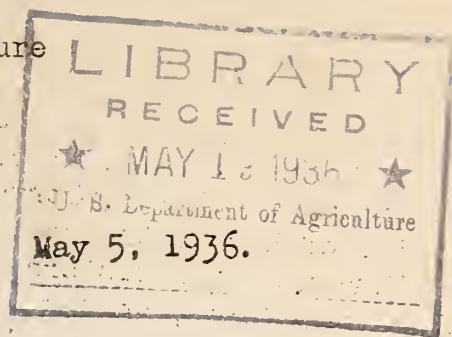


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United States Department of Agriculture  
Bureau of Agricultural Economics  
Foreign Agricultural Service  
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FOREIGN NEWS ON APPLES

Trends in Apple Exports 1/

Summary: The upward trend of apple exports ceased with the 1930-31 season and has been on a decline since that year. The chief reasons for the decline have been the world-wide business depression and the rapid increase in trade barriers which began to be felt about that time. The average import duty levied on American apples imported by European countries increased from 12¢ a bushel in the 1930-31 season to 60¢ per bushel in the 1935-36 season. In addition, import quotas, import license taxes, compensation arrangements, and other barriers have been established.

To some extent, the decline in exports may be attributed to smaller apple crops in the United States. The total apple crop has trended downward since about 1914 but this reduction has been due in a large measure to the abandonment of unsatisfactory orchards and the removal of unprofitable varieties. The commercial apple crop continued to increase up to 1926 but has shown a marked decrease since 1931.

There has been a change in the seasonal movement of apples during the last decade. In the middle 20's, apple exports during the last half of the season, January to June, generally ranged from 27 to 43 percent, whereas in the last two seasons over 50 percent of the exports have been made in this period. This tendency of apple exports to shift toward the last half of the season is chiefly due to the desire of foreign countries to protect their own crops with seasonal duties which are higher during the first half of the season, and to increasing competition in the earlier months from home-grown crops in the various important markets.

Exports trend downward: A survey of the apple exports from the United States during the last 26 years discloses that exports increased up to the 1930-31 season, July to June, but have been sharply downward since that season. From 1909-10 to 1918-19, exports showed little gain. Failure of exports to register a more rapid increase in this period was largely due to the disruption of trade occasioned by the World War. Exports increased rapidly from 1919-20 to 1923-24 and then turned sharply upward in the next five years, 1924-25 to 1928-29. Table I gives the exports of apples for the period 1909-10 to 1934-35. Far the largest



part of the exports have gone to Europe, the chief market being United Kingdom. Other important European outlets are France, the Netherlands, Belgium, Germany, and the Scandinavian countries. Outside of Europe the most important markets are Brazil, Argentina, and Canada in the Western Hemisphere, and the Philippines, Egypt, Palestine, China, and British India in the Eastern Hemisphere. Exports to Canada have declined to a mere trickle in the last few seasons which is explained by larger Canadian crops, higher duties, and the lower consumer purchasing power in that country. The relations of exports to the total crop is shown in Figure 1. With the exception of a slight decline in the trend during the 1914-18 period, exports in terms of the crops increased very rapidly until the 5-year period 1924-25 to 1927-28. The percentage of the crop exported continued to increase through the 5-year period 1929-30 to 1932-33. Exports of apples by 5-year periods are shown in Figure 2. Exports during recent years are plotted in Figure 3. It will be noted that the percentage of the commercial crop exported varied directly with the size of the crop until the 1930-31 season. Especially sharp drops in exports occurred in the 1931-32 and the 1934-35 seasons.

Seasonal exports shift: During the last decade apples have shown a tendency to increase during the last six months of the season, January to June, as compared with the exports for the whole season. This shift is largely explained by the increased protection that has been extended to the home apple crops by many European countries during the first part of the apple season, or from July to December. After the turn of the year many countries have lower duties on imported apples. In some countries the increased protection to the domestic industry has been accompanied by an improvement in the packing and grading of the home-grown fruit. Apparently there has been very little increase in the total production of dessert apples in the importing countries.

