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WHEAT STUDIES

OF THE

FOOD RESEARCH INSTITUTE

VOL. V, NO. 5 MARCH 1929

A WEIGHTED SERIES OF CASH WHEAT PRICES AT WINNIPEG

THE range of cash wheat prices at Winnipeg is a wide one at any time. Broad comparisons of short-time movements of Canadian prices with the movement in other countries are considerably facilitated if a price series adequately representative of the range of prices is available for each market or country. Canadian wheat crops vary widely in their composition by grades from year to year, so that the prices of any single grade are not consistently appropriate for such comparisons; and futures prices are also unsatisfactory. This study presents a series of weekly weighted average cash wheat prices at Winnipeg which seems, with certain limitations, to be satisfactorily representative of the range of Winnipeg prices. It is based upon weekly averages of cash closing prices on the Winnipeg Exchange, weighted by inspections of wheat by grades at Winnipeg.

The series is subject to several qualifications arising from the price statistics and the weights used. Of these qualifications the most important is that the volume of weekly sales at Winnipeg cannot be expected to conform precisely in its composition by grades with the composition of weekly inspections by grades. The series seems least reliable as an indicator of the true course of Winnipeg cash prices in the months of August and September, when inspections are small and when they may change radically in their composition by grades. It is less satisfactorily representative of terminal prices throughout all Canada than of terminal prices at Winnipeg, because prices and inspections of wheat sold at Vancouver are not included. The defects of weighting by Winnipeg inspections are, however, less significant in weekly weighted averages than they would be in monthly or annual weighted average prices.

STANFORD UNIVERSITY, CALIFORNIA

March 1929

WHEAT STUDIES

OF THE

FOOD RESEARCH INSTITUTE

The central feature of the series is a periodic analysis of the world wheat situation, with special reference to the outlook for supplies, requirements, trade, and prices. Each volume includes a comprehensive review of the preceding crop year, and three surveys of current developments at intervals of about four months. These issues contain a careful selection of relevant statistical material, presented in detail in appendix tables for reference purposes, and in summary form in text tables and charts.

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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 by Stanford University for the Food Research Institute.

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STANFORD UNIVERSITY, CALIFORNIA

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The Food Research Institute was established at Stanford University in 1921 jointly by the Carnegie Corporation of New York and the Trustees of Leland Stanford Junior University, for research in the production, distribution, and consumption of food.

A WEIGHTED SERIES OF CASH WHEAT PRICES AT WINNIPEG

I. INTRODUCTION

Wheat is not a homogeneous commodity. Within any terminal market, much less within a given country, there is never at any time a single cash wheat price. Rather there is a wide range of cash prices occasioned by differences in composition and merchandising position of particular lots of wheat. On January 21, 1929, for example, cash closing prices were quoted on the Winnipeg Grain Exchange for twenty-two distinct types and grades of wheat of identical position — in store at Fort William and Port Arthur; the price range was from 75⅜ to 123⅛ cents per bushel, and some grades were not quoted. Some such situation may be observed in any important wheat market on any day. As we have frequently had occasion to say, the wheat price at any time is not a point but a range.

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The most comprehensive description of changes in wheat prices in Canada, as in other countries, can be obtained by presenting the prices of all important grades, either as ranges or as averages. For special purposes this procedure is desirable, in spite of the labor entailed. But so numerous are the grades, and so great are their individual variations in quantity and price from year to year, that such a description is too complex to yield a clear picture of the general movements of wheat prices even in a single market. Moreover, it does not lend itself to inter-market comparisons or to general analysis of movements in world wheat prices, for the ranges in different markets are so wide and overlapping that significant changes in price relationships are obscured. In order intelligently to follow the course of wheat prices, or to analyze the causes of their variations, it is necessary to have some condensation of this range of prices or to select some significant but narrower range within it.

