A CRITICAL EXAMINATION OF THE EVIDENCE REGARDING THE SIZE OF MANUFACTURING UNITS IN THE FOOTWEAR INDUSTRY OF SOUTH AFRICA, GREAT BRITAIN, CANADA AND THE U. S. A. WITH AN ASSESSMENT OF THE ECONOMIC IMPLICATIONS AND CONSEQUENCES OF THESE CONDITIONS IN RELATION TO THE SOUTH AFRICAN CUSTOMS TARIFF.

by

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A thesis presented to the University of South Africa for the degree of Master of Commerce in Commerce as internal student of Rhodes University College, Grahamstown.

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I hereby declare that this thesis is entirely my own work.

R. M. Bits

FOREWORD

All the research for this thesis was done during the period 1st February to 1st December, 1946. During these ten months a large number of footwear manufacturers were visited in Port Elizabeth and Johannesburg, and topics appearing in this thesis were discussed with them. Many thanks are due to all those who assisted this investigation in this way.

The writer also wishes to express his indebtedness to the Leather Industries Research Institute, Grahamstown, who arranged this investigation and assisted him financially by means of a scholarship. Many thanks for suggestions are also due to Professor D. Liddell, Head of the Commerce Department, Rhodes University College, and to Mr. A. S. Humphries, Economic Research Officer at the Leather Industries Research Institute in Port Elizabeth.

Considerable use was also made of Government Blue Books, Year Books, and reports which contained statistics and other information connected with the footwear industries of the four countries - South Africa, Great Britain, Canada, and the U. S. A. Special thanks are also due to Dr. F. C. van der Riet, Librarian at Rhodes University College, who spared no effort in borrowing the necessary journals from all over South Africa.

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CHAPTER 1.

Before the formation of Union in 1910 there were a few scattered boot and shoe factories in South Africa. Unfortunately, owing to lack of statistics, it is impossible to tell which of these establishments were actually manufacturing boots and shoes, and which were only engaged in repair work.

From the limited statistics available for this period, it may be observed that there were 7 boot and shoe establishments before 1890. During the following 9 years progress was very slow, and only another 9 boot and shoe manufacturing and repairing establishments came into being. The first four years of the twentieth century were years of much greater progress, as during this short time 20 additional manufacturing and repairing units were established. This rate of progress did not decrease in the years that immediately followed, as statistics show that from 1905 to 1909 another 12 manufacturing and repairing units were established.(1) From these figures we see that during the pre-Union period 48 boot and shoe manufacturing and repairing units were established. Whether all of these establishments were still operating at the time of the amalgamation of the four provinces is a fact which must remain unknown. Unfortunately owing to the fact that statistics were not collected in detail during these years, it is impossible to give any information as regards their output, capital and number of employees. It is fairly certain, however, that none of these establishments

(1) U.G. 17 - 1920, page 20.

were of any considerable size.

During the pre-war years 1910-14 the boot and shoe trade was again in a very progressive state. Within these five years no less than 35 new manufacturing and repairing units were established in this industry.[1].
Unfortunately also here it is impossible to give a detailed analysis of their operations. At this stage, however, the limited amount of material available must be examined.

It appears that the general opinion among South African manufacturers at this time was that the quality of South African leather could be considerably improved, and the quantity available for boot and shoe manufacturing increased, if a campaign were launched against the branding of cattle, and the damage caused by barbed wire fences, whips and shot guns. There was also room for improved slaughtering.methods, and it was felt that the cattle and sheep should be dipped more often to kill the ticks which have a harmful effect on the hides of the animals. (2)

Manufacturers considered South African leather used as sole leather as good as any imported leather, but they agreed that the South African leather which could be used for the uppers of the shoe could not be compared with the imported material. It was for this reason that they used South African sole leather but imported the leather used for the uppers of the shoe. (2)

Owing to climatic conditions here manufacturers thought that workers could not do the same amount of work as a worker in England could do over the same period.

/Some

(2) U.G. 9-13 "Summary of the evidence given before the Commerce and Industries Commission."

Some employers put the difference at a figure as much as 25%, and yet the wages paid to workers in South Africa were higher than those paid in England. Note the following table which compares the wages in the two countries.

TABLE 1. (2)

Figures for 1912.

Boot factory	English wages per week of $52\frac{1}{2}$ hours.	Cape wages per week of 54 hrs. European	Coloured.
Clickers	29/-	50 to 55/-	42/6d.
Machinist (girls)	15/-	40/-	27/- (male)
Pressmen	28/-	50/-	28/-
Lasters	30/-	52/6d.	32/-
Finishers	28/-	47/6d.	30/-

The average wage for the factory works out at 33/6d. here as against 18/10d. in England. (2)

One of the manufacturers, Mr. A. J. Coaton, of the Western Tanning and Boot Company, Wellington, Cape, said, "The cost of manufacturing here is quite 33% more than in England, caused by higher wages, lower producing power, and higher charges. Thus a boot selling wholesale at 9/8, a similar boot made here would sell at 13/6d." Many manufacturers felt at the time that with the aid of modern machinery they had reached a stage where they could produce a shoe as good as any imported English shoe, but they found it impossible to produce a shoe of this quality at the same price as the British manufacturers were doing. (2)

From the above facts it may be concluded that although the South African footwear industry was expanding it was doing so under great difficulties. The South African home market for footwear was limited. The

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(2) U.G. 9 - 1913 "A summary of the evidence given before the Commerce and Industries Commission."

The customs tariff will not be discussed here, but it may be stated that South Africa was in such a position at that time that she could not export shoes to other countries. Production was thus for the home market only, and at that for European consumption only as the non-European demand for boots and shoes was insignificant. Above all this the industry had to face the fact that boots and shoes were being imported from other countries, because the consumer considered them of superior quality, and these imported goods could be sold on the South African home market at a price at which they could not be produced within the country. This was then the position the South African footwear industry found itself in, during the early years after the formation of Union.

According to Laites commercial blue book for 1914, there were in that year a total of 41 boot and shoe factories in the Union. Of these 11 were in Port Elizabeth, and 6 in Capetown; in Johannesburg there were only 2 such factories. Of these 41 factories, 36 were in the Cape Province, 3 in the Transvaal, and Natal, and the O.F.S. each had one,(3). Altogether up to this date 83 factories had been established. It appears thus that 42 factories of the total that were established at some time or other before this date had already been closed down, a definite proof of the difficulties under which production was taking place. An attempt was made here by the writer to obtain information that might indicate any possible amalgamation among the different establishments. Unfortunately, however, it

/appeared

(3) Laites Commercial Blue Book for S. Africa,1914, p.511.

appeared that such information was not available. It is felt, however, that it is most unlikely that there was any major movement towards amalgamations among the different units in these early days.

The first years for which detailed statistics of the footwear industry were collected were 1915-16. From these years the government undertook the task of issuing an annual report on the industrial statistics. It is to a large extent with the aid of these blue books that the tables in this chapter have been constructed. Some of the figures appearing in these tables were not found in the blue books, so they were calculated with the aid of the figures that were available. Let these tables now be examined to see what facts can possibly be deduced from the figures contained in them. It is a great pity that these tables up to the years 1924-25 represent both the boot and shoe manufacturing units and also the repairing units.

Before starting any discussion on these figures, it may be advisable to divide them into periods. The first period will cover the years of the first world war, the second period the post-war boom ending about 1922, the third period the post-war slump ending about 1925. The fourth period the boom till about 1929. The fifth period the slump which followed till about 1934. The sixth covers the boom years before the last war. The seventh period will cover as many of the war years as there are figures available for.

The first period is one of remarkable expansion. It is a known fact that numerous South African industries were given a certain amount of artificial protection by the way. This protection came in such forms as a rise in prices for overseas products, (if obtainable at all) and also a rise in freight charges on overseas goods. With these stimuli it is logical that the industries expanded much further and faster than would have been the case under normal conditions. The boot and shoe manufacturers took every opportunity that came their way.

TABLE 11 (5)

Classification of factories in the Union according to average number of persons employed.

1915-16

	Under 4.	Four	5-10	11-20	21-50	51-100	101 & over	Total
Est.	5	8	15	6	10	10	4	58
Hands	11	32	107	86	285	643	498	1662

1917-18

	Under 4	Four	5-10 Hands	11-20	21-50	51-100	101 & over	Total
Est.	32	16	25	15	14	13	4	120
Hands	95	64	175	208	423	946	582	2644

See page

TABLE 11a (6)

Proportion per cent of employees in establishments of each size - Union 1916-17 to 1936-37.

Year	Under 4 Hands	4 Hands	5-10 Hands	11-20 Hands	21-50 Hands	50-100 Hands	101 and over	Total
1916-17	3.4	1.5	7.1	7.4	20.9	27.6	32.1	100
1921-22	3.6	2.9	7.5	6.3	19.1	15.5	45.0	100
1926-27	0.4	0.6	2.6	0.9	8.1	14.8	72.6	100
1928-29	0.0	0.1	1.4	3.8	5.6	12.2	76.9	100
1929-30	0.1	0.1	1.0	3.7	5.9	13.6	75.6	100
1932-33	0.1	0.2	0.4	1.2	6.2	11.6	80.3	100
1934-35	0.0	0.2	0.5	1.0	7.1	8.1	83.1	100
1935-36	0.2	0.1	0.6	0.9	6.2	9.4	82.6	100
1936-37	0.2	0.1	0.7	4.0	7.8	86.5	86.5	100

TABLE 11b (6a)

Showing what percentages of employees are Europeans and non-Europeans, and also the average number of employees per factory.

Date	Average No. employed per factory.	European %	Non-European %
1916-17	40	50	50
1921-22	50	52	48
1926-27	61	63	37
1928-29	63	63	37
1929-30	52	65	35
1932-33	59	71	29
1934-35	66	74	26
1935-36	64	72	28
1936-37	68	69	31

(6) Office of Census & Statistics special report No. 137 p.6
(6a) " " " " " " " " " p.4

TABLE 111 [5]

Date	No. of Est.	Value of L & B.	Value of P. & M. & Tools	Total fixed capital
1915-16	58	£ 57,993	£ 54,253	£112,246
1916-17	104	91,107	86,516	177,623
1917-18	120	108,087	94,594	202,681
1918-19	138	153,415	141,766	295,181
1919-20	147	191,931	192,649	384,580
1920-21	146	210,040	265,526	475,566
1921-22	148	236,292	241,083	477,375
1922-23	137	260,129	275,143	535,272
1923-24	131	260,135	275,324	535,459
1924-25	74	207,422	327,119	534,541
1925-26	76	244,658	322,700	567,358
1926-27	73	254,266	347,678	601,944
1927-28	71	265,211	381,609	646,820
1928-29	57	250,916	372,771	623,687
1929-30	57	256,901	357,665	614,566
1932-33	57	300,556	408,169	708,725
1933-34	74	395,286	418,718	814,004
1934-35	76	388,717	462,282	850,999
1935-36	81	401,103	513,841	914,944
1936-37	82	428,231	553,448	981,679
1937-38	82	432,069	554,863	986,932
1938-39	83	466,165	593,040	1,060,105
1939-40	79	495,008	575,362	1,070,370
1940-41	84	526,623	606,245	1,132,868
1941-42	85	610,498	690,464	1,300,962
1942-43	99	670,855	707,220	1,388,075

TABLE 1V[5]

Number of employees.

Date	Europeans. Male	Europeans. Female	Others Male	Others Female	All races	Average capital per employee
1915-16	641	220	745	56	1662	£67
1916-17	901	301	1112	74	2388	74
1917-18	932	392	1239	81	2644	76
1918-19	1177	491	1588	143	3399	86
1919-20	1269	569	1701	91	3630	105
1920-21	1054	455	1367	78	2954	161
1921-22	1161	550	1445	127	3283	145
1922-23	1483	804	1652	127	4066	131
1923-24	1650	902	1751	129	4432	121
1924-25	1798	974	1515	130	4417	121
1925-26	1888	1105	1728	141	4862	116
1926-27	1962	1167	1667	141	4937	122
1927-28	1979	1181	1741	143	5044	128
1928-29	1924	1221	1683	129	4957	126
1929-30	1989	1272	1628	128	5017	122
1932-33	1760	1916	1727	151	6554	108
1933-34	3268	2367	1749	189	7573	107
1934-35	3636	2767	2099	183	8685	98
1935-36	3700	3081	2412	188	9381	97
1936-37	3875	3106	2892	235	10108	97
1937-38	3679	3110	3001	282	10072	98
1938-39	3635	3195	3364	361	10555	100
1939-40	3211	3127	3695	262	10295	104
1940-41	3307	3473	4726	413	11919	95
1941-42	3429	3535	5365	475	12804	101
1942-43	3516	3495	5704	510	13225	105

TABLE V.[5]

Amounts of salaries and wages paid.

Date	European	European per year	Other	Non-European per year	All Races
1915-16	£ 61,614	£71	£ 37,228	£ 46	£ 98,842
1916-17	76,243	63	53,155	45	129,398
1917-18	99,239	75	62,076	47	161,315
1918-19	152,289	91	86,470	50	238,759
1919-20	196,230	107	105,959	59	302,189
1920-21	185,408	123	92,517	64	277,925
1921-22	201,606	118	107,913	69	304,519
1922-23	243,982	106	113,988	72	357,970
1923-24	280,950	114	118,699	63	399,549
1924-25	291,909	105	110,231	67	402,149
1925-26	320,612	107	123,382	66	443,994
1926-27	355,872	113	133,367	73	489,239
1927-28	373,258	118	140,674	74	513,932
1928-29	392,721	124	148,146	82	540,867
1929-30	422,554	129	148,394	84	570,948
1932-33	541,293	116	145,690	78	686,983
1933-34	613,887	109	157,420	81	771,307
1934-35	714,340	112	181,248	79	895,588
1935-36	789,779	116	199,025	77	988,804
1936-37	845,180	121	218,261	70	1,063,411
1937-38	837,590	123	248,398	76	1,085,988
1938-39	897,977	132	295,763	79	1,193,740
1939-40	909,697	143	324,776	82	1,234,473
1940-41	1,039,146	153	461,617	90	1,500,763
1941-42	1,267,414	182	632,165	108	1,899,579
1942-43	1,452,928	137	784,723	126	2,210,670

TABLE VI.[5]

H.P. employed & Cost of Fuel, Light & Power.

Date	H.P. of engines	Cost of Fuel, light & power.
1915-16	459	£ 2,678
1916-17	627	4,193
1917-18	762	4,684
1918-19	1162	6,191
1919-20	1240	9,181
1920-21	1236	10,625
1921-22	1258	11,114
1922-23	1524	14,102
1923-24	1582	15,652
1924-25	1711	17,106
1925-26	2065	16,614
1926-27	2126	15,846
1927-28	2244	15,345
1928-29	2178	16,211
1929-30	2279	16,951
1932-33	2586	15,799
1933-34	3627	17,949
1934-35	3876	20,776
1935-36	4348	22,485
1936-37	4662	23,722
1937-38	4765	24,044
1938-39	5292	26,206
1939-40	5377	25,320
1940-41	5603	28,324
1941-42	6239	31,591
1942-43	6601	32,616

TABLE V11[5]

Materials used in manufacture.

Date	South African	Imported	Imported % of total	Total
1915-16	£234,850	£80,195	31	£ 324,045
1916-17	388,327	110,552	22	498,879
1917-18	484,796	151,377	24	636,173
1918-19	653,946	211,009	24	864,955
1919-20	805,466	310,904	28	1,116,370
1920-21	538,945	240,398	31	779,343
1921-22	485,623	252,799	34	738,422
1922-23	507,508	294,122	37	801,630
1923-24	555,444	370,113	40	925,557
1924-25	558,341	400,624	42	958,965
1925-26	660,101	457,080	41	1,117,181
1926-27	667,412	530,898	44	1,198,310
1927-28	728,570	554,387	44	1,282,957
1928-29	789,096	598,386	43	1,387,482
1929-30	693,074	601,081	46	1,294,155
1932-33	599,543	621,339	51	1,220,882
1933-34	618,253	820,094	57	1,438,347
1934-35	786,781	894,014	53	1,681,695
1935-36	841,214	967,762	54	1,808,976
1936-37	898,026	1,096,652	55	1,994,678
1937-38	843,648	1,056,046	56	1,899,694
1938-39	935,280	1,213,626	57	2,148,906
1939-40	1,280,645	1,253,238	49	2,533,883
1940-41	1,694,209	1,651,266	49	3,345,473
1941-42	2,360,729	1,080,872	47	4,441,601
1942-43	2,868,167	2,387,952	45	5,247,019

TABLE V111[5]

Articles manufactured, and value added by manufacture.

Art.manuf.	Value added
£ 503,999	£ 179,954
726,712	227,833
965,550	329,377
1,291,765	426,810
1,674,598	558,228
1,191,206	411,863
1,250,521	512,099
1,512,791	771,161
1,681,445	755,888
1,655,880	696,915
1,905,279	788,098
2,041,726	843,416
2,153,055	870,098
2,348,498	961,016
2,305,973	1,011,818
2,330,208	1,109,326
2,656,142	1,217,795
3,131,177	1,449,482
3,439,121	1,630,145
3,733,231	1,714,831
3,715,137	1,815,443
4,051,563	1,902,657
4,587,364	2,053,480
5,759,079	2,413,604
7,658,223	3,216,622
8,950,716	3,703,697

TABLE 1X[5]

Number and value of boots and shoes, slippers and veldschoens produced in South Africa.

	Boots & Shoes.		Slippers		Veldschoens	
	pairs	Value	Pairs	Value	Pairs	Value
1916-17	1,151,599	£ 546,918	44,050	£ 10,199	425,530	£106,272
1917-18	1,291,105	741,526	123,813	51,616	350,853	£106,515
1918-19	1,629,637	1,061,222	26,083	10,089	291,555	109,194
1919-20	1,806,917	1,383,856	42,869	14,800	315,243	110,549
1920-21	1,308,135	978,438	41,730	15,424	156,196	58,365
1921-22	1,572,204	1,024,504	23,553	8,434	231,342	72,094
1922-23	2,115,433	1,320,570	42,381	14,304	223,562	69,899
1923-24	2,351,124	1,445,272	20,326	7,237	411,091	121,958
1924-25	2,643,584	1,461,045	20,410	7,546	408,355	130,052
1925-26	2,963,301	1,695,923	15,355	5,258	501,442	142,273
1926-27	3,205,842	1,829,558	14,461	5,038	536,538	160,961
1927-28	3,136,320	1,905,125	8,543	3,283	621,656	209,183
1928-29	3,386,198	2,106,329	14,942	6,391	633,085	208,375
1929-30	3,510,589	2,081,749	20,235	7,276	610,121	191,502
1932-33	4,564,636	2,092,192	318,661	36,119	586,240	160,259
1933-34	6,201,048	2,429,769	422,656	44,519	545,975	158,084
1934-35	7,535,081	2,854,008	897,412	125,472	441,695	136,682
1935-36	8,667,111	3,098,488	1,200,114	142,188	570,800	175,982
1936-37	9,668,608	3,390,468	1,125,388	123,618	588,612	190,627
1937-38	8,768,024	3,368,491	1,105,621	119,445	623,094	194,664
1938-39	9,837,922	3,675,015	1,396,300	132,757	720,330	215,239
1939-40	10,518,093	4,178,541	1,528,175	174,682	567,017	197,870
1940-41	10,941,001	5,197,413	1,588,511	205,573	878,662	327,097
1941-42	12,526,388	7,008,831	1,349,013	243,251	846,742	367,770
1942-43	11,738,721	7,935,039	1,524,780	314,027	1,374,263	631,015
1944	12,965,000		1,850,000			
1945	14,027,000		1,812,000			

NOTE. The figures for the boots and shoes, the number and the value, include certain amounts for boots and shoes, the uppers of which were not made of leather but canvas. These figures were actually given in separate columns for the latter half of the table, but as they were all given together in the first half, this method of tabulation was continued. There is no data for 1915-16.

"When war broke out in 1914, South Africa was still dependent on importation for the major portion of its boots and shoes. Local industry had not yet sufficiently developed to make a bid for appreciable workers with the ability, knowledge and deftness of hand required in any industry producing an article of superior quality and finish. By the end of the war period South African manufacturers were supplying a very large portion of the South African needs in medium grade of footwear, and a certain amount even of the higher grades of footwear. By the end of the war period the industry had built up a body of skilled employees, had entrenched itself securely, and had potentialities of supplying in due course almost all South African requirements." (4)

Again, according to Laites Commercial Blue Book there were 41 boot and shoe manufacturing and repairing factories in 1914. This number had risen to 120 during the war years (Table 3) which means an increase in the number of establishments by almost 200%. The fixed capital of 58 factories in 1915-16 was £112,246 showing that the average capital per firm was about £1935, but in 1917-18 there were 120 establishments with a total capital of £202,681 which gives an average of only £1,688. The 62 new firms that were established during the war had a total fixed capital of only £90,435 giving an average capital per firm of £1462. It may be noted from Table 2 that in both the years 1915-16 and 1917-18 the size group which contained the largest number of establishments, is

(4) South African Journal of Economics Vol. 3 1935,p.523.

is the one which contains establishments employing between 5 and 10 hands, but at the same time it may be observed that whereas in 1915-16 only 5 establishments employed under 4 hands, there were actually 32 establishments employing under 4 hands in 1917-18. This shows that many of the firms established during the war must have been very small. Many of the pre-war established firms must have extended their units as it may be observed from this table that 13 firms instead of 10 were now employing more than 50 hands, and 14 firms instead of 10 were now employing between 21 and 50 hands, but according to Table 2a, even at this time the four employing over 101 hands were engaging 32.1% of the total employees in the footwear industry.

In connection with this war period it may be observed from Table 4 that the number of employees had increased from 1662 in 1915-16 to 2644 at the end of the war. This table also shows that there is a steady increase in the amount of fixed capital employed per employee, an increase from £67 per employee to £76 per employee, showing that more of the work was being done by mechanical means. In connection with this point it may be observed from Table 5 that the European wages increased from £71. to £75. p.a. and the non-European increased from £46. to £47. p.a. Table 6 shows that the horse power employed increased from 459 to 762 in 1917-18, also the fuel rose from £2678 to £4684 showing that there was no actual increase per unit cost of the fuel consumed.

Although there is throughout table 5 an increase in the European wage it may be as well to point out here that this average wage is not a very true reflection of the wages paid to male and female employees. It was obtained by adding together the figures of the total male and female Europeans employed, as given in Table 4, and dividing this total into the wages paid to Europeans as given in Table 5. While this does give some idea of the wage level, account must be taken of the fact that throughout table 4 the percentage of European female labour is continually increasing, this does tend to bring the average per employee to a lower figure than would have been the case had the ratio of male to female labour remained the same.

In connection with the cost of materials used, it may be seen by a study of table 7 that the value of South African materials used in the footwear trade during this period, far exceed the value of the imported material used. The fact that the percentage of imported material used to the total used dropped from 31 to 24% could not be put down to an improvement of South African leather as compared with overseas leather, the cause for this drop in imports is probably due to the usual difficulties which any industry importing materials meets with during war time. Table 8 shows that the value of articles manufactured in the footwear industry almost doubled itself during this period. It must be remembered when studying this table that the prices went up considerably during the war, with the result that the increase in volume produced would not be nearly as great as the increase represented by value.

Unfortunately in table 9 figures are available for only two of the war years. It may be noted, however, that there is a fairly substantial increase in the number of boots and shoes produced. In the slippers production there is a very remarkable increase. The volume increased by almost 200% while the value increased by almost 400%, giving some idea of the rise in prices, but at the same time something must be allowed for the fact that a better and more expensive type of slipper may have been produced in the latter year. A very good indication of the rise in prices is given in the section dealing with Veldschoen. Here it may be observed that although almost 75,000 pairs less were produced in 1917-1918 than in 1916-17, the value of the total remained the same. The fact that prices had risen so much does not mean that the manufacturer was pocketing an unusually large profit. In January 1918 the cost of living commission made the following statement after its investigation. "War or no war the prices of boots and shoes would probably have risen as there is a world wide shortage of leather. Here supplies are also difficult to obtain and can only be purchased at high and increasing costs. The position, however, is much eased by the large production of boots and shoes in South Africa". (7)

From the above facts and figures it appears thus that during this war period the South African footwear industry had gone ahead more than it has done in all the time that it has existed before 1914. The reasons, as has been said, why it had gone ahead so rapidly during this period, is because South African manufacturers found

(7) U.G. 16 - 1918, p. 10.

themselves in a better position as a result of the difficulties which a war presents to such an industry.

In the second period which will now be examined, the industry is once again operating under freer conditions, Where it is able to import as much plant and equipment, of the most modern type,as it pleases, and also in a condition where it finds the competition of foreign producers a very real factor.

It may be observed from Table 3 that the fixed capital of the industry as is to be expected during a post-war boom had expanded tremendously. At the end of the war the total fixed capital of the industry was £295,181; this figure increased to the sum of £477,375 in 1921-22. A large portion of this fixed capital consists of plant and machinery employed. It is interesting to note that much of this plant and machinery does not belong to the manufacturers. The machinery is actually rented to the manufacturers by the British United Shoe Machinery (South Africa) Ltd. Under this system a rent or royalty is paid by the footwear manufacturers to the machine manufacturers for the use of the machine. Under this agreement the footwear manufacturers cannot use the machine of another company. The lessee has to keep the machine in good order and if a spare part is required he must buy that part from the company which is lending him the machine. This is indeed a great advantage to all footwear manufacturers as they now have to spend very little money to equip their factories with machines, and also with such a system in use the manufacturer can without any considerable capital expense scrap his old equipment and refit his factory. Without such a system the manufacturer would require to provide for the replacement of worn out machinery by means of a sinking fund. The fact that this shoe machinery company has a monopoly of patents of the best machines does to some extent suggest that the benefits the footwear manufacturers derive from this scheme are not as great as they appear at first sight. The average capital per firm has risen during the course of this period, from £1688 per firm to £3236 per firm, showing that firms were getting bigger. It may also be noted from Table 4 that the total number of employees had decreased from 3399 to 3283, but that the average capital employed per employee had risen from £76 per employee to £145. The fact that there is a decrease in the number of employees and at the same time an increase in the capital employed per head, does show that the work is being done more with the aid of machinery, South African footwear manufacturers have realised that they cannot compete against the mass production methods of foreign producers if they do not employ the same amount of machinery per worker. During the period under discussion at least 28 new factories commenced operations. With trade and communications once again back to normal, and with such easy terms as those under which the footwear manufacturers obtained plant and equipment, it appears that it would not be unduly optimistic if it were assumed that these 28 factories were equipped with the best possible machinery, and that they did a great deal towards raising the capital employed per head. It is also observed that during this period the footwear industry was at one stage

stage (1920-21) actually employing so much machinery that the capital per head had risen to £161.

Table 5 also shows that the wage per employee (European) had increased from £75. to £118 p.a. and the non-European from £47 to £69 p.a. How far the increase in the European wage is due to trade union pressure and how much is actually due to an increase in efficiency is difficult to say. The figures in Table 1 show that even in 1912 the South African employees were being paid more than the same employees in England. In connection with the rise which took place in the wages of the non-European workers, this is probably due to a large extent to an increase in efficiency, as there were no non-European trade unions which could force the wages up. There were, of course, a certain number of Coloureds employed which may join European trade unions.

The increased use which has been made of machines is well represented in Table 6. It may be observed in this Table that the horse power of the engines used increased from 763 to 1258, while the cost of the fuel consumed rose from £4684 to £11,114 in these five years.

Now that the war was over, South African manufacturers could also import as much foreign leather as they pleased. Table 7 shows that during this post-war boom period the percentage of imported leather to the total used increased from 24% to 34%. The total value of South African leather used during 1921-22 was just about the same as that used in 1917-18, but the total value of imported leather had increased from £151,377 to £292,799 or an increase of about

95%. It must, however, be observed that at one stage during this post-war boom period, the value of South African leather used during the year was £805,466 which represented an increase of 66% on the 1917-18 figure, but in the same year the South African footwear manufacturers used £310,904 worth of imported leather which represented an increase of well over 100%.

Table 8 also shows up 1919-20 as the most prosperous of the post war years. During this year the value of articles manufactured reached a total of £1,674,598 which is a considerable increase over £965,550 which is the figure for the last of the war years. By the end of the post war boom period the figure was considerably less than it was for the most prosperous year.

The numbers of pairs of boots and shoes produced during this period increased. (Table 9) Here again 1919-20 was the year in which the largest number of pairs were produced. The dominating feature of this table for the second period is the way in which the production of slippers suddenly dropped. In 1917-18, 123,813 pairs were produced, but in the following year both the value and the volume dropped, to about 1/5 this figure. After that the volume of production again rose slowly, and the highest value was attained in 1920-21. As regards the manufacture of Veldschoens it may be observed that throughout this period there has been a decline in the volume of production.

In conclusion it may be stated that this post-war boom period was an extremely prosperous period for the footwear industry of South Africa. All the expansion that it wanted to do during the previous period, but which it could not do owing to war time difficulties, could be done during this period as it could now once again obtain as much material and equipment as it needed. During this period it also once again had to feel the pressure of foreign competition. This competition was to a large extent killed during the war, but now with improved equipment and methods of mass production, the foreign producers put forward a stronger case than ever before. It is worth observing that the number of manufacturing units increased very rapidly during the first two post war years, but that in the following year it actually decreased by one. The figures show that 1919-20 was the most prosperous year of this period, but even in the two years that followed when trade was not so prosperous, it appears difficult to imagine why nobody thought it worth while establishing a new firm. Owing to the fact that some manufacturers felt that the tide had turned, they probably amalgamated with other manufacturing units to form one unit, so that they might be in a stronger position when the slump actually came. The fact that the amount of fixed capital employed per head rose considerably after the most prosperous year does indicate that firms were in a stronger position, a position that was probably brought about by the amalgamation of several units.

The figures in the tables for the third period must now be examined. This period covers the post war slump, and it was a period in which many of the footwear units that were established under war conditions were tested to see whether they could really exist for an indefinite number of years and go through all the stages of the trade cycle.

Throughout this period the total fixed capital of the footwear industry did not expand. (Table 3). It must, however, be observed that the total fixed capital is made up of value of land and buildings and value of plant and machinery. The value of the land and buildings increased very little. In 1921-22 the total was £236,292 and this amount had risen to £272,000 by 1924-25. The value of machinery and plant had increased considerably from £241,083 in 1921-22 to £336,800 in 1924-25. This substantial increase during the slump was no doubt due to the fact that a large percentage of the machinery was rented and not owned.

During this period it was decided to collect the census for the footwear manufacturing and repairing units separately. Thus as from the last year of this period only the figures for the actual manufacturing units are considered, Some idea can be got of the size of the repairing units when the figures for 1924-25 are compared. In this year th there was a total of 133 manufacturing and repairing units. These 133 units had land and buildings to the value of £272,000 and plant and machinery to the value of £336,000. Of these 133 units 74 were manufacturing units employing land and buildings to the value of £207,000 and plant and machinery to the value of £327,119. These figures do show clearly that the repairing units must have been very much smaller than the manufacturing units.

Table 4 shows that manufacturers adopted a very conservative policy during the slump. The number of employees increased from 3283 to 4417 but at the same time the capital employed per head fell off from £145 per head to £121 per head, showing that manufacturers were very reluctant to erect new buildings. (Table 3 shows that plant and machinery did increase considerably). Table 5 also bears the signs of a heavy depression. The European wage during this period fell from £118 p.a. to £105 p.a. The non-European wage on the other hand fell only from £69. to £67 p.a. This small fall as compared with the European fall is probably because the non-Europeans had no system of collective bargaining which could force up wages during the boom period.

It is again well illustrated by Table 6 that the slump did not affect the footwear industry by preventing it from increasing the number of machines used. Here it is seen that the horse power of the machines used increased from 1258 to 1711 by the end of the slump period. The cost of fuel used by these engines increased from £11,114 to £17,106 by the end of this period.

Throughout this period of depression the value of both South African and foreign materials used increased. (Table7) but it is also to be noted that more and more use is being made of imported material. The percentage of imported material used to the total used increased from 34% in 1921-22 to 42% in 1924-25. The total value of articles produced during this period did increase, although the increase for the latter years was very slight (Table 8).

It may well be observed what effect the depression had on the manufacture of footwear, Table 9. During this period the production of boots and shoes actually increased by over a million pairs. The total value of the boots and shoes does show that the price fell slightly. The first year in this period seems to have been a very good year in the manufacture of slippers, but after that production figures fell again. The decline which has been going on in the production of Veldschoens suddenly stopped and production figures showed an increase in production. The reason for this change is probably because during a depression people cannot afford to buy as many boots and shoes as they were in the habit of buying in previous years; thus they decrease the demand for boots and shoes and increase the demand for Veldschoens, which is a cheaper article and which will probably give just as long service as the shoes they were previously buying.

The third period may thus be considered one in which trade was very slack. Manufacturers were not keen to extend their units as they did not know how long the depression would last. The number of establishments actually decreased from 148 to 133, showing the number which were forced out of business by the depressed state of the trade, but at the same time the depression is the time when manufacturers are most willing to amalgamate and so prevent closing down. It is therefore felt that there were probably several amalgamations of firms at this time, thus enabling those who have amalgamated to be in a stronger position and so stand up to the depression for a longer period.

The years which lay ahead of the footwear industry at this time were again years in which it was able to develop itself. Trade conditions throughout the world improved after 1925, and with the prospect of still better years ahead, manufacturers sunk more and more capital into their businesses, hoping to capture still a larger portion of the market, and in return receive increased profits for their additional efforts.

During this period the figures show an increase in the amount of fixed capital employed (Table 3). An increase which is not great and rapid, but rather a slow and steady one. It must, however, be observed that more fixed capital was employed during the years 1927-28 than was employed at the end of this period. At the same time the number of employees increased (Table 4). Also here 1927-28 is the peak year.