If the tendency for the exports to become larger in the last half of the season continues, it would appear that there will be a smaller and smaller market for early and fall apples, with the result that either the normal season will have to be lengthened for fall apples by more extensive use of cold storage or the chief apple exports will comprise largely long-keeping winter apples. This tendency for apple exports to increase during the last six months of the season, January to June, is brought out in Figure 4. In the 5-year period 1923-24 to 1927-28 only about 34 percent of the exports of apples on an average moved out of the United States from January to June, whereas during the 1933-34 and the 1934-35 season over 50 percent of the exports have been made during this 6-month period. The seasonal exports and the exports during the 6-month period January to June are shown in Table 3.

Production trend downward: In analyzing the trend of apple exports, some reference has to be made to the trend in apple production. The total apple crop of the United States increased from 1909 to 1914 and has been generally downward since that time. The decline in the crop was sharp from 1914 to 1919, then leveled off from 1919 to 1928, and has shown a downward dip since 1929. The total apple crops, exports

and the percentage of the crop exported are shown in table 2. Although the total crop has been declining for 20 years, the commercial crop did not start to decline until over 10 years later. The peak production was reached in 1926. Secondary peaks were reached in 1928, 1930, and 1931, but since the last year the trend in production has been decidedly downward. The smaller commercial crops may in part be due to the low prices prevailing for apples since the depression which has resulted in considerable abandonment and removal of orchards. The total apple crop is plotted by 5-year periods in Figure 1 and the commercial apple crop for recent years is shown in Figure 3. The commercial apple crops and exports are shown in table 3.

Significance of apple exports: Since American apples have been exported to Europe for about 150 years, the apple industry has been developed hand in hand with exports. Many orchards have been planted for the express purpose of raising apples largely for export, particularly plantings in the Shenandoah-Cumberland valleys of Virginia, West Virginia, Maryland and Pennsylvania and in the Pacific Northwest. Certain varieties such as Albemarle Pippins (Yellow Newtowns), Ortleys, Spitzenburg, and to a lesser degree York Imperials, Ben Davis, and Winesaps were expressly planted for export purposes. Moreover, the apple sections of both coasts have long depended on export markets to absorb the smaller sizes of apples. Since the domestic markets prefer medium to large sizes, it is fortunate for the apple industry that foreign outlets in general prefer the smaller fruit.