For certain purposes the price of a representative grade—expressed either as a range or as an average—is most serviceable. But in Canada, as in other countries, the wheat crops differ greatly from year to year with respect to the proportions of the various grades of wheat marketed. In one year the great bulk of the Canadian crop may lie within the so-called "statute" grades, Nos. 1, 2, and 3 Northern Manitoba; there may be little of the "commercial" grades, Nos. 4, 5, 6, and feed. In another year the commercial grades, which are always cheaper than the statute grades, may predominate; and in still another year the tough grades, which are cheaper grade for grade than the statute and commercial grades, may bulk large. The crop year 1922–23 was characterized by an extraordinary proportion of wheat grading No. 1 Northern, with very little wheat of tough or commercial grades. In 1925–26, 1926–27, and 1927–28, the proportions of wheat grading tough were exceptionally large. In the current year, 1928–29, there is an exceptionally large proportion of the commercial grades and relatively little either of No. 1 Northern or of tough grades. Under these circumstances, it is obvious that a price series of No. 1 Northern Manitoba alone cannot accurately reflect changes in the general level of Canadian wheat prices; for in some years No. 1 is much more a premium wheat than in others. Nor will a price series applicable to any other single grade serve, for no single grade constitutes the same proportion of the crop in every year.

Since one cannot feasibly compare ranges in wheat prices in the world's leading markets on account of the very width of the ranges, the best alternative is to secure, for each of the leading markets in each of the leading exporting and importing countries,

a single price series reasonably representative of the range of wheat prices in those markets. A weighted price comprehending several grades, or all wheat sold, in a single market, is needed as a supplement to or a substitute for the price of a representative grade.

In an earlier issue of WHEAT STUDIES[1] we have presented a weekly series of British parcels prices, which we regard as reasonably representative of the range of import wheat prices in the United Kingdom, the leading international wheat market. The U. S. Department of Agriculture currently compiles a weekly weighted average price of car-lot sales of all classes and grades of wheat in the six leading terminal markets of the United States; and this series, though it takes no account of the prices of the important fraction of the wheat crop sold in the Pacific Northwest, may be regarded as reasonably representative of the range of terminal prices in the United States. Here we present a comparable but not identical series for Canada, the principal wheat-exporting nation of today. This series of weekly weighted average prices of wheat at Winnipeg may be regarded, with appropriate qualifications set forth below, as reasonably representative of the range of terminal prices in Canada. We offer this series not as the best for all uses, but as one that is valuable for certain purposes simply because it is more generalized than any other weekly series now available. Moreover, the problems involved in reaching such a series are of interest in themselves. In the absence of price and inspections data for earlier years, this series begins with August 1922.

II. CONSTRUCTION OF THE SERIES

In order to simplify discussion, we may assume that the sole reason for constructing a weighted price of Canadian wheat is to secure some way of measuring changes in the course and general level of Canadian wheat prices over short as well as long periods. What existing prices series, then, can be made to serve the purpose?

THE SELECTION OF PRICES

Producers' prices, as now compiled, are unsatisfactory. In the United States, producers' prices are now obtained for the fifteenth (prior to December 1923, for the first) of each month; but in Canada only one estimate of producers' prices is obtained each year, at the end of December. Hence short-time fluctuations in Canadian prices cannot be followed by reference to producers' prices.

Export prices, weighted, may be obtained by reference to quantities and values of monthly exports of wheat. Such a series is of value for some purposes; but it cannot be made to show price movements from week to week.

Futures prices at Winnipeg are satisfactory for many purposes. But they are of limited utility for purposes of measuring changes in the course and general level of Canadian wheat prices. Futures prices are not continuous; hence in order to show the price movement over a considerable period of time, some splicing or adjustment of the futures prices to one another is required. Thus prices of (say) the May future may at some point be "spliced" to prices of the July, prices of the July to prices of the October, and so on. Such splicing may on occasion misrepresent the actual cash price movement, particularly when the near future closes at a large premium over the distant, or the distant over the near. Again, the Winnipeg future is tied more closely to the higher than to the lower grades of wheat. Only No. 1 Northern Manitoba or better quality is deliverable on futures contracts without discount; No. 2 is deliverable at a discount of 3 cents; No. 3 at a discount of 8 cents; No. 4 at a discount of 21 cents (23 cents from 1922–23 to 1925–26). Hence, at least in the futures closing months, the price level shown by futures quotations will be relatively higher in years when the deliverable grades happen to be scarce than in years when they happen to be plentiful, even if the total Canadian wheat crops are of the same size and the levels of international wheat prices are identical.[2]

[1] July 1928, IV, No. 8.

[2] See also below, pp. 189–91.