A sure sign of the prosperity in the industry is shown by Table 5. The wages per employee increased from £105 p.a. to £129 p.a. for Europeans and for non-Europeans it increased from £67 to £84 p.a. Note that the rise in wages for both European and non-European has been steady throughout this period. Further proof of increasing prosperity is seen in Table 6. The total horse power of engines employed increased from 1711 to 2279 while the value of fuel consumed by these engines decreased from £17,106 to £16,951. This fall is no doubt due to a decrease in the price of fuel, or it may be that as the old engines wore out new engines consuming less fuel or less expensive fuel were instituted in their places.

It is with regret that it is observed from Table 7 that throughout this period there is a continuous increase in the percentage of imported material to the total material used. There is in this period a steady increase in the value of South African material used, but this increase is exceeded by far by the very rapid increase in the value of foreign material used. Table 8 also shows a steady increase in the value of finished articles produced. It is interesting to note from this table that the percentage of the total value of the articles represented by the "value added to materials by manufacture" is remaining fairly constant.

For this period Table 9 shows a constant increase in the production and value of boots and shoes, slippers and veldschoens. It may, however, be observed that the percentage increase in Veldschoens is much larger than the increase in the production of boots and shoes and slippers or stated in another way it may be said that the increase in cheap utility shoes is greater than the increase in expensive shoes or luxuries such as slippers.

The discussion on this period may be concluded by stating that it was a period in which general all round progress was made in the footwear industry. Althogh progress was made during this period it appears that the industry as a whole has not gone ahead as much as it was expected it would. When an examination was made of past blue books and select committee reports, one very interesting statement in connection with this particular period was found. (8). The following were the reasons given in this statement why the footw ar industry was not doing as well as it ought to.

(1) There has lately been repeated increases in the wages paid. This naturally has made working conditions in

(8) U.G. 18 - 1930 page 17

in the industry very difficult. Above this difficulty competition has never before been so keen. The imports from overseas had increased immensely.

"During 1927 the local industry found itself facing severe competition from an unexpected source. Czecho-Slovakia, which had exported only 7847 pairs valued at £4299 to the Union in 1925, increased her exports in 1926 to 24,889 pairs valued at £10,923 and in 1927 to 72,897 pairs valued at £26,073. In 1928 the imports of boots and shoes into the Union from this country totalled 196,172 pairs valued at £65,846 while in 1929 300,867 pairs were imported valued at £94,168. This great increase in the importation of footwear from Czecho-Slovakia had been brought about by the development and extension of footwear production at Zin, Czecho-Slovakia, by Messrs. T. & A. Bata. This firm had risen in a comparatively short time to being the largest producers of boots and shoes in Europe. By means of an amazingly efficient organisation of production in all its branches, this firm was able to sell at prices which took its products in spite of all tariff barriers, all over the world." (9)

(2) It seems to be the general opinion among manufacturers that retailers are earning too large a profit. The government has been asked to investigate this matter.

(3) Prices of raw materials fluctuate considerably and cause an uneven flow of business. They are now, however, fairly firm at a level about 15% above the previous year.

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(9) South African Journal of Economics Vol. 3 1935, p.535

These, it is felt, are the 3 main reasons why the South African footwear industry has not progressed as much as it should have during these years. It may well be observed that during this period the number of manufacturing units actually decreased from 74 to 57, showing again that shut downs have been frequent. The very fact that there is actually an increase in the fixed capital invested does, however, indicate the probability of the amalgamation of individual units during this period. In connection with this point, it is interesting to note from Table 2A that at the end of this period 75.6% of the total employees of the South African footwear manufacturing units were employed in factories that were employing more than 101 hands.

When these tables were divided into periods, it was intended that the fifth period should cover the years of the depression. Unfortunately the Union government only collected statistics for the last two years included in this period.

It may be observed that during this fifth period the fixed capital employed increased from £614,566 to £814,004 (Table 3). It is also observed, however, that the remarkable feature about this increase is that whereas in the previous depression the machinery and plant increased much more than the land and buildings, in this depression the position is reversed, and the land and building increased much more than plant and machinery. The only explanation that can be offered is that the manufacturers did not expand their land and building sufficiently during the prosperous years because at the high prices ruling it was too expensive to do so, so instead they built up reserves and purchased the required land and building during the depression when it was possible to obtain it at a much lower price.

Table 4 shows that the total employees increased by 50% during this period from 5017 in 1929-30 to 7573 in 1933-34. The capital employed per head fell from £122 to £107, showing that as the number of employees increased more work was being done by hands and less by machines. Both the Europeans and the non-European wage fell during the depression. The European wage decreasing from £129 to £109 p.a. and the non-European wage decreasing from £84. to £81 p.a. Here again it is worth observing the actual fall in the two sets of figures.

The horse power of the machines used rose more during this period than it was expected it would (Table 6). The actual increase in horse power being greater than the increase for the previous boom period. It is as well to observe that the increase in the money value of these machines for this period is not very much more than half the increase of the machine value for the previous boom period.

During this period the value of South African materials used in the process of manufacture actually fell from £693,074 to £618,253 (Table 7) while the value of imported material rose from £601,081 to £820,094. The percentage of imported material used to the total used rose still further from 46% to 57%. The probable explanation for this big rise in percentage of imports is that the depression hit the foreign countries harder, with the result that prices fell more than they did in South Africa.

Table 8 again shows an increase in the value of articles manufactured. It seems, however, that this increase mainly came about during the last year of this particular period, when the worst of the depression was over, and trade on the general road to recovery.

The number of pairs of boots and shoes produced during this period increased tremendously (Table 9) from 3,510,589 in 1929-30 to 6,201,048 in 1933-34. Note, however, that the total value of the boots and shoes produced did not by any means increase proportionately; in 1929-30 the total value of 3,510,589 pairs was £2,081,749 but in 1933-34 the total value of 6,201,048 pairs was only £2,489,769 showing a considerable fall in the price per pair. A similar reduction in price per pair is evident in the slippers trade. In 1929-30 the total value of 20,235 pairs was £7,276 but in 1933-34 the value of 422,656 pairs (note the terrific increase in production) was only £44,519. As is to be expected the production of Veldschoens show a decrease i ~~decrease~~ in the number of pairs produced. The number of pairs of Veldschoens produced decreased from 610,121 pairs in 1929-30 to 543,975 pairs in 1933-34. The value of the total production decreased from £191,502 to £158,084. After examining the production for boots and shoes and slippers this decline in the volume of Veldschoens produced was expected. The volume of production for boots and shoes and slippers increased beyond all expectations. With this increase in production came a fall in price. Consumers now diverted their demand from the cheap utility shoes (Veldschoens) to cheap fancy shoes.

The great increase in the demand for South African boots and shoes, and slippers, during this period is no doubt to some extent due to the national advertising campaign which was started in 1931 with the purpose of removing the prejudice the public had against South African produced shoes. Eighteen firms co-operated and organised this campaign, nine of these firms were in Port Elizabeth. The administration of the campaign "was in the hands of a committee of Port Elizabeth footwear manufacturers and tanners. It was the South African footwear as such that was advertised and not any individual brand. South African leather also received special attention in a series of advertisements. The whole campaign was carried out on a bilingual basis." (10)

During this period the number of individual establishments in the South African footwear industry actually increased from 57 to 74. This increase in the number of manufacturers does to some extent explain how the industry managed to expand its output so much in the last year of this period. Table 2a also shows that by this time 80.3% of the total employees of the South African footwear industry were being employed in establishments employing more than 101 hands.

Let the figures which fall into the sixth period now be examined and an attempt be made to trace the development of the South African footwear industry. This period covers all the years from just after the depression of the early thirties, up to the time of the commencement of world war 2.

During this period the fixed capital of the industry increased from £814,004 to £1,060,105. It is worth noticing that the main increase was in the plant and

(10) S.African Journal of Economics Vol.3 1935 p.539

machinery division. The average capital employed per individual firm was at the beginning of this period about £11,000:by the end of the period it had increased to an average of £12,772 per individual firm. This is in harmony with the figures of Table 2A. In 1932-33 80.3% of the total employees of the industry were employed by firms employing more than 101 hands. In 1936-37 this percentage had risen to 86.5% of the total employees.

It is also to be observed that throughout this period there has been an increase in the number of employees, an increase from 7573 to 10555. It must, however, be observed that although there has been an increase in the fixed capital employed, the fixed capital per employee actually decreased during this period from £107 per head to £100 per head. It must also be observed that at one time during this period it was actually as low as £97 per head (Table 4).

Table 5 again proves the old theory that as the capital per head falls more labour is employed to do the work the machines had previously done. To do this work they require more skill than they would need if they merely had to attend to the machines. With increased skill goes increased wages, and so in this period it is found that the wages of the Europeans had risen from £109 p.a. in 1933-34 to £132 p.a. in 1938-39. The non-European wage on the other hand had risen from £81 p.a. to £82 p.a. in 1938-39. The reason why the increase is so small is probably because the non-European labour is being used on unskilled jobs. Also in connection with this question it is interesting to glance at Table 2b and observe that throughout the years that have been discussed in this chapter the percentage of non-Europeans employed to the total employed has been decreasing. The only exception to this rule occurs in the last two years mentioned in the table, where there is again a slight increase in the percentage of non-Europeans employed.

The horse power of the machines employed increased considerably during this period. (Table 6). The increase in the value of plant and machinery is of course to be expected during prosperous times, as the actual cost of installing an additional machine is very little to the manufacturer under the leasing system. It is as well to observe that the cost of the fuel consumed by the machines increased proportionately.

It is with pleasure that the large increase in the value of South African material used in the process of manufacture is observed. The percentage increase in the value of imported materials used, however, is about the same. Actually for most of the years during this period the percentage of imported materials used had actually fallen, but in 1938-39 it was the same as it was in 1933-34.

The total value of the finished articles produced also increased by over 50%, and their volume by about the same amount. Observe also that there has been no further marked fall in the price (Table 9). The output of slippers increased by well over 200% and their value by about the same amount. In this case there has been a certain reduction in price. The Veldschoen trade was also prosperous and even here production increased from 545,475 pairs in 1933-34 to 720,330 pairs in 1938-39.

It may confidently be said that this has been one of the most prosperous periods the footwear industry of South Africa has ever had. The number of producing units increased from 74 in 1933-34 to 83 in 1938-39. This increase does show that there was plenty of work for everybody throughout this period; whether this was still the case just before the war is difficult to say. There was a minor setback in 1938, but the figures do not show any effect that it might have had on the footwear industry. The number of employees did not decrease, although short time was worked. There was, however, a feeling at the time that supply was threatening to exceed demand. "The opinion is held in many quarters that there are more factories in the country than are necessary to supply its needs. It is hoped that the number of factories will not increase for some time, at any rate not until the increase in consumption following naturally on the growth of the Union's population has restored the balance between production and consumption." (11)

The seventh and last period covers a number of the war years. Unfort nately it has been impossible to obtain statistics for all the war years. The Director of Census states that they are not available yet.

Table 3 shows that there has been a large increase in the value of fixed capital employed. This increase is due to a considerable increase in both the land and buildings and the plant and machinery values. It is to be observed, however, that the increase in the value of the land and buildings is larger than the increase in the value of the plant and machinery.

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(11) Industrial and Commercial South Africa Jan. 1939,p.19.

The number of employees also show a considerable increase. From 10555 in 1938-39 to 13225 in 1942-43, Table (4). The same table shows that the capital employed per employee has increased to £105. per employee by 1942-43. The rise is very small. It is, however, to be observed that there has been considerable fluctuations during the years between these two dates.

There has been a considerable increase in the wages paid to both European and non-European employees. The European wage increasing from £132 to £187 p.a. and the non-European wage from £79 to £126 p.a., the latter figure being about the same as that representing the European wage in the pre-war years. The increase in wages in both these cases is probably not due to a big increase in the efficiency of employees, but to a rise in the cost of living which is always very noticeable during a war.

The horse-power of the engines employed has also increased from 5292 to 6601 horse power. The cost of fuel used by these engines increased from £26,026 to £32,618 showing that there has been very little increase in the cost per unit of the fuel used. (Table 6).

The effect of the war on the materials used in the footwear industry is shown by Table 7. The value of South African material used increased from £935,280 in 1938-39 to £2,868,167 in 1942-43. The value of imported material used on the other hand rose from £1,213,626 to £2,373,952. When the actual rise in price of these materials is taken into consideration, one might quite easily come to the conclusion that there might actually have been a decrease in the volume of imported material used although there is an increase in the value of this material. It is to be observed that only 45% of the value of the total material used in 1942-43 was of foreign origin.

A study of the figures representing this period in Table 8 also reveals a big increase in the value of the finished articles produced. Here, however, it must also be borne in mind that the increase in volume will not be as large as the increase in value owing to the rise in prices.

Table 9 bears out clearly what has been said in the previous paragraph. The volume of boots and shoes increased from 9,837,922 pairs to 11,739,721 pairs in 1942-43 and 14,027,000 pairs in 1945, while the value increased from £3,675,015 to £7,935,039 in 1942-43. The figures for the production of slippers increased from 1,396,300 to 1,524,780 pairs in 1942-43, the value of these slippers increased from £132,757 to £314,027. Observe that the volume had increased to 1,872,000 pairs by 1945. The figures for the Veldschoen trade also shows that the value of Veldschoens increased much more than the volume did. It must, however, be observed that the main rise in prices only came about in the last two years for which figures are available.

During this period the number of manufacturing establishments in the footwear industry increased from 83 to 99. The war gives an industry such as the South African footwear industry a great deal of artificial stimulation, as it does to a large extent kill all foreign competition. When the industry as a whole finds itself in a more favourable position, the establishment of a number of "mushroom" factories usually takes place. These factories can very often exist only under such wartime conditions. On the other hand, if an industry requires a large amount of imported material, the war might force this particular type of industry out of business, as it might now be unable to obtain the materials it requires in sufficient quantities. Whether in the first year of the war a number of factories had to go out of production owing to the shortage of material required from abroad is difficult to determine, but the fact that the fixed capital employed during this year increased (especially the land and buildings) does suggest that a certain number of amalgamations may have taken place.

The South African footwear industry has gone ahead during this period. The industry has certainly created a name for itself in the production of footwear required by the Allied armed forces. Whether it will be able to keep that which it has gained during the war years, and later even extend its markets, will to a large degree depend on how its prices and quality compare with those of the foreign producers when once again the world's trading conditions are normal. If it wants to keep pace with overseas producers, it must indulge in research, not only to improve the quality of the footwear it produces, but also the most efficient methods of attracting the attention of the consumer must be studied.

(1) U.G. 17-1920 page 20

(2) U,G. 9-1913 "Summary of the evidence given before the commerce and industries commission."

(3) Laites commercial blue book for South Africa 1914 p.511.

(4) South African Journal of Economics vol. 3 1935 p. 523.

(5) The following were the books used for the construction of the tables in this chapter :

(1)	U.G. 48-1921	page	67
(2)	U.G. 40-1922	"	37
(3)	U.G. 14-1924	"	38
(4)	U.G. 41-1924	"	44
(5)	U.G. 41-1927	"	50
(6)	U.G. 32-1928	"	50
(7)	U.G. 51-1928	"	52
(8)	U.G. 18-1932	"	46
(9)	U.G. 44-1930	"	47
(10)	U.G. 33-1931	"	38
(11)	U,G. 31-1935	"	46
(12)	U.G. 34-1936	"	47
(13)	U.G. 30-1937	"	46
(14)	U.G. 24-1938	"	46
(15)	U.G. 39-1939	"	46
(16)	U.G. 21-1941	"	53
(17)	U.G. 20-1945	"	75

(18) Stoker - Facts and figures of South African footwear.

(19) U.G. 20-1946 page 69

(6) Office of census and statistics apecial report No.137 p.6

(6a) " " " " " " " p.4 "

(7) U.G. 16-1918 page 10

(8) U.G. 18-1930 page 17

(9) South African Journal of Economics vol. 3 1935 page 535

(10) " " " " " " 3 " p.539

(11) Industrial and commercial South Africa Jan.1939 p.19.

In the first half of this chapter the main theoretical arguments in connection with the size of the unit and the optimum size of the firm will be considered. In the latter half an attempt will be made to discover the size of the unit and the optimum size of the factories in the South African footwear industries.

When a factory is erected there are several facts which by their influence on the entrepreneur(s), play a very important role in the size of the establishments. If it is a one man concern the dominating feature is usually the capital required. Very few people are in such a fortunate position as to establish a factory which requires a big sum of money for both fixed and floating capital. If it is a company with hundreds of share holders who are willing to furnish the concern with capital, this financial feature loses its importance. Other features which will influence the size of the manufacturing unit are such matters as, the size of the potential market, and the location of the market in relation to the location of the factory. In connection with the location of the manufacturing unit such details as the cost of raw material at nearest source, cost of transport from source to factory, wages and fuel costs, and costs of transport to market must be considered. If it is a highly mechanised factory the availability of repair shops must also be considered. The amount of labour available in certain areas is also very important, and so are the banking facilities which enable the firm to obtain a loan when it requires one.

These factors then influence the entrepreneur before he has started production. In connection with the actual producing the manufacturer soon realises that the amount he produces has a decided influence on the cost per unit of the article he produces. When his manufacturing unit is of such a size that its cost of production per unit is as low as it possibly can be, then it is said that his firm is optimum size, meaning by that, that his firm is of the most economical size from the cost of production point of view. If he expands or contracts the size of his firm, his cost of production must rise. How then does a manufacturer arrive at this optimum size?

There are five main factors which influence the optimum size of the firm. In fact it may be said that any one firm may have five different optima to which it may grow or contract,as the case may be. To be of the most efficient size, it must be of such a size where there is within it a compromise between these different optima. The following are the five different forces each making for a different optimum size.

(1) Technical forces making for a technical optimum size.

(2) Managerial forces making for a managerial optimum size.

(3) Financial forces making for a financial optimum size.

(4) Influences of marketing making for an optimum sales unit.

(5) Forces of risk and fluctuations making for a position where the firm will have the greatest chance of survival.

Let each of these different optima now be discussed in turn, and it be seen how each of them affect the optimum size of the firm.

(1) Technical optimum size. In considering the optimum size from the technical point of view, the chief consideration should be, economies achieved by specialisation and division of labour. A large firm has an advantage over a small firm here as it is able to lend itself more to specialisation. It can employ a large number of workers to take an article through the different processes; it can thus allow its workers to specialise more than would have been the case if it could only employ say half the workers it was employing now. As the employees specialise, they must naturally become more skilled than the employees of another firm where they are required to handle the product for more than one stage during the process of manufacture. The outcome of this specialisation is greater efficiency, and with greater efficiency must come, to some extent, a decrease in costs. Also, if there is division of labour the management will find it easier to fit each worker into the job for which he is best suited. There is thus less chance of misfits occurring in the factory. Again, if an employee does a certain job, and none other, and has a machine assisting him to do this particular job, a lot of time is saved if that employee stays with that machine all day, and does not have to change over from one machine to another, or has to adjust the machine to do a different job. Specialisation and division of labour do to some extent lead to new inventions. An employee is much more likely to discover some labour saving device if he does

the same job all day, than he would if he was continually changing from one job to another.

The general movement towards greater specialisation and division of labour has caused a certain amount of unemployment, especially among the older employees. These employees usually have a certain amount of responsibility such as being the chief wage earners in a family, with the result that they cannot afford to undergo an apprenticeship period, as their wage during this period is too small to keep the family alive. On the other hand, they cannot find employment without undergoing this apprenticeship period, as they have not got the qualifications such a job requires. They thus have to do unskilled work at a much lower wage. Even here they find it difficult to obtain employment in South Africa, as most of the unskilled work is being done by the non-European population. The only important exception to this is probably the South African Railways.

Also, in connection with the technical optimum the possibility of replacing men by machines must be considered. If the firm is a big producer it will be able to instal machines that cannot be installed by smaller firms, owing to the fact that these smaller firms have not got the available capital, and also have not created a demand large enough to absorb all that such a large machine could produce. Before a firm which is capable of installing such a machine does instal it, it must consider whether the cost of the machine, plus the running costs of the machine, is less than the wages that would have been paid to employees had the machine not been installed. If the cost of the machine is less than the sum of the other two, then it will be worth while to employ machines instead of men. The danger of installing a machine is that it may suddenly become obsolete soon after it has been installed, owing to the invention of a new machine which reduces the costs still further than the one in use, and which is capable of forcing the producer who employs the old machine out of production. He thus has no alternative but to scrap the old machine and instal a new one, even if it does mean heavy capital expenditure.

The power required for running these machines can also be got more easily by a large firm than a small one. The large firm will probably require a great deal of power in which case it will be able to operate its own power station, or if there is a large public power station close at hand, it can obtain the power from this company at a reduced rate, owing to the fact that it will use such a large quantity.

A large firm also has the advantage that with its numerous employees and machines, it stands a better chance to avoid bottle necks. If an article passes from Department 1 to Department 2, to Department 3, and so on, then the production must be so balanced that if Dept. 1 employs 50 workers, and these 50 employees produce 100 units per hour, then Dept. 2 must employ so many workers as are able to cope with 100 units per hour, or if Dept. 1 employs 10 machines producing 100 units per hour, then Dept. 2 must employ enough machines to cope with 100 units per hour, and Dept. 3 etc. must in turn employ enough machines or workers to cope with all the Dept. before it produces within that particular time.

It seems that from the technical point of view the optimum size of the firm is large. It may, however, be stated that the technical optimum of a firm is large when the product of that firm is large, e.g. ships, or when the product is very complex, such as watches, but where the product is of a simple nature, such as the production of pins, it is quite likely that the optimum from the technical point of view will be small. It may, however, be observed, that even where the technical economies cease to exist in large firms, it is unlikely that it will lead to any disadvantage. (1)

(2) Managerial optimum unit. The perfect manager of an establishment must have at least three outstanding qualities. They are (a) he must be able to organise, (b) he must know a great deal about the technical size of the business, and (c) he must be at home when discussing the business and its financial requirements. One man very seldom possesses all these qualities. It is therefore thus found that in a small business which can only afford one manager, some sides of the business are not being run as efficiently as they could be. In the case of a large firm the situation changes. The business can afford to employ a number of men, each of whom is an expert in one particular branch. The position is thus found where the financial and technical advisers are totally different men to the one actually doing the organising. Also in a small firm with one manager, he may have to do certain unimportant jobs which would be done by someone else in a

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(1) E.A.G.Robinson - Structure of competitive industry, pages 25 - 35.

large firm. The fact that the manager has to do these odd jobs does involve a certain amount of waste of high grade labour.

In the managerial as in the technical department, specialisation and division of labour are key words. The advantages of such specialisation are two. In the case of people such as managers, who are considered high grade labour, they are confined strictly to the actual management of the business. Also, in the case of the worker, he becomes a specialist in his own particular task.

From the managerial point of view the optimum size of the firm again tends to be large. As the works expand the managing staff also expands, but in actual fact it is found that the management does not expand to the same degree as the rest of the firm. If the size of the firm increases and the number of employees increase from, say, 1000 to 2000, it will be found that the actual managing body will probably only increase from 10 to 15, showing that big firms are more economical than small ones, from this point of view. Even when the ratio of the number of workers to the number of the managing staff is increased, it is still found that in larger firms the management plans with greater skill and efficiency the general running of the factory than they would do in the case of smaller firms.

Even in the managing side of the firm it is found that there is a certain amount of displacing of men by machines. In recent years the number of machines employed in connection with the bookkeeping side of the firm has increased considerably. These machines can do the books of the firm with great speed and accuracy. In fact, one machine can take the place of several accountants. Here again, owing to the high purchasing price of these machines, it appears that only the large firms can find these machines within their range of expenditure.

When the managerial size of the firm grows beyond a certain size, it ceases to increase the economies it had attained by its earlier growth. There is thus an upper limit to the size of the firm from this point of view. As the firm grows, its number of debtors and creditors will naturally increase. It will then be found that even with the greatest possible specialisation and division of labour, it does not derive any economies if its growth is beyond a certain point.

The problem of co-ordination within a big firm is indeed a difficult one. It must be seen that all the departments of the firm are in harmony with each other. As the firm grows, the problem of keeping the departments in harmony with each other grows with it; in fact, it is just about impossible to obtain perfect harmony within a very big firm. The maximum size to which a firm can eventually grow will depend on the co-ordination of the individual departments and the individuals within them. To achieve the best form of co-ordination and the most efficient form of management, a number of systems have been devised. Let some of these systems now be studied.

(1) Military or line type. In this type of organisation a general manager takes all the responsibility and has all the authority. The result of this is that the executive places too much emphasis "on the

phases of the business with which he is particularly familiar, with the resultant lack of development along other lines"(2). This type of organisation, because of its simplicity, is found in a great many small and growing businesses.

(2) Functional type of organisation. This type of organisation was invented by F.W.Taylor. In it there are a number of managers, each of whom is a specialist in his own department. An employee thus has as many bosses as he has facets. This form of organisation has met with a certain amount of success. "The lack of definite allocation of responsibility is one of its worst faults."(2) It is found to work best in a factory where there are a limited number of articles produced. It has an advantage over the previous system as one man now has all the responsibility if anything goes wrong, there is a certain amount of division of managerial responsibility.

(3) Line and staff type. Again, in this type of organisation, a single executive has all the authority. There are a certain number of officers known as specialists. They act on a pure advisory basis and cannot issue orders to workers. This type of organisation is a modification of the Military or line type, and functional type of organisation just mentioned.

"Acquaintance with modern management discloses the fact that all managerial activities can be divided into line activities and staff activities. Staff men analyse,

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(2) All information and quotations in this section in connection with types of organisation have been taken from "Business Management" - P White. pages 85-92.

initiate, plan and advise, they tell how the work should be done. In the line and staff organisations they are manifestly specialists, such as engineers, inspectors and technicians of various sorts."(2)

The advantage of this type of organisation is the speed with which action can be taken. It also contains the advantages of the military and functional types of organisation, while doing away with their disadvantages at the same time.

"The greatest advantages of any type of organisation cannot be repeated unless its members have the organisation view point. The essence of this view point is to see things in their related positions. Through increasing knowledge and experience comes the power to associate, discriminate, and to differentiate. Tasks no longer appear isolated, but grouped. The organisation view point is common to those trained in scientific method. Such individuals do not fail to see details, but they see them only as components of a whole."(2)

In connection with this management problem, a small firm is not completely without an advantage over a big firm. The main advantage of the small firm is the speed with which it can make decisions. If the firm suddenly has to decide whether it has to change its plan of production, or if it suddenly has to decide whether it should take a risk and change the shape and appearance of its product, and so gain by increased sales, or lose everything, then this decision will be able to be taken with much greater speed

(2) All information and quotations in this section in connection with types of organisation have been taken from "Business Management" - P. White, pages 85-92.

if it is a one-man concern, than would be the case if the business belonged to thousands of shareholders and a board of directors who will have to discuss the problem in the greatest detail. Another advantage that a small firm has, is that it usually belongs to the people who run it, with the result that a much greater effort will be made to ensure that the business is run efficiently.

To close the discussion on the managerial optimum, it might be added that the optimum from this point of view depends to a large extent on the man or men at the head. If he or they have a flare for organising and financing, and a sound technical knowledge which puts them above the average man, then the managerial optimum of the firm they are managing will be bigger than the managerial optimum of the firm managed by men of average ability and normal personality.(3)

The Financial optimum. In any manufacturing concern there are two types of capital; fixed capital and floating capital. Its fixed capital consists of its land and buildings and plant and machinery. Its floating capital, on the other hand, will be used to buy raw materials and pay wages of employees, etc. The fixed capital invested, then, decides the actual size and value of the land and buildings, and the number of machines employed. Therefore, if entrepreneurs have a considerable amount of capital available for a long term investment, the actual size of the firm will be large, but the amount this firm produces will depend on the floating capital. Let an

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(3) E.A.G. Robinson - Structure of competitive industry pages 36 - 53.

imaginary example of a firm in the boot and shoe trade be taken, and let it be assumed that this firm has a floating capital of say £50,000. During the twelve months of the year the firm will not require the same amount of floating capital continually, for production will not be the same each month of the year. During the slack months of the year the firm will require, perhaps, only £40,000, but during the busy times it might require as much as £80,000 or £100,000. The question is whether this £50,000 that is available is enough floating capital. The £50,000 will be sufficient if it is able to borrow the additional £30,000 or £50,000 during the busy months when it requires it. If it cannot borrow the additional money, it will have to have £80,000 or £100,000 for its floating capital so that it can cope with all its business during the busy period, or else it will have to cut down the amount of business it does during this period so that £50,000 will be sufficient floating capital. Whether the firm will be able to make a short term loan for the additional money it requires will depend on such matters as the general credit reputation and financial stability of the business. If the firm can borrow this additional money it will gain not only by a proportionately greater return on the capital actually invested, but will also gain because its costs of production per unit will be decreased as a result of the increased production up to a certain point.

If one considers the issuing of shares as a form of borrowing, then the lending of money also affects the financial optimum of the firm in that the size of the firm will depend on the number of shares that the public are willing to buy. When considering the potential demand for the shares, such matters as the type of business to be opened must be considered, and an even more important question is the general level of the business at the time when the shares are being issued. It will be extremely difficult to float any type of company during a depression when the general level of business is very low.

The amount of capital available at the beginning does then to some extent influence the size of the firm, but in the case of a business that is not a joint stock company the amount of capital available may also influence the type of business to be started. A man may have £5,000 at his disposal. With this he may be very keen to start a textile factory, but £5,000 is not nearly enough capital for a textile works. He will thus have to decide on something smaller such as a tannery or footwear manufacturing business instead. Even in the case of the potential capital available for a joint stock company, the type of business may have a decided influence on the amount of capital available. People may be very willing to take up shares in a gold mining company, whereas they might not be nearly as willing to take up shares in a transport company which is being floated at the same time. If the business is started by one man on a small scale, it might later expand and become a joint stock company. Whether it will expand will depend on whether it has made a substantial profit during the past years of its life. Profits made are the best possible proof to a potential buyer that the shares of the business are a sound investment. If the original founder of the business does not wish to turn it into a joint stock company, he may expand it himself by ploughing back part of the profits he makes every year.

If a man wants to expand his business faster than his accumulation of profits will allow him to do, then he could attempt expanding with the aid of borrowed money. In the past, British and South African banks have adopted a rather conservative policy and have been unwilling to lend money to industries on a long term basis. The result is that in England the industries have borrowed most of their money on the London money market. There is, however, definite proof that industries have in the past failed to expand as much as they ought to have done, owing to the difficulty of obtaining the necessary capital. In South Africa the Industrial Development Corporation has been established to assist industries. This corporation is prepared to investigate new propositions which are brought to its notice. It will also, if asked to do so, investigate into the circumstances in which an existing industry finds itself. If the investigation proves that the industry does require financial assistance for expansion, and that the expansion is justified economically, it will assist such an industry to undertake the desired expansion.

A large firm has the advantage over a small one that it usually finds it easier to borrow money. The name of the large firm is well known to everyone, with the result that it finds it much easier to raise the required capital. It may thus be said that from the financial point of view the optimum size of the firm is large.(4)

The optimum sales unit. Efficient buying of raw materials is as important to any firm as efficient methods of production. The cost of the raw material to the manufacturing unit has a decided influence on the price of the finished article. When a large firm buys raw materials, it is said to have a certain advantage over the buyers of smaller firms requiring less raw materials at the time. The main advantage is that in buying such big quantities at a time, the seller of the raw material is able to quote a lower price per unit of material than he would be willing to quote if a smaller quantity were bought. The seller of the raw material also has to pay more attention to a larger order because, unless he has a complete monopoly, he stands to lose this customer if the customer finds that he can obtain this material at a lower price elsewhere. He also has to give prompt delivery if such is required by the buyer. A large firm also has the advantage that it can afford to keep expert buyers who have a sound knowledge of marketing conditions throughout the year, and so is able to buy most of the materials that the firm requires for the year, at a time when prices are at their lowest.

Large scale buying is also subject to certain disadvantages. The main drawback is that even expert buyers are liable to make mistakes. A large buyer may misinterpret marketing conditions, and buy the firm's needs for the year when prices are not at their lowest,

(4) E.A.G.Robinson - Structure of competitive industry, pages 54 - 63.

Or a buyer may buy a certain quantity of material which is not quite the thing that the firm wants. In the case of the smaller buyer, not such a large quantity of material would be bought, so that the result of bad buying would not be so drastic. If he is a large buyer, he plays a very dominating part in the market for a particular product: he may by his misjudgment upset the equilibrium of all the smaller firms which also buy that particular product.

If a buyer buys a large quantity of raw material, it may be assumed that he has done this in order to enable his firm to produce a large number of the finished articles in a fairly short time, or at any rate in such a time as the firm of the smaller buyer would require to produce less of the same article. The large quantity of raw material may have been bought because of favourable buying conditions. If a large number is produced, a large number must be sold in the same period; this in turn requires a large market. A large market may be created over a number of years by a large number of satisfied customers, but usually a large market is created in a much shorter time by an advertising campaign. To do a lot of advertising costs a great deal of money, which a big firm would be able to afford more easily than a small one. It is generally considered that advertising costs are part of the cost of production, which means that advertising costs actually increase the price of the article. At the same time, with increased production greater specialisation and division of labour is brought about, which in turn will probably lead to a fall in costs. The result will probably be that the final price of the article of the firm which has done a great deal of advertising is still less than the price of the small firm which has been unable to do much advertising, and so has a much smaller market. The question now arises whether advertising is wasteful or not. Would it not perhaps be better to let the satisfied customer advertise the article and so increase the sales over a number of years. The solution to this problem appears to be the following. If one firm by means of its advertising it merely inducing the consumers to buy its products instead of those of a rival firm, then advertising is wasteful, as it is not creating a new demand, but is merely transferring demand from one producer to another, but if the advertising campaign is launched in a field where the product it is advertising is not consumed at all, and as a result of this campaign people then buy this product, then the advertising is not wasteful, as it is enabling people to spend part of their income in a way with which they were not familiar before the campaign.

