

W H E A T S T U D I E S

of the FOOD RESEARCH INSTITUTE

VOL. XV, NO. 6

(Price \$.75)

MARCH 1939

SEASONAL ASPECTS OF THE EUROPEAN WHEAT TRADE

M. K. Bennett

Overseas shipments of wheat and flour to Europe in August–December, when North American wheat usually preponderates, have ranged in the past seventeen crop years from 37.40 to 44.55 per cent of the crop-year shipments. A view rather widely accepted in trade circles is that the fraction of the year's total shipped in these months tends to be small when the margin between world export surpluses and world import requirements is large. Under such circumstances, it is commonly supposed that European importers tend to avoid accumulation of stocks in August–December, in expectation of cheaper wheat in the winter when the Southern Hemisphere export movement is at its peak.

The present study indicates that the reverse of this is true. Autumnal accumulation of import wheat stocks appears to be normal behavior of European importers in years of large margin of surpluses over requirements, mainly as the result of export pressure in the autumn. In general, August–December shipments to Europe may be expected to approximate 43.3 per cent of crop-year shipments in years when margins (as calculated in this study) run larger than 250 million bushels.

The current crop year, 1938–39, is one of very large margin between surpluses and requirements. If the political events of mid-March have not prompted Europeans to begin to accumulate wheat stocks, and if intensified war scare or war itself does not eventuate in the next eight months, the principles developed in the following pages suggest three conclusions regarding the outlook for European trade in wheat. August–December shipments may prove to be the largest fraction of the crop-year total recorded in eighteen years. May–July shipments may run larger than usual in relation to January–April shipments. By the end of the crop year, the stage may be set for severe export pressure in the autumn of 1939–40.

STANFORD UNIVERSITY, CALIFORNIA

WHEAT STUDIES
OF THE
FOOD RESEARCH INSTITUTE

Entered as second-class matter February 11, 1925, at the Post Office at Palo Alto, Stanford University Branch, California, under the Act of August 24, 1912.

Published eight times a year by Stanford University for the Food Research Institute.

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APPENDIX TABLES

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TABLE VII.—STOCKS OF WHEAT AND FLOUR IN PORTS OF THE UNITED KINGDOM NEAR THE FIRST OF EACH MONTH, FROM AUGUST 1921*

(Million bushels)

Aug.-July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
1921-22	7.60	9.92	9.87	12.45	11.05	8.84	6.64	4.08	6.48	9.76	9.08	9.14
1922-23	7.12	7.92	6.32	4.16	4.48	5.88	8.92	8.24	7.82	6.16	4.64	5.28
1923-24	8.12	9.32	9.28	8.88	7.76	8.48	5.20	4.56	8.48	7.28	8.56	8.40
1924-25	9.96	14.80	12.32	12.50	14.36	17.28	16.14	10.96	11.76	10.88	9.20	8.84
1925-26	9.16	5.84	5.12	5.72	3.76	6.16	9.04	7.36	7.72	6.40	4.88	4.24
1926-27	4.32	5.76	5.34	3.76	3.04	4.76	4.72	4.00	4.80	5.68	8.80	8.40
1927-28	8.20	10.40	9.96	8.64	9.20	7.20	6.24	6.96	9.20	8.80	10.00	10.40
1928-29	9.75	9.48	7.44	5.92	5.68	6.16	6.56	6.00	7.44	9.60	9.36	10.08
1929-30	6.16	4.96	11.20	16.76	20.56	15.20	15.12	13.60	11.04	9.60	8.16	6.80
1930-31	6.78	6.04	8.40	9.20	14.24	20.00	17.36	13.04	12.56	9.92	7.24	8.00
1931-32	10.60	12.48	22.08	28.96	29.52	23.88	17.76	17.20	15.36	14.40	10.40	10.96
1932-33	9.12	8.32	7.60	8.84	7.60	7.52	6.80	7.20	10.00	12.56	12.40	12.32
1933-34	11.36	10.24	13.20	16.76	17.20	19.12	12.80	13.28	14.80	14.40	14.56	14.00
1934-35	13.60	12.96	14.00	13.92	15.12	16.12	14.40	12.83	12.20	10.80	10.62	9.80
1935-36	8.76	7.60	5.92	6.24	8.80	10.24	9.04	8.00	8.86	9.84	9.92	9.91
1936-37	9.66	8.00	6.12	7.24	7.40	9.00	7.60	10.70	12.74	12.28	11.04	10.35
1937-38	12.00	11.20	9.76	10.16	10.34	13.00	10.36	10.48	10.20	9.56	11.08	11.99
1938-39	14.08	16.54	16.44	17.64	19.06	18.39	15.55	18.69				