A continuous weekly wheat price series most nearly representative of the range of Canadian prices is to be sought in cash prices recorded on the Winnipeg Grain Exchange. That exchange handles a far larger volume of cash sales of wheat than Vancouver, which is the only other important cash wheat market of Canada; Winnipeg, indeed, is probably the greatest single cash (not sample) wheat market in the world. If data were available to show for each day of the year the total volume of cash wheat sales in Winnipeg in relation to the total value of wheat sold,[1] daily weighted average prices could be computed that would be truly representative; and satisfactory weekly, monthly, and annual weighted average prices could be obtained. Such prices would be representative of the range of Canadian terminal cash wheat prices except in so far as other cash transactions, at different prices, occurred in the other terminal markets. But records of the daily volume and value of sales, or of each particular sale, at Winnipeg are not available. Hence one must seek in some other way whatever may appear to be the nearest approach to the weighted price series that would be obtained if these data could be secured.

The chief difficulty involved in obtaining a price series at all times representative of the range of Canadian terminal prices lies, as we have seen, in the fact that the Canadian crops contain wheat of the several grades not in identical, but in widely varying, proportions from year to year. Analysis of official data on inspections in the Western Division illustrates the point.

There are two administrative inspection divisions in Canada, the Eastern and the Western. The Western Division includes such important wheat-receiving centers as Fort William and Port Arthur, Winnipeg, Duluth, Moose Jaw, Medicine Hat, Saskatoon, Edmonton, Calgary, and Vancouver; the Eastern Division includes Montreal, Toronto, and all other points east of Fort William and Port Arthur. Comparatively little Canadian wheat receives its primary inspection either at Fort William and Port Arthur or at any point in the Eastern Division, though a good deal of United States wheat is reinspected at Montreal. The annual average quantities of Canadian wheat inspected over the period 1921–22 to 1926–27 were 303.5 million bushels in the Western Division, and only 1.4 million in the Eastern Division.[2]

The quantitatively important grades of wheat inspected in the Western Division are Nos. 1, 2, and 3 Northern Manitoba; commercial grades Nos. 4, 5, 6, and feed; and "no grade"[3] hard red spring wheat. Table 1 (p. 178) shows that the combined total of these grades has not fallen below 91.6 per cent of total inspections in any of the past seven years. In all years except the present, feed wheat and No. 6 were unimportant, and No. 5 was of little importance except in 1924–25. The category "others" includes numerous grades, chiefly straight grade or tough durum wheats; smutty hard red spring; rejected and/or sprouted hard red spring; Alberta and mixed red winter; No. 1 Hard, the highest quality of Canadian wheat;[4] and grades of hard red spring called Nos. 4, 5, and 6 special. The winter wheats, the smutty wheat, and the No. 1 Hard were never, in these years, present in appreciable amounts. In 1922–23, rejected and durum predominated in the "others" category; in 1923–24, rejected and the "special" grades; in 1924–25, durum; in 1925–26, rejected and durum; in 1926–27, sprouted and durum; in 1927–28, durum. The classification "special" was employed only in 1922–23, 1923–24, and 1924–25, "sprouted" only in 1926–27.

Clearly, therefore, a satisfactory weighted average price of Canadian wheat could be secured (1) if price quotations were avail-

[1] Equally adequate information would consist of a record of individual transactions for each day—the quantity and the price per unit of each sale.

[2] These were primary inspections; the figures do not include reinspections arising either because of protests on grading, or because of changes in grade caused by mixing, cleaning, and/or drying operations conducted principally at Fort William and Port Arthur.

[3] Wheat classified as "no grade" in the inspections returns is further termed either "tough" or "damp," and is actually graded tough Nos. 1 to feed and damp Nos. 1 to feed. "Tough" grades contain from 14.4 to 16.9 per cent of moisture, "damp" grades 17 per cent or over. Grades called "wet" are no longer in use. Since damp types are relatively insignificant in quantity, we may regard "tough" and "no grade" as practically synonymous terms.