Manufacturers such as those in the footwear industry sell on a large scale. That is, they sell to a large number of buyers. Where there is, as in this case, a large number of buyers, there usually must be an elaborate sales organisation in order that they may serve all the customers promptly and efficiently. The result of this elaborate sales organisation is that the sales costs are usually high. There will be a considerable gain if any large quantity of goods could be sold to one customer. A large manufacturer has the advantage over a small manufacturer that he usually holds a larger amount of stock. Out of these larger stocks he is able to fill up emergency orders immediately, whereas the customers of the smaller manufacturers will have to wait several days or even weeks. The small firm has the advantage that as its stocks are smaller, its turnover will be quicker.

In connection with the buying of raw materials, and the selling of the finished product, it is found that the smaller manufacturers sometimes buy and sell by means of one specialist. This specialist buys and sells the raw materials in such quantities that he obtains all the advantages that the buyer of the big firm receives. After he has bought the raw material, he then shares it out among the smaller buyers, giving each of them the amount he has ordered. There is also a certain amount of specialised selling, that is a specialist selling the products of a number of smaller firms. This, however, can only come about where the products are not standardised and branded. Where the products are standardised and branded, this selling of products of a number of small manufacturers by one specialist has not met with so much success as in the former case.

It is very unlikely that a retail shop selling only one particular article, say drawing pins, will ever be found. To a certain extent it is also found that manufacturers do not produce one particular type of article, e.g. the manufacturer producing drawing pins could also produce paper clips and a number of similar articles. The reason why he produces so many different articles is because the market for any one of them is limited; even if his market is fully developed, his revenue will still be on the small side. If he produces additional articles for the market, his sales expenses will hardly increase at all, but his income might easily increase considerably.

A change in the methods of marketing a firm's products must have a decided influence on the optimum size of that firm. If the firm of optimum size finds that it will now gain if it markete its own products, instead of leaving it to the wholesalers, then the optimum size of that firm will expand as it strives to obtain retail stores through which its product can be brought to the attention of the public. (5)

The effects of risks and fluctuations on the optimum size of the firm: when there is a decline in the demand for the product of a particular firm, that decline may have been brought about by one of the four following reasons, or alternatively the decline may have been brought about by a combination of some or all of these reasons. The four types of decline which a firm may experience are the following. (a) The fall in the demand may be permanent because a rival firm is making a better article at the same price, or the fall might be because the article has gone out of fashion. (b) The decline may be temporary owing to the pressure of a depression on the economic system of the country. (c) The decline may be merely a seasonal one, e.g. the sale of heavy overcoats is likely to be greater in winter than summer. (d) The decline may be due to consumers not placing their orders

(5) E.A.G. Robinson - Structure of competitive industry, pages 64-82.

in a continuous stream. Let each of the above four now be discussed in turn.

(a) A permanent decline. The reason why a manufacturer experiences a permanent decline in the demand for his product is usually because as the time passes, the products of his rivals improve more than his. The reason for this lack of improvement, is probably because it may require a lot of money for research, or because an improvement in the article will mean the introduction of new machinery into the business, which in turn means heavy capital expenditure. It is advisable for a manufacturer producing such an article that may lose its popularity, to develop another article while the first one is still in great demand, to take the place of it when its demand begins to fall.

(b) Temporary variations. These variations in demand are caused mainly by the general level of business during the depressed period of the Trade Cycle. That is, the demand has not fallen because the article has gone out of fashion, but has fallen because the consumers have not got the income to spend that they had at their disposal during the prosperous years of the cycle.

During this depressed period, the demand falls off, but it must be remembered that the demand falls off for all commodities. The actual amount the demand of any particular commodity will fall will depend on whether that commodity is an essential commodity or not. The fall in the demand is followed by a fall in the amount produced, which in turn means a fall in the amount of raw material required. The fall in the demand for raw materials will lead to a fall in their price. The question now arises whether the manufacturer should shut down his factory altogether, or not. If he shuts down, he still loses by the general depreciation of his plant and machinery. He should pay his skilled workers an allowance during the shut down, or he will probably not be able to get them when he reopens his factory in better times. If he has a loan, he still has to pay interest on this loan whether he produces or not. It is true that he will not have to buy raw materials if he shuts down altogether. If he does not produce during the depressed period, he will lose his old customers, who might want something during this period. The general opinion seems to be that it will pay the manufacturer to continue producing if he can get a price for his product that will cover his prime costs. Prime costs include wages, cost of raw material, depreciation on plant and machinery. He will thus be producing at a loss as he will have to pay all overhead costs out of reserves, or raise a loan to meet such costs. Whether the manufacturer will be able to obtain such a price, will depend to a large extent on the nature of his product, and also what percentage prime costs are of total costs of production of the article he is producing.

Throughout a depression, the demand for a product falls off, and the price of that product usually decreases. The price will continue to fall as long as supply exceeds demand. The result of this general decline in demand is that the industry has got to adjust its supply to demand for its product. This adjustment it may make in three different ways. (1) The capacity of the industry to produce may be diminished. (2) Demand may once again grow so that it equals or exceeds supply. (3) The adjustment may be made by reducing costs of production so that the demand is altered as a result of greater rationalisation. That is a lower cost of production, and thus a lower price to the consumer, which may increase the consumers' demand for the product.

During a depression some firms go out of production. The question is, which are the firms to go out of production? If perfect compeition reigned, it would be expected that the least efficient would be forced out of business by the more efficient ones who can produce at lower costs. But this is not the case in the business world. The most efficient establishments may be relatively new firms without reserves; they will thus not be able to stand as long during a depression as the older firms who have built up large reserves during the past prosperous years. A firm which is by no means the most efficient may have a certain amount of brand monopoly for its product, so it will have a better chance of survival than its more efficient rivals. The problem of which firm will survive is also influenced by the banks. The weakest firms are usually the first to find themselves in financial difficulty during a depression. At the onset of the depression, the banks will lend more freely than they will during the later years. Thus the weak firms who apply for financial aid during the early stages of the depression are likely to get a loan, whereas the stronger and more efficient firms, who have been able to do without a loan for a longer period, are likely to be refused financial aid from the banks when they do apply for it.

(c) Seasonal decline. Certain firms produce goods which are only in demand during certain times of the year, e.g.a firm producing summer clothing. How does this firm manage to keep in production throughout the year? It may produce throughout the year if it keeps producing month after month such an amount which, when its product is in season, the supply is less than the demand, and when the product is out of season the supply is more than the demand. If the product it produces is not subject to fashion changes every season or does not deteriorate rapidly it may adopt this plan of production. The cost of storage must of course be considered. Where the demand is seasonal, and the commodity not durable, the firm may either produce this commodity in combination with another commodity, but one which is not demanded at the same time so that the production of the commodity can be spread out evenly over the year, or it may produce this commodity in combination with another commodity which has not got a seasonal demand, but which can keep the producers busy throughout the year.

(d) Irregular demand. Firms whose products are not standardised but who produce to order, sometimes find that the demand for their product is very erratic. Such producers will find it convenient to produce their specialised product in combination with another product that is standardised, so that the workers can produce this secondary product when they are not engaged on the production of the special product.

Price fluctuations is probably the greatest risk that the manufacturing unit undertakes. If the manufacturer is one of many manufacturers of the product, he will have very little influence in the price of the product if he expands or contracts production without the co-operation of other producers. If all the producers of the product agreed that each of them shall only produce a certain quantity of this particular product, then they may eliminate a considerable portion of the risk they undertake due to price fluctuations. In the case of a firm having a monopoly, the price risk may also be considerably reduced if the entrepreneur adopts a sound production policy (6).

Now that the various optima within a firm have been discussed, let it be considered how a compromise between these optima may be brought about.

It must be realised that a firm does not reach its optimum from all these different points at the same time. It may have reached its managerial optimum but at the same time there may be room for further expansion in the technical and financial sides. If the technical optimum is bigger than the managerial optimum, the firm is usually divided into separate departments. The work of each department is then planned by a central management. If the division of the firm into departments is not possible, then an attempt should be made to decrease the technical optimum by increased specialisation. If the technical optimum is very much larger than the rest of the firm, it has happened in the past that the firm has not allowed itself to produce all the parts of the article it needs. Instead it has purchased some of its requirements from an outside specialist. This enables the firm to bring the technical side into balance with the rest of the firm. The fact that such specialist do exist is of great importance to the smaller firms, as it gives them a chance to

(6) E.A.G. Robinson - Structure of competitive industry, pages 83-106

reduce their costs much more than they would have been able to, had they produced that particular part of the product themselves.

In the case of a firm whose managerial optimum is bigger than its technical optimum, the problem is much simpler. In this case the technical optimum is simply reproduced several times. That is to say, if the management is capable of managing efficiently a factory which produces 100 units per hour, but the technical optimum is a firm producing only 50 units per hour, then in this case there will be two plants both of optimum size from the technical point of view, and each producing 50 units per hour. The advantage of several small technical units under one management is that they need not necessarily be together. They can be placed in the most convenient position after factors such as potential market and transport costs have been considered. If the technical optimum is too small and it is not advisable to establish several small units, the technical optimum can be extended by allowing the firm to produce a number of subsidiary products.(7)

From the above information, the conclusion may be formed that a firm cannot exist in perfect competition unless it is optimum size. The reason why so many firms do exist that are not of optimum size is because conditions are nowhere near perfect. "It is only if conditions of perfect competition prevail that a firm will be of optimum size, and there is no reason to expect that they will be of optimum size in the real world, since in the real

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(7) E.A.G.Robinson - Structure of competitive industry, pages 107-119

world competition is not perfect." (8)

So much, then, for the theoretical arguments in connection with the size of the firm and the optimum size. Let us now proceed to the second part of this chapter and investigate the size of the firm and the optimum size in connection with firms in the South African footwear industry. The discussion in this half will take the form of nine questions, for which an attempt has been made to find answers. Let the first question be examined.

How does the size of the different manufacturing units vary as shown by the number of workers employed by each? To answer this question fully, it is necessary to study the figures in Table X. The figures for the first three months of 1946 appearing in this table were obtained by examining the figures of the number of employees in each firm. Unfortunately this information could only be obtained in the case of 69 firms. I was however, informed by Mr. Humphries, the representative of the Leather Industries Research Institute in Port Elizabeth that the 18 firms for which no figures were available were very small firms and that none of them employed more than 20 hands. The figures in the last column of this Table were calculated (average number of employees per firm) by dividing the total number of employees in the industry by the number of manufacturing units.

The figures for the years 1916-17 and 1921-22 show that the majority of firms were very small. More than half of the total number of firms in existence at this time employed less than 10 hands (10 workers). The last

(8) J. Robinson - Economics of imperfect competition, page 97.

TABLE X[9]

Classification of establishments according to the number of employees.

Year	Under 4 hands	4 Hands.	5-10 Hands.	11-20 Hands.	21-50 Hands.	51-100 Hands.	101 & over	Total	Av. emp. per unit
1916-17	29	9	25	12	15	9	5	104	23
1921-22	42	24	35	14	18	7	8	148	23
1926-27	7	7	17	3	12	11	16	73	54
1928-29	1	1	9	11	9	9	17	57	87
1929-30	1	1	8	12	10	9	16	57	88
1932-33	2	3	4	5	13	10	20	57	115
1934-35	1	4	8	6	19	9	29	76	115
1935-36	8	1	10	6	17	11	28	81	116
1936-37	8	2	10	5	13	11	33	82	123
1946 (Jan. to March.)	-	-	-	4	12	15	38	69	173

(9) Special report No. 137 of the Office of Census and Statistics.

TABLE XI[10]

Boot and shoe factories: Distribution according to size 1940-42
% of total number of establishments according to value of,

£.	Land & Buildings. 1940-41	1941-42	Plant & Machinery 1940-41	1941-42	Gross Output 1940-41	1941-42
Under 101			11.9	11.8		
101-250	15.5	14.1	10.7 22.6	8.2 25.9	8.3	4.7
251-500				5.9		
501-1000	8.3	9.4	11.9	9.4		
1001-2500	22.6	20.0	10.7	8.2	6.0	9.4
2501-5000	14.3	15.3	10.7	11.8	9.5	9.4
5001-10,000	19.1	18.8		17.7	8.3	3.5
10,001-25,000	20.2	17.7	44.1		10.7	10.6
25,001-50,000				27.1	14.3	16.5
50,001-100,000		4.7			15.5	12.9
100,001-250,000 250,001-500,000					27.4	32.9

(10) South African Journal of Economics. December 1945, page 289.

column, however, shows that the average number of employees per firm was 23, indicating that some of the remaining firms must have been of considerable size to bring up the average to this figure. The reason why the majority of firms were so small is probably because (a) these small firms bought certain of their requirements from outside: that is, probably they did not have their own tanneries or retail shops. (b) Also an important reason is, that at that time there was no great degree of specialisation and division of labour. One worker probably took the shoe through a number of processes whereas today each worker is a skilled man and is connected with a particular process. It must, however, be observed, that even during these years there was a trend towards bigger manufacturing units. The units employing over 101 hands did increase from 5 to 8, which is an increase of 60% in a matter of about five years.

During the following four years, for which figures are available (1926-27, 1928-29, 1929-30, 1932-33) there is a distinct decrease in the number of small factories. On the other hand there is a very noticeable increase in the number of larger factories, especially those employing more than 101 hands. The average number of employees per firm increased from 23 to 115, an increase of 400%. It must be remembered that during this time (1922-30) the footwear industry went through a boom period, so the expansion in the size of the firms is to be expected. The value of the machinery and plant used in the footwear industry increased by more than 50% during these years, indicating greater mechanisation. As the value of machines per man increased, greater specialisation must have been brought about, which means more workers through whose hands or machines the raw material must pass before the finished product is available. The optimum size of the establishment must therefore be bigger than before. Observe that in 1932-33, twenty of the fifty-seven independent units were employing more than 101 hands.

From 1932-37 there is a big increase in the number of independent establishments, but at the same time there is also a substantial increase in the number of very small factories. By small factories is meant factories employing less than ten hands. The establishment of such a considerable number of small factories can only be put down to the prosperous conditions of the trade. These small units must all have been newly established, as it is very unlikely that entrepreneurs would decrease the size of their unit during the prosperous years of the trade cycle. It will be observed, however, that even with the establishment of several new units, there was such an expansion among the other units that the average number of employees per unit increased from 115 to 123. The size of the unit was thus still expanding. The introduction of machinery had raised the optimum size to a bigger unit.

It is unfortunate that the report No. 137 of the Office of Census and Statistics does not publish any figures after 1937. No figures are thus available at this moment showing the classification of establishments according to the number of employees for the immediate pre-war years and the war years themselves. I was, however, fortunate enough to obtain certain raw material for the first quarter of 1946. This material could be classified into groups, as has been done previously. During this investigation it was observed that there were two firms engaged in the manufacture of footwear in South Africa who employed more than 1000 and less then 1100 employees each. These were then the two largest firms that came to be noticed. The smallest firm observed employed only 11 workers. As has been stated, however, the remaining 18 firms for which no figures were available were all firms employing less than 20 workers. The figures do show to a certain extent the very big differences between the largest and smallest firms. The 1946 figures also show that the size of the unit is expanding, especially for the groups 51-100 hands and over 101 hands. The average of 173 employees per unit, although not very accurate, does show that the average unit is expanding. The average was obtained by dividing the number of employees in 1946 in the footwear industry (15,000 approximately) by the number of units 87. One of the main reasons for this terrific expansion of individual units is the fact that the 1939-45 war gave the footwear industry of South Africa the greatest impetus it has ever had. Without the war, the size of the individual unit may have expanded, but it must be remembered that the industry would have had to face a depression somewhere in the early 1940's. This depression would certainly not have helped the industry to expand very much.

In conclusion, it may be stated that there is a wide difference in the number of employees in each unit. The fact that the average number of employees per establishment is still increasing does indicate that the optimum size has not yet been reached by a great many firms, or that the optimum size is itself expanding. Whether a firm is of optimum size when studied from the point of view of the number of workers it employs, is perhaps a question which can best be answered when attempting to answer question 2, which will now be attempted.

How does the number of processes through which the article must pass affect the size of the unit and the optimum size? During an investigation it was determined that there must be approximately 161 processes through which a certain quantity of raw material must pass before it can emerge as a finished pair of leather shoes or boots. Each one of these 161 processes is a skilled job and requires a worker qualified in a certain direction. It is possible, however, for a worker to take the raw material through more than one process. But if it is maximum specialisation and division of labour that is desired, then the article must pass through 161 pairs of hands. While busy with this investigation, it was also observed that in the case of the slipper footwear there were 32 processes each of which required its own skilled worker. In the Platnate and Doppers footwear there were 12 processes each requiring a skilled man, while in the canvas footwear there were ten processes each requiring a skilled attendant.

Whether a man will take an article through only one process will depend on the amount of specialisation and division of labour within that factory. The amount of specialisation and division of labour which a firm will in turn be able to undertake will depend on the demand for its product. Demand in South Africa today is such that the maximum amount of specialisation and division of labour is possible. Therefore, in the case of the leather footwear, if one man can in a certain period use exactly the amount of material as the man before him prepared in the same period, and demand for that firm's product during a particular period is as much as the man who finally touches the product can turn out within that particular period, then the optimum size of that firm from the point of view of numbers employed is 161 employees, but if it requires at a certain stage two or more men to cope with that which one man produces within a certain period, then the optimum size will expand and will be 161 employees plus the additional workers employed to avoid a bottleneck at any particular stage. If the last man who touches the product turns out 50 units per day, and the public demands 100 units per day, the two factories of optimum size should be run side by side.

The argument in the above paragraph could be applied to the other three types of footwear mentioned, thus in the case of the slipper footwear the optimum size from the labour point of view will be 32 workers plus those employed to avoid bottlenecks. In the case of the Platnate and Doppers, twelve men, plus those employed to avoid bottlenecks, and in the case of the canvas footwear, ten workers plus those employed to smooth out production.

It may thus be observed that the optimum size from the labour point of view is very much bigger for a firm producing leather footwear than for a firm producing canvas footwear. The different optima for the different types of production does thus to some extent explain the big differences in the number of employees per individual firm in the footwear industry. Now let question 3 be examined and attempt be made to find an answer.

What effect has the value of the land and building, plant and machinery, and gross output, on the optimum size of the firm? Before an attempt is made to find answers to these three questions, let the figures in Table XI be examined.

In connection with the land and buildings, it will be observed that both the figures for 1940-41 and 1941-42 show that the class in which the majority of units fall (22.6% in 1940-41 and 20% of the total in 1941-42) is that which represents the units which have land and buildings valued at between £1000 and £2500. It must, however, also be observed that several units (15.5% in 1940-41 and 14.1% of the total in 1941-42) have land and buildings valued at less than £500. It appears that most of the manufacturing units have land and buildings valued at between £1000 and £25,000. A very wide range indeed.

The figures representing the plant and machinery show that the class into which the largest number of units fall is that representing units which have plant and machinery valued at between £10,000 and £100,000. The reason why the plant and machinery of most units is so much more than the value of their land and buildings is because most of the plant and machinery does not belong to the factories, but, as has already been stated, is hired out to them by the British United Shoe Machinery Company. At the same time it is interesting to observe that about a quarter of the units employ plant and machinery valued at less than £500.

It appears that in 1941-42 at least 32.9% of the total manufacturing units had a gross output of between £100,000 and £1,000,000. It seems as if there has been an all-round increase in the gross output of manufacturing firms. In 1940-41 8.3% of the firms had a gross output of less than £1000. The majority of firms had a gross output of over £25,000 for the year.

It seems thus as if the size of the firm from the land and buildings point of view is between £1000 and £25,000. From the machinery and plant point of view, the optimum size is between £10,000 and £100,000 whereas from the gross output point of view the optimum size is somewhere between £25,000 and £500,000 per annum.

The answers to the six questions which will now follow are to some extent the views held by manufacturers who were interviewed, and to whom these questions were put.

How does the seasonal fashion changes affect the optimum size of the firm? Does the firm produce as much during a particular year if subject to fashion changes, as it would produce if there were no possibility of it being left with a quantity of out-of-fashion goods on hand? The answer to this question seems to be that firms do not produce very much in anticipation of demand. Before a shoe of a particular design is mass-produced, travellers are furnished with samples which they can take round to retailers, and obtain orders for that particular shoe. This procedure does give the manufacturer some idea of what the demand for a particular type of shoe over a certain period is going to be. Some risk is taken as the manufacturers do produce a little more than the total orders constitute.

The fact that the firm produces a variety of types of shoes must have some effect on the size of the firm. Does this fact tend to increase the size of the firm? To produce a variety of different types of shoes, a firm must have a variety of different types of machines, and also different types of raw material. The small firm finds it very difficult to obtain the different machines, which are easily obtainable by the large firms. They also usually find it difficult to obtain the different types of raw material, because to obtain all these raw materials requires considerable working capital. Also, the small firms cannot place such large orders for materials as the large firms can place, with the result that their orders do not receive the same amount of attention. The general rule seems to be that it is only the larger firms that can produce a variety of types of shoes. The smaller firms specialise in a few lines.

Is the price of shoes that are expected to be in demand for only a short period higher, comparatively speaking, than the price of shoes that remain in demand for a longer period? It appears that the fashion firms only produce that which is ordered, with a little extra. If there is a stock of a certain style still on hand, and the demand for that style suddenly ceases, then it is the retailer who suffers, as he is left with out-of-fashion goods on hand. If a particular shoe is expected to hold the fancy of consumers for only a short while, then its price will tend to be higher than the price of the shoe that will remain in demand for a longer period.

How do manufacturers actually do the buying of their raw materials? Do they buy enough raw material to last them for the financial year, or do they buy at shorter intervals? Buying conditions are to some extent dictated by conditions of supply. Manufacturers also buy to meet their estimated demands. In the case of fashion shoes which may go out of fashion at any time, they buy small quantities at short intervals, but in the case of "staple" shoes that are likely to be in demand for a long time, manufacturers buy larger quantities at a time, and at less regular intervals. In this case they also attempt to buy their raw materials at such a time as they consider the price would be at the lowest possible level. In the case of fashion shoes, the amount they buy is also influenced by the amount of orders on hand.

In connection with the floating capital, that is, the capital used for the buying of raw materials, paying of wages and overhead expenses, do manufacturers require the same amount month after month, or does the amount required vary? If they require varying amounts during the course of the year, what is the amount they keep? Do they keep enough to meet their requirements during the period when they need most, or do they actually keep less than this amount required at the peak, and borrow some by means of a short term loan? If they do borrow, what form does this loan take? It appears that manufacturers in the footwear industry on the whole require the same amount of floating capital month after month, with the result that it pays the manufacturers to own all their floating capital and not, if possible, borrow any in the form of a short term loan. How do manufacturers obtain their floating capital? is a question which appears to have a different answer in each establishment. It seems, however, that most of the firms have enough floating capital of their own to meet their demands. Those who do require a little extra capital usually obtain it in the form of a bank overdraft.

How do manufacturers bring their products to the notice of the consumers? Do they have their own retail shops, or do they just allow any retailer to sell their products? What is the general rule? Manufacturers have been spending large sums of money on advertising, which brings their goods to the attention of the consumers. There is also an increasing tendency among manufacturers to have their own retail shops. This, of course, is only possible in the case of very large manufacturers. Where this is not possible one retailer may sell the products of several manufacturers. Manufacturers also attempt to get retailers to stock only their particular products, the result of such stocking being that one retailer is eventually known by consumers as the stockist of the products of a particular manufacturer.

The following are the references used in Chapter 2.

(1) E.A.G.Robinson - Structure of competitive industry pages 25-35

(2) All information and quotations in this section in connection with types of organisation have been taken from "Business management", P. White, pages 85-92.

(3) E.A.G. Robinson - Structure of competitive industry pages 36-53.

(4) " " do. " 54-63

(5) " " do. " 64-82

(6) " " do. " 83-106

(7) " " do. " 107-119

(8) J. Robinson - Economics of Imperfect Competition, Page 97.

(9) Special report No. 137 of the Office of Census and Statistics.

(10) South African Journal of Economics, December 1945, page 289.

CHAPTER 111.

In this chapter an attempt is made to compare on six different planes the statistics of the footwear industries of Great Britain, the U.S.A., Canada and South Africa. In each case the latest figures available have been used. As will be observed these latest figures represent very different years. The last British figures available are those for the year 1935. The latest American figures are also pre-war being those for 1939. On the other hand, the figures for Canada (1943) and South Africa (1942-43) were collected during the war. The situation may thus be summed up by stating that the statistics representing the industries of the two large countries, Britain and the USA, are unaffected by war while the figures representing South Africa and Canada must show the influence of the war on the footwear industries of those countries. It is for this reason that the bulk of the comparison will be for the year 1939. The last year in which the footwear industries of all four countries mentioned operated under similar conditions. In the course of Chapters 111 and 1V reference will also be made to figures which owing to their bulk were not included in these chapters, but which may be found in the appendices at the end of the thesis.

The six points on which the statistics of these four countries have been compared are the following. (a) Number of employees per firm. (b) Net output per employee. (c) The volume and value of the output of firms in the different countries. (d) Output in pairs per employee. (e) The total wages as a percentage of total cost of production. (f) Average wage per employee.

The data for each of these points will now follow. A few comments will be made but the main discussion will appear in Chapter 1V, where also an attempt will be made to give explanations for possible differences.

Point A.(1) Number of employees per firm.

Britain (1935)

Total number of employees 116,567

Number of establishments 808

Average number of employees per firm, $\frac{116,567}{808} = 144$

Canada (1943)

Total number of employees. 18,665

Number of establishments. 222

Average number of employees per firm $\frac{18,665}{222} = 84$

U. S. A. (1939)

Total number of employees 244,146

Number of establishments 1070

Average number of employees per firm $\frac{244,146}{1070} = 228$

South Africa (1942-43)

Total number of employees. 13225

Number of establishments 99

Average number of employees per firm $\frac{13225}{99} = 134$

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(1) Part 1 page 439 Table 1A of the final report on the Fifth Census of Production and Import duties Act Inquiry 1935. A bulletin of the department of trade and commerce Dominion Bureau of Statistics Ottawa-Canada, Volumes 1 & 2 of the Sixteenth Census of the U.S.A. Vol. 1 page 76 Vol. 11 page 34, U.G. 20 - 1946 page 69.

Average number of employees per factory in Great Britain during 1939 was estimated about the same as in 1935 = 144

Average number of employees in Canada during 1939 was = 76

Average number of employees in the U.S.A. in 1939 = 228

Average number of employees in South Africa in 1939 = 127

It will be observed from these figures that the average number of employees per firm in the U.S.A. is well over 50% more than the average number of employees per firm in Britain and South Africa, who employ almost the same number of employees per factory, and who employ almost $1\frac{1}{2}$ times as many employees per factory as are employed per factory in Canada. Observe also that whereas the Canadian footwear industry employes a total of about $1\frac{1}{2}$ as many workers as the South African footwear industry does, it has $2\frac{1}{4}$ factories for every factory in the South African footwear industry. The U.S.A. footwear industry employs more than twice the number of workers the British footwear industry does, but it only has 262 more factories or about 32%.

It appears thus that from this point of view there are three distinct divisions into which the footwear industries of these countries may be placed. In the first division the U.S.A. may be put as its number of employees per firm is very much greater than the number of employees per firm in the other three countries. In the second division Britain and South Africa fall, as their average number of employees per firm are very similar, and in the third division Canada may be placed by herself as her number of employees per firm is so small that it is impossible to compare it with the firms of the other countries from this point of view. On the other hand, if only two divisions are used, the footwear industries of the different countries may be classified into them according to the total number of workers they employ. In this case the U.S.A. and Great Britain may be placed into one division, as they employ many more workers than the footwear industries of the remaining two countries do, but even here it is doubtful whether Britain can be classified with the U.S.A. as she employs less than half the number of workers employed by the footwear industry of the U.S.A. Another point which must be considered when examining the statistics for point A is the influence of the war on the industries of the two smaller countries. Let the statistics for point B now be examined.

Point B (2) Net output per employee.

Canada (1943)

Value added by production.		32,935,175 dollars
Number of employees		18,665
Net output per employee	$\frac{32,935,175}{18,665}$	= 1764 dollars or £403.8

South Africa (1942-43)

Value added by production		£3,703,697
Number of employees		13,225
Net output per employee	$\frac{3,703,697}{13,225}$	= £274

(2) Bulletin of the Department of Trade and Commerce Dominion Bureau of Statistics. Ottawa, Canada, page 3, Sixteenth Census of the U.S.A. vol. 1 page 76 Vol. 11 Part 111 p.50. Final report on the fifth census of production and the Import Duties Act Inquiry 1935 Part 1 page 439, U.G. 20 - 1946 page 69.

Great Britain (1935)

Value added by production.		£18,837,000
Number of employees		116,567
Net output per employee	$\frac{18,837,000}{116,567}$ = £162.	

U.S.A. (1939)

		Dollars.
Value added by production		346,234,009
Number of employees		218,028
Net output per employee	$\frac{346,234,009}{218,028}$ - 7% = 1477 dol. or £304	

In Canada during 1939 the output per employee was £260

In South Africa during 1939 the output per employee was £190.

In U.S.A. during 1939 the output per employee was 1477 dol. or £304.

In Great Britain during 1939 output was about the same as in 1935 .. £162

It will be observed that the latest figures available in each case show that the net output per employee is nearly £100 more in the Canadian footwear industry than in any of the footwear industries of the other three countries. If at the same time it is remembered that the average Canadian footwear factory is smaller than any of the other, then it is not difficult to realise that this very big output per employee must be due to greater mechanisation. The small number of workers per establishment does in itself suggest greater mechanisation. It is also to be observed that the output per employee in the British footwear industry is the smallest of the four countries, and that it is very much smaller than the output per employee when compared with the other countries. It is remarkable that no two of these countries compared, can be put into one division from this point of view. The difference in output per employees is much too great. The only two countries which have fairly similar outputs are the U.S.A. and South Africa and even here the outputs per employee differ by £30. It must also be remembered when comparing the footwear industries of these two countries that the actual volume in output greatly differs; in fact, the largest and the smallest countries are being compared; also, it is of vital importance to bear in mind especially in this case, that the South African and Canadian statistics represent countries at war which in turn means that those countries are probably very short of labour. It may be that the most highly skilled labour was not used in the armed forces. This then does to some extent account for the high Canadian output per employee, as compared with Great Britain. This point will be fully discussed in the next chapter.

Point C.[3] Volume and value of production of average firms.

Britain (1935)

Total volume of shoes produced	132,468,000 pairs
Total value of shoes produced	£37,619,000
Total number of firms	808

Volume produced per firm $\frac{132,468,000}{808}$ = 163,946 pairs

Value produced per firm. $\frac{£37,619,000}{808}$ = £46,558

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(3) Part 1 page 445 & 439 of the final report on the fifth census of production and import duties Act inquiry 1935. Volume 11 part 11 page 48 of the sixteenth census of the U.S.A. Pages 3 and 14 of a bulletin of the department of trade and commerce dominion bureau of statistics, Ottawa, Canada, U.G. 20-1946 page 69.

U.S.A. (1939)

Total volume of shoes produced 435,285,125 pairs

Total value of shoes produced 732,807,874 dol.

Number of firms 1070

Volume produced per firm $\frac{435,285,125}{1070}$ = 406,808 pairs

Value produced per firm $\frac{732,807,874}{1070}$ = 684,867 dollars
£140,600

Canada (1943)

Total volume of shoes produced 33,927,621 pairs

Total value of shoes produced 75,145,180 dol.

Number of firms 222

Volume produced per firm $\frac{33,927,621}{222}$ = 153,277 pairs

Value produced per firm $\frac{75,145,180}{222}$ = 338,496 dol.
£77,481

South Africa (1942-3)

Total volume of shoes produced 14,638,764 pairs

Total value of shoes produced £8,880,081

Number of firms 99

Volume produced per firm $\frac{14,638,764}{99}$ = 147,900 pairs

Value produced per firm $\frac{8,880,081}{99}$ = £89,710

The volume and value produced in Great Britain during 1939 is estimated to be about the same as that produced in 1935 Volume 163,946, Value £46,558.

Volume and value of production in the U.S.A. 1939 -
Volume 406,808 pairs; value 684,867 dol. - £140,600

Volume and value in Canada in 1939 was -
Volume 109,578 pairs, value 184,349 dol. (£47,868)

The most remarkable feature of this data is that it reveals that the two largest countries have both the largest output per factory and the smallest output per factory. The average British factory has an output of about 163,946 pairs valued at £46,558 p.a. The average U.S.A. factory, on the other hand, has an output of 684,867 pairs valued at £140,600. This shows that the average U.S.A. factory has an output in pairs of almost four times that of the average British factory.

The average output of the South African and Canadian footwear industries appear to be very similar from this point of view, or rather it should be stated similar when the great differences in the output of the other two countries is considered. At the same time from this point of view, it must be observed that Canada has about 2¼ times the number of factories the Union of South Africa has, with a total output of more than twice the number of pairs. Observe also that the total output in pairs of the U.S.A. is more than three times as great as that of the British output, while the U.S.A. only has about 32% more factories than the British footwear industry. Here again the fact that the statistics of the different countries do not represent the same calendar years must be seriously considered. When these figures come under a fuller discussion in the next chapter use will be made of data which will be found in the appendices.

<u>Point D.</u>(4) (Output in number of pairs per employee)

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(4) Part 1 pages 443 and 439 of the Final Report on the Fifth Census of Production and Import Duties Act Inquiry 1935. Volume <u>11</u> part <u>11</u> pages 48 and 50 of the Sixteenth Census of the U.S.A. Pages 2 and 3 of a bulletin of the Department of trade & Commerce Dominion Bureau of Statistics, Ottawa-Canada, U.G. 20- 1946, page 69.