Table 1. APPLES: Exports from the United States

Season	United Kingdom		Other Europe		Total Europe		Canada		Others		Total	
	July-June	Bushels	July-June	Bushels	July-June	Bushels	July-Dec.	Bushels	Jan.-June	Bushels	Dec.-June	Bushels
1909-10	1,940,178	356,880	2,297,058	206,760	262,416	2,766,234	1,793,313	972,921	1,408,074			
1910-11	3,954,330	411,381	4,365,711	465,243	332,364	5,163,318	4,036,164	1,127,154	1,698,384			
1911-12	2,983,653	432,240	3,415,893	620,571	332,679	4,369,143	3,183,651	1,185,492	1,812,708			
1912-13	3,955,278	946,767	4,902,045	1,130,853	417,498	6,450,396	4,254,876	2,195,520	2,653,071			
1913-14	2,481,084	599,172	3,080,256	898,041	541,410	4,519,707	3,565,143	954,564	1,555,374			
Average:	3,062,905	549,288	3,612,193	664,294	377,273	4,653,760	3,366,630	1,287,130	1,825,522			
1914-15	5,242,188	282,507	5,524,695	956,520	573,288	7,054,503	3,669,519	3,384,984	4,186,863			
1915-16	2,623,761	279,552	2,903,313	905,958	589,692	4,398,963	3,145,992	1,252,971	1,714,278			
1916-17	3,442,236	130,737	3,572,973	944,865	702,153	5,219,591	3,758,658	1,461,333	2,489,049			
1917-18	5,298	3,423	8,721	1,373,844	523,662	1,906,227	1,412,979	493,248	1,064,445			
1918-19	3,050,835	555,828	3,606,663	793,995	328,386	4,729,044	1,246,500	3,482,544	3,962,649			
Average:	2,872,864	250,409	3,123,273	995,036	543,437	4,661,746	2,646,730	2,015,016	2,683,457			
1919-20	1,801,734	326,514	2,128,248	565,629	457,917	3,151,794	1,654,557	1,497,237	1,925,655			
1920-21	6,184,866	349,497	6,534,363	982,683	478,257	7,995,303	3,895,896	4,099,407	5,608,413			
1921-22	2,314,356	242,767	2,557,123	399,149	326,175	3,282,447	1,709,265	1,573,182	2,141,772			
1922-23	3,944,944	242,474	4,187,418	488,934	592,635	5,268,987	3,372,062	1,896,925	2,755,750			
1923-24	8,866,184	1,776,171	10,642,355	782,194	870,373	12,294,922	6,979,366	5,315,556	6,277,267			
Average:	4,622,417	587,484	5,209,901	643,718	545,072	6,398,691	3,522,229	2,876,462	3,741,771			
1924-25	7,119,165	1,005,482	8,124,647	546,595	932,558	9,603,800	7,045,464	2,558,336	3,631,067			
1925-26	7,148,448	1,819,137	9,027,585	728,994	1,258,828	11,015,407	7,484,522	3,530,885	5,787,784			
1926-27	13,637,463	4,950,514	18,587,977	1,202,486	1,501,841	21,292,304	12,638,956	8,653,348	11,132,138			
1927-28	5,722,041	1,855,778	7,577,819	705,506	1,146,610	9,429,935	6,880,223	2,549,712	3,900,385			
1928-29	9,995,777	8,420,792	18,416,569	824,681	1,801,206	21,042,456	11,085,204	9,957,252	11,949,847			
Average:	8,724,579	3,622,340	12,346,919	801,652	1,328,209	14,476,780	9,026,874	5,449,906	7,280,244			
1929-30	5,515,946	2,584,963	8,098,909	620,940	1,558,960	10,278,809	6,899,280	3,379,529	4,945,784			
1930-31	6,853,286	11,335,241	18,188,527	595,459	1,556,486	20,340,472	12,470,655	7,869,817	11,254,099			
1931-32	9,191,872	7,604,437	16,796,309	345,721	888,354	18,030,384	9,911,399	8,118,985	9,640,534			
1932-33	5,662,151	7,171,310	12,833,461	154,278	766,070	13,753,809	8,749,903	5,003,906	6,148,312			
1933-34	3,438,325	7,843,455	11,281,780	73,079	906,131	12,260,990	6,078,668	6,182,322	8,077,395			
Average:	6,131,916	7,307,881	13,439,797	357,896	1,135,200	14,932,893	8,821,981	6,110,912	8,013,225			
1934-35	3,378,772	3,670,758	7,049,530	98,838	913,598	8,061,966	3,887,909	4,174,057	5,172,419			
1935-36	:	:	:	:	:	:	:	:	:			
1936-37	:	:	:	:	:	:	:	:	:			
1937-38	:	:	:	:	:	:	:	:	:			
1938-39	:	:	:	:	:	:	:	:	:			

Compiled by Foreign Agricultural Service from Official Records of the Bureau of Foreign and Domestic Commerce.