[4] This grade of wheat was dropped from the list of inspected grades in 1928–29, on account of continuing scarcity of offerings.

able for the seven straight and the no grade or tough grades of wheat listed above as quantitatively important, and (2) if one could devise some appropriate system of weighting that would correspond fairly closely to the actual sales of cash wheat on the Winnipeg Exchange. A weighted weekly price series must prove unrepresentative to the extent that certain grades of wheat actually sold are disregarded in the computation, and to the extent that the weights employed fail to represent the quantities of the various grades that are sold week by week.

subtracting from the weekly average prices of the straight grades of the same designations the weekly average discount of tough No. 3 under straight No. 3. This procedure is by no means exact; but from some points of view it seems appropriate. The lower grades of tough wheat seem ordinarily to sell at smaller discounts below the straight grades than do the higher tough grades below the higher straight grades of the same number. In 71 per cent of the weeks for which weekly average prices are shown in Appendix Table I, the discount of No. 3 tough under No. 3 straight was smaller than

TABLE 1.—PERCENTAGES OF SPECIFIED GRADES OF HARD RED SPRING WHEAT TO TOTAL INSPECTIONS OF ALL WHEAT IN THE WESTERN DIVISION, ANNUALLY FROM 1922–23*

Classification	1922–23	1923–24	1924–25	1925–26	1926–27	1927–28	1928–29[a]
No. 1 Northern	65.6	37.3	19.3	22.3	9.2	.9	1.4
No. 2 Northern	16.8	25.8	18.3	27.1	17.5	7.7	12.0
No. 3 Northern	9.3	22.9	18.6	13.9	7.8	22.3	19.5
No. 4 Northern	.8	5.2	16.3	3.1	3.2	12.3	19.5
No. 5 Northern	.2	1.2	8.1	.9	1.4	5.0	17.1
No. 6 Northern	.1	.4	3.2	.2	.9	2.9	15.8
Feed	.1	.6	1.3	.0	.4	1.2	6.1
No grade[b]	2.6	1.0	11.7	28.6	51.2	43.1	1.6
Total above	95.5	94.4	96.8	96.1	91.6	95.4	93.0
Others[c]	4.5	5.6	3.2	3.9	8.4	4.6	7.0
Grand total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

* Data from *Canadian Grain Statistics,* for September–August crop years.

[a] September–March.

[b] Hard red spring wheat of grades Nos. 1 to feed, but containing a higher proportion of moisture than those grades.

[c] Includes numerous grades of winter, durum, and hard red spring wheat, chiefly rejected, sprouted, and special grades of hard red spring and durum.

Price quotations are readily available for straight grades Nos. 1, 2, 3, 4, 5, 6, and feed; and also for tough Nos. 1, 2, and 3. Weekly averages of daily prices of these grades since August 1922 have appeared in *Canadian Grain Statistics,* an official publication. These are prices of wheat in a given position, in store at Fort William and Port Arthur. These statistics are given in Appendix Table I. There are as many grades of tough as of straight wheat; but prices of tough Nos. 4, 5, 6, and feed are not published in any journal available in our files, though they could be secured at Winnipeg.

Since it seems desirable to include in a weighted average price the prices of these lower tough grades, we have estimated the prices of tough Nos. 4, 5, 6, and feed by

the discount of No. 1 tough under No. 1 straight; it was larger in 23 per cent of the weeks, and the same in 6 per cent of the weeks. We have tested our procedure for the year 1927–28, in which lower grades of tough wheat bulked relatively largest in quantity, by employing our derived prices and, alternatively, actual prices secured from daily spread cards at Winnipeg. The weekly weighted prices did not differ by a full cent per bushel in any week of the year. In other years the weights ascribed to our estimated prices of tough grades happen to be relatively lighter than in 1927–28, so that our procedure seems sufficiently accurate.

With these estimated prices of tough Nos. 4, 5, 6, and feed, we have available weekly averages of daily cash closing prices on the

Winnipeg Exchange for fourteen grades of wheat. It might appear desirable to include in a weighted average the prices of other grades, particularly of durum wheat. The proportion of durum inspections to total inspections in the Western Division has increased considerably in recent years; and if, as some observers think probable, durum wheat production should show a large relative increase in the future, a weighted average price of Canadian wheat which excludes durum would lose some if its significance, or would at least become decreasingly representative. But since inspections of the fourteen grades whose prices we employ have always exceeded 91 per cent of total inspections, omission of the prices both of durum and of less important grades is not a serious matter; and it is justifiable partly because computation would be made unduly complex if the several grades of straight and tough durum were taken into account.