* Broomhall's data, from *Corn Trade News*.

TABLE VIII.—SHIPMENTS OF WHEAT AND FLOUR TO EUROPE BY SHIPPING PERIODS, AND INDEXES OF VARIABILITY IN SEASONALITY OF SHIPMENTS, FROM 1921-22*

Aug.-July	Million bushels in			Percentage in			Ratios* of May-July to			Indexes of variability	
	Aug.-Dec.	Jan.-Apr.	May-July	Aug.-Dec.	Jan.-Apr.	May-July	Jan.-Apr.	Aug.-Apr.	Aug.-Dec.	Monthly basis ^b	Period basis ^c
1921-22	220.13	192.30	130.45	40.53	35.42	24.05	67.84	31.63	87.36	14.96	3.36
1922-23	246.23	191.34	146.88	42.13	32.74	25.13	76.76	33.57	77.71	9.74	2.16
1923-24	237.10	223.49	173.28	37.40	35.26	27.34	77.53	37.62	94.26	12.12	7.30
1924-25	275.54	242.69	112.00	43.72	38.51	17.77	46.15	21.61	88.08	17.12	13.88
1925-26	215.18	166.70	148.36	40.58	31.44	27.98	89.00	38.85	77.47	11.66	6.34
1926-27	257.18	263.08	163.27	37.63	38.49	23.88	62.06	31.38	102.29	12.54	9.50
1927-28	277.69	235.36	151.83	41.77	35.39	22.84	64.51	29.59	84.76	5.42	3.74
1928-29	300.48	232.53	160.87	43.31	33.51	23.18	69.18	30.18	77.39	6.72	5.52
1929-30	209.97	142.61	130.92	43.42	29.50	27.08	91.80	37.13	67.92	14.10	8.48
1930-31	271.49	178.46	159.65	44.55	29.27	26.18	89.46	35.48	65.73	12.80	8.94
1931-32	251.03	196.05	136.54	43.01	33.60	23.39	69.65	30.54	78.10	11.84	3.92
1932-33	186.78	159.15	104.56	41.46	35.33	23.21	65.70	30.23	85.21	9.74	3.18
1933-34	170.86	128.87	103.15	42.41	32.00	25.59	80.04	34.41	75.42	9.76	3.48
1934-35	167.11	118.16	90.34	44.49	31.46	24.05	76.46	31.67	70.71	10.36	6.88
1935-36	151.35	122.05	85.91	42.13	33.94	23.91	70.39	31.42	80.64	7.74	2.18
1936-37	183.22	187.28	107.37	38.34	39.19	22.47	57.33	28.98	102.22	13.26	10.90
1937-38	161.81	152.09	96.30	39.45	37.08	23.47	63.32	30.68	93.99	10.86	6.88

* Basic data on shipments as in Table I.

* Calculated from data in columns 1 to 3.

* Differences between average postwar percentages of annual average total shipped each month, and percentages of crop-year total shipped each month in each year. The sum of the twelve differences in a year, regardless of sign, repre-

sents one measure of relative variability of shipments in that year.

* Procedure as in footnote b, except that calculations are based upon percentages shipped in each of the three periods August-December, January-April, and May-July.