Table 2. APPLES, fresh: Total United States crop, domestic exports, and percentage of crop exported, 1909-10 to 1934-35

Season July - June	Total		Percentage of crop exported	January - June	
	Crop	Domestic exports		Domestic exports	Percentage of total exports
	1,000 bushels	1,000 bushels	Percent	1,000 bushels	Percent
1909-10	145,412	2,766	1.9	973	35.2
1910-11	141,640	5,163	3.6	1,127	21.8
1911-12	214,020	4,369	2.0	1,135	27.1
1912-13	235,220	6,450	2.7	2,196	34.0
1913-14	145,410	4,520	3.1	955	21.1
Average	176,340	4,654	2.6	1,237	27.7
1914-15	253,200	7,055	2.8	3,385	48.0
1915-16	230,011	4,399	1.9	1,253	28.5
1916-17	193,905	5,220	2.7	1,461	23.0
1917-18	166,749	1,906	1.1	493	25.9
1918-19	169,625	4,729	2.8	3,435	73.7
Average	202,698	4,662	2.3	2,015	43.2
1919-20	140,736	3,152	2.2	1,497	47.5
1920-21	207,313	7,995	3.9	4,099	51.3
1921-22	95,478	3,232	3.4	1,573	47.9
1922-23	189,776	5,269	2.8	1,397	36.0
1923-24	180,963	12,295	6.8	5,316	43.2
Average	162,364	6,399	3.9	2,376	44.9
1924-25	160,049	9,604	6.0	2,558	26.6
1925-26	151,752	11,015	7.3	3,531	32.1
1926-27	227,043	21,292	9.4	3,653	40.6
1927-28	115,625	9,430	8.2	2,550	27.0
1928-29	176,721	21,042	11.9	9,957	47.3
Average	166,233	14,477	8.7	5,450	37.6
1929-30	133,318	10,279	7.7	3,380	32.9
1930-31	153,372	20,340	13.3	7,370	38.7
1931-32	202,477	18,030	8.9	8,119	45.0
1932-33	140,775	13,754	9.8	5,004	36.4
1933-34	142,981	12,261	8.6	6,132	40.4
Average	154,535	14,933	9.7	6,111	40.9
1934-35	120,670	8,062	6.7	4,174	51.8
1935-36	168,465				
1936-37					
1937-38					
1938-39					
Average					

Compiled by the Foreign Agricultural Service from official sources.



Table 3. APPLES FRESH: Commercial crop of the United States, domestic exports, and percentage of crop exported, January - June and December - June, 1919-20 to 1935-36

Season	Commercial crop	Domestic exports					
		Year ended June 30		January - June		December - June	
		Total	Percent of crop	Total	Percent of crop	Total	Percent of crop
Million bushels	Million bushels	Percent	Million bushels	Percent	Million bushels	Percent	
1919-20...	81.5	3.2	3.9	1.5	46.9	1.9	59.4
1920-21...	103.1	3.0	7.8	4.1	51.3	5.8	70.0
1921-22...	66.3	3.3	5.0	1.6	48.5	2.1	63.6
1922-23...	101.3	5.3	5.2	1.9	35.8	2.8	52.8
1923-24...	109.9	12.3	11.2	5.3	43.1	6.3	51.2
1924-25...	87.7	9.6	10.9	2.6	27.1	3.6	37.5
1925-26...	100.1	11.0	11.0	3.5	31.8	5.8	52.7
1926-27...	121.5	21.3	17.5	8.7	40.8	11.1	52.1
1927-28...	78.3	9.4	12.0	2.5	26.6	3.9	41.5
1928-29...	107.9	21.0	19.5	10.0	47.6	11.9	56.7
1929-30...	88.0	10.3	11.7	3.4	33.0	4.9	47.6
1930-31...	102.1	20.3	19.9	7.9	38.9	11.3	55.7
1931-32...	106.0	18.0	17.0	8.1	45.0	9.8	53.3
1932-33...	85.6	13.8	16.1	5.0	36.2	6.1	44.2
1933-34...	75.0	12.3	16.4	6.2	50.4	8.1	65.9
1934-35...	73.5	6.1	11.0	4.2	51.9	5.2	64.2
1935-36...	91.7						
1936-37...							
1937-38...							
1938-39...							
1939-40...							