Weighting

In default of records of the weekly volume, by grades, of the actual transactions in wheat on the Winnipeg Grain Exchange, the weighting of Winnipeg prices must be based upon primary inspections by grades, either in the Western Division as a whole or in Winnipeg alone. No account need be taken of what we may call secondary inspection, which takes place when wheat is unloaded from the terminal elevators at Fort William and Port Arthur to boats and cars for eastward shipment. The wheat dealt in on the Winnipeg Exchange is usually of the grade determined by primary inspection, though some warehouse receipts carry notations of grade after mixing has taken place, and some wheat is sold before official inspection has occurred and/or before warehouse receipts have been issued upon it.

Inspections data appear appropriate for use in weighting only on the assumption that the volume of each grade of wheat sold each week on the Winnipeg Exchange conforms roughly to the volume of each grade of wheat inspected in that week. Clearly the assumption is not in exact accord with the facts. Cash wheat sales on the Winnipeg Exchange consist chiefly in the purchase and sale of warehouse receipts, each of which bears the equivalent of the statement that a certain quantity of wheat of a specified grade has been received at a given warehouse, normally at Fort William or Port Arthur. Other sales are made of wheat "on track" (that is, in railway cars not yet inspected but in or near an inspection point) and of wheat "billed and inspected" (that is, inspected and on its way from Winnipeg to the head of the lakes, but against which warehouse receipts have not yet been issued). All prices resulting from these sales, however, are prices of wheat in store at Fort William and Port Arthur.

It is readily conceivable that 100,000 bushels, say, of each of ten grades of wheat might be inspected in a given week, but that the several types of sales might not amount to precisely 100,000 bushels of each grade. There can be no possibility of *precise* concordance of sales by grade and inspections by grade. The two principal causes of divergence would seem to be (1) the possibility that owners of warehouse receipts sometimes choose to press offers of one grade and withhold offers of another; and (2) the fact that mixing operations result in sales different in their composition by grades from the composition of primary inspections by grades.

Nevertheless, since we are here concerned chiefly with the construction of a *weekly* weighted average, differences between the composition of cash sales by grade and the composition of primary inspections by grade seem not to be of major significance.

Throughout a given crop year, the situation is probably about as follows. If a large proportion of wheat grades No. 1 at Winnipeg and a small proportion grades No. 4, in any week, then warehouse receipts issued and sold in that week will tend to apply to No. 1 more than to No. 4 in something like the same proportion as inspections consist of these grades. On the whole, within a given crop year, the proportions which inspections of the various grades bear to total inspections tend to remain fairly constant from week to week. Although there are some fairly abrupt shifts, especially in the period of transition from old to new crop, inspections do not consist entirely of No. 1 in one week, entirely of No. 6 in another;

in their composition by grades, physical receipts of wheat at warehouses and warehouse certificates issued against them necessarily differ only slightly from inspections. It is difficult to see why sales of warehouse receipts applicable to particular grades should in one week be negligible if inspections of those grades were large in proportion to inspection of other grades. The more probable view is that, when physical receipts of *all* grades are largest in the October–November crop movement, then sales of *all* grades are somewhat reduced, and that sales of *all* grades tend to exceed physical receipts and inspections in later months when the peak of the marketing movement is passed. In so far as drying and mixing are practiced, and warehouse receipts are sold applicable to grades emerging from the process, there exists a further discrepancy between primary inspections by grades and sales by grades, though perhaps not a large one because mixing does not result in extreme changes in grades.

One may reasonably assume, in short, that if in a given week inspections at Winnipeg consist of definite proportions of each grade, then sales by grade on the Exchange will tend to approximate these proportions, though the correspondence cannot be expected to be exact. If the proportions of sales by grades and inspections by grades tend to correspond each week, then weekly average prices may appropriately be weighted by inspections. In so far as, over a year, sales are spread more evenly than inspections, this would have more serious effects on a weighted *annual* average terminal price than on a weighted *weekly* average price: for if, in a given year, low prices were more heavily weighted by inspections than by sales, and high prices by sales than by inspections, then a weighted average based on sales would be higher than one based on inspections. The difference would be the greater if price fluctuations were wide.