South Africa 1942-43

Number of pairs produced, 14,638,764

Number of employees 13,225

Output per employee $\frac{14,638,764}{13,225} =$ 1107 pairs

Great Britain, 1935

Number of pairs produced. 32,468,000

Number of employees 116,567

Output per employee $\frac{132,468,000}{116,567} =$ 1136 pairs

Canada 1943

Number of pairs produced, 33,927,621

Number of employees 18,665

Output per employee $\frac{33,927,621}{18,665} =$ 1817 pairs

U.S.A. 1939

Number of pairs produced 435,285,125

Number of employees 244,146

Output per employee $\frac{435,285,125}{244,146} =$ 1783 pairs

Output per employee	in South Africa during 1939,	1132	pairs
" " "	in G.B. in 1939, about same as 1935	1136	"
" " "	in the U.S.A. during 1939	1783	"
" " "	in Canada during 1939	1463	"

The data collected under point D shows the actual output per employee in each of the four countries. When examining the latest available statistics in each case, the great difference in the number of pairs produced per employee in the different countries immediately strikes one. In South Africa during the years 1942-43 the average output per worker was 1107 pairs while in Canada in 1943, which has a footwear industry that can be compared with the footwear industry of South Africa in many respects, the output per worker was 1817 pairs per annum. A greater output per worker of 710 pairs per year. This terrific difference in output per employee in the different footwear industries was to some extent expected when it was shown by the data collected under point B, that the output per employee in South Africa was £274 as compared with £403.8 per employee in the Canadian footwear industry, but even these two figures do not represent quite such a big difference as is shown by the figures representing actual pairs produced per worker.

Observe also that there is a very big difference in the output, measured in number of pairs produced per employee when the footwear industry of Great Britain is compared with that of the U.S.A. In the U.S.A. during 1939 the output per employee was 1783 pairs, while in Britain during 1935 the output per employee was only 1136 pairs, which is only about 64% of the American workers output.

The most remarkable feature about these figures is the high output in number of pairs per employee in the Canadian footwear industry as compared with the footwear industries of the other countries. As the South African footwear industry is the smallest of the four mentioned, it is to be expected that its output per employee would be the lowest, as probably not as much research has been done into the working conditions, and methods of work, as may be the case in the footwear industries of the other three countries. At the same time, however, it must be realised that 1107 pairs per employee is an extremely low figure.

The great difference in output per employee that is evident when comparing the British figures with those of the U.S.A. is also very remarkable. One should think that the output per employee in these two countries should be fairly similar, as they are both old countries in which the footwear trade has been going for many years, and also the population of both these countries are of such a size as to allow the footwear manufacturers to make use of all the gains that an industry derives from mass production. However, the work of this chapter is to point out the differences; the reasons for these differences will be given in the next chapter.

Point E. (5) - Total wages as a percentage of total cost of production.

Great Britain 1935.

Total wages paid.	£12,577,579
Gross value of goods produced.	40,180,000

Wages as a percentage of gross value,

$$\frac{£12,577,579}{40,180,000} \times \frac{100}{1} = 31.3\%$$

U.S.A. 1939

Total wages paid	222,865,621 dol.
Gross value of goods produced	734,673,111 dol.

Wages as a percentage of gross value, $\frac{222,865,621}{734,673,111} \times \frac{100}{1} = 30.3\%$

Canada 1943

Total wages paid	21,677,798 dol.
Gross value of goods produced	75,583,954 dol.

Wages as a percentage of gross value $\frac{21,677,798}{75,583,954} \times \frac{100}{1} = 28.6\%$

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(5) Year Book of the British Boot Manufacturing Federation 1939 page 205. A Bulletin of the Dept. of Trade & Commerce Dominion Bureau of Statistics page 3. Volume 11 page 48 of the Sixteenth Census of the U.S.A. U.G. 20 - 1946 page 69.

South Africa 1942-43

Total wages paid £2,210,660

Gross value of goods produced £8,658,223

Wages as a percentage of gross value $\frac{2210,660}{8658,223} \times \frac{100}{1} = 25.5\%$

It is estimated that by 1939 the percentage figure given for 1935 for Great Britain had not changed much. = 31.3%

Wages as a percentage of gross value for the U.S.A. 1939 = 30.3%

Wages as a percentage of gross value for Canada 1939 = 32.9%

Wages as a percentage of gross value for South Africa 1939 = 29.4%

The data collected under point E is striking in that it provides a complete contrast to the data collected for the previous four points.

The percentages arrived at under point E are such that they can be fairly easily compared with each other. It will be remembered that under the other points previously mentioned, the differences in the figures were so great that hardly any similarity existed and a discussion of them would consist of explanations stating why there are such big differences. In this case, however, total wages as a percentage of total cost of production does not vary much in the case of Canada, the U.S.A. and Great Britain; there is, however, a larger variation in the four percentages when the percentage representing the South African footwear industry is also included. Note that the percentage representing the British wages paid is the highest of the four, being exactly 1% higher than the figure representing the U.S.A. footwear industry, which in turn is 1.7% higher than the figure representing the Canadian footwear industry. The figure representing the South

African footwear industry is, however 3.1% less than the Canadian figure, and 5.8% less than the British figure. 3.1% might not sound very much, but it is a figure of considerable importance when the figures representing the differences in the percentages of the other three countries are compared with it.

It is interesting to observe that the figure representing wages as a percentage of total cost of production is slightly larger in the two countries with the largest footwear industries, Britain and the U.S.A., while this percentage is lowest in the country which has the smallest footwear industry. On the other hand it must be remembered that the Canadian and South African figures represent war years, while this is not the case with the figures of Britain and the U.S.A. Moreover, the British figure is for a year as early as 1935. It is, however, considered that by 1939 the British figure had not changed very much though after that the war might have had a considerable influence, and this figure may have changed considerably. Unfortunately, however, owing to lack of statistics at present any such change that may have taken place cannot be studied.

Point F (6) .(Average wage per employee.)

Britain 1938

Average wage per employee per week £2/6/11.

:. Wage per annum £2.6.11 x 52 = £123.9

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(6) Year Book of the British Boot Manufacturing Federation 1939 page 205.

Vol 11 page 48 of the Sixteenth Census of the U.S.A.

A bulletin of the Dept. of Trade and Commerce, Dominion Bureau of Statistics, Ottawa-Canada. U.G.20-1946 page 69.

U.S.A. 1939

Number employed 244,146

Total wages paid 222,865,621 dollars

Average wage per employee $\frac{222,865,621}{244,146}$ = 913 dollars or £188 p.a.

Canada 1943

Number employed 18,665

Total wages paid 21,677,798 dollars

Average wage per employee $\frac{21,677,798 \text{ doll.}}{18,665}$ = 1162 dol.or £264 p.a.

South Africa 1942-43

Number employed 13,225

Total wages paid £2,210,660

Average wage per employee $\frac{2,210,660}{13,225}$ = £167 p.a.

Av. wage per European employee £187 p.a.

Again it is considered that the annual wage had not changed very much in Great Britain by 1939 = £123.9 p.a.

The average wage in the U.S.A. in 1939 was = £188 p.a.

The average wage in Canada in 1939 was = £168 p.a.

The average wage in South Africa in 1939 was = £113 p.a.

Av. European wage in S.A. in 1939 was £132 p.a.

Here again as in the data for most of the other points already mentioned, there is a very big difference in the figures representing the average wage per employee of the four countries. The highest average wage is that paid in the Canadian footwear industry, being £264 p.a. during 1943, while on the other hand the average wage per worker in the footwear industry of Great Britain was only £123.9 p.a. during 1938. It thus appears that in

1943 the Canadian worker was paid about 113% more than the British footwear worker in 1938. Of course a considerable portion of the high Canadian wage is probably due to increased cost of living during the war, but, even if this increased cost of living figure is deducted, the average Canadian footwear industry wage will probably be considerably above the figure representing the British footwear industry. It is also worth observing that the average wages of the two American countries are both very much above the wages paid in South Africa and Great Britain. It is to be expected that the wage paid in Canada would bear some relation to the wage paid in the U.S.A, but it is most unexpected to find the average wage in the Canadian footwear industry is actually higher than the average wage paid in the footwear industry of the U.S.A. Here again it must be borne in mind that the Canadian wage figure is for 1943 while the U.S.A. wage figure is for 1939. Also, the average South African wage, which is considerably higher than the average British wage, is for a war year while the British wage is not.

While bearing in mind the picture which has been formed by the comments made in this chapter, and remembering at the same time that in this chapter the latest data available for each country was compared with the other, let Chapter 1V now be examined and it be observed what a totally different picture is formed of the footwear industries of these countries, when data representing the same year is compared. As has been said before, it was considered that 1939 would be the best year for such a comparison.

The rate of exchange used was Canada 1943 4.36875

U.S.A. 1939 4.866

Canada 1939 4.72

References used in Chapter 111.

(1) Part 1 page 439 Table 1a of the final report on the fifth census of Production and Import Duties Act Inquiry 1935.

A Bulletin of the Department of Trade & Commerce Dominion Bureau of Statistics, Ottawa-Canada.
Volumes 1 & 2 of the Sixteenth Census of the U.S.A. Vol. 1 page 76, Vol.11 page 34.
U.G. 20 - 1946 page 69

(2) A Bulletin of the Department of Trade & Commerce Dominion Bureau of Statistics Ottawa-Canada oage 3
Sixteenth census of the U.S.A. Vol.1 page 76, Vol. 11 part 11, page 50
Final report of the fifth census of production and the import duties Act Inquiry 1935 Part 1 page 439
U.G. 20 - 1946 page 69

(3) Part 1 page 445 and 439 of the Final Report on the Fifth Census of Production and Import Duties Act Inquiry 1935
Volume 11 part 11 page 48 of the Sixteenth Census of the U.S.A.
Pages 3 and 14 of a Bulletin of the Department of Trade and Commerce Dominion Bureau of Statistics, Ottawa-Canada
U.G. 20 - 1946 page 69

(4) Part 1 pages 443 and 439 of the final report on the fifth census of production and Import Duties Act Inquiry 1935, Volume 11 part 11 pages 48 and 50 of the Sixteenth Census of the U.S.A.
Pages 2 and 3 of a Bulletin of the Department of Trade & Commerce Dominion Bureau of Statistics, Ottawa-Canada,
U.G. 20-1946 page 69

(5) Year Book of the British Boot Manufacturing Federation 1939 page 205.
A Bulletin of the Department of Trade and Commerce Dominion Bureau of Statistics page 3.
Volume 11 page 48 of the Sixteenth Census of the U.S.A.
U.G. 20-1946 page 69

(6) Year Book of the British Boot Mfg. Federation 1939 p.205.
Vol.11 page 48 of the 16th Census of the U.S.A.
A Bulletin of the Dept. of Trade & Commerce, Dominion Bureau of Statistics, Ottawa-Canada.
U.G. 20-1946 p.69.

Point A.

In the previous chapter it was decided to make certain divisions and to classify the footwear industries of the different countries accordingly. It appears that if there are three dividions the countries could be classified by placing the U.S.A. in the first division, as her number of employees per factory is very much greater than any of the other compared with her. South Africa and Britain fall in the second division as the number of employees per factory in these two countries are almost the same, and lastly Canada is placed in the third division as her number of employees per factory is very much less than is the case with any of the other three countries. Making use of only two divisions has also been suggested. In this case countries would be classified according to the total number of employees in the industry. The result of such a division would be that Britain and the U.S.A. would fall into the first division, as they both employ several times the number of employees the Union of South Africa and Canadian footwear industries do, and the two smaller countries would be placed in the second division.

Before this discussion proceeds any further, let the difference in years which the statistics of the different countries represent, once again be stressed. The statistics for Great Britain and the U.S.A. are for the years 1935 and 1939 respectively. They are thus totally void of any influences of the war. The statistics of South Africa and Canada, on the other hand, represent the years 1942-43 and 1943 respectively. These figures have obviously been under the influence of the war.

The data for point A in Chapter 111 brings to light the following facts. In 1935 there were in Great Britain 808 footwear factories employing a total of 116,567 workers. This gives an average of about 144 workers per factory. The U.S.A. in 1939 had 1070 footwear factories employing 244,146 workers; this gave an average of 228 workers per factory. Figures representing the Canadian footwear industry shows that this industry in 1943 had 18,665 workers which were employed in 222 factories. This shows that the average factory employed about 84 workers. For the years 1942-43 statistics show that the South African footwear industry consisted of 99 factories employing in all 13,225 workers, which represents an average of 134 workers per factory. It must be remembered that in all four cases the number of workers per factory include a number of men and women operating the clerical side of the business. The size of the clerical staff may be determined when examining the figures in Table 8 appendix 11. The figures in this table show that in 1935 of the total of 116,567 workers in the British footwear industry 7,918 were engaged in clerical work. This figure represents a little over 6% of the total workers in the industry. Observe the figures representing the other years and it will be seen that the percentage of the clerical staff to the total employed vary very little. Table 1 Appendix 111 indicates the size of the clerical staff in the footwear industry of the U.S.A. In the manufacturing side alone 238,169 workers were employed of which 5561 were managers and 6978 were clerks. The number employed for clerical purposes, that is clerks and managers, in this case is slightly less than 6% of the total employed. Observe, however, from this table that 4189 workers are employed in distribution which does bring the clerical percentage up to about 7% of the total employed.

When comparing the British footwear industry with that of the U.S.A. the question arises; is it not perhaps possible that the British footwear industry was the same size as that of the U.S.A. in 1939? The answer to this question is No, it was not as big as the U.S.A. footwear industry in 1939, both from the point of view of total number of employees, and average number of employees per firm. Tbale 9 appendix 11 shows that the index for the total number of employees in the British footwear industry in 1935 was 97.3. From this table it may be observed that the industry actually employed more people in 1929 than in 1935. The drop in the number of employees from 1929 to 1933 is to be expected as these were years of very heavy depression, but why there was again a decrease in the number of employees after 1933 fob ahe years 1934 and 1935 is difficult to explain. The figures in this table also show that after 1939 the number of employees in the footwear industry of Great Britain fluctuated very much, e.g. compare the index figures for the years 1937, 1938 and 1939. In 1939 the index figure was 103.7, representing an increase of about 7,000 employees over the 116,567 of 1935. At the same time it may be assumed that it is very unlikely that the number of individual establishments varied very much from 808. Thus, even in the year 1939 the British footwear industry employed only about half the number of workers the footwear industry of the U.S.A. did, and also in this year the size of the factory from the number of employees point of view was still very much smaller than the footwear factory of the U.S.A. Observe, however, table 11 appendix 11 which shows that in 1935 almost 60% of the factories of the British footwear industry employed less than 100 workers each.

The British footwear industry may thus be summed up from this point of view by stating that during the 10 years 1929-39 there has been a very small increase in the number of workers employed, though there have been fluctuations of greater magnitude in the numbers employed during these years. As regards actual increase in numbers employed, the best years were 1931 to 1933 when the number of employees increased by about 10%. After 1933 there was no increase in the numbers at all. In fact, Table 1X Appendix 11 shows that there has been a decrease in the numbers employed in the industry.

It is also very interesting to examine Tables X1, X11 and X1V of Appendix 111. Table X1 shows that since 1923 to 1935 there has been a continual decrease in the number of footwear factories in the U.S.A. The number of factories decreasing from 1606 in 1923 to 1024 in 1935. This means that approximately 37% of the factories that had existed in 1923 had gone out of business by 1935. Table X11 reveals that since 1931 to 1939 there has been a fairly steady, though very small, increase in the numbers employed. It is worth observing that in 1923, 1606 factories in the U.S.A. employed 225,216 wage workers; this total does not include the clerical staff, but even if this total is divided by the number of establishments, it gives an average of 140 wage workers per factory, which is about the average per factory of the British footwear industry in 1935.

Observe, however, that as the average number of employees per factory increased in the footwear industry of the U.S.A., the total number of employees did not increase as much as was expected they would, instead the actual number of factories in existence decreased. Thus it may be stated that as some manufacturing units found for some or other reason that they could not continue business and closed down, with the result that those establishments' workers were unemployed; those employees did not find themselves unemployed for long, as they were being absorbed by other factories to whom trade was favourable, and who were continually expanding their own number of employees. It may even have happened that certain factories had to close down because their workers were being drawn away from them by higher wages offered to them by other manufacturers of footwear. This second explanation, though, is not a likely one, because if wages were so high as to draw workers away from one manufacturer to another, it is quite probable that the total number of employees in the industry would have increased considerably. This, however, is not the case as statistics show.

So much then for the wage employees. Table XlV gives the indices for the total employees in the U.S.A. footwear industry. These figures show that there has been very small increase in the total number of workers employed in the industry. If any change at all between

1929 and 1941, the indices show that the total number of workers have actually decreased. The only year in which more workers were employed than were employed in 1929 was in 1937, and then only about 5% more were employed for that year. The indices do, however, show that from 1931 to 1937 there was a slow but steady increase in the total number employed. The fact is thus clear that certain U.S.A. footwear establishments expanded their numbers at the expense of other establishments who found that they could not continue to produce.

Table V111 appendix 1 shows that there has been a steady increase since 1925 of not only the number of footwear factories in Canada but also the total number of employees. It appears from this table that in 1925 188 factories employed 13,792 workers giving an average of 73 per factory. In the years that followed up to 1928, both the number of establishments and the total number of employees increased considerably. At this time the average number of employees per establishment was approximately 78. By 1935 there were 217 factories employing a total of 15,930 workers which gave an average of 73 workers per factory. When war was declared in 1939 the Canadian footwear industry consisted of 222 factories employing a total of 16,957 workers which means that the average factory consisted of 76 workers. In the two years that followed, the number of factories actually decreased to 210, but all this time there was an increase in the total number of employees, so that in 1941 the average number of employees per factory was 90. The number of factories increased again to a total of 222 in 1943, at this time the total number of employees was 18,665 which gave an average of 84 employees per factory.

Table 111 appendix 1 also shows that the majority of Canadian footwear factories employ less than 100 workers. Only a very few factories, about 16%, employ over 150 workers. It appears that 47% of the factories actually employ less than 50 workers each.

This survey of the Canadian footwear industry from the number of employees per factory point of view, may be concluded by stating that this industry has expanded considerably during the last 18 years. The expansion has been both in the number of factories and the total number of workers employed, with the result that the number of workers per factory has varied very little. It appears from statistics in Table 1V appendix 1 that there is not a very great difference in the actual size of each factory. There are a few which are exceptionately big for Canada, and also several which are on the very small side, but ghe general tendency is for the factories to be about the size the figure for the average number of employees per establishment represents. This table also indicates that there are more factories (36) employing over 150 workers each, than there are employing between 100 and 150 workers each. It is possible that this might indicate the fact that a footwear factory in Canada employing between 100 and 150 workers is not of a very good size from the labour point of view. The manufacturers might thus have the choice of employing less than 100 workers or over 150 workers.

In South Africa there has been a constant increase in the total number of employees and the number of establishm nts since 1928-29 (Tables lV and lll Chap. l). There has also been a constant increase in the number of employees per firm. (Table 10 Chap.ll). In 1938-39 83 firms employed 10,555 workers, giving an average of 127 employees per factory. The fact that there has been an increase in both the number of firms, and the total number of employees, does show that there is still plenty of room for the development in the footwear industry of South Africa. The South African footwear industry, like the Canadian footwear industry, is an industry of a young country which may expand in step with an increase in population.

According to Table X chapter ll it appears that there is a tendency for firms to expand wherever possible. This does suggest that the most economical size for footwear factories in this country is much larger than the most economical size for a factory in Canada. In Chapter ll it was stated that the optimum size depended on the types of footwear that that factory was producing, which suggested that the optimum size for firms producing leather footwear was ± 161 workers. In Canada the optimum size from the number of employees' point of view appears to be much smaller. It thus appears that the smallness of the Canadian footwear factory as compared with the footwear factories of the other countries, is due to differences in the manufacturing processes of the different countries. The differences in manufacturing technique of the South African and Canadian footwear industries must not, however, be over-estimated. It must be borne in mind that about half of the labour force of the South African footwear industry consists of non-Europeans, many of whom can only do unskilled jobs. If, then, a large portion of the workers in a factory consists of such unskilled or semi-skilled people, then that factory must require more workers to do the same amount of work, than would be required if all the workers in a factory had attained a certain degree of skill.

It therefore appears that the difference in size is not so much due to the different manufacturing processes, but, if the labour force of the South African footwear industry consisted entirely of skilled workers, as is the case in the Canadian footwear industry, then the South African footwear industry, considered from the point of view of the average number of employees per firm, would not have been classified with the British footwear industry, but would have moved down to the third division and classified with the Canadian footwear industry, with which it was expected it would be classed.

From the point of view of average number of employees per firm, the position of the four countries may be summed up by stating that the British footwear industry appears to have been developed to its maximum with its present markets and trade conditions. There is very little hope of any major expansion if conditions which prevailed before the war continue to exist. The war may have had a decided influence on the position of the British footwear industry, but unfortunately there are no statistics available yet to show what has been the effect of this conflict.

In the footwear industry of the U.S.A. there has been a more marked development in the last ten years, but even here there has been a distinct fall in the rate of development in the immediate pre-war years. This suggests that also this country's footwear industry is nearing its maximum. What the position now is, now that the war is over, is something which cannot be estimated without some knowledge as to what happened during the war years.

For the South African footwear industry, it may be said that this industry has made tremendous strides since 1925, and that there is yet no sign of the pace of development decreasing. The industry is only a young one in this country, and with improved products there is immense scope for the development of markets which in turn means the employment of greater numbers and perhaps to the expansion of existing manufacturing establishments. The last war has given the footwear industry of South Africa the chance it has been waiting for. This chance was made use of and the industry went ahead as much during the war years as it would have done in double the time under normal circumstances.

The Canadian footwear industry like the South African footwear industry has gone ahead much since 1925. Its development has been a steady one, and also here there is no sign yet of the rate of development slowing down. Canada is at present a country which has a small population compared with the population it is capable of holding. There is thus plenty of room for a greater population. This larger population will in turn lead to the expansion of its footwear industry.

Let the data for point B in Chapter 111 now once again be examined before any lengthy discussion is gone into.

To obtain the net output per employee, the total number of employees in the footwear industry of the country was divided by the total value added to the raw materials during the process of manufacture. The tables contained in appendix 1V were especially constructed for this purpose, and will be constantly referred to in the discussion on this particular point. Unfortunately the tables for the footwear industry of the U.S.A. only gave the number of wage employees. The figure did not include those earning a salary. It was decided to divide this total into the total of the value added by manufacture and then subtract 7% from the output per individual employee as given by this division. The figure arrived at in this manner it was supposed was the one which could be compared with the output per employee of the other countries. The reason for the deduction of the 7% is because it was estimated that the clerical staff in the footwear industry of the U.S.A. totalled about 7% of the total employed. It must be realized that although the figure arrived at in this manner is not absolutely right, it is more accurate than the figure which simply represents a division of value added by manufacture, by the total wage employees, without any consideration for the clerical staff.

The rates of exchange used to convert dollars into pounds sterling were U.S.A. 1939, 4.866 dollars to the pound, and Canada 1943, 4.36875 dollars to the pound. These rates of exchange for the respective countries and years were suggested by officials of the South African Standard Bank.

The data for point B in chapter 111 shows that the output per employee in Canada during 1943 was 1764 dollars which is equivalent to about £403.8, a truly remarkable figure when compared with the output per employee in the footwear industries of the other countries. Observe, however, (Table 111 appendix 1V) that in 1942 the net output per employee was 1441 dollars or 321 dollars less than in 1943. It means, therefore, that in 1942 the output per employee was about £330. In 1941 it fell to 1320 dol. or about £300 per employee which is not a very much greater output per employee than was found at the time in the South African footwear industry. Further more the output per employee in 1939 was only 1144 dol. which is about £260 per employee. Note, however, (Table 11 appendix 1V) that in 1939 the output per employee in the footwear industry of the U.S.A. was about 1477 dol. or £304, which means an output of about £44 more per employee than in Canada. It would appear, therefore, that the high output per employee in Canada, as shown by the 1943 figure, is almost entirely due to circumstances caused by the war. Figures in Table 111 appendix 1V show that the output per employee in the Canadian footwear industry did not once rise above 1144 dol. during the years 1933 to 1939. It is thus impossible to put down this sudden rise in output per employee, a rise of 620 dollars or over 50% from 1939 to 1943, to a natural development in the Canadian footwear industry. It is a rise which can only come about by means of an artificial stimulation such as war.

It was stated that there was not a very big difference in the output per employee for Canada and South Africa during the year 1941. At this time the Canadian output was about £300 per employee p.a. and the South African output per employee about £251 p.a. Note however, that in 1940-41 the South African output per employee was only £202.5 and in 1939 it was £199.3. In 1938-39 it was still lower, being only £180.1 per employee. It may thus be said also in this case, that an output of £251 per employee is much above the level usually found in the South African footwear industry during the pre-war years. Observe that the output per employee in the South African footwear industry had not been above £180 since 1932. Thus also here, the war has been the main cause for the output per employee in the South African footwear industry, rising £70 p.a. in a matter of about four years.

In 1935 it is found that the output per employee in the U.S.A., Canadian and South African footwear industries is less than it is for any year after that date. The Canadian figure for 1935 is 1042 dollars or about £215. The U.S.A. figure is 1427 dollars or approximately £296. (The rate of exchange used in this case was the par rate 4.866 dollars to the pound). The situation in 1935 thus appears to be as follows: the output per employee in the U.S.A. was 1427 dollars or about £296, in Canada it was approximately 1042 dollars or about £215, while in South Africa it was between £163 and £173.8, say about £168, and in Great Britain it was only £163. 1935 is a very important year for it is the last year for which figures for all four countries are available. An attempt must thus be made to explain why there is such considerable differences in the output per employee of the different countries during this year, but before this attempt is made it may be advisable to take a brief glance at the figures representing the previous years.

Unfortunately in the case of Great Britain figures were only available for the years 1933, 34 and 35. (Table 1 appendix 1V). The limited figures available show that in Britain the output per employee has been fairly steady with a slight rise in 1935. A rise both in the ~~bumber~~number of employees and the value added by manufacture, does indicate a small expansion in the industry. The general impression that these figures gives is, however, one of very slow progress and development. According to H.C. Hillmann in the Economic Journal, June 1939, page 278, the British footwear industry in 1904 employed 126,800 workers which increased to 130,500 by 1924 but fell again to 121,700 in 1930. A table on page 289 of the same journal does however show that in 1907 the total shoes produced was 97,400,000 pairs. This total increased to 119,000,000 pairs p.a. by 1924 but was down again to 118,900,000 pairs in 1930. After that it rose again and was 132,600,000 pairs in 1935. As there has been a slight decrease in the number of employees since 1924 this does indicate that there has been some increase in the net output per employee.

More figures are available for the U.S.A. footwear industry pre-1935. (Table 1V appendix 11). These show that since 1931 there has been a steady increase in both the total number of employees and the total value added by manufacture. Note, however, that the net output per employee fluctuated considerably. It is very interesting to follow the progress of this industry in the U.S.A. Observe especially the tremendous difference in output per employee for the years 1914-19. This difference was of course mainly due to the influence of the war on the industry. 1923 appears to be the best year in the history of the footwear of the U.S.A. During this year the industry employed more workers than it had ever done before or since that date till 1939, and also the total value added by manufacture was more for this year than for any year before or since, till 1939. Above all this the net output per employee was very high.

After 1929 there was a considerable decrease not only in the total number of employees and total value added by manufacture, but also in the net output per employee. The worst year seems to have been 1933, after which date there was again a general recovery within the footwear industry of the U.S.A.

Table 111 appendix 1V shows that the net output per employee in the Canadian footwear industry during the year 1935 was only 1042 dollars. Except for the year 1934 when the net output was a few dollars lower, this is the lowest output per individual employee the Canadian footwear industry has had since 1925. Note, however, that there has been a gradual increase in the number of employees since 1931, while the value added during the manufacturing process fluctuated considerably during these two dates. Observe that the value added by manufacture is considerably less for 1935 than for any of the years 1925 to 1931. The number of employees varied very little between these two dates. The output per employee also varied very little between 1925 and 1931, but started falling after this date. The reason for this considerable decline in net output per employee is no doubt the great influence which the crash of 1929 in the U.S.A. and the world depression which followed, had on industry.

When table 111 appendix <u>1V</u> is studied, and it is borne in mind at the same time that these figures represent the footwear industry of a young and undeveloped country (Canada), one cannot help feeling that they are rather disappointing. During the 10 years 1925-35 the figures which represent the particular point which is now under discussion hardly shows any development at all. For example, compare these figures with the figures representing the total number of employees, and also those showing value added by manufacture, in the South African footwear industry over the same period, and observe the difference. (Table lV, appendix lV). Why the progress in the Canadian footwear industry during these 10 years was so insignificant is difficult to imagine. A possible explanation might be that they had exploited the home market and were not attempting to export on a large scale. A more likely explanation would appear to be, that the footwear industry of the U.S.A. was producing a better shoe and was underselling the Canadian manufacturer in his own home market.

Statistics representing the South African footwear industry on this point (Table lV appendix lV) show that since statistics were first collected in 1915-16, there has been except for one year, 1920-21, a continuous increase in the total number of employees. There has also been since 1915-16 a steady increase in the value added by manufacture, though this upward trend has been subject to small fluctuations. The highest figure ever reached was in 1929-30 when the net output per employee was £201.7

The South African footwear industry appears thus to be making much faster progress than the Canadian footwear industry. This is probably because it is younger than the Canadian footwear industry with more room for development and also it is not right next door to such a powerful competitor as the U.S.A. who might impair the development of the industry.

It is felt that as the figures stand under point B in Chapter 111 they cannot be compared as the influence of the war on the figures representing Canada and South Africa is too great. The obvious year during which to compare them is thus 1939, as the war had little effect on the footwear industries of the four countries at the end of that year. The only difficulty that arises is that the information required in order to calculate the net output per employee for the British footwear industry is not available for that year.. It is thus proposed to get over this difficulty in the following manner. Statistics show that since 1904 there has been very little development in the British footwear industry, though there are signs that the net output per employee has increased; this increase has, however, been so slow that if it assumed that the net output per employee increased at the same rate as it has been doing for the last 30 years (for there is no reason to show why it should have done otherwise) then it may safely be assumed that the net output per employee in 1939 was in the region of about £170.

To clear up the situation the following are the figures representing the net output per employee in the different countries during 1939. The U.S.A. 1477 dollars or approximately £304. Canada 1144 dollars or approximately £260. South Africa £190 approximately (somewhere between £199 and £180) and the estimated output per employee in

Great Britain was £162 ± say £170.

The question now is, why is the output per employee so different in the different countries? A brief historical review of the footwear industry of each country has already been made. It appeared that the British footwear industry has made very little progress during the last 10 years. It seems thus that the market for British footwear has not expanded very much during this time, thus as no new markets were available to produce for, and as existing methods of production could cope with all the requirements, it appears that not so much time as otherwise would have been the case, had been spent on developing new methods. New methods of production, no doubt, would have meant lower cost of production, but it would also have meant greater specialisation, and with greater specialisation invariably goes higher wages. Another very likely explanation why the British net output per employee is so low, is probably because the British footwear industry employs less machinery per individual than is done in the footwear industry of the U.S.A. It is known that it is generally more difficult for manufacturers to obtain capital in Britain than in the U.S.A. with the result that manufacturers find it more difficult to instal all the latest types of machinery. A Shoe Machine Company exists in both Britain and the U.S.A. which hires out shoe machinery, but it must be remembered that this company has a monopoly and charges a very high rent. Another reason for the low output per employee might be trade union action. The trade unions might insist that its workers do only a certain amount of work over a certain period. The idea behind this go slow policy is of course to force manufacturers to employ more workers and so decrease the numbers that are unemployed.

It will be observed that the output per employee in the South African footwear industry is not very much higher than the British output per employee. The reasons for this low output, however, it is felt, are totally different to the reasons which explained the low output in the British footwear industry. The first reason has already been mentioned, that the large number of non-Europeans employed are mostly unskilled workers, and that their output per individual employee is very low. It is therefore felt that the net output of the average skilled European worker in the South African footwear industry is considerably above the figure which is given in Table 1V, appendix 1V, as the net output per employee. Another reason for this small output per employee is probably because in certain manufacturing processes the South African industry has not attained the same degree of specialisation as has been attained in the older and larger countries. It is well worth observing that the net output per employee has risen considerably in the South African footwear industry during the war. Whether it will be able to maintain this level of output and even improve it in later years, will depend to a large extent on whether the manufacturing methods developed during the war will remain in use and be improved. The improvement of such manufacturing processes can be done only by continuous research. Research more than anything else is capable of raising the net output per employee.

The Canadian footwear industry already has a high output per employee when compared with countries such as South Africa and Great Britain. The industry and the country are, however, both young, and there is still plenty of room for expansion with an increase in population. This high net output is probably to some extent due to the use of highly skilled labour and excellent manufacturing processes. Another important reason is, that the footwear industry of the U.S.A. which is right next door, may to a certain degree be the cause of the high output in the Canadian footwear industry. If the Canadian footwear industry did not produce its best shoes at the lowest costs, then the U.S.A. footwear industry would swamp it in its own home market. No doubt it could be protected against foreign producers by means of a tariff barrier, but even in the case of a tariff barrier the government of a country will realise after a time, that if it raises this tariff above a certain level, it will be damaging the economic position of its own country, as it will be attempting to keep an industry alive which will probably never stand on its own feet. It is felt thus, that it is mainly for this reason, because Canada has such a live competitor in the footwear trade, that she has to see that her footwear industry is run on the most economic lines.

Why is it that the net output per employee in the footwear industry of the U.S.A. is so high? In answering this question the standard of living in the U.S.A. must be considered. The standard of living is much higher in the U.S.A. than in Canada, England and South Africa. To attain such a high standard of living requires a high income, or perhaps a better way of putting it would be to say that such a high standard of living is the result of high incomes, (as compared with the other countries) earned in the U.S.A. In order to earn a high income a worker must be of a highly skilled type. It is thus found in the U.S.A. that there is much more specialisation and division of labour in most of its industries, than in any other country in the world. Before specialisation and division of labour can be undertaken to any considerable extent the industry must have a market for its product. Also here, the U.S.A. industries have an advantage over the industries of the other countries. The U.S.A. industries have such a large home market that they can specialise and mass produce as much as they want to without worrying about the size of the market. Many of the smaller countries have to develop external markets before they can undertake such a venture. Furthermore, in the U.S.A. an industry very seldom has any trouble in obtaining the required capital once it has proved its worth. The banks are usually quite willing to give it a long term loan. This of course is not the case in Britain as banks do not make any long term loans to industries. The industries have to obtain a loan on the London money market, where it is not always easy to obtain such a loan on favourable terms.

