of more than 2,000 population was due to the increase in the number of chain stores.

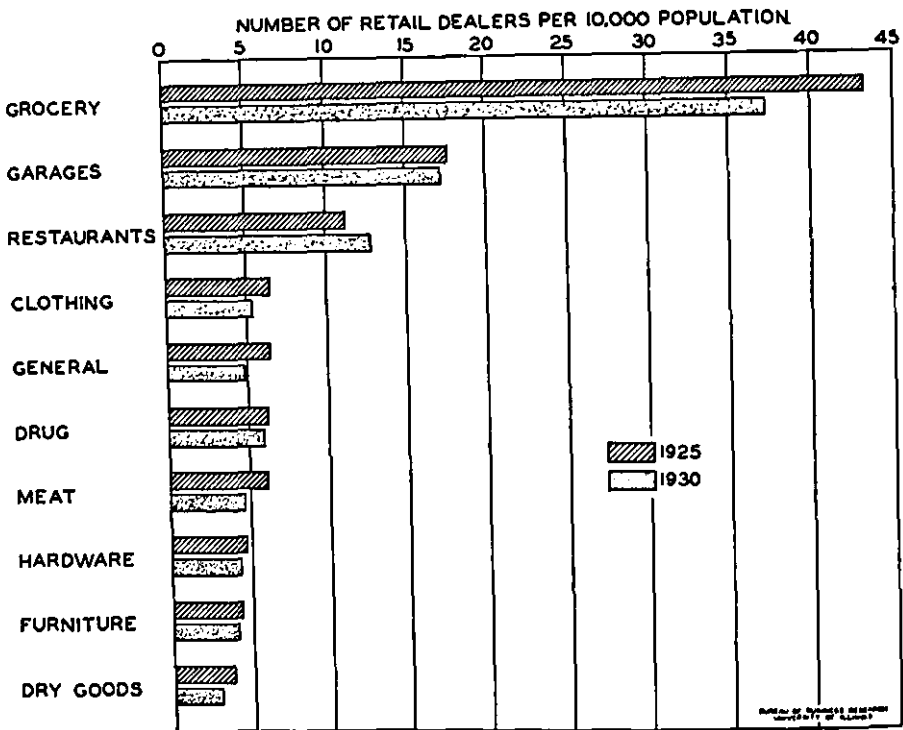


CHART 4—COMPARISON OF NUMBER OF RETAIL STORES FOR EACH 10,000 POPULATION IN 10 TRADES (IN 154 TOWNS OF MORE THAN 400 POPULATION) IN 1925 AND 1930 (SEE TABLE XI)

Table XI B shows the changes in the five largest towns. Without making local studies, the causes of these changes cannot be stated. It is evident, however, that conditions have been quite different in these towns. In two of these towns the number of dealers increased faster than the population, but in the other three towns the number of dealers failed to keep pace with the growth of population. There is a question whether it is desirable for the number of stores to increase with population. There is a rather wide-spread opinion among students in marketing that there are too many retail stores in most trades. Fewer and better stores might well serve a town better than more and smaller stores.

Growth of Chain Stores

No figures on the expansion of chain stores in the various trades were gathered in this study. It is common knowledge, however, that there has been an expansion of the number of chain stores in certain

trades throughout the state in the period covered by this study. It, therefore, seems safe to assume, from the data already presented, that the decline in the number of grocery, meat, dry goods, and clothing stores was due in large part to the growth of chain stores. The chains appear to have cut deepest into the grocery and meat business in towns of between 2,000 and 15,000 population. As the growth of stores in certain other trades failed to keep pace with the increase in population, it is possible that the chains increased their sales in these lines. The chains appear to have had a much larger growth, during the period under consideration, in towns of less than 35,000 population than in towns of more than 35,000.