Compiled by the Foreign Agricultural Service from official sources:



TOTAL APPLE CROP, EXPORTS, AND PERCENTAGE OF THE CROP EXPORTED ( JULY - JUNE )

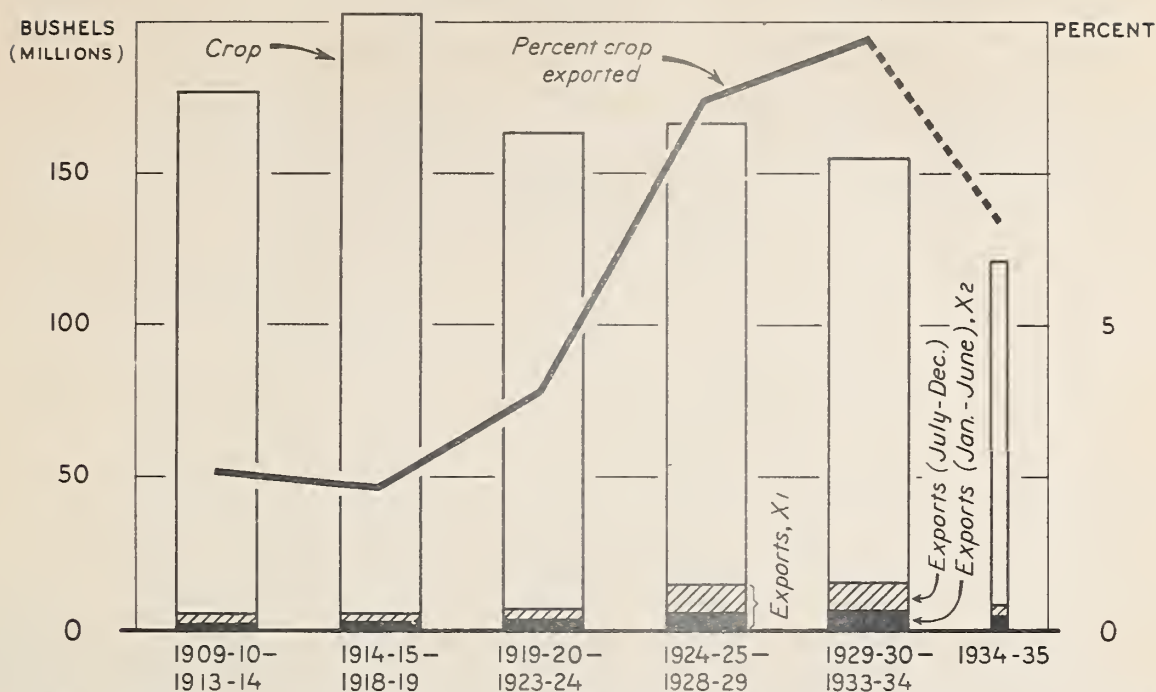


FIGURE 1.- THE TOTAL APPLE CROP REACHED A PEAK IN THE 5-YEAR PERIOD 1914-18 AND HAS BEEN ON A DOWNWARD TREND SINCE. THE PERCENTAGE OF THE CROP EXPORTED INCREASED THROUGH THE 5-YEAR PERIOD 1929-33.

APPLE EXPORTS ( JULY - JUNE ) COMPARED WITH EXPORTS ( JAN. - JUNE )