So much discussion then for the data of point B in Chapter 111. Let the data for point C now again be examined before a discussion is commenced.

From the data of point C in Chapter 111 the following facts appear. In 1935 the British footwear industry produced an average of 163,946 pairs valued at £46,558 per factory. The U.S.A. footwear industry in 1939 produced an average of 406,808 pairs valued at 684,867 dollars or approximately £140,600 per factory. While the South African footwear industry in 1942-43 produced an average of 147,000 pairs valued at £89,710 per factory, and the Canadian footwear industry in 1943 produced an average of 153,277 pairs valued at 338,496 dollars or approximately £77,481 per factory. These figures are the latest figures available. It is however, felt that no true reflection could be obtained of the general state of affairs, when comparing for instance 1943 figures with 1935 figures. Not only is there a difference of eight years, but also does the one set of figures represent war years while the other are more normal years. An attempt must thus be made to find a year for which the figures of all the countries are available.

Here again it appears that the best year will probably be 1939, even though no figures are available for the British footwear industry for this year. Table V11 appendix 11 shows that from 1924 to 1935 the increase in the total boots and shoes produced and also the increase in total value is very small. The years 1935 to 1939 were very normal years, except for a small setback in 1938. It is therefore felt that there is justification in assuming that the total output measured in pairs and value, was not very much higher in 1939 than it was in 1935. There is also no reason to suspect a big increase in the number of footwear factories, which means that the output per factory in value and pairs had not changed much since 1935.

A totally different state of affairs exists in the Canadian footwear industry. This industry produced 33,927,621 pairs valued at 75,145,180 dollars in 1943. (appendix 1, table 1). Note however, that in 1942 it produced 33,066,389 pairs valued at 67,166,456 dollars. These figures illustrate the tremendous rise in the price per pair which came about during the course of one year. Tables V11 and V111 appendix 1 show that in 1939 the Canadian footwear industry produced 24,805,251 pairs valued at 40,925,513 dollars. Note also the rise in price indicated in table Vll. According to table Vlll appendix 1 there were the same number of factories in the Canadian footwear industry in 1939 as there were in 1943. By dividing the total number of factories into the total number of pairs and the total value, it is shown that in 1939 each factory produced 109,578 pairs valued at 184,349 dollars or about £39,224 (rate of exchange 4.7 dollars to the £). When these figures are compared with those of 1943, it will be observed that the war has not only caused a tremendous increase in the volume of output per factory, but that the increase in value has far exceeded the increase in volume, showing a considerable increase in price per pair.

Table Vll appendix 1 shows that the number of pairs produced in the Canadian footwear industry has gradually increased since 1925 with the exception of minor fluctuations especially during the depression years in the early thirties. Note, however, table Vlll in this appendix. This table shows that the fluctuations in the total value of boots and shoes produced have been greater than the fluctuations in the volume produced since 1925. Observe that for instance from 1931 to 1932 the volume increased by about 150,000 pairs, while the value fell by about 4,000,000 dollars, also during the years 1932 to 1933 there was a gradual increase in the total volume while the total value remained about the same, which again illustrates the effect of the depression on the prices of the products of the industry.

It may thus be stated that there has been a gradual increase in both value and volume of the shoes produced in the Canadian footwear industry from 1925 to 1939 after which date development was accelerated by the stimulating effect of the war on the industry. It must, however, at the same time be observed that there has been a gradual increase in the number of factories. It thus appears that there has been very little change in the total value produced per factory from 1925 to 1939, but that there has been a fairly big change in the number of pairs produced per factory during these years.

Unfortunately, the only figures available for the U.S.A. showing the number of pairs produced are those for 1939 and 1937. (table X111 appendix 111). The figures in this table show that while actually more pairs were produced in 1939 than in 1937, the total value of these pairs was greater in 1937, showing that the average price per pair was lower in 1939 than in 1937. Table 11 of this appendix gives the number of footwear factories in the U.S.A. in 1939 as 1070 and 1080 for 1937. Note from this table that there has been a considerable decrease in the number of footwear factories in the U.S.A. since 1923. The total number of employees has not varied very much since that date although there has been a considerable decrease in the number of factories, thus showing that there has been an increase in the number of employees per factory. The last column in table X11 appendix 111 shows that the total value of the goods produced in the footwear industry of the U.S.A. was considerably greater for the years 1919-29 than for any year after that. This does suggest that the great American slump of 1929 must have been a very heavy blow for the footwear industry of the U.S.A. A blow from which it was slowly recovering, but by 1939 the total value of the products of the industry was still considerably below the 1929 figure. It must however, be remembered that the total number of pairs produced in 1939 is probably not so much less as the number produced in 1929 as the total value suggests it was. Since 1929 there has been a considerable decrease in the cost of production per pair. It may thus be assumed that the total number of pairs produced in 1939 does not differ very much from the total produced in 1929. The progress of the footwear industry of the U.S.A. from 1899 to 1939 from this particular point of view may be summed up by stating that there was general and rapid development from 1899 to 1914. During the war till 1919 there was a terrific boom followed by a minor setback. This slump was followed by years of smooth progress and development till 1929. During the years 1929-33 the level of activity declined considerably, but since then till 1939 it has increased gradually.

Table 1X chapter 1 showed that in 1938-39 the South African footwear industry produced 11,954,552 pairs valued at £3,973,011 which gives an average of 144,031 pairs valued at £47,868 per factory. When these figures are compared with those of 1943, there appears a considerable difference in both the number of pairs per factory and the value of the factory's product. The increase in the number of pairs from 1939 to 1942 is about 2.5% but the increase in the value of these shoes produced is so much that the total value of the factory's product is almost double. A further examination of table 1X will prove that since 1915-16 to 1939 there has been, except for minor fluctuations, a continuous increase in the number of pairs produced, and the value of these pairs. In 1916-17 for instance 104 factories produced 1,621,179 pairs valued at £663,389, this gives an average per factory of 15,588 pairs valued at £6,379. By 1925-26 76 factories were producing 3,480,098 pairs valued at £1,843,464 giving an average of

45,791 pairs valued at £24,256 per factory. Note the increase in the price per pair. In 1935-36 there were 81 factories producing a total of 10,438,025 pairs valued at £3,416,658, when these totals are divided by the number of factories in operation it is shown that during this year the average per factory was 128,864 pairs valued at £42,181. When the output per employee for 1935-36 is compared with the output for 1925-26, it is also worth observing that there has been a considerable decrease in the cost of production per pair.

The situation summed up to the moment is thus as follows. In 1939 Great Britain produced about the same number of pairs, valued at about the same figure as she did in 1935, that is a production of about 163,946 pairs valued at £46,558 per factory. During this year the U.S.A. produced 406,808 pairs valued at about 684,867 dollars or about £140,600 per factory, while the Canadian footwear industry produced 109,578 pairs valued at about 184,349 dollars or £39,224 per factory, and the South African footwear industry 144,031 pairs valued at £47,868 per factory for this year.

These figures thus show that the average output of a Canadian footwear factory is less than that of an average factory of the other three countries. This is to be expected when the data under point A in chapter 111 is studied. This data, it will be remembered, shows that the average Canadian footwear factory from the number of employees point of view is much smaller than the average footwear factory in any of the other three countries. Note, however, that whereas the number of employees per factory in Canada is not much more than half the average number of employees per factory in Great Britain, the output in pairs per factory in Canada is very much more than half the output in pairs per factory in Great Britain, showing again a higher output per employee. Observe also the total output value per factory in Canada as compared with Great Britain. Even South African labour appears to be more productive than British labour. It appears that the Canadian labour is slightly more productive than the South African. Note however that the Canadian cost of production per pair is about the same as the South African cost of production.

From this particular point of view of output per factory, the footwear industry of the U.S.A. appears to be in a class by itself as compared with Great Britain, and as Great Britain as regards size of potential market is about the only one of the countries that can be compared with the U.S.A., the following facts may be observed: The average footwear factory of the U.S.A. has an output of about 2½ times the output in number of pairs of the average footwear factory in Britain. The total value of this output is also about 2½ times as great. This tremendous output per factory the footwear industry of the U.S.A. has achieved although it only has 228 employees per factory as compared with 144 employees per factory in Great Britain. Why is the output per factory in the U.S.A. so much greater than in Britain? The obvious answer is, because the number of employees per factory is greater. But this answer does not quite satisfy the question; there must be some other explanation. A second reason is that the output per employee is much greater in the U.S.A. It will be remembered that the output per employee in the U.S.A. during 1939 was about £304, while the output in England in 1935 per employee was £162, this figure it was considered had not changed much by 1939. This shows that the average output per employee was almost double in the U.S.A. as compared with England at this time. This great difference in output per employee, it was said, was due to greater specialisation and division of labour, and more capital employed per worker.

The above two reasons are considered the fundamental causes for the tremendous differences in output per factory in the U.S.A. and Great Britain. This of course, does not mean that Britain should make an attempt to expand her factories so that they are the same size as those of the U.S.A. or that she should increase the productivity of her workers up to the American standard. Before Britain can increase the number of employees per factory, it has to be considered whether this will not have a vital effect on the cost of production per unit. If such an increase under conditions prevailing in England means an increase in the cost per unit produced, then such an undertaking should be immediately abandoned. Also to increase the productivity of the workers up to the American standard does not necessarily mean that the British footwear industry will gain by such an undertaking. The increase in capital equipment which such a venture will require, may make it impossible to undertake it. Also, an increase in productivity will mean an increase in wages paid, because highly specialised workers demand a high wage and this might not benefit the industry as a whole. Finally before any change is made which will effect the total produced, the present and potential markets must be intensively studied.

An attempt to compare the footwear industry of South Africa with that of the U.S.A. meets with considerable difficulty. Not only are the environments totally different, but, there are also huge differences in the quantities that they produce. The South African industry produces almost entirely for its home market which consists of 2,000,000 Europeans and a number of non-Europeans by no means the whole non-European population. Even if the U.S.A. footwear industry only produces for its home market, the amount it will be required to produce, will be about sixty times greater than the amount required in South Africa. If however, the individual factories are compared it appears that the average footwear factory of the U.S.A. produces about three times as many pairs of boots and shoes as a South African factory does, and that the total average value of the footwear produced per factory in the U.S.A. is about three times that produced per South African factory. This does indicate that there is some comparison possible as far as cost of production goes. Perhaps the only explanation that can be put forward for the differences in output per factory when the U.S.A. is compared with South Africa, is that South Africa has not got the market. The factories in existence at the moment can supply all South African needs at their present size. If they all expand they will flood the market and prices will have to be cut lower than the industry can afford to cut them.

When the South African footwear industry is compared with that of Great Britain it appears that the factories are in very many respects very similar. It does however appear that the costs of production are higher in this country than in England

Canada can also be more easily compared with England than with the U.S.A. In fact the only way in which the Canadian footwear industry can be compared with that of the U.S.A. is to compare it as the South African industry was compared with the U.S.A. Compared in this fashion and remembering at the same time that the two countries adjoin each other, one might easily come to the conclusion that the figures represent ing the Canadian footwear could have represented the U.S.A. footwear industry, had the population of the U.S.A. been equal to that of Canada. The cost of production is higher in Canada than in the U.S.A., but the Canadian footwear industry might easily decrease its cost of production to that of the U.S.A. footwear industry cost of production, if the volume of output expanded to that extent. The reason why the South African factory has a larger output than the Canadian factory is because it has more employees per factory. It however only has so many more employees per factory than the average Canadian factory because it makes considerable use of cheap unskilled non-European labour.

Considering the four countries from the point of view of output per factory, it may be concluded that the average U.S.A. footwear factory is very much ahead of those of Great Britain, while the output per factory in Britain is a little above that of the South African footwear factory, and the South African output per factory a little above that of the Canadian factory. The reasons for these differences in output per factory of the different countries have already been discussed.

Let the data for point D in chapter 111 now once again be examined before an analysis of the footwear industries of the four countries on this particular point is made. It appears from the latest figures available, that the average South African footwear employee produced 1107 pairs in 1942-43, while the average British footwear employee in 1935 produced 1136 pairs. The figures for the U.S.A. and Canadian footwear employees are much higher, as they show that in 1939 the average U.S.A. footwerr employee produced 1783 pairs while the average Canadian footwear employee produced 1817 pairs in 1943. Note however, the different picture that appears when the figures representing these four industries are compared for the year 1939. In this year the average South African footwear employee produced 1132 pairs. It was estimated that the production in pairs of the average British footwear employee had not changed much from 1935 to 1939, so production is still round about 1136 pairs per employee. Note however the big change in the figure representing the average Canadian footwear employee. In 1939 the average employee only produced 1463 pairs as compared with 1817 pairs in 1943. A difference of 354 pairs per employee. Before an explanation is given as regards the differences in output per employee of the four countries, it might be advisable to have a brief historical review of the footwear industries, but, before this is done, a short analysis of the effect of the war on the footwear industries of Canada and South Africa from this particular point of view might be undertaken.

Observe again that in 1939 the output per employee in Canada was 1463 pairs and in South Africa 1132 pairs, but by 1943 this Canadian figure had risen to 1817 pairs per employee while by 1942-43 the South African figure had decreased to 1107 pairs per employee. What has been the cause of this decrease in the number of pairs produced per employee in the South African footwear industry, as compared with the huge increase in the number of pairs per employee in the Canadian footwear industry? It appears at first sight that the reason might be that the war has decreased the supply of labour available for the South African footwear industry, while not having the same effect on the Canadian footwear industry. It has, however, been shown earlier on in this chapter, that during the war years the number of employees actually increased in both these footwear industries, and furthermore, the increase in the number of employees per factory was very much greater in the South African footwear industry than was the case in the Canadian footwear industry. It may be that in the case of the South African footwear industry, more and more unskilled or semi-skilled labour was employed owing to the shortage of skilled labour. But it must be remembered while examining point B earlier on in this chapter it was actually shown that the output per employee had increased in value in both the South African footwear industry and the Canadian footwear industry from 1939 to 1941-42 and 1943 respectively. Observe however, that the Canadian increase was considerably bigger than the South African one. Note especially the huge increase during the year 1943.

It appears therefore that although the output per employee in South Africa had increased considerably in value, it had actually decreased a little in volume as is shown when the number of pairs per employee during the years 1942-43 and 1939 are compared. The increase in value is of course due to the increase in prices. A number of factory owners in Port Elizabeth and Johannesburg were questioned in connection with their actual increase in cost of production during the war. The estimates for the increase in the cost of production varied from 55 to 70% on 1939 prices. It will be observed that in

South Africa the net output per employee measured in number of pairs had actually increased considerably by 1939-40 but then decreased again. For this decrease there are many explanations. The chief ones probably being poorer labour, also the difficulty of obtaining sufficient leather, and the difficulty of obtaining the machines required for the mass production of footwear. The Canadian footwear industry was no doubt also affected by these difficulties, but it appears that the effect was not so drastic, judging by the increase in the pairs of boots and shoes produced per employee.

Figures discussed under the heading point D, and which are not found under point D data in chapter 111 will be found in the tables 1-4 appendix V at the end of this thesis. Unfortunately as will be observed when examining this appendix, not as many figures were available for the British and U.S.A. footwear industries as was the case in the South African and Canadian footwear industries.

Table 1 appendix V contains all the U.S.A. statistics that could be found in connection with this point. As will be observed this is not very much, being only for the years 1939 and 1937. However, it is shown here that in 1937 the output measured in pairs per employee was 1792 pairs while it was only 1783 pairs in 1939. The difference in the figures representing these two years is however so small, that it may be considered, that from the number of pairs per employee point of view the U.S.A. footwear industry has not changed at all.

The only possible way of obtaining a slight indication as to what happened in the U.S.A. footwear industry before 1937 as regards the average number of pairs produced per employee, is to examine table 11 appendix 1V. This table as table 1 appendix V shows that the 1937 figure was slightly higher than the 1939 figure. Observe that in 1939 the net output per employee was 1477 dollars while in 1937 it was as high as 1520 dollars. Not a very big difference, but an indication that more pairs were produced per employee in 1937 than in 1939. This table also shows that in 1935 the net output per employee was 1427 dollars and 1301 dollars in 1933, showing that if prices remained the same, there has been an increase in the number of pairs per employee from 1933 to 1937. Observe, however that in 1931 the net output per employee was 1622 dollars, and in 1929 and 1927 it was 2039 and 2062 dollars respectively. These figures are however of so many years ago, and at those times prices fluctuated so much, that it would hardly be advisable to say that the output per employee measured in number of pairs produced was higher in 1927 and 1929 than in 1937 or 1939. It appears however, that it might definitely be said, that from 1933 to 1937 the number of pairs produced per employee has definitely increased. Observe that even in 1933 the output per employee in the U.S.A. footwear industry was higher than the output per employee in any of the other three countries in 1939. Showing once again the distance the U.S.A. footwear industry is ahead of the footwear industries of the other three countries.

Table 11 appendix V contains the statistics of the British footwear industry on this point. Note the impression of complete stagnation which the contents of this table gives. The output in pairs per employee in 1933 was 1100, by 1934 this figure had risen to 1104 pairs per employee, while in 1935 it was 1136 pairs. The increase in the number of pairs during these years is so small, that it may safely be said that there has been no fundamental change in the British footwear industry from this point of view during these years. Observe also that the other figures in table contain very little variation. In 1933 the total number of employees was 113,926, in 1934 112,637 and in 1935 116,567. The total number of pairs produced in 1933 was 125,172,000, in 1934 124,368,000 pairs and in 1935 132,468,000 pairs. Both these sets of figures show that there is no noticeable progress or decline within the British footwear industry during these years.

Bearing in mind the figures of 1933, 1934 and 1935 it is considered that it may safely be said, that by 1939 the output measured in pairs per employee in the British footwear industry was not very different from 1935. It thus appears that this 1935 figure for the British footwear industry can be compared with the 1939 figures of the other three countries.

More information is at hand for the Canadian footwear industry in connection with the number of pairs per employee analysis. This information may be found in table 111 appendix V.

Observe that in 1925 the average number of pairs produced per employee was 1255 which is higher than the British figure for 1935. This figure for the Canadian footwear industry compares well with other figures for this industry which have been examined in this chapter and which have shown that the productive capacity of the average employee of the Canadian footwear industry, is very much higher than that of the average British and South African footwear employee. Note, however, that the figure did not remain at 1255 pairs per employee. By 1927 it was 1377 pairs per employee. An increase of 122 pairs per man within two years. A truly magnificent effort. But by 1928 this figure had fallen to 1342 and to 1315 by 1929. This fall must have been caused to a large extent by the slump during that year. In the following two years the output in pairs fell still further, and in 1931 it was as low as 1268 pairs per employee. From this year till 1933 there was again a steady increase in the number of pairs produced per employee. In 1933 it was thus 1371 pairs, which is just about the same as the 1927 level. Note, however, that by 1933 still less workers were employed than were employed in 1927, showing that the industry was still recovering from the depression, and that it was not yet employing as many workers as it would be able to take on under more favourable conditions.

In 1934 there was again a minor decrease, the output falling to 1345 pairs per employee, but the output rose again in the following year. In 1937 a new record was attained, the average number of pairs produced per employee being 1451, but this output again dropped by 77 pairs per employee during the following year. From 1938, however, there has been a steady increase in the number of pairs per employee, and by 1943 the output per employee was 1817. Note that the war years in this table show a much greater increase in the number of pairs per employee, than is the case with the general increase from 1925 to 1939. It may thus be said that the average number of pairs produced per employee would have increased in the Canadian footwear industry during the years 1938-43, war or no war, but it is most unlikely that this increase would have been as large as the figures now show it is, if the industry was operating under normal conditions.

Let table 1V appendix V now be examined, so that some impression may be obtained of the South African footwear industry in connection with this particular point of view. The figures for the South African footwear industry on this point go back as far as 1916-17. A fuller examination will thus be possible in this case.

During the middle of World War 1 the output per employee measured in number of pairs produced per employee in the South African footwear industry was 678 pairs. During the next four years the figure gradually decreased and in 1920-21 it was only 510 pairs per employee, again showing that during a war the production per employee is considerably higher than it is under normal conditions. However, in the following years this figure increased again and by 1924-25 the output per employee was a little above the figure it stood at during the war in 1916-17. Note that the 1926-27 figure for South Africa was 716 pairs per employee which compares very unfavourably with the Canadian figure of 1255 pairs per employee for that year. The number of pairs produced per employee in the South African footwear industry increased still further, and by 1929-30 it was 826 pairs per employee. What happened in the following two years which were depression years, is difficult to say as no statistics are available for these years, but it is suspected that there might have been possibly a slight decrease in the number of pairs produced per employee. The reason for suspecting this decrease is because by 1932-33 the output per employee was only 835 pairs which is only 9 pairs per employee above the 1929-30 figure.

From 1932-33 to 1936-37 there was again a slow but constant increase in the number of pairs produced per employee. An interesting year for comparison is 1935. In this year the output per employee in the South African footwear industry was 1022 pairs, while in Canada the output per employee for this year was 1397 pairs. This comparison is not quite as unfavourable for the South African footwear industry as the one made in 1925 with the Canadian footwear industry. Note also that in 1935 the output per employee in the British footwear industry was 1136 pairs per employee. Compare this with the South African figure, and it will be found that the South African footwear industry compares quite favourably with the British footwear industry on this point during this particular year. Unfortunately the U.S.A. figure is not available for this year.

In 1936-37 there was again a minor decrease in the number of pairs produced per employee, the figure falling to 1043 pairs but during 1938-39 it rose to 1132 pairs. The highest known figure in South Africa is that for the year 1939-40 when the output per employee was as high as 1225 pairs. Note that with the exception of this year the output per employee during the war years does not differ very much from the output per employee during normal times. The output per employee during 1935-36 and 1936-37 was 1114 and 1127 pairs respectively; these outputs compare favourably with the outputs for the years 1940-41 and 1941-42 which were 1118 and 1149 pairs respectively.

When the situation is summed up for 1939 it appears that during this year the output per employee in the U.S.A. footwear industry was 1783 pairs, in the Canadian footwear industry 1463 pairs, in the British footwear industry 1136 pairs, and in the South African footwear industry 1132 pairs per employee. A totally different picture to the one seen when only the latest figures available in each case are compared.

The brief historical review just made of the four footwear industries from this particular point of view showed that 1939 (or 1935 as is the case in the British footwear industry) was no exceptional year. It was a year which may be taken as a very good sample of the industry's level of production. Any increase in the output per employee for the previous ten years up to 1939 has in the case of all four countries been a gradual one, and one that is to be expected with the development of the industry.

It thus appears that for at least ten years the output per employee in the U.S.A. and Canadian footwear industries has been considerably above the output of the British footwear industry worker, while on the other hand the South African output per employee was considerably less per employee than the output per employee in the British footwear industry before 1934-35, after 1935-36 the figures representing the output per employee of these two countries compare very favourably.

The high output per employee in the footwear industry of the U.S.A. appears to be because the industry is the largest of the four mentioned. It has thus a better chance of developing each and every point in the production of boots and shoes. Observe also that it is able to achieve this maximum specialisation and division of labour without worrying about external markets. Its internal markets are large enough to enable it to achieve such a high standard. The highly specialised worker is in a position to demand a higher wage which in turn means that if he is to receive a high wage he must be highly specialised. Also in the U.S.A., manufacturers are generally much more progressive than in Great Britain. This in turn gives the worker a much better chance of increasing his output per hour.

The reason why the output per employee is so high in the

Canadian footwear industry is thus obvious. Right next door it has the largest footwear industry in the world producing shoes at a certain price. Of course it can by means of tariff walls protect its industry, but any country will soon realise that there are limits to the amount of protection it should give to any of its industries. Beyond this limit it will definitely be most unwise to give the home industry any more protection. The Canadian footwear industry thus realises that in order to compete with its next door neighbour, or at any rate to keep the neighbour out of its own home market, it must, if it cannot find any better methods of production than its neighbour, at least follow the same methods of production as its neighbour. This then has resulted in such a high output per employee in the Canadian footwear industry.

The British footwear industry finds itself in a totally different position. It has a fairly large home market for which it can produce, and it also gets some preference over foreign producers in the markets of its dominions. As regards its own home market it is in a fairly safe position. The transport costs from the U.S.A. to Great Britain will raise the selling price of the shoes considerably. The British output per employee is thus not as high as the Canadian output per employee, because it has not such a big neighbour as the Canadian footwear industry, which threatens to absorb its home market in front of the nose of its own industry. Also as has been said before, the British entrepreneur, owing to his lack of enterprise, does not give his employee as much scope to increase his output as an employee would receive in the footwear industries of the U.S.A. and Canada.

An explanation is quite easily found for the low output per employee in the South African footwear industry. The most important fact to remember is of course that a large part of the labour force is made up of non-Europeans, most of whom have not attained a very high degree of skill. This immediately brings down the average output per employee. Also the South African footwear industry is heavily protected by tariff walls against foreign producers. This protection it is felt does to some extent deter manufacturers from doing the utmost to help their workers increase their output. While going around the factories it appeared that although there were several model factories with well organised systematic production, there was considerable room for improvement in others. It also appeared that in some of the manufacturing units there was considerable wastage of leather. When this point was brought to the manufacturer's attention, the writer was informed that this wastage could not be prevented under present conditions owing to the lack of machinery, which although ordered two or three years ago, had not arrived yet owing to war-time difficulties.

It is therefore felt that the output in the South African footwear industry could be considerably improved. This improvement it is hoped will be brought about during the early post-war years when the demand for boots and shoes is such that it will enable manufacturers to incur the necessary expenses which will be required in the re-organisation of the manufacturing processes and factory layout.

Now let the data under point E in chapter 111 once again be examined and an attempt be made to compare the footwear industries of the U.S.A., Canada, South Africa and Great Britain on this particular point. As will be remembered the figures collected and arrived at under this point give a percentage figure for wages as a percentage of the total value of the goods manufactured.

The situation as recorded in chapter 111 may be summed up as follows. In Canada during 1943 wages as a percentage of total cost of production showed a figure of 28.6%. In South Africa during 1942-43 the figure was 25.5%, while in the U.S.A. and Great Britain during the years 1939 and 1935 respectively, the figures were 30.3% and 31.3% respectively. In 1939 however the figures representing the four industries on this point were as follows. For Canada and South Africa in 1939 the figures were 32.9% and 29.4% respectively. The U.S.A. figure for 1939 has already been mentioned, being 30.3%, while here again the British figure available is that for 1935 which is 31.3%.

For a discussion on this point, as for a discussion on the other points previously examined, it will be assumed that the figure representing the British footwear industry had not changed very much by 1939. It is, however, felt that in this case the making of such an assumption is not as justified as has been the case under the previous points examined; as however there is no later data available, it appears to be the only way out.

It is also here considered advisable to have a short historical review of the footwear industry of each of the four countries, before any deeper analysis is made of the figures representing the four industries for the year 1939. Note, however, that such a review is not possible of the British footwear industry, as the only figures available are those for the year 1935. Several books were examined in an attempt to obtain a figure for the total wages and salaries paid to employees in the British footwear industry. The only suitable figure that was eventually found was £2/1/6. This was the figure given in the "Year book of British Boot Manufacturers' Federation 1939" and it represented the average wage per week per employee in the industry for the first week in January 1937. No 1935 figure was available. To obtain a total wage figure for 1935, this figure was multiplied by 52 to bring it to the total wage per annum per employee; this annual wage was in turn multiplied by the total number of employees in the industry during 1935, which was 116,567. In this way a figure was arrived at which, though not very accurate, does give one some indication of the total wages paid to employees in the British footwear industry during 1935, and this figure representing the total wages does enable the writer to arrive at a figure which indicates what percentage total wages are of total cost of production.

In this chapter reference will also be made to numerous figures which will not be found in chapter 111, but which appear in appendix V1 tables 1-4.

Before a review is made of the footwear industry of the U.S.A., let it be observed that the figures for the years before 1939 were not arrived at in the same manner as the 1939 figures themselves. The figures for this year are wages and salaries 222,865,521 dollars and cost of production 734,675,111 dollars. Now examine table X11 appendix 111. This is the only table which gives a wages figure. The figures for wages and salaries for before the year 1939 are not available. Only the figures for wages are available, not the figures for salaries. The figure for wages in 1939 was 183,657,829 dollars, If this figure is calculated as a percentage of total cost of production, the figure arrived at is 25% instead of 30.3%, showing a difference of 5.3%. If it is assumed that the amount paid cut in salaries as a percentage of total wages and salaries, remained fairly constant, then it might be advisable to add 5% to each of the figures found in table 11 appendix V1 which represent the years before 1939. If this is done it will be found that they compare much more favourably with the 1939 percentage than is at present the case.

Throughout the forty years for which figures are available for the U.S.A. footwear industry on this point, there is extremely little variation in the figures representing wages as a percentage of total cost of production. The lowest this figure ever falls is 25% and the highest it ever rises is 31.5% and the years which these two percentages represent are by no means near each other.

In 1899 the wages represented 27.6% of the total cost of production in the U.S.A. footwear industry. By 1904 this figure had decreased by 1% and in 1909 it stood at 25.9%. It did not vary very much from this figure in the following five years, and in 1914 it was still 26%. It again decreased slightly and was down to 25% in 1919. From 1919 to 1923 it increased further and faster than any increase known before or after that date. During 1923 wages were actually 30% of the total cost of production. One of the reasons why wages represented such a high percentage during this year as compared with the other years, is because it was a year of depression. During such a depression the cost of raw materials is reduced considerably. Wages also fall during a depression, but the cost of goods fall more, with the result that wages are a higher percentage of the total cost of production.

From 1923 right through the boom years till 1929 the wage percentage again decreased slowly, and in this latter year showed a figure of 27%. 1929 was of course the year in which prices in the U.S.A. attained their highest level. Note that by 1931 the percentage was again up to 30%, and was still rising so that by 1935 it stood at 31.8%, the highest known figure it has ever reached. Although this increase in the percentage of the wage figure may to some extent be due to a decrease in the price of raw materials, it must also be remembered that there has been a general rise in the standard of living, which can only come about by the payment of higher wages. Note, however, that there must have been a minor setback in 1937, as the wage percentage again fell to 29.9%. By 1939 however, it had recovered slightly and was up to 30.3%, which is the last figure available for the footwear industry of the U.S.A. on this particular point.

For the Canadian footwear industry figures are available from 1925 on this particular point. There are also however, figures available for four of the years of World War 11.

During 1925, which was a year in which prices were still fairly low, the figures representing wages as a percentage of total cost of production was 32.7%. But as prices rose with the development of the boom, this percentage gradually decreased so that by 1928 it was only 30% (table 111 appendix V1). The percentage of wages to total cost of production again rose considerably after this year, and by 1932 it stood at 34.7%, the highest figure it ever reached during the time for which figures are available. These figures suggest that the bottom of the slump was not reached at the same time in the Canadian footwear industry as in the footwear industry of the U.S.A. In 1933 the figure again fell to 32.6%. It varied very little from this figure in the years that followed, and in 1936 it was standing at 32.7%. Note, however, that by 1937 it had fallen by 1% and was standing at 31.7%. In the following year there was a sudden increase in this percentage and the figure for 1938 was 33.4%. But in the next year the percentage was down again to 32.9%.

1939 is a very interesting year, as after this year the influence of the war is shown by the figures representing the Canadian footwear industry on this particular point. The 1939 figure for wages is thus 32.9% of the total cost of production. By 1940 this percentage had fallen to 30.5%. The reason for this sudden fall is the increase in the cost of the raw materials which has been brought about by the war. But by 1941 the percentage was again up to 31.3%. This increase in the percentage can be explained by stating that wages are always slower to increase than the cost of raw materials. By 1940 the cost of materials had risen so as to force the wage percentage down below the 1939 figure, but, by 1941 with increased cost of living allowances paid to workers, the figure representing wages as a percentage of total cost of production had gone up again. However in the following year the prices of goods rose still more, which again forced the wage percentage down, so that in 1942 the figure representing wages as a percentage of total cost of production was down to 27.9%, the lowest it had ever been since 1925. By 1943 there must have been an increase in the cost of living allowance paid to workers. This in turn again forced up the figure representing wages as a percentage of total cost of production. Note, however, that throughout the war the figure representing wages as a percentage of total cost of production is considerably lower than it was for any of the pre-war years since 1925.

For the South African footwear industry figures are available on this point for almost every year since 1915-16. These figures may be found in table lV appendix Vl.

During the years 1915-16, of the total cost of production only 19.6% was paid out in wages and salaries, and above all, this figure was considered fairly high, as in the years that followed up to 1918-19 it decreased steadily and was eventually as low as 14.7%. However, in the following year there was a very big increase and the percentage stood at 18.1%. The increase did not stop here either and was up to 24.4% by 1921-22. An increase of 10% in three years. Thus between the years 1915-16 and 1921-22, the figure representing wages as a percentage of total cost of production had decreased from 19.6% to 14.7% and had then again increased to 24.4% by 1921-22. It is interesting to compare the magnitude of this fluctuation with the magnitude of fluctuations in the U.S.A. and Canadian footwear industries on this particular point. In the footwear industries of these latter two countries, the figure representing wages as a percentage of total cost of production, never varied so much within the periods for which data is available.