IV. COMPARISON WITH OTHER STUDIES

A brief statement comparing the findings in this study with those of other investigations may be useful. Some similar studies are those of McGarry, covering grocery, drug, shoe, and hardware stores in Buffalo, N. Y., from 1918 to 1927;⁵ of Nystrom, covering the retailers in various Wisconsin towns from 1890 to 1912;⁶ of Olsen, covering retail grocers in Louisville, Kentucky, from 1890 to 1929;⁷ of *System*, covering Waterloo, Iowa, Grand Rapids, Michigan, and a third unnamed city, from 1886 to 1916;⁸ of the Bureau of Business Research of the University of Nebraska, covering retail grocers;⁹ of the School of Commerce and Administration, University of Chicago, covering retail drug stores in Chicago, and retail grocery stores in Fort Wayne, Indiana.^{10, 11}

Turnover Slower in Smaller Cities and Towns

Comparing the results of this study with those made in larger cities, we may conclude that the dealers in the smaller cities and towns have a somewhat longer life than those located in larger cities. A part of this difference, however, may be due to the difference of definition used in this study.¹² In Buffalo, 36% of the retail grocers went out of business in one year. In Louisville, Kentucky, approximately 25 per cent of the retail grocers went out of business in one year. In Fort Wayne, Indiana, 21.6 per cent of the retail grocers quit in one year, whereas in 255 Illinois towns, only 17.5 per cent went out of business in one year. In Chicago, an average of 15.5 per cent of the retail

⁵McGarry, Edmund D.: *Mortality in Retail Trade*, University of Buffalo, Bureau of Business and Social Research, 1930.

⁶Nystrom, Paul H.: *Economics of Retailing*, Ch. 17; 1915.

⁷Olsen, Paul C.: "Louisville Blues." *Chain Store Progress*, July, 1930. Vol. 2, No. 7.

⁸Dennis, Stanley A.: "What Can We Do About the Business Death Rate?"; *System*, January, 1916; "Will you have a Business in 1924?" *System*, January, 1917; "When Will My Business Die?"; *System*, October, 1917.

⁹University of Nebraska, Committee on Business Research; *Some Aspects of Grocery Store Failures*, January, 1926. Bulletin No. 14.

¹⁰Preliminary figures from a study made for the School of Commerce and Administration, University of Chicago, supplied by J. L. Palmer. Studies made by F. Zancanaro and R. L. Furst.

¹¹See also figures published by R. G. Dun & Co., and The Bradstreet Co.; *A Study of Credit Conditions and Causes of Failures Among Grocery Retailers in Louisville, Ky.*, U. S. Dept. of Commerce, Trade Information Bulletin No. 627; and *Credit Extension and Causes of Failure Among Philadelphia Grocers*, U. S. Dept. of Commerce, Trade Information Bulletin No. 700.

¹²See page 7 for definition used in this study.

drug stores go out of business each year. In Buffalo, 12.6 per cent of the retail druggists quit within one year. In Illinois outside Chicago, only 7 per cent of the druggists quit within one year. In Buffalo, 16.3 per cent of the retail hardware merchants quit each year, whereas in Illinois towns only 5.2 per cent quit within a year. In Kansas City, 50 per cent of the restaurants quit business in one year,¹⁸ but in Illinois towns, only 28.5 per cent of the restaurants quit business within one year.

Little Change in Rate of Retail Mortality in the Past Forty Years

Olsen found that the rate of mortality among retail grocers in Louisville, Kentucky, had changed very little in the last 40 years. Furst found almost exactly the same average rate of mortality among retail grocers in Fort Wayne, from 1891 to 1904 as from 1917 to 1930.

A comparison of the results obtained in this study of 255 Illinois towns with those obtained by Nystrom and *System* in the 80's and 90's in middle western towns shows that there has been very little change, although the three sets of studies did not include identical trades, towns of identical size, nor identical classifications of data.