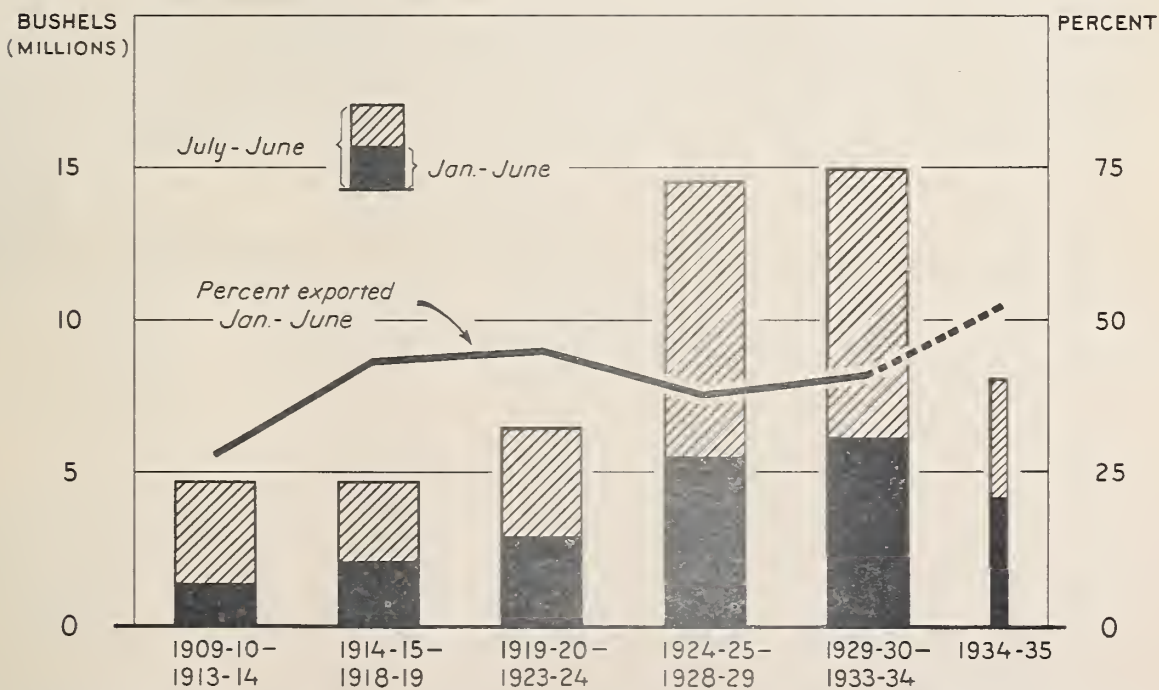


FIGURE 2.- EXPORTS INCREASED FROM 1914-18 TO 1929-33 BUT HAVE DECLINED SINCE THEN. JANUARY-JUNE EXPORTS INCREASED THROUGHOUT THE PERIOD EXCEPT IN THE LAST SEASON SHOWN. THE PERCENT OF THE TOTAL EXPORTS SHIPPED IN THE JANUARY TO JUNE PERIOD HAS BEEN UPWARD IN THE LAST 10 YEARS.