The wage percentage remained fairly stable from 1921-22 to 1929-30. In 1929-30 it was 24.8% as compared with 24.4% in 1921-22. The largest fluctuation during this period being not more than 1%. Observe however, the big difference in the figures representing wages as a percentage of total cost of production for the years 1929-30 and 1932-33. Unfortunately here again figures are not available for the years between these two dates, so it is difficult to trace any developments. It is however, known that the years for which figures are not available were years of depression, so it is to be expected that the percentage representing wages and salaries paid, would rise as the price of goods decreased. Thus the 29.4% which is the figure for the years 1932-33 is partly so high as compared with the 1929-30 figure because there has been a considerable decrease in the costs of raw materials required in the production of footwear. For several years after 1932-33 up to the end of 1936-37, there was a slow decrease in this figure. The decrease was, however, so slight, that by 1936-37 the figure representing wages as a percentage of total cost of production was only down to 28.5%, which is only about 1% less than the 1932-33 figure. After 1936-37 however there was again a slight increase, and by 1938-39 this percentage figure had risen to 29.4%. This figure is of extreme importance as it is the last pre-war figure.

Observe that there was in the first war year in the South African footwear industry as in the Canadian footwear industry, a sudden drop in the figure representing wages and salaries as a percentage of total cost of production. This drop, it has been explained, is due to a sudden increase in the cost of raw materials used, without an increase in the wages paid. Thus in 1939-40 the percentage was down to 26.9%. Note, however, that unlike the Canadian footwear industry, this figure continued to decrease for all the years for which figures are available, and that it had fallen to 25.5% of the total cost of production by 1942-43. This continuous decrease does suggest that although cost of living allowances may have been paid to the workers, the amounts paid were not sufficient to prevent the figure representing wages as a percentage of total cost of production from decreasing further as the war went on.

It thus appears that the position in which the footwear industries of the four countries found themselves during 1939 was as follows. The figure representing wages as a percentage of total cost of production was 29.4% in South Africa, 32.9% in Canada, and 30.3% in the U.S.A., while once again in the case of Great Britain it was estimated, that by 1939 the 1935 figure had not changed very much. It may thus be put down as 31.3%. If it could be assumed that the cost of producing a pair of shoes in the different countries was exactly the same, then it could be said, that the highest average wage was paid in the footwear industry of Canada, and the lowest average wage paid in the footwear industry of South Africa. Such an assumption however, would be very misleading as there is no truth in it.

In connection with this point it must be realised that the cost of production per pair of shoes differs considerably in the different countries; e.g. to produce a pair of mens leather shoes in Great Britain in 1935 costs 8/9, while in the U.S.A. during 1939 the same pair of shoes costs 10/4 to produce, and in Canada during 1943 the cost of production of these shoes was 16/- per pair. This last figure, however, is considerably higher than it would have been in 1939. Unfortunately no similar South African figures were available or could be obtained from the manufacturers. These figures thus show that whereas in Great Britain the workers get 31.3% of 8/9 for every pair of shoes they produce, in Canada they get 32.9% of 16/- during 1943 for every pair of shoes they produce.

The South African cost of production like the Canadian cost of production is considerably higher than the British cost of production. Thus what has been said of the Canadian footwear industry also applies to the South African industry in this case. The reason why the South African figure is only 29.4% as compared with 32.9% of the Canadian footwear industry, is because the wages paid to the non-Europeans bring down the percentage considerably. There is so little difference in the figures representing wages as a percentage of total cost of production in the different countries, that no additional explanation is necessary, as these minor differences may not have any definite explanation.

A brief glance at the figures under point F in chapter 111 might be advisable before a discussion is commenced on the footwear industries on this particular point.

Examining the latest data available in each case, the following facts appear. During 1943 the average wage per employee in the Canadian footwear industry was 1162 dollars or about £264. The average wage in the U.S.A. footwear industry in 1939 was 913 dollars or about £188. While in the South African footwear industry during 1942-43 the average wage per employee was £167 p.a. and in the British footwear industry in 1938 the average was £123.9 p.a. From these figures it appears that the workers in the Canadian footwear industry are the best paid. Note, however, that when the figures for the last pre-war year are compared, it appears that the workers of the U.S.A. footwear industry are the best paid. Once again it is here deemed advisable to make a brief historical review of the four footwear industries from this point of view, before an attempt is made at explaining away the differences which exist in the wages paid to employees in the four footwear industries.

Unfortunately it is again impossible to undertake such a review of the British footwear industry, as only the figures for the years 1937 and 1938 are available. It is however considered that although the wages may have been lower before 1937, it is very unlikely that they have increased or decreased very much by 1939. The British figures for 1937 and 1938 were obtained by taking the highest weekly average attained in the British footwear industry during those years, and multiplying this weekly average by 52. Actually no wage figures are available for the whole of the British footwear industry. The figures used were taken out of the British Boot Manufacturing Federation Yearbook for 1939. According to this handbook these figures were voluntarily supplied by manufacturers representing two-thirds of the British footwear industry. Therefore, although these figures are not very accurate, they do give some indication of the general wage level in the British footwear industry. These figures thus show (appendix Vll table 1) that in 1937 the average wage of the British footwear industry was £116.8, while by 1938 this wage had risen to £123.9, thus showing that there was a tendency for wages to rise in the industry.

In the case of the U.S.A. footwear industry, the figures for the total wages and salaries paid were only available for the year 1939. For all the years previous to that, only the figures for the total wages paid were available, also the figures for the total employees of the U.S.A. footwear industry were only available for 1939. After that date only the figures for the total wage employees were available, and not the figures for the salaried employees. The average wage for the years before 1939 thus represents only the wage employees, and does not take account of the salaried employees. The omission of the salaried employees is insignificant, as they are only a very small portion of the total employed by the industry.

It appears that the average wage per employee has fluctuated considerably in the footwear industry of the U.S.A. The earliest figure is that available for 1899 (appendix Vll table 11). During this year the average wage per employee was 412 dollars, which by today's rate of exchange is about £100 p.a. Observe, however, that from this date there was a continuous increase in the average wage. By 1914 it was standing at 552 dollars. This represents a rise of 140 dollars or 34% in 15 years. Note, however, the tremendous increase which came during the war. From 1914 to 1919 the average wage rose from 552 dollars to 998 dollars. A rise of 446 dollars or approximately 82% within 5 years. This tremendous increase in the average wage does give one some idea of the influence the war must have had on the industry.

For the immediate post-war years, while the industry was getting back to normal conditions, the average wage continued to rise, and by 1921 it was 1117 dollars. From this date, however, till 1929 there were only minor fluctuations, and the avarage wage remained very much the same. In 1929 it was the lowest it had been since 1921. It however still stood at 1081 dollars p.a. per employee, which is only 36 dollars below the 1921 figure. After this date the depression had a decided effect on the wages in the footwear industry of the U.S.A. By 1931 the average wage was down to 900 dollars p.a. and by 1933 it had fallen still further and was only 743 dollars p.a. This is the lowest it has been since 1919, and it was also the lowest point it fell to during this depression. By 1935 it had again risen by over 100 dollars and was standing at 853 dollars p.a. per employee. There was however still a further increase and by 1939 it was 913 dollars or approximately £188 p.a, This is the highest figure the average wage has reached since 1931. Observe that it is still below the figure for 1919 which was 998 dollars per employee p.a., also it is lower than the average wage for any of the years 1919-29.

The first figure available for the Canadian footwear industry on this particular point is for 1925. During this year the average wage was 947 dollars p.a. per employee (appendix Vll table 111). In the following year the average wage was up to 981 dollars. Observe that during the years that followed up to 1934 there was a steady decline in the average wage. By 1934 the average wage was only 695 dollars p.a. Note, however, that from 1926 to 1930 the average wage only declined from 981 dollars to 924 dollars p.a. whereas from 1930 to 1934 the average wage decreased from 924 dollars to 695 dollars p.a. This second decline is very much more rapid than the minor decrease from 1926 to 1930. Here again the reason for this big decrease in the average wage after 1930 is the influence of the depression on the Canadian footwear industry. It appears that by 1935 the industry had slightly recovered from this depression, and wages once again took an upward trend. During this year they were standing at 737 dollars per employee, but within the next year there was again a slight decrease, and the average wage per employee in 1936 was down to 728 dollars. Note, however, that as from this date, there has been a continuous increase in the average wage. By 1939 it was 794 dollars or approximately £168 p.a, per employee. Observe, though, that this figure is still very much below the average wage paid to employees during any year before the depression of the early thirties.

During the first year of the war the average wage did not rise very much and was only 815 dollars p.a. in 1940. During the second, third and fourth years, however, the average wage rose by more than 100 dollars every year, so that in 1943 it stood at 1162 dollars or approximately £264 p.a. Here again the reason for the small increase in the average wage during the first year of the war, as compared with the increase during the later years, is because wages always lag behind prices. Prices usually have to rise before, and rise considerably, before there is any increase in the wages paid to employees.

In table 111 appendix V11, it will be seen that the average for the South African footwear industry has been put into three columns, which represent three different averages. In the first average column will be found the average wage for all the employees in the South African footwear industry. In the second average column, the average wage for only the Europeans in this industry, and in the third column the average wage for only the non-European employees. Under point F in chapter 111, the general average wage and the European average wage will be found, though in that chapter comments were only made on the general average. It is, however, considered inadvisable to compare the general wage of the South African footwear industry with the average wage of the footwear industries of the other three countries, as the non-European wage brings down the general wage to too low a figure. The European average will thus be the one used in the comparison, though comments will be made on the general average, and the non-European average throughout the discussion.

The first figures available for the South African footwear industry in connection with this point are those for the year 1915-16. At this time the average European wage was £71 p.a., while the non-European average wage was £46 p.a. and the general average £59.5 p.a. In the following year all these averages decreased slightly. The European average falling to £63 p.a. But as from 1917-18 to 1920-21 there was a general and steady increase in both the average wage for the European and the non-European. By 1920-21 the average European wage was £123 p.a. while the average non-European wage was £54 p.a. In the five years that followed, during which time there was also a depression, the average wage for both types of workers fluctuated considerably, but it appears that the general tendency was for the average wage of the Europeans to decrease. By 1925-26 the average European wage was down to £107 p.a. It will be observed, however, that during this year the average Canadian wage was 947 dollars, which is almost £200 p.a. However, from 1925-26 to 1929-30 the average European wage increased, and was standing at £129 p.a. during this latter year.

The depression that followed again forced the average European wage down. Unfortunately here again the figures are not available for the years 1931-33, but it appears that in 1933-34 the average European wage was only £109 p.a. The average non-European wage at this date was £81 p.a. As from this date, however, there has been a steady increase in the average wage paid to both the European and the non-European. By 1938 the average European wage was £123 p.a. as compared with £123.9 p.a. in the British footwear industry. Also in the South African footwear industry the war caused the wages to rise very fast. Note especially the big increase in the last year for which figures are available, an increase from £153 p.a. to £182 p.a. within one year. Observe also the big increase in the average non-European wage during the war years, an increase from £79 to £108 p.a.

From this brief historical review of the footwear industries on this particular point, it appears that the British footwear industry wage has always been fairly low. It is most unlikely that it has ever been much above the 1938 figure, which in itself is a very unattractive wage. The review also showed that the average wage paid to workers in the U.S.A. footwear industry has been high since 1919, and that better wages were paid in the U.S.A. footwear industry during the years 1919-29 than for the 10 years after that date. Whether the average rose above the 1919-29 level after 1939 appears most likely, though nothing definite can be said owing to lack of statistics.

As in the U.S.A. footwear industry, so in the Canadian footwear industry it appears that the average wage paid from 1925-30 was higher than the one paid from 1931 to 1939. Note, however, that the wages rose considerably above the 1925-30 level after 1940.

In the South African footwear industry, there has been an almost steady increase in the European average wage since 1915-16. Note, however, that there were fluctuations in the yearly average wage from time to time.

The question now to be answered is, why is the average U.S.A. and Canadian footwear industries wage so much higher than the British and South African footwear industries wage? Before this question is answered, let the situation for 1939 once again be summed up. During this year the average U.S.A. footwear industry wage was £188 p.a., while the Canadian footwear industry wage was £168 p.a., and the South African footwear industry average European wage £132 p.a. The average wage in the British footwear industry was in 1938, £123 p.a.

At first it appeared that this difference may have been caused by the fact that the percentage of female labour employed might be different in each case. When the figures for South Africa, the U.S.A. and Great Britain were examined however, it was found that this was not the case. It must however be remembered that the average wage in the case of all four countries is an average for both male and female labour employed. Separate averages for both male and female could not be obtained.

Another possible explanation for this difference in wages paid to employees in the four industries, might be that they work a different number of hours per week. This explanation, though, is not a very good one, for although the number of hours worked in each country could not be obtained, the U.S.A. figures, which were available, showed that its employees worked on the average 34.9 hours per week during 1939. It is most unlikely, thus, that they worked many more hours per week than the British footwear industry employee.

It appears therefore, that the explanations for these differences in wages paid to the employees in the four footwear industries, are the more obvious ones which have already been mentioned during the discussions of the previous points. It will be remembered that these explanations were, greater specialisation and division of labour thus greater productivity per worker, better management and layout of factories, and generally such circumstances as will give the worker a better chance to improve his efficiency and earn for himself a higher wage.

The reason for the high Canadian wage, it was said, was because the Canadian footwear industry was more or less forced into this high degree of specialisation of labour, as without a high productivity per worker it would not be able to keep the product of the U.S.A. footwear industry out of its own home market.

The British footwear industry wage, like the wage of all other British industries, is very low compared with American standards, but as a British wage it is nothing out of the ordinary. The British footwear industry worker cannot expect a higher wage with the low productivity which is very evident at the moment. Whether the manufacturer is entirely to blame for this low productivity of the worker is a question open for debate.

The South African wage has always been higher than the British wage, although this high wage has not always been justified, judging by output per employee. The fact that the industry is protected by means of tariff walls does also tend to make the wages higher than they would have been without the protection.

Point F is considered not a very good point for comparison. The reason why it is not very good for a comparative analysis, is because the wage that is compared is the average wage of the whole industry. The average wage does not only represent the wages of males and females all in one, but also are thrown in the wages of apprentices and foremen. It would have been a much better comparison, if say the wages of skilled workers only were compared. But, as the figures are not available for all the countries, a comparison of this nature is not possible.

CHAPTER V.

The main theme of this chapter is an attempt to determine what effect the South African Customs Tariff on imported Boots and Shoes has had on the manufacture of boots and shoes in this country. That is, it is hoped that this investigation will show which types of boots and shoes the South African mauufacturers have found most economical to produce and, what production they have left to a large extent in the hands of foreign producers.

Before this investigation is however undertaken, it might be advisable to state briefly why an industry such as the South African footwear industry, should have its home market protected against the exploitation of foreign producers.

Of the many arguments put forward to prove the case for protection, the Infant country and Infant Industry arguments are probably the best known. Stated briefly these two arguments in fovour of protection run along the following lines.

Infant Industry. This argument may be used to show that protection is required for a new industry in either an old or a young country. It is said that a newly established industry must be protected against its well established rivals in foreign countries. It must, however, only be protected for such a time until it is firmly established and is producing on the most economical basis it can hope to produce. Once it has reached this stage the protection it has received up till now should be removed. A very sound argument for protection. Unfortunately it is usually found that an industry never grows out of its infancy.

"Nearly every industrial tariff was first imposed as an infant industry tariff under the promise that in a few years, when the industry has grown sufficiently to face foreign competition, it would be removed. But, in fact, this moment never arrives. The interested parties are never willing to have the duty removed. Thus temporary infant industry duties are transformed into permanent duties to preserve the industries they protect."[1]

Infant Country. The industries of an old and established country have two distinct advantages over the industries of a young and undeveloped country. The main advantage is that it has a larger population and thus a larger market, which in turn gives its industries a better chance to mass produce at the lowest possible cost. In hand with this advantage goes of course the advantage that it has a large and skilled labour force which is not available in the young country.

With these odds against it the industry of the young country may find that it cannot get a foothold on its own home market, as the manufacturers of the older country can undersell it every time even in this market. If these conditions prevail then the only way in which the industries of the younger country can ever establish themselves is by doing so under the cloak of protection. But, here again the protection must only be temporary. Once the infant countries' industries are firmly established, all forms of protection should be removed. But as in the previous case so also here it is found that once protection has been granted to an industry, it is very difficult to get the manufacturers to agree to its removal.

(1) G. von Haberler - The Theory of International Trade. page 281.

"The suggestion is that the manufacturer in a new country is like a child which requires to be protected against the winter and rough weather, till such time as it is fuller grown and is able to take its place in the competition of nations. Unfortunately experience shows us that this time never arrives. Once an infant always an infant."[2]

These are the two main arguments in favour of protecting a country's industries against foreign competition. There are, however, several others. And, as most of them have been used to justify the protection given to the South African footwear industry, it might be interesting to examine them briefly.

Protection against Dumping. Dumping has been defined as "Price discrimination between national markets"[3]. That is selling goods in a foreign market at a price less than the one for which those same goods are selling on the home market.

There are several reasons why an industry of one country may decide to dump its products on the market of a foreign country at a price less than consumers are paying at home. The three main reasons are :

(a) It may do so because its own home market is not large enough to allow it to mass produce. But, if it dumps some of its products on a foreign market it can produce in such quantities that it is able to reduce costs to such an extent, that it still makes a larger profit than it did before it dumped part of its product on a foreign market. Dumping in this form, if it is continuous, can do the importing country

(2) W. Smart - The Return to Protection.

(3) Jacob Viner - Dumping, a Problem in In ernational Trade.p.3.

very little harm, and the government of the importing country should make a very sound investigation, before it protects its industries against the dumping of goods in this manner.

(b) A manufacturer may dump his products on a foreign market only during the years when he is unable to find a market for them elsewhere. This type of dumping is thus not continuous, and may do the importing country a great deal of harm, because, if its manufactures are not protected against it, they will not be able to compete during these years when goods are dumped, and will not be in existence to produce during the years when the goods are not dumped.

(c) Goods may be dumped on a market of a foreign country in order to stop production of that particular commodity within that country. Once production has been stopped, the foreign exporter again raises the price of the commodity to the normal level. Dumping of this nature is also disadvantageous to the importing country and home producers should be protected against it.

Protection prevents Unemployment. This is one of the favourite arguments of the South African footwear industry. This industry today employs over 15,000 workers. Had this industry not received protection in the form of a Customs Tariff, the number of workers that it would have employed would have been but a small fraction of the number it is actually employing. But, it cannot be said that had it only employed say 1000 workers today there would be 14,000 more unemployed than there are at present. It can safely be stated that had these 14,000 workers not been employed in the footwear industry they would have been absorbed by the other industries of the country. Quite probably by an industry which is not receiving protection.

If an industry such as the South African footwear industry or any other industry that requires protection is started during a depression, when there is considerable unemployment, and this industry then causes a large number of the unemployed to be employed, then the claim can be put forward that protection prevents unemployment, but if this protection just causes workers to be diverted from one industry to another, then there is certainly no justification for the protection of an industry just because it employs some of the country's working population.

Protection safeguards the Standard of Living. A high standard of living is caused by high wages. Wages in one country can be higher than wages in another country because:

(a) The workers are provided with better training facilities and are more efficient.

(b) Because the workers are employed in conjunction with a larger amount of capital per head.

(c) Wages are forced up, or the number of workers are limited by Trade Union action.

If the standard of living in a country is high as a result of (c) above, then the industry in which those workers are employed will require protection against the competition of foreign producers. But, if wages are high as a result of (a) or (b), then no protection will be required. The high wage will be the result of the greater product of the more efficient worker. "The price of every article entering into international trade, and most articles now do enter, must tend to be the same, however and wherever it is produced. If the people who make particular articles, say shoes, in one country, get at the end of the week a much higher wage than those who make the same quality of shoes in another country, this must mean that, each workman in the high wage country makes more shoes in a week than each workman in the low wage country, otherwise his produce could not sell for the same price per pair. The difference in wages in the different countries represent at the bottom differences in the productivity of their labour. A country can and does have a relatively high standard of life, because and so long as its labour is relatively more productive than those of the other countries". (4)

Protection increases the National Income. This is one of the best arguments in favour of protection from the point of view of any one single country. "One of the most respectable arguments for protection is that it may turn the terms of trade in favour of the country imposing export or import duties." (5)

If a country is importing a commodity from another, and it decides to place a duty on the importation of that commodity, with the result that the article can be produced at a lower cost at home than it can be imported for, then it is said that as a result of this protection this particular country has improved its terms of trade and so increased its national income. Note, however, that one country can only improve its terms of trade at the expense of another country.

Protection for the sake of security during a war : There are certain industries within any country which are essential to the economic stability of that country

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(4) Sr. W. Beveridge - Tariffs, The case examined, p. 40

(5) Economica - F. Benham - The terms of trade, p. 361.

during a war. These industries have thus to be protected against foreign rivals during peace time, even though it were possible that their products could be imported during normal times at a price much less than they could be produced for at home. An example of such an industry is agriculture.

Protection for the sake of revenue : A duty on imported goods for revenue purposes does not mean that that duty is imposed on imported goods for the protection of the home industry. It is quite logical that if a duty is so high that it is high enough to prevent certain goods from entering the country, then it loses its effect as a revenue collector. If a duty is thus placed on an article for revenue purposes, that duty must be so small that it still allows an importer considerable gain if he imports the commodity instead of buying it from a home producer. The ideal duty for revenue is of course a duty on goods which are not manufactured in the country imposing the duty.

So much, then, for arguments advocating protection. Let the importation of footwear and the manufacturers of footwear in South Africa now be examined, and let it be determined what has been the effect of the duty on imported shoes, both from the number of pairs imported point of view, and from the point of view of the local manufacture.

In 1910 the tariff structure in connection with the importation of footwear into South Africa was a very simple affair. The duty being £15. for every £100. worth of footwear imported, with a minimum duty of 9d., 6d., and 3d., on each pair of mens, womens, and childrens shoes imported respectively. This duty of £15. per £100 was a standard duty on all footwear imported, irrespective of the material the footwear was made of.(6).

Tables 1 and 11 show that for the years 1910 to 1914 there was very little change in the annual value of imported footwear. Observe that at the time the annual value of mens footwear imported was more than the sum of womens, childrens and slippers footwear imported. This is most remarkable as the main complaint of the South African footwear manufacturers at the time was that they found that the fine quality leather tanned in South Africa inferior to the imported material. This fine quality leather was, of course, required mainly in the manufacture of womens' shoes. Surely, then, if they found it easier to compete with the imported mens shoes, and assuming that the difference in the male and female population is insignificant, then statistics should show that the value of the imported womens shoes is greater than the value of the imported mens shoes.

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(6) Trade and Shipping 1910, page 1V

Unfortunately there are no statistics available showing the production of footwear in South Africa at the time. However, the fact that the tariff on imported footwear was not raised by Act 26 of 1914 does suggest that the manufacturers were, generally speaking, satisfied at the time with the protection they were receiving, and that their trade was progressing favourably. "It is clear that by 1912-13 the boot and shoe manufacturers were enjoying a considerable measure of prosperity. The industry was concentrating mainly on the production of the lower grades of footwear, but some attempt was being made to improve the standard of production. The boot and shoe industry was actually in a position to carry on without additional protection, provided heavy duties were not placed on imported leather but, needless to say, most manufacturers viewed favourably a suggestion that the existing duty of 15% might be increased to 20% (with a rebate of 3% in either case to Great Britain.)" (7)

According to Table 4 the total customs duty collected on imported footwear during 1910 was £162,473. In the succeeding years it varied very little from this amount, and by 1915 the amount collected in this manner was £164,448. Observe, however, from this table that more than half the duty collected was paid on imported mens footwear.

During the war years 1914-18 there was a considerable increase in the cost of imported footwear. In 1914 1,713,917 pairs of mens shoes valued at £567,215 were imported, but by 1918 the volume imported had fallen to 796,781 while the value had only fallen to £541,865 showing that the price per pair of imported mens shoes had more

(7) South African Journal of Economics - Dec.1935 p.522

Imports of Leather Footwear.

Table 1.[34]

Year.	Mens Value.	Mens Pairs	Womens Value.	Womens Pairs.	Childrens Value.	Childrens Pairs	Total Leather Footwear Value	Total Leather Footwear Pairs.
1910	£643,221	----	£346,957	----	£175,212	---	£1,065,380	---
1911	£643,089	2,107,278	317,563	1,553,083	169,454	1,242,844	1,130,106	4,903,205
1912	651,042	2,065,614	287,089	1,873,702	197,640	1,426,838	1,235,771	5,366,154
1913	657,686	2,019,976	379,395	1,694,743	186,136	1,299,982	1,123,217	5,004,701
1914	567,215	1,713,917	343,488	1,528,183	187,784	1,256,687	1,098,487	4,498,787
1915	512,521	1,339,673	306,363	1,169,635	148,342	934,130	£967,226	3,443,438
1916	738,525	1,853,666	514,950	1,795,442	232,624	1,241,141	1,486,099	4,890,249
1917	356,863	686,967	363,423	967,321	141,795	618,232	862,081	2,272,520
1918	541,865	796,781	757,679	1,464,023	200,613	784,586	1,500,157	3,045,390
1919	691,776	818,466	576,998	974,157	153,928	516,254	1,421,702	2,308,877
1920	1,374,534	1,174,642	1,489,962	1,648,499	354,051	937,436	3,218,547	3,760,577
1921	244,517	285,441	396,588	523,433	72,285	191,935	713,390	900,809
1922	291,238	376,433	654,099	1,044,521	87,864	269,437	1,033,201	1,690,391
1923	378,813	593,833	602,601	1,128,191	64,498	226,543	1,045,912	1,948,567
1924	300,296	466,964	631,109	1,213,886	63,580	242,309	993,985	1,923,159
1925	246,227	385,672	538,171	1,017,401	51,120	213,623	835,518	1,616,696
1926	266,144	417,971	605,576	1,172,939	48,813	211,951	920,533	1,802,861
1927	232,635	363,699	489,143	1,004,901	40,969	184,876	762,747	1,553,476
1928	222,299	343,302	573,543	1,211,583	51,984	237,237	847,826	1,792,112
1929	209,153	347,495	535,584	1,283,930	55,477	279,303	798,214	1,910,728
1930	146,766	239,880	388,879	895,492	40,993	217,432	576,638	1,352,804
1931	86,111	147,885	237,871	617,809	20,345	135,313	344,327	901,007
1932	38,045	80,370	97,484	282,298	12,187	112,213	147,720	474,881
1933	50,419	81,776	131,147	273,958	19,138	146,864	200,704	502,598
1934	61,632	92,597	153,213	263,141	19,944	133,749	234,789	489,487
1935	67,764	105,450	156,000	268,850	21,832	169,906	244,596	544,206
1936	80,447	126,371	190,616	330,196	20,413	151,648	291,476	608,215
1937	78,706	135,439	178,286	321,301	24,621	168,783	281,613	625,523

- contd.-)

Table 1 continued.

Year	Mens. Value	Mens. Pairs	Womens Value	Womens Pairs	Childrens Value	Childrens Pairs	Total leather footwear Value	Total leather footwear Pairs
1938	£73,544	110,474	£183,445	318,532	£18,064	125,125	£275,053	554,131
1939	67,530	98,238	167,990	263,631	15,835	114,246	251,355	476,115
1940	65,243	80,861	155,554	198,042	11,811	65,670	232,608	244,573
1941	39,840	48,274	186,594	249,024	12,154	60,113	238,588	357,411
1942	45,264	61,468	157,040	203,416	10,077	43,031	222,381	307,915
1943	2,751	3,212	19,840	25,155	2,792	12,302	25,383	40,669

Imports of other footwear (not leather).

Table 11.[34]

Year	Slippers Value	Slippers Pairs.	Second-hand B&S. Value	Second-hand B&S. Pairs.	Infants Value	Infants Pairs	Canvas, Rubber & Other Value	Canvas, Rubber & Other Pairs
1910	£26,124	---						
1911	27,198	313,559						
1912	31,605	380,880						
1913	28,278	323,716						
1914	23,709	285,966						
1915	12,212	105,409						
1916	21,038	166,771						
1917	19,300	143,185	£20,608	114,048				
1918	37,235	231,565	£13,333					
1919	31,039	162,226	15,461	76,348				
1920	74,990	320,056	1,760	10,640				
1921	24,868	123,002	557	2,324				
1922	39,294	252,142						
1923	43,630	283,963						
1924	24,266	139,691			£30,041	256,729	£144,499	775,903
1925	21,877	139,992			£30,848	282,474	£140,544	937,422
1926	28,467	189,388			£36,952	321,867	£116,755	712,971
1927	22,438	127,770			£35,471	326,494	£128,221	893,071
1928	46,449	293,892			£44,837	390,867	£151,043	948,618
1929	62,140	451,482			£51,110	535,211	£217,826	1629,704
1930	55,519	455,231			£40,294	404,686	£253,900	2441,137
1931	54,393	484,206			£29,627	406,661	£324,673	5771,926
1932	30,289	388,227			£24,046	473,172	84,937	1998,608
1933	36,640	370,899			£33,057	514,615	98,760	1629,616
1934	52,536	537,282			42,105	615,560	72,927	993,489
1935	42,929	410,899			46,528	700,409	76,917	1284,754

- continued -

Table 11 continued.

Year	Slippers Value	Slippers Pairs	Second-hand B&S. Value	Second-hand B&S. Pairs	Infants Value	Infants Pairs	Canvas, rubber & other. Value	Canvas, rubber & other. Pairs
1936	53,757	500,774			£52,809	794,205	£81,627	1,464,128
1937	47,436	360,189			61,655	892,156	£106,675	1,129,593
1938	42,257	298,368			54,900	805,936	80,142	1,170,449
1939	37,937	286,542			58,221	841,939	92,141	1,254,327
1940	36,800	264,958			50,055	670,362	98,578	371,714
1941	32,036	191,916			52,007	585,495	74,007	443,938
1942	25,718	131,641			44,324	375,180	55,381	28,366
1943	2,737	14,134			61,302	392,302	7,187	

Manufacture of Footwear in South Africa.

Table 111[35]

Year.	Leather Footwear Pairs	Leather Footwear Value £	Slippers Pairs	Slippers Value	Veldschoens Pairs	Veldschoens Value	Canvas footwear Pairs	Canvas footwear Value
1916-17	1,151,599	546,918	44,050	£10,199	425,530	£106,272		
1917-18	1,291,105	741,526	123,813	51,616	350,853	106,515		
1918-19	1,629,637	1,061,222	26,083	10,089	291,555	109,194		
1919-20	1,806,917	1,383,856	42,869	14,800	315,243	110,549		
1920-21	1,308,135	978,438	41,730	15,424	156,196	58,365		
1921-22	1,572,204	1,024,504	23,553	8,434	231,342	72,094		
1922-23	2,115,433	1,320,570	42,381	14,304	223,562	69,899		
1923-24	2,351,124	1,445,272	20,326	7,237	411,091	121,958		
1924-25	2,643,584	1,461,045	20,410	7,546	408,355	130,952		
1925-26	2,963. 01	1,695,923	15,355	5,258	501,442	142,273		
1926-27	3,205,842	1,829,558	14,461	5,038	536,538	160,961		
1927-28	3,136,320	1,905,125	8,543	3,283	621,656	209,183		
1928-29	3,386,198	2,106,329	14,942	6,391	633,085	208,375		
1929-30	3,510,589	2,081,749	20,235	7,276	610,121	191,502		
1932-33	4,283,946	2,061,898	318,661	36,119	586,240	160,259	280,690	£30,294
1933-34	4,680,049	2,285,816	422,656	44,519	545,975	158,084	1,520,999	143,953
1934-35	5,712,367	2,692,664	897,412	125,472	441,695	136,682	1,822,714	161,344
1935-36	6,074,720	2,896,835	1,200,114	142,188	570,800	175,982	2,592,391	201,653
1936-37	6,388,559	3,127,287	1,125,388	123,618	588,612	190,627	3,280,321	253,181
1937-38	6,207,229	3,169,597	1,105,621	119,445	623,094	194,664	2,560,795	198,894
1938-39	6,847,636	3,438,070	1,396,300	132,757	720,330	215,239	2,990,286	236,945
1939-40	7,082,532	3,883,932	1,528,175	174,682	567,017	197,870	3,435,561	294,609
1940-41	7,884,992	4,878,985	1,588,511	205,573	878,662	327,097	3,056,009	318,427
1941-42	9,506,870	6,559,583	1,349,013	243,251	846,742	367,770	3,019,518	449,248
1942-43	9,732,513	7,558,412	1,524,750	314,027	1,374,263	631,015	2,007,218	376,627

TABLE 1V.[34]

Customs Duty collected on Imported Footwear.

Year	Mens.	Womens	Childrens	SLippers	Total
1910	£83,935	£49,042	£22,069	£7,426	£162,473
1911	85,208	44,645	21,559	7,767	159,179
1912	88,160	54,619	25,261	9,065	177,105
1913	85,678	51,325	23,438	7,934	168,375
1914	70,644	45,927	23,387	6,561	146,519
1915	85,281	52,030	24,475	2,662	164,448
1916					173,587
1917					165,807
1918					273,049
1919					296,066
1920					506,193
1921					206,698
1922					192,936
1923					278,522
1924					319,066
1925					296,285
1926					327,720
1927					282,038
1928					321,134
1929					333,363
1930					283,694
1931					234,283
1932					130,289
1933					159,230
1934					138,229
1935					135,865
1936					157,616
1937					160,241
1938					150,424
1939					261,512
1940					119,946
1941					117,241
1942					83,559
1943					19,757

than doubled. During the same time the value of imported womens shoes had increased from £343,488 to £757,679 while the volume actually decreased from 1,528,183 to 1,464,023 pairs, again showing a very big increase in the price per pair. The value of childrens footwear imported also increased from £148,342 in 1914 to £200,613 in 1918, while the volume decreased from 1,256,687 to 784,586 pairs. Observe also that this table shows that the value of the total leather footwear imported rose from £1,098,487 to £1,500,157 during this period while the volume decreased from 4,498,787 pairs to 3,045,390 pairs.