Nystrom studied grocery, dry goods, shoe, clothing, hardware, furniture, and drug stores in 7 Wisconsin towns in the 90's. His findings, and those for towns of a somewhat similar size in Illinois from 1925 to 1930, follow:

Wisconsin Towns (7 Trades) 1890 to 1897

Town	1890 Population	Percentages of dealers in business in 1890, gone in			
		2 years	4 years	5 years	6 years
Oshkosh.....	22,836	....	....	37.2	....
LaCrosse*.....	25,090	31.5	40.3	....	....
2 Towns.....	7,000-15,000	....	....	....	46.8
3 Towns.....	800-2,000	....	....	....	52.0

*Data beginning with 1893. Figures include jewelry stores.

Illinois Towns (6 Trades) 1925 to 1930

Size of Town Group	Percentages of dealers in business in 1925, gone in		
	2 years	4 years	5 years
Towns over 35,000.....	23.0	36.0	41.1
Towns 7,000-15,000.....	....	....	45.9
Towns 2,000-5,000.....	....	....	40.0
Towns 400-1000.....	....	....	40.1

¹⁸The *Business Week*, November 27, 1929, quoting the U. S. Department of Commerce.

No direct comparison can be made, as the Illinois study does not include shoe dealers. This omission probably increases the mortality rate somewhat in comparison with the Wisconsin figures. However, after making allowances for this factor and for differences in the sizes of the towns, the results are very similar.

The inference from these facts is that the growth of chain stores has not increased the number of dealers quitting business, but has lessened the number of new dealers entering business. This agrees with McGarry's conclusion for Buffalo. The University of Chicago study, on the other hand, indicates that the advent of a chain drug store into a neighborhood does increase somewhat the mortality of independent drug stores within a radius of three blocks.

These facts also indicate that competition, with its theory of "the survival of the fittest," has not produced dealers any better adapted to existing conditions than those of forty years ago. The data would seem to discredit the idea that competition eliminates the least efficient and leaves only the more efficient in business. This is because of the constant stream of poorly prepared dealers who enter business. It is also possible, however, that the general level of efficiency has been raised so that a more efficient dealer today lives no longer than a less efficient dealer did forty years ago.

V. SUMMARY

This study is based on the number of independent retailers in 11 trades entering and leaving business in a five-year period from 1925 to 1930 in 255 Illinois towns. A study was also made of all retail businesses in two typical towns. An investigation of concerns in these two towns showed that the averages for the 11 trades are typical of conditions among all types of retail businesses, including personal service establishments such as pressing shops, hotels, and laundries.

The 11 trades include those with relatively short business lives and those with long business lives. Of the short-lived (or high mortality) dealers, 29 per cent of the restaurants, 17 per cent of the grocery stores and garages, and 14 per cent of the meat stores went out of business in one year. In five years, 65 per cent of the restaurants, 51 per cent of the garages, 50 per cent of the grocery stores, and 46 per cent of the meat stores quit business.

Of the longer-lived dealers, 5 per cent of the hardware stores, 7 per cent of the drug stores, 8 per cent of the dry goods stores, 9 per cent of the furniture and clothing stores, 10 per cent of the department stores, and 14 per cent of the general stores went out of business in one year. In the five-year period, 24 per cent of the drug stores, 28 per cent of the hardware stores, 36 per cent of the dry goods, furniture, and clothing stores, 39 per cent of the department stores, and 41 per cent of the general stores quit business.

The mortality among new dealers is much higher than among long established dealers. A great many of the incompetent, newly established dealers fail within a year. It appears that most of the poorly prepared store owners quit by the end of the second year following that in which they start. The high mortality in the short-lived trades (restaurants, garages, grocery, and meat stores) is indicated by the large number of exits in the first two years. The dealers in these trades who stay in business for two years have almost as long an expectancy of business life as the dealers in the slow turnover trades.

A study of the new concerns entering business in the two typical towns from 1926 to 1930 shows that 31.4 per cent quit in the first year, 47.4 per cent quit in the first two years, and 58.7 per cent quit in the first three years.

A dealer entering business has two chances out of three of lasting until the end of the following year, an even chance of lasting to the end

of the second year, and two chances out of five of lasting until the end of the third year.