Partly because Winnipeg cash wheat sales probably correspond more closely with Winnipeg inspections by grades than do Winnipeg cash wheat sales and inspections by grades throughout the Western Division, we have employed Winnipeg inspections for weighting Winnipeg prices. In so far as one seeks a weighted average terminal cash price representative of the whole Canadian crop, the use of Winnipeg inspections alone is defective. In some years a distinctly large proportion of the Canadian crop, mostly from Alberta, moves westward to Vancouver.[1] Sometimes, as in 1928–29, the Alberta crop, including the portion moved westward, may consist more largely of the lower grades of wheat than do the crops of Saskatchewan and Manitoba. Wheat moving westward is inspected at western points, principally Calgary, Edmonton, and Vancouver, and not at Winnipeg; the terminal price of this wheat is recorded principally at Vancouver, though the relationship between the Vancouver and the Winnipeg markets is close.[2]

Now in order to obtain the most representative weighted average terminal price of Canadian wheat, prices at Winnipeg should be weighted by sales (or inspections) there, and prices at Vancouver by sales (or inspections) there, and the two series combined. But Vancouver is only beginning to assume large importance; Vancouver cash prices for a period of years are not readily available; and to separate inspections of wheat moving to Vancouver from inspections of wheat moving to Winnipeg is at best a time-consuming and necessarily an inexact procedure. Consequently

[1] The relative importance of the Vancouver market in relation to the Winnipeg market is suggested by the following figures, which show for the past seven years, in million bushels, August–July wheat receipts at Fort William and Port Arthur in contrast with receipts at Vancouver (and Prince Rupert after October 1, 1926). Data are official.

	Fort William, Port Arthur	Vancouver
1922–23	246.6	16.9
1923–24	297.4	52.0
1924–25	157.0	25.5
1925–26	261.8	53.8
1926–27	254.0	43.6
1927–28	261.3	93.1
1928–29[a]	262.4	67.7

[a] August–February.

[2] Cash wheat transactions at Vancouver are still made on the basis of the Winnipeg future (so much over or under the future for each grade of cash wheat, just as occurs at Winnipeg), despite the existence of a new futures market. No. 1 Northern cash wheat may sell at Vancouver either at a smaller or at a larger premium over the Winnipeg future than it sells, on the same day, at Winnipeg. This year No. 6 wheat has brought higher prices at Vancouver than at Winnipeg, because Oriental demand for this grade has been active, while European demand has been less so.

this procedure is not feasible; and one is left with the alternatives of weighting Winnipeg prices either by inspections at Winnipeg alone or by inspections throughout the Western Division.

In effect, the use of Winnipeg inspections results in a weighted price not accurately representative of terminal prices in all Canada. But the use of inspections in the Western Division would result in a price not accurately representative of terminal prices recorded at Winnipeg. In view of the fact that Winnipeg is still by far the leading cash wheat market of Canada, more seems to be gained in obtaining the best possible Winnipeg weighted price series than in seeking to render this price series accurately representative of terminal prices throughout Canada by means of what is at best a compromise procedure, the weighting of Winnipeg (excluding Vancouver) prices by inspections in the Western Division. One may be reasonably certain that Winnipeg prices weighted by Winnipeg inspections will yield a weighted price series only a cent or two different from a series computed either from Winnipeg prices and Western Division inspections, or from Winnipeg and Vancouver prices weighted by Winnipeg and Calgary, Edmonton, and Vancouver inspections.

Weekly inspections at Winnipeg since August 1922 are shown in Appendix Table II, in terms of cars inspected. As we have seen, weekly average prices are available for fourteen grades, including derived prices for commercial tough grades 4, 5, 6, and feed. As appears from Appendix Table II, published data on inspections do not show fourteen grades, but eight: all tough wheat, whatever the grade, is listed as no grade. In order to ascribe weights to the prices of the seven grades of tough wheat, it has been necessary to estimate what percentage of all no grade wheat graded No. 1 tough, and so on for the lower grades.

Our basis of estimation is the assumption that each grade of tough wheat constituted the same percentage of all tough wheat inspected as each straight grade constitutes of all straight wheat inspected. This assumption is probably not in precise accord with the facts, but there seems no reason to suppose that weather conditions would give rise to higher moisture content in any one grade of wheat than in any other. In order to shorten the calculation of the percentages to total inspections grading tough of each grade, we have employed monthly inspections in the Western Division rather than weekly inspections in Winnipeg. The differences between weekly and monthly figures, and between Winnipeg and Western Division inspections, seem too small appreciably to affect the weighted averages.

In the final computation, the weekly average price of each of the fourteen grades is multiplied by the percentage borne by inspections of each grade to the total inspections of the fourteen grades. The sum of the fourteen products thus obtained for each week is divided by the total weight; this weight is 100 per cent, so that division of the product-sum by the weight consists merely in shifting the decimal point.