When the figures in the total columns in table 1 are compared with the figures in the first two columns in table 111, which show the total value and volume of leather boots and shoes produced in South Africa, then it can be seen that by the end of the war South Africa was still importing the major portion of her leather footwear requirements. The South African manufacturers must have had this fact in mind when they pressed for still greater protection for the South African footwear industry against the foreign producer. This increased protection they received when by Act 22 of 1915 the duty on imported footwear was raised from £15 per £100 to £20 per £100 with a minimum of 9d, 6d, and 3d per pair on mens, womens and childrens footwear respectively. Also observe from table 1V that in 1915 the total customs duty collected on imported footwear was £164,448 while in 1916 it was £273,587. As a result of this increased protection and also as result of the difficulty of importing footwear during the war, the South African footwear manufacturers' position improved considerably since the prewar days, and they were now awaiting post-war competition with confidence.(8)

During the immediate postwar years, till about the middle of 1920, the volume and value of imported leather boots and shoes increased considerably. The actual increase being from 3,045,390 pairs valued at £1,500,157 in 1918 (the total of mens, womens and childrens leather footwear imported) to 3,760,577 pairs valued at £3,218,547 in 1920 (table 1). It must however be observed, that table 111 shows that there was a decrease in the value and volume of leather boots and shoes manufactured in South Africa during 1920 as compared with the 1918 production. Observe also (tables 11 and 111) that there was an increase in the value and volume of both South African produced slippers and the imported slippers during this period.

Another menace to the South African footwear industry at this time was the importation of second hand footwear from Europe (see table 11). These second hand boots and shoes were imported at such low prices that they altogether prevented the South African manufacture from competing in the market for cheaper footwear. The situation became so bad that a manufacturers convention was held to discuss the matter. The convention adopted the following resolution : "In view of the large importation of second hand footwear into South Africa during recent years, and the fact that enormous quantities of second hand boots are available for export from Europe, this convention desires to impress upon the government the necessity for taking such immediate action as will prevent the importation of second hand boots, thus avoiding disastrous effects on the boot manufacturing industry in the Union."(9)

(8) South African Journal of Industry and Trade May 1918 p.828.
(9) " " " " " " " July 1918 p.981.

The huge increase in the volume and value of boots and shoes imported into South Africa during the immediate post-war years is also illustrated by table lV which shows that from 1918 to 1920 the total customs duty collected on imported footwear increased from £273,049 to £506,193.

The beginning of 1921 found the South African footwear industry on the down grade. So much had been produced and imported during the previous year that the manufacturers were unable to obtain new orders. As the months of 1921 went by, the position of the South African footwear industry grew steadily worse. Eventually the position became so bad that a committee of the Board of Industry and Science was appointed to investigate into the position of the South African footwear industry, and attempt to determine what effect the recent importation of boots and shoes has had on this South African industry.(10)

The committee reported that the South African footwear industry was well organised and efficient and that some manufacturers were thinking of expanding their factories "if they can be assured of a market."(11)

When the footwear industry was in a depth of a depression during the first half of 1921 the provisions of the Moratorium Act were utilised and a proclamation issued by the Governor-General on the 12th. of May 1921 prohibiting the importation of leather footwear except under a permit issued under the authority of the controller of imports and exports. All leather footwear was placed in two categories. Those made in the Union and those not made here. A permit was only given

(10)South African Journal of Industry and Trade.Jan.1921 p.4.
(11)South African Journal of Economics. Dec.1935. p.528.

for the importation of the latter. The dividing line was one of price. All footwear above a certain price could be imported.(12) Thus, say the dividing line was 30/- in the case of mens leather shoes. Then all mens leather shoes costing over 30/- could be imported even if the South African manufacturers produced an odd pair costing say 31/-. The idea behind this proclamation was not to exclude the foreign producer altogether from the South African market, but merely to give the South African manufacturer a freer hand in his own home market with those types of footwear that he could produce, and at the same time preventing him from charging too high a price.

This act however had to expire on the 30th. June 1922 so the Board of Trade had to decide how to protect the industry after that date. The Board put forward three proposals and suggested that the Government should adopt one or all or some combination of them. The three proposals were : (a) To increase the Customs Tariff from 20 to 25%. (b) Continuation of the licencing system for another three years. (c) To leave the duty as it is and withdraw the licencing system. The Board however, agreed that high grade leather should enter duty free, and that the importation of second hand boots and shoes should be prohibited.(12)

The Government decided to maintain the licencing system for another year, and not to accept any of the other recommendations of the Board. The Board of Trade, however, objected to this licencing system and suggested that the future of the South African footwear industry should be made more definite.

The introduction of such an "import by licence" system does suggest that the South African footwear manufacturers had

(12)South African Journal of Industry and Trade.Oct.1922 p.445.

up till 1922 not attempted to compete with the foreign manufactures in the high priced and high quality footwear. It appears that the main efforts of the South African producer up to date have been directed in the way of producing a good but not very stylish shoe at a reasonable price. For the very high class shoe the South African consumer has had to look mainly to the foreign producer.

In 1921 the depression was so bad that only 900,809 pairs valued at £713,390 of mens, womens and childrens leather shoes were imported as compared with 3,760,577 pairs valued at £3,218,546 in 1920. There was also a very substantial decrease in the value and volume of slippers imported during 1921. A decrease from 320,056 pairs valued at £74,990 in 1920 to 123,002 pairs valued at £24,868 in 1921. Observe however, that while less boots and shoes were produced in the Union during 1920-21 than 1919-20 (table 111) there was actually an increase in 1921-22 over the 1920-21 figure. The production of slippers also fell in 1921-22 as the total production in that year was only valued at £8,434 as compared with £15,424 in the previous year.

The depression, however, was not of long duration, as table 111 shows that by 1922-23 the production of boots and shoes in South Africa had increased by over a half a million pairs, while the production of slippers had almost doubled itself. In connection with the imports of mens, womens and childrens leather shoes it is interesting to observe from table 1 that although the value and volume increased from 900,809 pairs and £713,390 in 1921 to 1,690,391 pairs and £1,033,201 in 1922, there was no further increase in these figures during the years that immediately followed. In fact there was a gradual decline in the volume and value of imports of this nature until the end of 1925. The volume of slippers (table 11) imported also increased in 1922 and 1923 but slowly declined after the latter date, and by 1925 the value, though not the volume, was below the 1921 level. Observe also from this table that as a result of the Government's action the importation of second hand footwear had ceased altogether.

One of the main reasons for this decline in the importation of both boots and shoes and slippers is no doubt the fact that by Act 23 of 1923 the duty on all footwear imported was raised from £20 to £30 per £100 with a rebate of 3% to Great Britain. At the same time the embargo on imported footwear was removed. This 30% however, was only to remain in force for five years till the 31st. March 1928, after that date it was to be reduced by 2½% yearly until it reached 20% again.

Although there was at this time a decrease in the value of imported boots and shoes, South African manufacturers were now finding that certain footwear of a very cheap nature were being imported. "Difficulties to be contended with in trade are (a) Competition with imported footwear of a cheap variety, constructed of paper and waste unsaleable leather."(13)

Table 111 again shows that there was a substantial increase in the value and volume of both leather boots and shoes and slippers produced in the Union. Table 1 on the other hand indicates that the volume and value of leather boots and shoes imported for men, women and children decreased from 1,616,696 pairs costing £835,518 in 1925 to 1,352,804 pairs costing £576,638 in 1930. Table 11, however, shows that in 1925

(13)South African Journal of Industry and Trade June 1924 p.401.

139,992 pairs of slippers valued at £21,877 were imported while by 1930 455,231 pairs valued at £55,519 were imported into the Union. Observe also that this table shows that there has been a very big annual increase in the volume and value of Infants shoes and Canvas and Rubber shoes imported from 1925 to 1930.

By Act 36 of 1925 an addition was made to Act 23 of 1923. This new Act stated that a duty of 30% ad valorem is to be paid on imported footwear of any kind, and including slippers sandals and goloshes and rubber soles, and that a duty of 12% ad valorem is to be paid on all infants shoes imported. This Act also removed the 3% preference that was formerly given to Great Britain.

The 30% ad valorem on all imported leather shoes is nothing new as this was already imposed by Act 23 of 1923. But it is to be observed from table 1 that ever since the introduction of the 30% duty on imported leather boots and shoes in 1923 there has been a steady decline, except for minor fluctuations, in the annual volume of imported footwear of this nature. It appears therefore that although the 30% ad valorem duty may have been enough to decrease the volume and value of leather boots and shoes imported, the figures in table 11 certainly do not show any such effect which it may have had on the importation of slippers, canvas and rubber footwear. The duty of 12% levied on Infants shoes imported appears to be a duty for purely revenue purposes, as Infants shoes were not manufactured in South Africa on any large scale at the time.

During this period, (1925-30), although there was a gradual decrease in the value and volume of leather footwear imported from abroad, the South African manufacturers were still clamouring for greater protection against the foreign producer.

"Unless the cheaper and middle class grades of footwear are shut out by a higher protective tariff, it will always remain impossible for the South African manufacture to specialise in a given direction, as the costs of securing special lasts, knives, fittings, etc. for the recurring fashionable styles could not be entertained and would be impracticable from the business point of view, not only on account of the expense involved, but because the demand would be inadequate with the overseas competition."(14)

It appears that at this time a large quantity of very cheap footwear was being imported into the Union, footwear so cheap that it was impossible for the Union manufacturers to compete. This cheap footwear did not compete directly with the product of the South African manufacturers as they were not producing any very cheap footwear. It did, however, rob the home manufacturers of their market indirectly as consumers were now buying this cheap and not very durable footwear in the place of the durable and not very attractive South African produced footwear which was a little more expensive. The South African footwear industry was producing by 1928 a men's shoe of good quality which could compete with the best imported shoes. It was specialising in these shoes and was not engaged in the production of cheap fancy shoes for men. It did produce a cheaper shoe for men, this shoe was, however, a utility shoe (Veldschoen) and not a shoe of a particularly attractive style. In connection with womens shoes the South African footwear industry was producing a medium grade shoe of good quality. "Specialising in the manufacture of ladies shoes of a good medium grade quality, we have created a demand in excess of what we have been

(14) South African Journal of Industry and Trade Aug.1925 p.418.

able to supply."(15) "The changing character of the South African boots and shoes manufacture is well illustrated by the fact that the industry asked in 1928 for an increase in the duty on cheaper types of boots and shoes, pointing out that it could hold its own in regard to medium and high grade footwear. The request was not granted."(16) The majority of cheap footwear imported at this time came from Messrs T. & A. Bata of Czecho-Slovakia.

With the arrival of the 1st of April 1928 it was time for the first reduction to be made in the amount of protection the South African footwear industry was receiving. The footwear manufacturers would, however, not hear of this reduction, and stated that their remarkable progress during the last years would not have been possible without such protection as they were receiving. The Board of Trade and Industries was once again asked to investigate into the position of the South African footwear industry, and make a recommendation.

The Board found that the South African footwear industry was well organised and efficient and that it justified all protection that had been granted to it. "The Board recommended therefore that section 13 of the Act, the provision for reducing the duty be repealed, and that the duty be stabilised at 30% ad valorem."(17)

By 1930 the importation of cheap footwear had become such a menace to the South African footwear industry that the Board of Trade recommended to the Government that a minimum duty of 3/6 per pair be levied on all mens, womens and childrens

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(15) U.G. 41 - 1927 page XXl.
(16) South African Journal of Economics. Dec.1935 page 534.
(17) Industrial and Commercial South Africa June 1928 page 301

shoes imported. By Act 32 of 1930 the Government imposed a duty of 3/6 per pair on all imported womens shoes only. This new duty satisfied the main demand of the South African manufacturers as it was against the importation of cheap womens shoes that they were mainly complaining.

Observe that from 1923 to 1930 there have been fluctuations in the total amount of customs duty collected on imported boots and shoes (table lV). But, although there have been these fluctuations, there is not any big difference in the total amounts of customs duty collected on imported footwear in 1930 as compared with 1923. The fact that these two figures are almost the same does also show that less footwear was being imported in 1930 than was the case in 1923.

By the end of 1929 there was talk among South African footwear manufacturers that a depression might be coming. It was however considered at this time, that the decline might be of short duration, and that the level of activity would be fully restored within a few months. This was however not the case and by the end of 1930 the general level of activity in the South African footwear industry was considerably below the level it was at the end of 1929.(18) The fact that money was becoming scarce was shown by the increased demand for cheaper shoes, and a decrease in demand for all the higher priced footwear.(19)

Unfortunately figures showing the production of footwear in South Africa during the years 1931 and 1932 are not available as they were never collected. But, the figures in table 1 show that while in 1930 the importation of mens, womens and

(18) Industrial and Commercial South Africa. Jan.1931 p.33.
(19) Industrial and Commercial South Africa. Mar.1931 p.117.

childrens leather boots and shoes amounted to 1,352,804 pairs valued at £576,638, by 1932 the figures representing these imports had dropped to 474,881 pairs valued at £147,720. This huge decrease in the volume and value of leather footwear imports is no doubt to some extent due to the fact that in 1930 a minimum duty of 3/6 per pair was levied on all womens shoes imported. But, the fact that money was becoming scarce in South Africa must certainly also have influenced the volume and value of imports considerably.

Now examine table 11. Here it is seen that in 1930 445,231 pairs of slippers valued at £55,519 were imported, while in 1932 only 388,277 pairs valued at £30,289 were imported. As the duty on slippers imported was not changed by the Act in 1930, this big decrease in the volume and value of slippers imported must almost entirely have been due to the oncoming depression. Observe however, that the volume of Infants shoes imported did not decline between these two dates. During 1930 404,686 pairs valued at £40,294 were imported while in 1932 473,172 pairs valued at £24,046 came into the country. Observe in this case that there has been a very big change in the price per pair. The importation of canvas and rubber footwear did not decrease immediately after 1930. During this year the Union imported 2,441,137 pairs of canvas and rubber shoes valued at £253,900. This large importation of cheap footwear caused the South African footwear manufacturers a great deal of worry. But, during the following year, the number of pairs of this type of footwear imported more than doubled, and 5,771,926 pairs valued at £324,673 were imported. Of this total 5,062,901 pairs valued at £217,558 came from Japan.[20] This huge importation of cheap

(20) Trade and Shipping 1931, Annual 1, page 205.

footwear brought the South African manufacturers up in arms, as it created even more depressed conditions within the industry. As a protest against the importation of such footwear, a mass meeting of footwear manufacturers was held in Port Elizabeth. "At a mass meeting of leather workers at Port Elizabeth the Government was requested to take action against Japanese importation, and a petition to this effect is being extensively signed."(21)

While the South African footwear industry was in such a depressed state, it received another great shock. Great Britain went off the Gold Standard. This meant that the South African footwear manufacturer was not nearly as well protected against British footwear producers as he was while Great Britain was still on the Gold Standard.

The Government realising how serious the position of the South African footwear industry was, imposed a duty by Act 27 of 1932 of 2/- per pair on imported canvas shoes with rubber soles, and by the same Act a duty of 3/6 per pair on imported mens, youths and maids shoes. As a result of this Act, table 11 shows that in 1932 only 1,998,608 pairs of canvas and rubber shoes valued at £84,937 were imported as compared with 5,771,926 pairs valued at £324,673 in 1931.

These new duties on imported footwear improved the position of the South African footwear industry considerably. However, the fact remained that the buying power of consumers at the time was very low owing to the depression. The South African footwear industry thus still found that trading conditions were very depressed. That South Africa was importing less footwear is also shown by table 1V, which shows that

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(21) Industrial and Commercial South Africa. Aug 1931, p.331.

whereas the customs duty collected on footwear amounted to £283,694 in 1930, the amount collected in this manner during 1932 was only £130,289.

During the second half of 1932 while most South African industries were still finding the trade very depressed, the footwear industry showed signs of improvement. By the middle of 1933 the industry was working at full pressure. It was suggested that the early recovery of the footwear industry as compared with the other industries of the country was due to two facts : (a) The increased protection it has received. (b) The employment of very highly skilled labour which achieved a greater degree of efficiency than had previously been the case.(22)

Table 1 shows that from 1932 to 1935 there was again a steady increase in the volume and value of mens,womens and childrens leather shoes imported. The total leather shoes importrd in 1932 was 502,598 pairs valued at £200,704 while, by 1935, these figures had increased to 544,206 pairs valued at £244,596. Not a very big increase but a steady one. The figures of table 11 also show an increase in the volume and value of slippers imported. In this case however, the increase is considerably larger than the one shown by table 1. In 1932 388,227 pairs of slippers valued at £30,289 were imported, while in 1935 410,899 pairs valued at £42,929 came into the country. Observe also the increase in the volume and value of Infants shoes imported. In 1932 473,172 pairs valued at £24,046 were imported while in 1935 794,205 pairs valued at £52,809 came from foreign producers. The only import figures that did not increase during the period 1932 to 1935 were those repre-

(22) Industrial and Commercial South Africa. May 1933 p.157.

senting canvas and rubber shoes. The probable reason why these figures actually show a decrease in the value and volume imported, is because after the duty of 2/- per pair was levied by Act 27 of 1932, a large canvas footwear industry was started in the Union. As a result of this industry the duty levied on imported canvas shoes had to be continually revised. Thus in 1934 by Act 40 in place of the 2/- per pair duty, a maximum and minimum rate was instituted. The maximum rate was 2/6 per pair and the minimum rate 1/6 per pair. The minimum rate was levied on canvas footwear from Great Britain and the maximum rate on canvas footwear from all other countries. As a result of this increased duty there were thus only 1,464,128 pairs valued at £81,627 imported in 1935 as compared with 1,629,616 pairs valued at £98,760 in 1932.

The contents of tables 1 and 11 thus show that, excepting for canvas and rubber footwear, there has been a considerable increase in the amount of footwear imported into the Union from 1932 to 1935. This fact is however not shown very clearly by table 1V as it shows that in 1932 the total amount of customs duty collected on imported boots and shoes was £130,289 while in 1935 this figure had only risen to £135,865.

An examination of statistics representing the production of footwear in South Africa, shows that the home manufacturers have also increased their production during these years (1932-35). The volume of boots and shoes produced in South Africa during this period increased by about 50% above the 1932 figure, while the volume of slippers produced had increased by almost 300%.

Throughout the years 1932 to 1935 the South African footwear industry was working at full pressure. Manufacturers felt however, that the volume of childrens shoes imported was too great and that something ought to be done to increase the volume of childrens shoes produced in South Africa. "It has been estimated that on the basis of the volume of childrens shoes at present coming into the country from overseas, transference of this market to the Union's factories would mean scope for the employment of an additional five hundred operatives of both sexes."(23)

As regards the quality and type of shoes they were producing at this time, it appears that the mens shoes were still of high quality, which could be compared with the best imported shoes. There has, however, been a change in the production of ladies shoes. Some factories were still producing the medium grade womens shoe, but several factories had gone over to the production of high grade shoes of the very latest fashion. "Without exception the boot factories in Port Elizabeth are working at full pressure, and particularly is this the case where the establishments specialise in the fashion foot wear. At this time of the year Milady must be served with the very latest styles, and manufacturers have been concentrating on a variety which will serve every need and fancy."(24)

Towards the end of 1935 the Government appointed the Customs Tariff Commission. This commission had to enquire into, advise and report upon such matters as : (a) The effect the customs tariff has had up to the moment on the development of secondary industries in the Union of South Africa. (b) On what grounds protection has been granted and whether it appears advisable to either maintain, increase or decrease the exist-

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(23) Industrial and Commercial South Africa. April 1934 p.114.
(24) Industrial and Commercial South Africa. Nov. 1934 p.353.

ing duties. (c) The extent to which it is possible to draw the distinction between revenue and protective duties."(25)

The commission reported that the South African footwear industry with its high protection involves the community in considerable costs. It stated that as the industry was employing all the most up to date equipment, the high protection which the manufacturers regard as essential, required some explanation. It however found that a deeper investigation into this matter was beyond its powers and suggested that a committee be appointed to investigate into (a) The amount of protection. (b) The level of wages. (c) The interests of the consumers of its products with particular reference to the relative wage levels. (d) The efficiency of the different units and the desirability of maintaining protective rates to shield inefficient units.(26)

In connection with the duty imposed on imported canvas shoes the commission stated that this duty was levied on such importations in order to protect the lower priced leather shoe against them, the duty had however failed in its purpose as such as it immediately gave rise to the manufacture of canvas shoes in the Union. They considered that this duty when used as protection for the Union canvas footwear manufacturers against foreign manufacturers was excessive. They therefore recommended that a lower "specific duty of 1/6 per pair (with 6d. per pair for the United Kingdom and Canada) would be adequate".(27)

As a result of this recommendation by the commission

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(25) U.G. 5 - 1936 p.5 "Report of the Customs Tariff Commission"
(26) " " " p.77 " " " " " "
(27) " " " p.77 " " " " "

the Government by Act 25 of 1936 again revised the duty on imported canvas footwear. The new duty took the form of minimum, intermediate and maximum duties which were 6d., 1/- and 1/6 respectively. The duty of 6d. per pair being levied exclusively on canvas footwear imported from the United Kingdom and Canada.

Trade conditions throughout 1936 were good. The figures in table 111 show that considerably more boots and shoes were produced during this year than 1935. Observe, however, from the same table that there is a distinct decrease in the volume of slippers and canvas shoes produced in South Africa at the time. It must also be observed that the figures of table 1 show an increase in the volume of leather shoes imported, while the figures of table 11 also register an increase in the volume of slippers, Infants, canvas and rubber shoes imported in 1936 as compared with 1935.

Early during 1937 the trade became slack and by September there was still no signs of improvement. "The state of the trade in the boot and shoe manufacturing industry is still bad, and one authority expressed the view that it was possible that there might not be a recovery till the end of the year. The majority of factories are on short time." (28)

The figures in table 111 show that there has been a slight decrease in the number of boots and shoes, slippers and canvas shoes produced in South Africa during 1937. The figures in table 1, however, show that while there has been an increase in the total value of leather footwear imported during 1937 as compared with 1936, there has been a considerable decrease in the total value imported, a decrease from £291,475

(28) Industrial and Commercial South Africa. Sept.1937 p.272.

to £281,613. Note,however, that table 11 shows a decrease in both the volume and the value of slippers imported during 1937 as compared with 1936. Statistics representing the importation of Infants shoes show a very definite increase in both the value and the volume of these shoes in 1937 as compared with past years. Statistics representing the value of imported canvas and rubber shoes, show a decrease in 1937 as compared with 1936. This is rather surprising as it will be remembered that by Act 25 of 1936 the duty on imported canvas shoes was actually reduced, which would lead one to expect a considerable increase in the figures representing the imports of this type of footwear.

Trade conditions did not improve in 1938 as it was anticipated they would by the South African footwear manufacturers, but remained depressed throughout the year. The local footwear manufacturers blamed this state of affairs on the large quantities of footwear that were being imported. Observe however that the figures in tables 1 and 11 show that much less footwear was being imported in 1938 than was imported in 1937.

Conditions however improved towards the beginning of 1939. "The wheel of fortune has turned. Behind the footwear industry is a year of depression, but ahead, for six months at any rate, are good times."(29) Figures in table 111 also indicate that there was a substantial increase in the production of boots and shoes and slippers and canvas shoes in South Africa during 1939. Observe however, from tables 1 and 11 that while there was an increase in the importation of Infants shoes and canvas and rubber shoes during this year, there was

(29) Industrial and Commercial South Africa. Feb.1939 p.51.

a decrease in the importation of mens,womens and childrens leather shoes and slippers.

By the time war was declared in September 1939, the South African footwear industry was producing mens shoes of all types. That is from the best quality shoe, which compared favourably with the finest of the overseas producers, down to the cheap shoes of very poor quality. The industry however found that as its costs of production were somewhat higher, largely due to the higher wages it was paying, than the costs of its foreign competitors, it could thus best produce the more expensive shoe of good quality. The establishments specialising in mens footwear have thus tended to specialise in the higher grade footwear which is considerably more expensive than the poorer quality shoe, which could be imported. The South African footwear manufacturers have also produced cheap shoes. The best known cheap shoe it was producing and still is producing is the veldschoen which, as has been said before, is a shoe which is very strong and will last much longer than the cheap imported shoes. In connection with womens shoes the South African footwear industry was producing in 1939 shoes of all prices and qualities but, also here as a result of their high production costs, they have specialised in the production of high quality shoes of a very fashionable nature. It must however be stated that much of the very fine leather used in the production of womens shoes has had to be imported. The war however, caused the type of womens shoe demanded by consumers to change considerably. The women now demanded a simple shoe which did not have any elaborate design.(30) The shoes demanded by the men did not undergo any change. Several of the

(30) Shoes and Views. Oct-Dec. 1939 p.4.

footwear factories that had produced mens shoes took on military contracts and went over to the production of footwear for the armed forces.

By the end of 1941 the war had caused a considerable fall in the volume and value of footwear imported. It must also be remembered that shortly after the outbreak of the war, the Government obtained the power to control all imports. So the imports may have decreased due to the Government's use of this power. The South African footwear industry was very busy as it now had the entire responsibility of satisfying the South African consumer. "There is every indication that 1941 returns will close at new high levels of trading results in the footwear industry."(31) As the war progressed trade remained very favourable for the South African footwear industry, but manufacturers found it more and more difficult to obtain all the materials they required. By 1943 the imports of footwear had almost ceased altogether.

It appears that throughout the war the South African footwear manufacturers did not find any difficulty in obtaining a market for their products. It is unfortunate however, that during the war years they had to find it so difficult to produce the type of footwear in which they were specialising just before the war. In the case of womens shoes and to a much lesser extent in the case of mens shoes, they could not produce shoes during the war equal to those of pre-war quality and style because some of the very high grade leather which they required for such footwear had to be imported from foreign tanners, an action which was quite impossible on a large scale during the war. Another difficulty the manufacturers had to

(31) Shoes and Views Oct.-Dec. 1941 p.20.

face was the shortage of skilled labour, and of course at the same time, there was the shortage of machinery, as a large portion of the pre-war stock had worn out and could not be replaced owing to the difficulty of obtaining shipping space.

In the face of these difficulties the South African footwear manufacturers found many a day trying, but it appears that they emerged victorious as their products are to-day recognised among the best footwear produced. The South African produced Army boot, it is said, was preferred by many Allied soldiers to the boots produced in their own country. It must, however, be remembered that the South African footwear industry has achieved this high standard, partly because the war prevented the foreign producer from sending his product to the South African market. Now that the war is over, what will be the effect of post-war competition on the South African manufacturer?

A committee of the Board of Industries and Trade headed by Dr. Norval was appointed to investigate into the manufacturing industries of the Union of South Africa.

In connection with the protection the South African industries were receiving, the Board reported that it was satisfied that the moderate protection the industries were receiving has been a distinct advantage to South Africa as it has brought about the expansion of the industries and had created employment for workers within the Union. It therefore recommended that this policy of protection should be continued.(32) With reference to the continued protection the Board is of the opinion that when matters such as the modern and up to date equipment the industry uses, the careful selection of employees,

(32) Board of Trade Report 282 p.104.

and the efficiency with which South African industries are managed are considered, then it appears that the South African industries are at a lesser disadvantage as compared with foreign producers than is generally supposed.

The Board is however aware of the fact that the South African industries have been placed at a great disadvantage during the war as they have not been able to install new equipment, nor have they been able to build up reserves or make sufficient provision for depreciation. The Board therefore feels that an immediate reduction of tariffs would be very unwise.

In connection with the post-war importation of footwear, Dr. Norval, the chairman of the Board of Industries and Trade put forward a proposal that as from 1st. July 1945 permits be granted for the importation of footwear for one year on a basis of 25% of pre-war imports. Pre-war imports being defined as the average annual imports for the years 1939, 1940 and 1941. Further he proposed that as from 1st. July 1946 permits be granted for one year for the importation of footwear equivalent to 50% of the annual pre-war average, and that as from 1st. July 1947 permits be granted on a basis of 100%.

The footwear manufacturers' federation opposed this proposal. They regarded the 1st.of January 1947 "as the earliest date from which any gradual relaxation should commence. This period would be needed to enable adjustment to take place between civilian demand and total available production, any relaxation of import control during this period would magnify the difficulties of adjustment, and undermine the capacity of the industry to cope with employment and re-employment".(33) Their opposition was, however, of no avail as in December 1945 all import control was removed, and anybody who wanted to import footwear could import as much of it as they could lay hands on. It must, however, be realised that at this time it was very difficult to obtain footwear from Europe and America as there was a great shortage of it in those countries.

During 1946 a large number of footwear factories were visited by the writer in Port Elizabeth and Johannesburg. Interviews with the manufacturers proved that at the time they were not being effected in the slightest by the volume of imported footwear. To the question "How are you finding the market for your product" the answer in almost every case was, "We can sell everything we make." Their main problem at this time appeared to be new boot making machinery which some of them had ordered several years back. They were also finding difficulty in obtaining all the skilled labour they required.

The South African footwear industry has had to cater for the whole of the South African market during the war, a job which has been well done by them. Above all this they have exported footwear on a fairly large scale. It thus appears that under the existing tariff structure, the foreign producer will meet with considerable opposition from the South African footwear industry, if he attempts to get a foothold on the South African market for his product. It can be said with confidence, that the importation of footwear on a large scale into the Union is a matter of the past for which there is no place in the future.

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(23) Industrial and Commercial South Africa, April 1934, page 114.

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(29) " " " " " Feb. 1939, p. 51

(30) Shoes and Views Oct.-Dec. 1939, page 4

(31) " " " Oct.-Dec. 1941, page 20

(32) Board of Trade Report 282 page 104

(33) Industry and Trade July 1945 page 182

(34) The following are the Journals of Trade and Shipping used in the construction of Table 1, 11 and 1V.

1910	Annual	1	pages	73 and 74	Annual	1	page	73
1911	"	1	"	75 and 76	"	1	"	75
1912	"	1	"	72 and 73	"	1	"	72
1913	"	1	"	72 and 73	"	1	"	72
1914	"	1	"	71 and 72	"	1	"	72
1915	"	1	"	69 and 70	"	1	"	69
1916	"	1	"	81 and 82	"	4	"	2
1917	"	1	"	78 and 79	"	14	"	2
1918	"	1	"	72 and 73	"	14	"	2
1919	"	1	"	72 and 73	"	14	"	2
1920	"	1	"	72 and 73	"	15	"	2
1921	"	1	"	82 and 83	"	15	"	2
1922	"	1	"	87 and 88	"	16	"	2
1923	"	1	"	87 and 88	"	16	"	2
1924	"	1	"	177 and 179	"	16	"	2
1925	"	1	"	190 and 191	"	16	"	5
1926	"	1	"	198 and 199	"	16	"	8
1927	"	1	"	202 and 203	"	16	"	8
1928	"	1	"	202 and 203	"	16	"	8
1929	"	1	"	202 and 203	"	16	"	8
1930	"	1	"	202 and 203	"	16	"	8
1931	"	1	"	203 and 205	"	15	"	454
1932	"	1	"	202 and 203	"	15	"	455
1933	"	1	"	196 and 197	"	15	"	434
1934	"	1	"	195 and 196	"	15	"	434
1935	"	1	"	202 and 204	"	15	"	462

1936	Annual	1	pages	203	and	204	Annual	15	page	510
1937	"	1	"	203	"	204	"	15	"	510
1938	"	1	"	214	and	215	"	15	"	526
1939	"	1	"	214	"	215	"	15	"	526
1940	"	1	"	214	"	215	"	15	"	442
1941	"	1	"	195	"	196	"	15	"	442
1942	"	1	"	184	"	185	"	15	"	404
1943	"	1	"	160	"	161	"	15	"	365

(35) The following were the Blue Books used in the construction of Table 111.

(1) U.G. 48-1921 page 67
(2) U.G. 40-1922 page 37
(3) U.G. 14-1924 page 38
(4) U.G. 41-1924 page 44
(5) U.G. 41-1927 " 50
(6) U.G. 32-1928 " 50
(7) U.G. 51-1928 " 52
(8) U.G. 18-1932 " 46
(9) U.G. 44-1930 " 47
(10) U.G. 33-1931 " 38
(11) U.G. 31-1935 " 46
(12) U.G. 34-1936 " 47
(13) U.G. 30-1937 " 46
(14) U.G. 24-1938 " 46
(15) U.G. 39-1939 " 46
(16) U.G. 21-1941 " 53
(17) U.G. 20-1945 " 75
(18) U.G. 20-1946 " 69
(19) Stoker. Facts and figures of South African footwear.

APPENDIX 1. TABLE 1. Canada.

(1) Quantity and Value of Product.

(a) Boots and Shoes with leather or fabric uppers.

	1942 Pairs	1942 Dollars	1943 Pairs	1943 Dollars.
Mens.	9,166,689	28,721,411	9,415,538	33,040,360
Boys and Youths	1,048,458	1,922,172	1,318,608	2,572,782
Womens	12,609,226	26,863,084	12,583,093	29,112,011
Misses and children	3,236,963	3,934,773	3,170,717	4,046,883
Babies and infants	1,767,078	1,333,060	2,018,497	1,525,719
TOTAL	27,828,414	62,774,500	28,506,453	70,297,755

(b) Shoepacks, larrigans and moccasins, (oil tan)

Mens	17,557	39,734	27,516	65,957
Boys and Youths	4,991	8,045	8,936	13,491
Womens	260	452	112	263
Misses and Children	801	1,248	65	58
Babies and Infants	--	--	--	---
Total	23,609	49,479	36,629	79,769

(bb) Moccasins, all other.

Mens	105,875	163,409	64,472	93,572
Boys and Youths	21,564	19,395	19,915	19,119
Womens	13,762	15,835	6,526	5,409
Misses and Children	10,631	7,706	10,473	6,952
Babies and Infants	24,374	6,939	21,952	6,227
Total	176,206	213,284	122,338	131,279

App. 1 Table 1 (Contd.)

(c) Footwear of all kinds with felt uppers.