COMMERCIAL APPLE CROP, EXPORTS, AND PERCENTAGE OF CROP EXPORTED

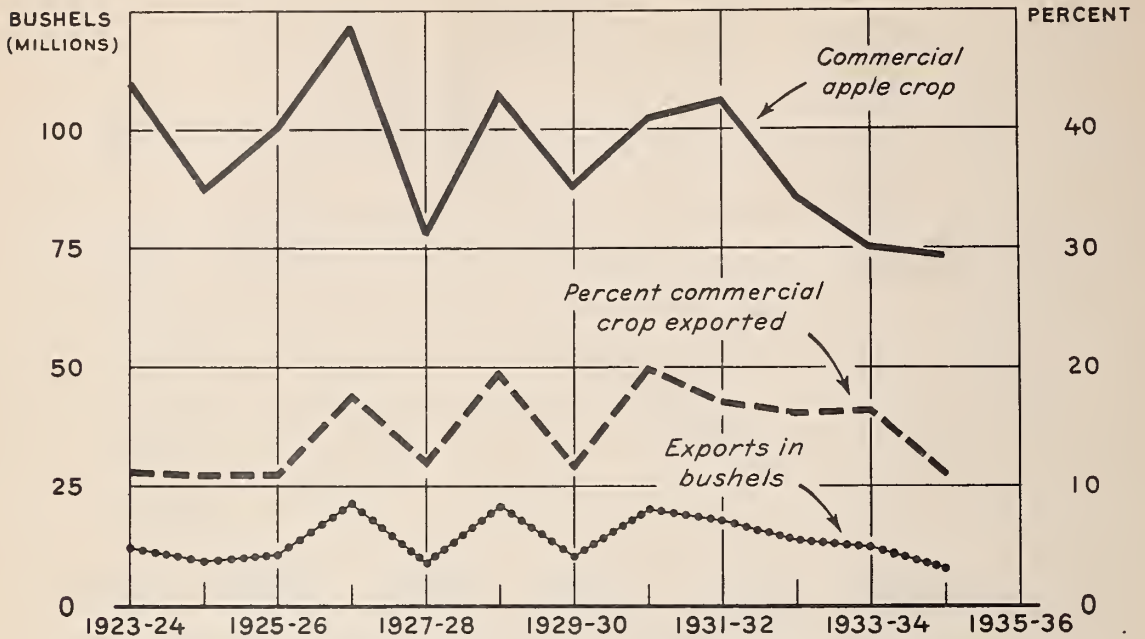


FIGURE 3.- THE COMMERCIAL APPLE CROP HAS BEEN DECLINING FROM THE PEAK REACHED IN 1926. EXPORTS VARIED WITH THE SIZE OF THE CROP UNTIL 1931-32; SINCE THEN THE DECLINE IN EXPORTS HAS INCREASED MORE RAPIDLY.

EXPORTS OF APPLES IN THE 6-MONTH PERIOD, JANUARY TO JUNE COMPARED WITH THE TOTAL EXPORTS

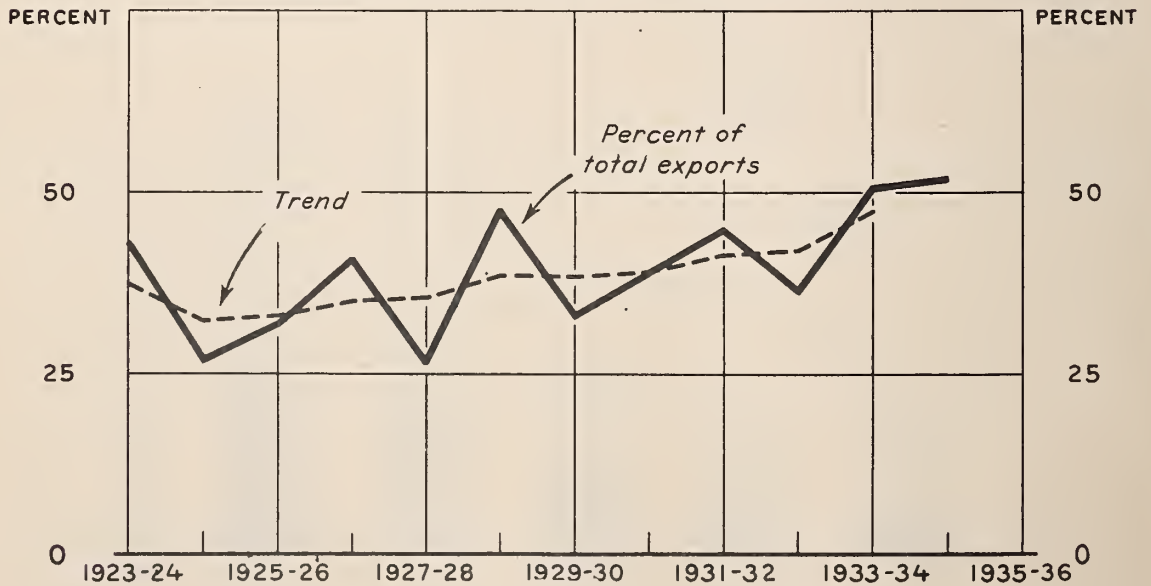


FIGURE 4.- EXPORTS HAVE GRADUALLY BECOME RELATIVELY HEAVIER DURING THE SECOND HALF OF THE SEASON, JANUARY TO JUNE.