The trades that require more capital or more knowledge of goods have longer lives than those that are easier to enter. Drug and hardware stores have the longest lives. The druggist is the only retailer covered in the study who must pass an examination before entering business.

The number of dealers in six of the 11 trades declined in the period studied: general stores, 18.1 per cent; meat stores, 15.6 per cent; clothing stores, 11.6 per cent; dry goods stores, 11.2 per cent; grocery stores, 6.5 per cent; and hardware stores, 2.5 per cent. The number of dealers in five trades increased: restaurants, 22.9 per cent; department stores, 6.5 per cent; garages, 5 per cent; drug stores, 4.9 per cent; and furniture stores, 3.5 per cent.

The number of dealers in 10 of the 11 trades declined relative to population. The restaurant trade was the only one in which the number of dealers increased faster than population.

There appears to be a rather close relationship between the changes in the number of dealers and the changes in population. Towns with large increases in population usually had an increase in the number of dealers, and in towns whose population decreased, there was usually a decrease in the number of dealers also.

The number of dealers in business decreased in all town groups except in the group of towns with more than 35,000 population. The town groups that had the largest decline in the number of dealers were those with less than 400 population and those from 7,000 to 15,000 population. The former group apparently was affected by declining rural population and a shifting of trade to the larger towns by the automobiles. The latter group was affected by adverse conditions in the coal mining industry.

Judging from the figures, there appears to be a close relation between industrial prosperity and the number of dealers. In the 15 coal towns, the number of dealers declined 26.7 per cent in the five-year period, compared with a decline of 2.3 per cent in all the towns studied. The mortality in the period for the coal towns was 53.8 per cent, compared with 46.3 per cent in all towns studied. In towns of 7,000 to 15,000, the number of dealers in the coal towns declined 28.1 per cent compared with a decline of 3.2 per cent in the non-coal towns. The five-year mortality in the coal towns was 55.9 per cent compared with 47 per cent in the non-coal towns.

The spread of chain stores has apparently reduced the number of

independent grocery, meat, dry goods, and clothing stores. It does not appear to have increased the rate of mortality among the independent stores but has reduced the number of new dealers entering business.

A comparison of the facts developed in this study with the facts developed in other studies, indicates: (1) that the average length of business life has changed little in the past forty years; and (2) that the retailers in the smaller cities and towns have a somewhat longer average life than dealers in the same trades located in large cities.

APPENDIX

RETAIL STORE MORTALITY, 1925 TO 1933

(Cumulative number of retailers in business in July, 1925, gone out of business in successive years from 1925 to 1930 in 11 retail trades in 255 Illinois towns)

Trades	Number of Dealers in July, 1925	Cumulative Number Out of Business in July of Each Year				
		1926	1927	1928	1929	1930
100 Towns Under 400 Population						
Furniture.....	8	1	2	2	2	3
Grocery.....	85	25	36	41	43	49
Meat.....	27	3	6	9	12	12
Dry Goods.....	0	0	0	0	0	0
Hardware.....	51	3	11	16	19	21
Garages.....	136	30	46	55	65	73
Drugs.....	21	3	5	6	9	9
Department Stores.....	0	0	0	0	0	0
General Stores.....	229	26	51	61	71	82
Clothing.....	2	0	1	2	2	2
Restaurants.....	60	19	32	36	41	41
Total.....	619	110	190	228	264	292
75 Towns—400-1000 Population						
Furniture.....	38	3	7	7	7	9
Grocery.....	176	31	50	74	89	102
Meat.....	65	13	22	30	35	41
Dry Goods.....	25	7	9	11	13	14
Hardware.....	91	4	9	12	19	24
Garages.....	213	46	63	84	92	105
Drugs.....	75	6	12	12	17	19
Department Stores.....	1	0	1	1	1	1
General Stores.....	225	32	42	60	75	87
Clothing.....	29	2	3	5	6	6
Restaurants.....	121	38	57	78	85	88
Total.....	1059	182	269	374	439	496
50 Towns—2,000-5,000 Population						
Furniture.....	94	8	18	24	30	35
Grocery.....	654	109	201	238	287	325
Meat.....	117	22	33	44	53	57
Dry Goods.....	130	8	16	24	33	39
Hardware.....	124	7	15	18	26	31
Garages.....	378	64	116	135	160	181
Drugs.....	128	10	12	16	20	28
Department Stores.....	5	1	1	1	1	1
General Stores.....	145	16	35	46	55	63
Clothing.....	131	10	25	32	41	47
Restaurants.....	214	76	105	117	135	145
Total.....	2120	331	577	695	841	952
25 Towns—7,000-15,000 Population						
Furniture.....	127	9	23	32	43	49
Grocery.....	1338	256	385	520	627	697
Meat.....	143	12	26	40	55	67
Dry Goods.....	103	7	17	29	37	42
Hardware.....	99	6	13	20	25	30
Garages.....	509	82	157	224	238	274
Drugs.....	157	7	17	24	29	35
Department Stores.....	17	2	3	4	6	8
General Stores.....	133	33	39	50	58	65
Clothing.....	201	14	34	50	60	77
Restaurants.....	284	85	122	156	175	191
Total.....	3111	513	836	1149	1353	1535