Mens	382,450	637,870	408,201	697,739
Boys and Youths	32,591	44,809	42,266	59,690
Womens	213,186	191,005	184,171	194,316
Misses and children	115,429	77,733	74,558	71,833
Babies & infants	6,459	7,592	7,640	9,068
Total	750,115	959,009	716,836	1,032,646

(d) Slippers of leather or any other material, including Indian slippers.

Mens	534,617	593,461	502,255	645,726
Boys and Youths	150,491	94,867	103,444	69,736
Womens	2,875,112	2,105,557	3,079,552	2,429,719
Misses & children	601,806	316,024	765,333	407,071
Babies & infants	126,019	60,275	94,781	51,479
Total	4,288,045	3,170,184	4,545,365	3,603,731

TOTAL FOOTWEAR				
MENS	10,207,188	30,155,885	10,417,982	34,543,354
BOYS & YOUTHS	1,258,095	2,089,288	1,493,169	2,734,818
WOMENS	15,711,546	29,175,933	15,852,454	31,741,718
MISSES & CHILDREN	3,965,630	4,337,484	4,021,146	4,532,797
BABIES & INFANTS	1,923,930	1,407,866	2,142,870	1,592,493
TOTAL	33,066,389	67,166,456	33,927,621	75,145,180

Appendix 1. Table 11.

Power equipment used.

Steam	4	Engines	285	Horse Power
Hydraulic Turbines	2	"	325	" "
Electric Motors	2090	"	7736	" "
Boilers	50	"	2957	" "

Table 111

Classification of Est. according to No. of employees,1943.

Less than 50	50-100 emp.	100-150 emp.	over 150 emp.
Est. 104	57	25	36

TABLE 1V

Classification of Est. according to value of products,1943.

Less than 100,000	100,000 but under 200,000	200,000 but under 500,000	500,000 but under 700,000	700,000 & over
74	37	63	17	31

TABLE V

Classification according to value of Capital,1943.

Less than 50,000	50,000 but under 100,000	100,000 but under 200,000	200,000 but under 400,000	400,000 & over
86	41	38	32	25

TABLE V1

Quantity and Value of Production 1943

Mens	10,417,982	Pairs	34,543,354	Dollars
Boys	1,230,961	"	2,309,697	"
Youths	218,156	"	363,361	"
Little Gents	44,052	"	61,760	"
Womens & Girls	15,852,454	"	31,741,718	"
Misses	2,211,735	"	2,582,408	"
Children	1,809,411	"	1,950,389	"
Babies & Infants	2,142,870	"	1,592,493	"
TOTAL	33,927,621		75,145,180	"

TABLE V11

2. Number of Pairs of Leather Footwear and Average Price per pair.

Year	No. of Pairs	Price per Pair (dollars)
1924	17,729,421	2.36
1925	17,316,565	2.30
1926	19,896,539	2.30
1927	20,567,765	2.29
1928	20,793,758	2.39
1929	20,459,737	2.36
1930	17,646,338	2.28
1931	18,239,635	2.00
1932	18,376,123	1.75
1933	19,922,654	1.61
1934	19,990,716	1.61
1935	22,258,410	1.61
1936	21,882,586	1.62
1937	24,325,355	1.68
1938	21,977,600	1.68
1939	24,605,251	1.64
1940	25,751,617	1.77
1941	31,522,236	1.80
1942	33,066,389	2.03
1943	33,927,621	2.21

TABLE V111

3 Principal Statistics of the Leather Footwear Industry, Canada.

Year.	No. Est.	Capital Invested.	No. Employees	Salaries & Wages	Cost of Mat. used	Value of Production
1925	188	30,863,482	13,792	13,088,954	20,486,473	40,022,515
1926	186	31,325,331	15,016	14,726,763	24,091,923	46,096,163
1927	191	31,921,002	15,433	14,927,844	24,566,423	47,372,549
1928	199	31,433,028	15,505	14,982,608	26,383,043	50,018,802
1929	191	31,028,229	15,563	15,031,101	25,510,731	48,627,590
1930	179	28,162,582	13,922	12,858,062	20,521,726	40,478,911
1931	184	25,844,168	14,150	12,340,283	17,949,804	36,625,565
1932	191	22,024,801	13,728	11,156,856	15,753,021	32,242,416
1933	205	22,963,783	14,526	10,509,461	16,347,068	32,291,092
1934	211	22,709,588	14,868	10,571,099	17,021,115	32,305,637
1935	217	24,313,445	15,930	11,742,871	19,431,799	35,989,912
1936	219	25,318,549	15,961	11,622,002	18,889,035	35,543,115
1937	221	27,374,704	16,773	13,026,642	22,295,404	41,088,713
1938	213	25,328,677	15,932	12,396,670	19,054,739	37,194,770
1939	222	30,258,048	16,957	13,467,293	21,528,236	40,925,513
1940	217	29,517,070	17,149	13,958,753	24,613,366	45,767,912
1941	210	34,243,680	18,841	17,687,326	32,201,024	57,053,251
1942	221	35,877,425	19,113	19,846,642	40,153,136	67,648,975
1943	222	34,873,991	18,665	21,677,798	42,648,779	75,583,954

All the statistics of the forerunning pages were taken from a bulletin of "Department of Trade and Commerce Dominion Bureau of Statistics, Ottawa - Canada."

TABLE 1

General Summary

Particulars	1935	1934	1933
Value of products (gross output)	£40,180,000	£37,012,000	£38,073,000
Cost of materials, fuel, electricity.	21,292,000	19,904,000	20,668,000
Amount paid out for work given out.	51,000	42,000	63,000
Net output	18,837,000	17,066,000	17,342,000
Average No. of persons employed	116,567	112,637	113,920
Net output per person employed	162	152	152
No. of returns	750		
No. of establishments	808		

Page 439, Part 1, Table 1A.

TABLE 11

Size of Est. Av. No. emp.	No. of Est.	Gross output	Net output	Number employed	Net output per employee
11-24	160	£1,004,000	£448,000	2,481	£197
25-49	145	£1,802,000	£827,000	5,641	£147
50-99	193	£4,840,000	£2,132,000	13,762	£155
100-199	147	£6,990,000	£3,232,000	20,793	£155
200-299	64	£5,035,000	£2,340,000	15,319	£153
300-399	35	£4,205,000	£1,990,000	11,759	£169
400-499	19	3,106,000	1,445,000	8,441	£171
500-749	22	4,737,000	2,177,000	13,030	£167
750-1000	9	2,693,000	1,343,000	7,669	£175
1000 & over	14	5,768,000	2,863,000	17,672	£162
Total	808	£40,180,000	£18,837,000	116,567	£162

Table 11.
Part 1, p.440

TABLE 111

Showing number of pairs produced, and value - certain manufacturers only.

Year	Men's	Women's	Children	B & S.	Total
1935	£30,912,000	£43,728,000	30,384,000	23,964,000	131,988,000
193	£12,951,000	16,526,000	4,913,000	3,187,000	37,577,000

Page 442 Table 1V.

TABLE 1V (1935 Figures.)

Kind of output	Quantity	Value
Boots & Shoes (mens)	30,912,000	£12,951,000
Womens	46,728,000	16,526,000
Youths & Boys	8,208,000	1,712,000
Girls & maids	13,500,000	2,386,000
Infants	9,060,000	828,000
Total B&S.of leather	108,108,000	£34,403,000
B&S. other material	5,916,000	997,000
House S. & Slippers	18,564,000	£2,219,000
Total B.& S.& Slippers	132,468,000	£37,619,000

There are certain items included in this table which are not included in Table 1, and vice versa.

P. 443, Table Va.

TABLE V.

Materials, Fuel and Electricity purchased.

Kind		1935	1934
Materials used -	sole leather	£4,376,000	£3,744,000
" "	soles	117,000	134,000
" "	heels	104,000	73,000
Unclassified		23,000	37,000
Rubber soles		146,000	169,000
" heels		74,000	66,000
Unclassified		77,000	125,000
Upper leather -	Glace kid	£1,747,000	£1,406,000
" "	Patent	556,000	604,000
" "	Box & willow calf	£3,170,000	£2,654,000
" "	Other -	£2,489,000	£2,477,000
Fuel & Electricity,	Coal	34,000	
" "	Coke	25,000	
" "	Heavy Fuel	11,000	£8,415,000
" "	Purchased electricity	182,000	
All other materials & fuel purchased		£8,161,000	
Total		£21,292,000	£19,904,000

TABLE VI

Average number employed in 1935 and 1934.

Persons employed		Males Under 18	Males All ages	Females Under 18	Females All Ages	Total Under 18	Total All Ages
Operatives	1935	9961	61,075	11,480	47,574	21,441	108,649
(average)	1934	9409	59,610	10,038	45,346	19,447	104,956
Administrative	1935	285	4,565	747	3,353	1,032	7,681
Tech. & Clerical staff	1934	174	4,532	624	3,149	798	7,681
Total.	1935	10,246	65,640	12,227	50,927	22,473	116,567
	1934	9,583	64,142	10,662	48,495	20,245	112,637

TABLE V11

Output for sale of certain principal products (1924-1935)
(other than slippers or house shoes).

MENS	1924	1930	1933	1934	1935	
With soles of leather	24,384,000	21,672,000	24,060,000	23,520,000	26,220,000	PAIRS
	£15,339,000	£12,363,000	£10,922,000	£10,425,000	£11,425,000	
" " " rubber	650,000	2,760,000	4,752,000	4,560,000	4,692,000	PAIRS
	£565,000	£ 1,869,000	£1,613,000	£1,520,000	£1,526,000	
Unclassified		1,980,000				
		1,177,000				
Total MENS	25,044,000	27,012,000	28,812,000	28,080,000	30,912,000	PAIRS
	£15,904,000	£15,409,000	£12,535,000	£11,945,000	£12,951,000	
WOMENS	32,652,000	36,984,000	43,344,000	42,336,000	46,728,000	PAIRS
	£17,989,000	£17,238,000	£15,476,000	£15,075,000	£16,526,000	
YOUTHS & BOYS	9,288,000	8,760,000	7,764,000	7,296,000	8,208,000	PAIRS
	£3,105,000	£2,456,000	£1,717,000	£1,612,000	£1,712,000	
GIRLS & MAIDS	9,708,000	12,300,000	13,644,000	12,648,000	13,500,000	PAIRS
	2,878,000	£2,898,000	£2,300,000	£2,213,000	£2,386,000	
INFANTS	9,120,000	8,868,000	7,788,000	8,232,000	9,060,000	PAIRS
	£1,273,000	£1,024,000	£755,000	£795,000	£828,000	
MENS,WOMENS,CHILDREN		1,968,000				
(Unclassified)		£605,000				
TOTAL BOOTS & SHOES	85,812,000	95,992,000	101,352,000	98,592,000	108,108,000	PAIRS
OF LEATHER	£41,147,000	£39,630,000	£32,783,000	£31,640,000	£34,403,000	
B.& S.of other mat.	12,504,000	13,620,000	11,172,000	11,220,000	11,764,000	PAIRS
not rubber	£2,203,000	1,135,000	£931,000	£935,000	£997,000	
Slippers & House S.	14,292,000	17,460,000	19,188,000	20,304,000	18,564,000	PAIRS
Not rubber	£2,024,000	£2,157,000	£2,250,000	£2,411,000	£2,219,000	
BOOTS & SHOES	4,560,000					
Unclassified	£1,558,000					
TOTAL B.&S.& SLIPPERS	117,168,000	119,220,000	125,172,000	124,368,000	132,468,000	pairs
(OTHER THAN RUBBER)	£46,932,000	£42,922,000	£35,964,000	£34,986,000	£37,619,000	

Part 1, p.445.

TABLE V111

Average Number employed 1924-35

YEAR	OPERATIVES	ADMINISTRATIVE TECHNICAL & CLERICAL STAFF	TOTAL (excluding out-workers)
1924	121,331	9,169	130,500
1930	108,261	8,191	116,452
1933	106,230	7,690	113,926
1934	104,956	7,681	112,637
1935	108,649	7,918	116,567

The 1924 figures include firms mainly engaged in repair work.

All the above statistics are from the "Final Report on the Fifth Census of Production & Import Duties Act Enquiry,1935"

TABLE 1X

The following are the indices of the numbers employed.

(Wage & Salary employees in the Boot & Shoe Industry),

Taking 1929 as base year with index 100.

1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
100	-	94.2	91.9	105.4	96.	97.3	100.8	104.4	94.6

1939
103.7

Year book of labour statistics 1942, p.46 (International Labour Office)

APPENDIX 111 U.S.A.

Chapter 3. Footwear Industry of the U.S.A. (1939 figures).

TABLE 1.

Total employed 244,146 (134,694 m. & 109,452 fe.)
Salaried officers 1549 (1470 m. & 79 fe.)
Manufacturing 238,169 (130,240 m. & 107,929 fe.)
Distribution 4,189 (2747 m. & 1442 fe.)
Construction 195
All other 44 (42 m. & 2 fe.)

Manufacturing Total employed, 238,169 (130,240m. & 107,929)

Salaried Persons, Managers, 5561 (5159m. & 402fe.)
Clerks 6978 (1173m. & 5805 fe.)
Wage earners, 225,630 (123,908m. & 101,722 fe.)

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TABLE 11

Grand total of wages and salaries earned, 222,865,621 dollars

Salaried officers	9,563,517	"
Manufacturing	203,474,997	"
Distribution	9,556,540	"
Construction	195,078	"
Others	75,489	"

Manufacturing - 203,474,997 dollars.
Managers - 13,020,690 dollars
Clerks 6,796,778 "
Wage earners 183,657,529 "

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TABLE 111

No. of Est. employing a certain number of wage earners.

Total Est.	No wage earners	1 - 5 W. E.	6-20 W.E.	21-50 W.E.	101-250 W.E.	251-500 W.E.	501-1000 W.E.
1070	4	63	120	148	278	204	95

1001-2500 W.E.	2500 & above W.E.
14	1

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TABLE 1V

No. of Est. with total products valued at (output for year)

No. of Est.	5000 to 19,999	20,000 to 49,999	50,000 to 99,999	100,000 to 249,999	250,000 to 499,999	500,000 to 999,999	1,000,000 to 2,499,999
1070	89	90	101	161	179	205	197

2,500,000 to 4,999,999	5,000,000 & over
44	4

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TABLE V.

Wage earners (averaged for the year) in est. with products valued at

Total	$ 5,000 to 19,999	20,000 to 49,999	50,000 to 99,999	100,000 to 249,999	250,000 to 499,999	500,000 to 999,999	1,000,000 to 2,499,999	2,500,000 to 4,999,999	5,000,000 & over
218,028	506	1,231	2965	19,204	22,710	48,497	89,131	36,543	6241

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TABLE V1

Total value of product.	734,673,111	dollars
Value added by manufacture	346,234,009	"
Value of materials & supplies	383,343,831	"
" of Fuel	1,246,180	"
" of Electricity	2,765,678	"
" of Contract Work	1,083,413	"

Vol.1, Page 29.

TABLE V11

Wages paid in est. with products valued at

Total paid	$ 5,000 to 19,999	20,000 to 49,999	50,000 to 99,999	100,000 to 249,999	250,000 to 499,999	500,000 to 999,999	1,000,000 to 2,499,999	2,500,000 to 4,999,999	5,000,000 & over
183,657,529	288,813	858,987	2,062,812	7,581,362	17,820,467	38,599,911	76,254,787	34,208,508	5,981,882

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TABLE V111

Value of products made in est. with products valued at :

Total value of products made	734,673,111	dollars
$5,000 to 19,999	953,511	"
$20,000 to 49,999	3,078,766	"
$50,000 to 99,999	7,330,292	"
100,000 to 249,999	27,423,533	"
250,000 to 499,999	66,964,322	"
500,000 to 999,999	150,621,049	"
1,000,000 to 2,499,999	309,109,723	"
2,500,000 to 4,999,999	141,854,120	"
5,000,000 & over	27,337,695	"

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TABLE 1X

Value added by manufacturers in est.with products valued at :

Total value added	346,234,009	dollars
$5,000 to 19,999	490,029	"
20,000 to 49,999	1,542,715	"
50,000 to 99,999	3,614,063	"
100,000 to 249,999	13,078,593	"
250,000 to 499,999	31,148,905	"
500,000 to 999,999	71,904,257	"
1,000,000 to 2,499,999	146,437,104	"
2,500,000 to 4,999,999	64,369,444	"
5,000,000 & over	13,648,899	"

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TABLE X - Footwear Industry 1939

Number of establishments	1,070
Wage Earners	218,028
Wages in dollars	183,657,529
Cost of material supplies, fuel, purchased electric, & contract work,	$388,439,102
Value of products	$734,673,111
Value added by manufacture	$346,234,009

TABLE X1

Number of footwear establishments in U.S.A.

Year	1939	1937	1935	1933	1931	1929	1927	1925	1923	1921	1919	1914	1909	1904	1899
No.	1070	1080	1024	1132	1156	1341	1357	1460	1606	1505	1449	1355	1343	1316	1599

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TABLE X11

Year	Wages paid	No. of wage emp.	Value of products	Value added by manufacture
1939	183,657,829	218,028	734,673,111	346,234,009
1937	191,305,407	215,438	768,327,303	352,021,896
1935	172,348,507	202,113	643,872,470	310,073,498
1933	142,054,152	190,914	553,425,166	267,122,023
1931	163,271,281	181,374	653,879,746	316,252,274
1929	222,407,732	205,640	965,922,694	450,867,448
1927	225,090,242	203,110	944,714,463	450,161,447
1925	225,787,981	206,992	925,383,422	443,751,458
1923	250,345,922	225,216	1,000,078,022	472,621,154
1921	204,954,095	183,502	867,475,896	389,043,451
1919	210,734,610	211,049	1,155,041,436	439,772,121
1914	105,695,404	191,555	501,760,458	191,403,872
1909	92,359,152	185,116	442,630,726	165,162,983
1904	69,059,680	149,924	320,107,458	122,743,963
1899	58,440,883	141,830	258,969,580	90,336,926

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TABLE X111

Boots and shoes and other footwear.

	No. of pairs.	Value (dollars)
1939	435,285,125	732,807,874
1937	424,971,349	766,616,291

The above table is made up of the following types, both their value and the number of pairs.

Type	Year	No. of pairs	Value (Dollars)
Mens dress	1939	76,636,981	182,166,659
	1937	76,190,883	196,887,572
Mens work	1939	28,124,981	48,553,025
	1937	27,938,190	54,097,048
Youths & Boys	1939	17,316,169	24,778,307
	1937	19,126,985	29,775,237
Misses & Children	1939	46,091,283	50,290,097
	1937	43,382,107	50,071,789
Womens	1939	168,776,620	335,126,882
	1937	150,899,589	319,654,829
Infants	1939	24,631,553	17,649,709
	1937	23,357,159	17,600,253
Athletic	1939	4,144,194	8,890,403
	1937	2,647,862	7,346,065
Part leather & fabric	1939	7,558,481	16,293,291
	1937	14,558,785	34,416,097
Canvas etc.	1939	5,760,232	8,107,065
	1937	8,073,378	15,158,828
Leather Slippers	1939	15,339,027	15,227,221
	1937	13,918,383	14,348,672
Part leather, felt, etc.	1939	34,323,547	19,516,692
	1937	37,801,877	19,780,644
Beach sandals	1939	4,860,788	3,631,692
	1937	5,206,052	3,745,560
Other footwear	1939	1,694,749	1,585,054
	1937	1,870,119	2,529,285

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The total value of both these years included a certain amount which was actually the money value of leggings and putties manufactured. This amount has thus to be subtracted from the final figure before we get the actual value of all the footwear manufactured. Note the following calculation.

Total value (including value of leggings, putties, etc.)

	1939	1937
	732,807,874	766,616,291
Less value of Leggings, putties	991,798	1,204,412
	731,816,076	765,411,879

End of U.S.A. Statistics.
(All Statistics from Volumes 1 and 2 of Sixteenth Census of the U.S.A.)

TABLE X1V

In the U.S.A. the indices of the numbers employed in the Boot and Shoe Industries was as follows. Taking 1929 as base year with index No. 100, we arrive at the following figures.

1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939
100	93.3	88.2	87.4	92.9	98.2	98.3	99.6	104.9	99	99.7

1940	1941
93.6	98.3

Year book of labour statistics 1942, Page 42 (International labour office).

APPENDIX 1V

Data for Point B, Chapter 111 (Net output per employee)

TABLE 1.

Britain

Year	Number of employees.	Value added by manufacture	Net output per employee
1933	113,926	£17,342,000	£152
1934	112,637	£17,066,000	£152
1935	116,567	£18,837,000	£162

TABLE 11

U.S.A.

Year	Number of wage employees	Value added by manufacture.		Output per wage emp.		Output per employee	
1899	141,830	90,336,926	dollars	637.2	dollars	5 2	dollars
1904	149,924	122,743,963	"	818.3	"	761	"
1909	185,116	165,162,983	"	892.5	"	830	"
1914	191,555	191,403,872	"	999.1	"	929	"
1919	211,049	439,712,121	"	2084	"	1958	"
1921	185,502	389,043,451	"	2119	"	1971	"
1923	225,216	472,621,154	"	2189	"	2031	"
1925	206,992	443,751,458	"	2144	"	1994	"
1927	203,110	450,161,447	"	2217	"	2062	"
1929	205,640	450,867,448	"	2193	"	2039	"
1931	181,374	316,252,274	"	1744	"	1,622	"
1933	190,914	267,122,023	"	1399	"	1301	"
1935	202,113	310,073,498	"	1534	"	1427	"
1937	215,438	352,021,896	"	1634	"	1520	
1939	218,028	346,234,009	"	1588	"	1477	" = £304

TABLE 111

Canada

Year	Number of employees.	Value added by manufacture. Dollars	Output per employee. Dollars
1925	13,792	19,536,042 $	1416 $
1926	15,016	22,004,240	1464
1927	15,433	22,806,126	1479
1928	15,505	23,635,759	1524
1929	15,563	23,116,859	1486
1930	13,922	19,957,185	1433
1931	14,150	18,675,761	1320
1932	13,728	16,489,395	1200
1933	14,526	15,944,024	1097
1934	14,868	15,284,522	1024
1935	15,930	16,558,113	1042
1936	15,961	16,654,080	1043
1937	16,773	18,793,309	1120
1938	15,932	18,140,031	1139
1939	16,957	19,397,277	1144
1940	17,149	21,154,546	1292
1941	18,841	24,852,227	1320
1942	19,113	27,495,837	1441
1943	18,665	32,935,175	1764 = £ 403.8

TABLE 1V.

S. Africa

Year	Number of employees	Value added by manufacture.	Net output per employee.
1915-16	1662	£179,954	£107.1
1916-17	2388	£227,833	£ 95.4
1917-18	2644	£329,377	£124,6
1918-19	3399	£426,810	£125.5
1919-20	3630	£558,228	£153.8
1920-21	2954	£411,863	£139.4
1921-22	3283	£412,099	£156.1
1922-23	4066	£771,161	£189.8
1923-24	4432	£755,888	£170.5
1924-25	4417	£696,915	£157.8
1925-26	4862	£788,098	£161.9
1926-27	4937	£843,416	£170.8
1927-28	5044	£870,098	£172.5
1928-29	4977	£961,016	£193.8
1929-30	5017	£1,011,818	£201.7
1932-33	6554	£1,109,326	£173.1
1933-34	7573	£1,217,795	£160.8
1934-35	8685	£1,449,482	£163
1935-36	9381	£1,630,145	£173.8
1936-37	10,108	£1,714,831	£169.6
1937-38	10,072	£1,815,443	£180.3
1938-39	10,555	£1,902,657	£180.1
1939-40	10,295	£2,053,486	£199.3
1940-41	11,919	£2,413,604	£202.5
1941-42	12,804	£3,216,622	£251.1
1942-3		£	£

APPENDIX V

Data for Point D, Chapter 111 (Average number of pairs produced per employee.)

TABLE 1.

Britain

Year	Number of employees	Footwear produced	Pairs produced per employee
1933	113,926	125,172,000 pairs	1100
1934	112,637	124,368,000 "	1104
1935	116,567	132,468,000 "	1136

TABLE 11

U.S.A.

Year	Number of employees	Footwear produced	Pairs produced per employee
1937	237,082	424,971,349 pairs	1792
1939	244,146	435,285,125 "	1783

TABLE 111.

Canada

Year	Number of employees.	Footwear produced	Pairs produced per employee.
1925	13,792	17,316,565 pairs	1255 pairs
1926	15,016	19,896,539 "	1326 "
1927	15,433	20,567,765 "	1377 "
1928	15,505	20,793,758 "	1342 "
1929	15,563	20,459,737 "	1315 "
1930	13,922	17,646,338 "	1268 "
1931	14,150	18,239,635 "	1289 "
1932	13,728	18,376,123 "	1339 "
1933	14,526	19,922,656 "	1371 "
1934	14,868	19,990,716 "	1345 "
1935	15,930	22,258,410 "	1397 "
1936	15,961	21,882,586 "	1371 "
1937	16,773	24,325,355 "	1451 "
1938	15,932	21,977,600 "	1380 "
1939	16,957	24,805,251 "	1463 "
1940	17,149	25,751,617 "	1468 "
1941	18,841	31,522,236 "	1673 "
1942	19,113	33,066,389 "	1731 "
1943	18,665	33,927,621 "	1817 "

TABLE 1V

S. Africa.

Year	Number of employees	Footwear produced		Pairs produced per employee
1916-17	2388	1,621,179	pairs	678
1917-18	2644	1,765,771	"	653
1918-19	3399	1,947,275	"	573
1919-20	3630	2,165,029	"	597
1920-21	2954	1,506,061	"	510
1921-22	3283	1,826,099	"	556
1922-23	4066	2,381,376	"	585
1923-24	4432	2,782,541	"	628
1924-25	4417	3,072,349	"	695
1925-26	4862	3,480,098	"	716
1926-27	4937	3,756,841	"	761
1927-28	5044	3,766,519	"	747
1928-29	4957	4,044,225	"	816
1929-30	5017	4,140,945	"	826
1932-33	6554	5,469,537	"	835
1933-34	7573	7,169,679	"	947
1934-35	8685	8,874,188	"	1,022
1935-36	9381	10,448,025	"	1,114
1936-37	10108	11,382,608	"	1,127
1937-38	10072	10,496,739	"	1,043
1938-39	10555	11,954,552	"	1,132
1939-40	10295	12,613,285	"	1,225
1940-41	11919	13,408,174	"	1,118
1941-42	12804	14,722,143	"	1,149
1942-43				

APPENDIX VI

Data for point E Chapter III (Wages as a percentage of total cost of production)

TABLE I.

Britain

Year	Total Wages	Total cost of production	Wages as a percentage of total cost.
1937	£12,577,579	£40,180,000	31.3%

TABLE II.

U. S. A

Year	Total Wages		Total cost of production		Wages as a percentage of total cost.
1899	58,440,883	dollars	258,969,580	doll.	22.6% + 5 = 27.6%
1904	69,059,680	"	320,107,458	"	21.6% + 5 = 26.6%
1909	92,359,152	"	442,630,726	"	20.9% + 5 = 25.9%
1914	105,695,404	"	501,760,458	"	21.0% + 5 = 26.0%
1919	210,734,610	"	1,155,041,436	"	20.0% + £ = 25.0%
1921	204,954,095	"	867,475,896	"	23.6% + 5 = 28.6%
1923	250,345,922	"	1,000,078,022	"	25.0% + 5 = 30.0%
1925	225,787,981	"	925,383,422	"	24.4% + 5 = 29.4%
1927	225,090,242	"	944,714,463	"	23.8% + 5 = 28.8%
1929	222,407,732	"	965,922,694	"	22.0% + 5 = 27.0%
1931	163,271,281	"	653,879,746	"	25.0% + 5 = 30.0%
1933	142,054,152	"	553,425,166	"	25.7% + 5 = 30.7%
1935	172,348,507	"	643,872,470	"	26.8% + 5 = 31.8%
1937	191,305,407	"	768,327,303	"	24.9% + 5 = 29.9%
1939	222,865,621	"	734,673,111	"	30.3%

TABLE 111

Canada

Year	Total wages		Total cost of production.		Wages as a percentage of total cost.
1925	13,088,954	dol.	40,022,215	dol.	32.7%
1926	14,726,763	"	46,096,163	"	32.0%
1927	14,927,844	"	47,372,549	"	31.5%
1928	14,982,608	"	50,018,802	"	30.0%
1929	15,031,101	"	48,627,596	"	30.9%
1930	12,858,062	"	40,478,911	"	31.9%
1931	12,340,283	"	36,625,565	"	33.8%
1932	11,156,856	"	32,242,416	"	34.7%
1933	10,509,461	"	32,291,092	"	32.6%
1934	10,571,099	"	32,305,637	"	32.7%
1935	11,742,871	"	35,989,912	"	32.6%
1936	11,622,002	"	35,543,115	"	32.7%
1937	13,026,642	"	41,088,713	"	31.7%
1938	12,396,670	"	37,194,770	"	33.4%
1939	13,467,293	"	40,925,513	"	32.9%
1940	13,958,753	"	45,767,912	"	30.5%
1941	17,687,326	"	57,053,251	"	31.3%
1942	19,846,642	"	67,648,973	"	27.9%
1943	21,677,798	"	75,583,954	"	28.6%

TABLE 1V.

S. Africa

Year	Total Wages	Total cost of production.	Wages as a percentage of total cost.
1915-16	£ 98,842	£ 503,999	19.6%
1916-17	129,398	726,712	17.8%
1917-18	161,315	965,550	16.7%
1918-19	238,759	1,291,765	14.7%
1919-20	302,189	1,674,598	18.1%
1920-21	277,925	1,191,206	23.3%
1921-22	304,519	1,250,521	24.4%
1922-23	357,970	1,512,791	23.7%
1923-24	399,549	1,681,445	24.3%
1924-25	402,149	1,655,880	24.3%
1925-26	443,994	1,905,279	23.3%
1926-27	489,239	2,041,726	24.0%
1927-28	513,932	2,153,055	23.9%
1928-29	540,867	2,348,498	23.0%
1929-30	570,948	2,305,973	24.8%
1932-33	686,983	2,330,208	29.4%
1933-34	771,307	2,656,142	29.0%
1934-35	895,588	3,131,177	28.6%
1935-36	988,084	3,439,121	28.7%
1936-37	1,063,411	3,733,231	28.5%
1937-38	1,085,988	3,715,137	29.3%
1938-39	1,193,740	4,051,563	29.4%
1939-40	1,234,473	4,587,363	26.9%
1940-41	1,500,763	5,759,079	26.0%
1941-42	1,899,579	7,658,223	24.8%
1942-43	£	£	%

APPENDIX V11

Data for point F, Chapter 111 (Wage paid per employee)

TABLE 1

Britain

Year.	Weekly wage	Annual wage.
1937	£2.1.6.	£107.9
1938	£2.6.11.	£123.9

TABLE 11

U. S. A.

Year	Number of employees	Total wages earned.	Average wage per employee.
1899	141,830	58,440,883 dol.	412 dollars
1904	149,924	69,059,680	460 "
1909	185,116	92,359,152	499 "
1914	191,555	105,695,404	552 "
1919	211,049	210,734,610	998 "
1921	183,502	204,954,095	1117 "
1923	225,216	250,345,922	1111 "
1925	206,992	225,787,981	1091 "
1927	203,110	225,090,242	1109 "
1929	205,640	222,407,732	1081 "
1931	181,374	163,271,281	900 "
1933	190,914,	142,054,152	743 "
1935	202,113	172,348,507	853 "
1937	215,438	171,305,407	888 "
1939	244,146	222,865,621	913 " = £188

TABLE 111

Canada

Year	Number of employees	Total wages earned	Av. wage per employee.
1925	13,792	13,088,954 Dol.	947 dol.
1926	15,016	14,726,763	981 "
1927	15,433	14,927,844	973 "
1928	15,505	14,982,608	966 "
1929	15,563	15,031,101	966 "
1930	13,922	12,858,062	924 "
1931	14,150	12,340,283	872 "
1932	13,728	11,156,856	813 "
1933	14,526	10,509,461	721 "
1934	14,868	10,571,099	695 "
1935	15,930	11,742,871	737 "
1936	15,961	11,622,002	728 "
1937	16,773	13,026,642	777 "
1938	15,932	12,396,670	778 "
1939	16,957	13,467,293	794 " = £168
1940	17,149	13,958,753	815 "
1941	18,841	17,687,326	938 "
1942	19,113	19,846,642	1039 "
1943	18,665	21,677,798	1162 " = £264

TABLE 1V.

S. Africa

Year	Number of employees	Total wages earned	Average wage per employee	Average European wage.	Average non-European wage
1915-16	1,662	£98,842	£59.5	£71	£46
1916-17	2,388	£129,398	£54.2	£63	£45
1917-18	2,644	£161,315	£61.0	£75	£47
1918-19	3,399	£238,759	£70.3	£91	£50
1919-20	3,630	£302,189	£83.2	£107	£59
1920-21	2,954	£277,925	£94.1	£123	£64
1921-22	3,283	£304,519	£92.7	£118	£69
1922-23	4,066	£357,970	£87.7	£106	£72
1923-24	4,432	£399,549	£92.2	£114	£63
1924-25	4,417	£402,149	£82.7	£105	£67
1925-26	4,862	443,994	89.3	107	66
1926-27	4,937	489,239	99.8	113	73
1927-28	5,044	513,932	101.9	118	74
1928-29	4,977	540,867	108.6	124	82
1929-30	5,017	570,948	113.9	129	84
1932-33	6,554	686,983	104.8	116	78
1933-34	7,573	771,307	103.0	109	81
1934-35	8,685	895,588	103.1	112	79
1935-36	9,381	988,084	105.3	116	77
1936-37	10,108	£1,063,411	105.2	121	70
1937-38	10,072	£1,085,988	107.9	123	76
1938-39	10,555	£1,193,740	113.0	132	79
1939-40	10,295	£1,234,473	119.9	143	82
1940-41	11,919	£1,500,763	126.2	153	90
1941-42	12,804	£1,899,579	148.5	182	108
1942-43		£	£	£	£

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