SEASONAL ASPECTS OF THE EUROPEAN WHEAT TRADE

TABLE IX.—PRICE LEVELS, RANGES, AND SPREADS ON BRITISH MARKETS, AND MARGINS BETWEEN EXPORT SURPLUSES AND IMPORT REQUIREMENTS, FROM 1921-22*

(Price averages and ranges in shillings per quarter; price spreads in pence per cental; margins in million bushels)

Aug.-July	Prices			Margin A, total ^d	Margin B, total ^e	Margin B, components					
	Annual average ^a	Range ^b	Autumn spread ^c			United States	Canada	Argentina	Australia	Danube basin ^f	Western Europe ^g
1921-22	56.3	20.4	-2.4	139	23	0	15	-4	-1	6	7
1922-23	47.0	6.1	-6.8	123	53	22	7	-1	8	16	1
1923-24	45.0	10.2	-2.2	157	101	27	20	1	9	25	19
1924-25	61.7	15.1	+1.4	66	13	-2	2	-7	3	0	17
1925-26	56.0	7.5	-4.6	76	23	-10	11	2	-1	20	1
1926-27	53.9	4.6	-8.5	98	72	0	26	4	10	25	7
1927-28	49.9	7.3	-.1	200	117	2	53	30	11	5	16
1928-29	42.5	8.7	+.4	575	341	118	79	65	16	55	8
1929-30	41.8	14.2	+7.4	349	313	179	86	0	24	24	0
1930-31	25.0	14.5	+1.2	402	412	203	108	15	35	37	14
1931-32	25.1	10.7	+3.6	429	445	265	105	0	25	29	21
1932-33	24.7	5.4	-2.2	622	510	268	185	10	30	7	10
1933-34	22.3	4.5	+3.1	498	498	164	168	53	60	34	19
1934-35	25.8	4.9	+4.2	343	278	38	177	20	32	0	11
1935-36	29.3	5.7	-3.2	169	151	32	83	0	18	4	14
1936-37	42.0	15.1	-5.2	-53	5	-27	8	-14	16	10	12
1937-38	39.3	13.9	-2.9	60	78	44	-2	0	25	4	7

* Price data compiled from *London Grain, Seed and Oil Reporter* and *Corn Trade News*; data on margins partly official, partly estimated by Food Research Institute and largely published in "Review" issues of *WHEAT STUDIES*, e.g., December 1938, XV, 257.

^a Simple averages of monthly average prices of parcels imported into the United Kingdom.

^b Range between highest and lowest monthly average prices of parcels.

^c Spreads, measured from December future, between March and December futures at Liverpool in eight weeks centering in November; weekly data averaged.

^d Export surplus minus import requirements, in million bushels. Export surpluses defined as annual net exports from United States, Canada, Argentina, and Australia, plus or minus year-end stocks in excess or in deficiency of "normal" year-end stocks in those countries, plus net exports

from Russia and the Danube countries (Hungary, Yugoslavia, Rumania, and Bulgaria), as in Table X, column 12. Import requirements defined as recorded shipments to Europe, as in Table I, column 1.

^e Algebraic summation of excess or deficiency of year-end stocks in relation to "normal" year-end stocks in countries specified in the following six columns. "Normal" year-end stocks taken as 110 million bushels in the United States, 25 in Canada, 65 in Argentina, 25 in Australia, 20 in the Danube basin, and 37 in western Europe.

^f Hungary, Yugoslavia, Rumania, Bulgaria.

^g British Isles, Belgium, Netherlands.