Trades	Number of Dealers in July, 1925	Cumulative Number Out of Business in July of Each Year				
		1926	1927	1928	1929	1930
5 Towns Over 35,000 Population						
Furniture.....	100	11	18	25	29	37
Grocery.....	1393	217	367	513	552	630
Meat.....	181	25	46	54	64	70
Dry Goods.....	46	2	5	9	13	13
Hardware.....	77	3	5	9	16	17
Garages.....	359	53	104	139	159	181
Drugs.....	150	11	20	29	33	38
Department Stores.....	8	0	1	1	1	2
General Stores.....	26	2	6	7	9	10
Clothing.....	170	21	31	48	53	61
Restaurants.....	299	61	119	138	157	168
Total.....	2809	406	722	972	1086	1227

Summary of Totals by Trade Groups—All Towns

Furniture.....	367	32	68	90	111	133
Grocery.....	3646	638	1039	1386	1598	1803
Meat.....	533	75	133	177	219	247
Dry Goods.....	304	24	47	73	96	108
Hardware.....	442	23	53	75	105	123
Garages.....	1595	275	486	637	714	814
Drugs.....	531	37	60	87	108	129
Department Stores.....	31	3	6	7	9	12
General Stores.....	758	109	173	224	268	307
Clothing.....	533	47	94	137	162	193
Restaurants.....	978	279	435	525	593	633
Total.....	9718	1542	2594	3418	3983	4502

Summary of Totals by Town Groups—All Trades

100 Towns Under 400.....	619	110	190	228	264	292
75 Towns 400-1000....	1059	182	269	374	439	496
50 Towns 2,000-5,000.....	2120	331	577	695	841	952
25 Towns 7,000-15,000.....	3111	513	836	1149	1353	1535
5 Towns Over 35,000.....	2809	406	722	972	1086	1227
Total.....	9718	1542	2594	3418	3983	4502

NUMBER OF RETAILERS IN BUSINESS IN 255 ILLINOIS TOWNS FROM 1925 TO 1930

Number of Retailers in 11 Selected Retail Trades Listed in the July Rating Books of R. G. Dun & Company, July, 1925-July, 1930

Trade	1925	1926	1927	1928	1929	1930
100 Towns Under 400 Population						
Furniture.....	8	9	9	9	9	10
Grocery.....	85	80	69	80	83	77
Meat.....	27	28	27	25	26	26
Dry Goods.....	0	0	0	0	2	2
Hardware.....	51	54	52	50	48	49
Garages.....	136	134	133	130	136	126
Drugs.....	21	21	20	21	19	19
Department Stores.....	0	0	0	0	0	0
General Stores.....	229	216	211	207	199	190
Clothing.....	2	2	3	1	1	1
Restaurants.....	60	65	62	59	64	60
Total.....	619	609	586	582	587	560