TABLE X.—WORLD SHIPMENTS OF WHEAT AND FLOUR BY SOURCES OF ORIGIN AND TO EX-EUROPE, AND ESTIMATED EXPORT SURPLUSES OF SPECIFIED COUNTRIES, FROM 1921-22*

(Million bushels)

Aug.-July	Shipments by origin				Shipments to ex-Europe	Export surpluses						
	Total	North America	Southern Hemisphere	Others		United States ^a	Canada ^a	Argentina ^a	Australia ^a	Russia ^b	Danube ^b	Total
1921-22	643.6	403.5	229.9	10.2	100.7	254	200	114	114	0	21	682
1922-23	675.9	456.1	185.1	34.7	91.4	225	286	138	58	1	12	707
1923-24	766.3	450.2	250.5	65.6	132.4	157	366	173	95	22	34	791
1924-25	706.0	423.2	239.1	43.7	75.8	257	194	118	127	0	26	696
1925-26	668.7	413.9	168.3	86.5	138.5	96	335	99	76	27	45	606
1926-27	815.8	485.4	243.0	87.4	132.3	202	319	148	113	50	45	782
1927-28	796.6	492.7	252.9	51.0	131.7	189	386	208	82	2	32	865
1928-29	918.2	536.3	333.4	48.5	224.3	272	485	287	125	0	37	1,169
1929-30	614.0	319.1	217.7	77.2	130.5	324	271	151	87	9	56	833
1930-31	788.7	350.8	277.2	160.7	179.1	319	366	140	187	114	46	1,012
1931-32	772.4	332.4	292.5	147.5	188.8	380	312	140	181	65	82	1,013
1932-33	616.5	290.5	281.7	44.3	166.0	301	449	142	180	17	12	1,072
1933-34	525.5	220.2	231.1	74.2	122.6	193	362	200	146	34	35	901
1934-35	525.9	169.7	285.1	71.1	150.3	34	342	202	141	2	22	719
1935-36	498.1	238.6	178.5	81.0	138.8	1	337	70	120	29	25	528
1936-37	596.8	212.0	270.1	114.7	118.9	-44	203	148	116	5	89	423
1937-38	513.6	192.0	200.6	121.0	103.4	162	85	72	151	43	54	470

* Shipments data from *Corn Trade News* and *Corn Trade Year Book*, here adjusted to monthly basis. Data used in calculating export surpluses official, as published in earlier issues of *WHEAT STUDIES*.

^a Export surplus defined as reported net exports of a crop year, plus year-end stocks on August 1 (July 1 for the United States) in excess of normal stocks defined as in footnote c to Table IX.

^b Export surplus defined as crop-year net exports.

TABLE XI.—DATA BEARING ON THE SEVERITY OF EXPORT PRESSURE DURING AUGUST-DECEMBER, FROM 1921*

(Million bushels except as noted)

Year	August 1 surpluses ^a		Autumn exports ^b				Percentage of surplus in autumn ^c	
	Argentina	Australia	Russia	Danube	United States	Canada	United States	Canada
1921.....	20	38	0	14	163	72	64.2	36.0
1922.....	31	15	1	7	121	129	53.8	45.1
1923.....	44	24	6	16	76	126	48.4	34.4
1924.....	44	25	0	20	174	76	67.7	39.2
1925.....	35	18	20	23	43	124	44.8	37.0
1926.....	43	13	38	31	119	109	58.9	34.2
1927.....	44	25	4	22	137	113	72.5	29.3
1928.....	70	25	0	19	87	190	32.0	39.2
1929.....	105	31	0	36	77	70	23.8	25.8
1930.....	40	38	83	29	63	120	19.7	32.8
1931.....	54	49	63	63	60	82	15.8	26.3
1932.....	38	40	15	7	23	120	7.6	26.7
1933.....	48	44	27	19	9	84	4.7	23.2
1934.....	90	74	1	9	0	80	.0	23.4
1935.....	56	46	26	13	0	102	.0	30.3
1936.....	36	32	2	51	0	109	...	53.7
1937.....	21	30	31	34	41	42	25.3	49.4

* Based on official trade statistics except for estimates of Argentine and Australian exportable surpluses.

^a Estimated total stocks on August 1 minus estimated requirements for domestic consumption until new crops are harvested.

^b August-December net exports except for Canada, which

are August-November. Net imports ignored. Early data for Russia and Danube partly estimated.

^c August-December net exports (United States) or August-November net exports (Canada) as percentages of crop-year surpluses in Table X.

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