Trade	1925	1926	1927	1928	1929	1930
75 Towns—400-1000 Population						
Furniture.....	38	39	36	38	39	37
Grocery.....	176	172	179	182	173	167
Meat.....	65	65	64	58	54	46
Dry Goods.....	25	22	20	22	22	17
Hardware.....	91	90	92	93	93	85
Garages.....	213	201	225	225	231	224
Drugs.....	75	73	74	72	69	67
Department Stores.....	1	1	0	0	0	0
General Stores.....	225	216	215	197	196	185
Clothing.....	29	27	27	28	27	28
Restaurants.....	121	112	129	128	127	130
Total.....	1059	1018	1061	1043	1031	986
50 Towns—2,000-5,000 Population						
Furniture.....	94	98	96	95	91	95
Grocery.....	654	649	618	613	601	569
Meat.....	117	107	111	109	103	95
Dry Goods.....	130	129	129	126	121	115
Hardware.....	124	127	134	136	130	126
Garages.....	378	398	419	420	430	429
Drugs.....	128	129	131	131	133	132
Department Stores.....	5	4	5	5	6	6
General Stores.....	145	144	144	139	120	119
Clothing.....	131	131	129	121	119	118
Restaurants.....	214	193	227	236	251	255
Total.....	2120	2109	2143	2131	2105	2059
25 Towns—7,000-15,000 Population						
Furniture.....	127	136	132	131	128	122
Grocery.....	1338	1310	1324	1252	1204	1162
Meat.....	143	147	146	140	124	107
Dry Goods.....	103	101	99	96	96	91
Hardware.....	99	98	100	99	94	87
Garages.....	509	552	539	544	520	484
Drugs.....	157	168	165	161	164	160
Department Stores.....	17	17	16	17	19	18
General Stores.....	133	124	130	133	110	103
Clothing.....	201	202	197	185	174	162
Restaurants.....	284	305	332	320	329	318
Total.....	3111	3160	3180	3078	2962	2814

Trade	1925	1926	1927	1928	1929	1930
5 Towns Over 35,000 Population						
Furniture.....	100	97	106	109	109	116
Grocery.....	1393	1361	1385	1382	1407	1433
Meat.....	181	187	193	189	180	176
Dry Goods.....	46	51	51	49	44	45
Hardware.....	77	83	82	87	85	84
Garages.....	359	382	386	396	401	411
Drugs.....	150	165	166	166	174	179
Department Stores....	8	8	8	9	9	9
General Stores.....	26	27	28	24	25	24
Clothing.....	170	171	166	160	165	162
Restaurants.....	299	310	318	366	414	439
Total.....	2809	2842	2889	2937	3013	3078

Summary of Totals by Trade Groups—All Towns

Furniture.....	367	379	379	382	376	380
Grocery.....	3646	3572	3575	3509	3468	3408
Meat.....	533	534	541	521	487	450
Dry Goods.....	304	303	299	293	285	270
Hardware.....	442	452	460	465	450	431
Garages.....	1595	1667	1702	1715	1718	1674
Drugs.....	531	556	556	551	559	557
Department Stores....	31	30	29	31	34	33
General Stores.....	758	727	728	700	650	621
Clothing.....	533	533	522	495	486	471
Restaurants.....	978	985	1068	1109	1185	1202
Total.....	9718	9738	9859	9771	9698	9497

Summary of Totals by Town Groups—All Trades

100 Towns Under						
400.....	619	609	586	582	587	560
75 Towns 400-1000...	1059	1018	1061	1043	1031	986
50 Towns 2,000-5,000.....	2120	2109	2143	2131	2105	2059
25 Towns 7,000-15,000.....	3111	3160	3180	3078	2962	2814
5 Towns Over 35,000.....	2809	2842	2889	2937	3013	3078
Total.....	9718	9738	9859	9771	9698	9497

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**41. Business Mortality of Illinois Retail Stores from 1925 to 1930. By P. D.
CONVERSE.**