All Canadian price figures shown in Appendix tables or graphically in charts are presented in terms of Canadian currency. The labor of conversion to United States currency seems unnecessary because Canadian exchange has remained close to par in all of the years for which price statistics are here presented. As judged by comparison of monthly weighted average export prices converted and unconverted, conversion has not altered the price by more than one cent per bushel since July 1924. From January 1923 to July 1924, however, depreciation of the Canadian exchange caused prices expressed in Canadian currency to exceed prices expressed in United States currency by more than one cent in most months, but never by more than three cents.

III. QUALIFICATIONS

We have already noted some features in the construction of our weekly weighted series which prevent one from placing perfect confidence in it as representative of the range of terminal cash wheat prices either in Winnipeg or in all Canada. These and other shortcomings merit examination to reveal what qualifications pertain to the

series and with what reservations it should be used.

In brief, the series falls short of being perfectly representative of the range of cash wheat prices at Winnipeg (1) because the official data on prices and inspections are deficient for a few weeks; (2) because the series is based upon weekly averages of daily cash closing prices, rather than upon prices of all cash sales; (3) because prices of certain grades and varieties of wheat sold on the Winnipeg market are not included; (4) because prices of certain grades employed in construction of the average are estimated; (5) because the weighting factors to be applied to all prices of tough wheats are estimated; and, most important of all, (6) because the weighting factor, Winnipeg inspections, cannot be expected to correspond with the proper but unknown weighting factor, actual volume of cash sales, especially in the months of August and September. The number of qualifications is more impressive than their significance.

The series falls short of being perfectly representative of the range of Canadian terminal wheat prices for the reasons listed above, and in addition because neither prices nor quantities of wheat sold at Vancouver are taken into account.

Minor Imperfections

The first four of the imperfections noted are of minor importance and can be dismissed without extended discussion.

1. For several weeks in the seven-year period considered, weekly average price quotations for particular grades of wheat were either not available in the primary source, *Canadian Grain Statistics,* or were probably incorrect as there reported. Missing figures were for the most part supplied from the *Grain Trade News* (called *Market News* in the earlier years of the period). Occasional interpolations were necessary, but these could be made with confidence in view of the consistency shown by spreads in preceding and following weeks. Palpable errors in quotations, which readily appeared upon the calculation and plotting of spreads, were corrected in most instances by reference to the same sources. Trifling errors doubtless remain embodied in the figures shown in Appendix Table I; we have made no effort to check in detail the weekly averages shown in *Canadian Grain Statistics* with averages secured directly from daily price quotations. Such errors cannot be of importance in their effect upon the weighted averages.

Data on weekly inspections at Winnipeg were missing for a few weeks, notably in August and September 1922 and in August 1923, as appears from Appendix Table II. Our procedure in filling gaps in these months was to employ data on monthly inspections in the Western Division. Thus the weights applied to weekly prices in August 1922 were identical in each of the four weeks of that month; and so with weights applied to the prices in September 1922 and August 1923. For two other weeks (those ending October 15 and December 31, 1923) it was necessary to obtain inspections data by interpolation. In so far as inspections at Winnipeg differed in their distribution by grades from Western Division inspections, and in so far as the distribution by grades changed from week to week, the weighted average prices for August-September 1922 and for August 1923 are likely to misrepresent the facts. In general the weighted average prices in the months of August and September of each year—the period of transition from one crop to another—are to be regarded as less dependable than the prices in other months, for reasons set forth below.[1]

2. The use of weekly averages of daily cash closing prices rather than prices of all cash sales is not of great significance, but may result in showing weighted averages too high in some weeks and too low in others. The daily cash closing price of each grade is the price of the last sale of the day on the Exchange. At some periods prices rise rapidly and consistently from day to day and from week to week, or fall similarly; usually the prices of one grade fluctuate in the same direction and to much the same extent as prices of other grades, though changes are more frequently in the same direction than of the same amount. During a period of sustained rising prices, the cash closing price each day probably tends to be higher than the prices recorded

[1] See p. 185, paragraph 3.

in the earlier hours of the day. If this happens each day for several weeks, the weighted average price during those weeks must be higher than would be the case in weekly average prices made up not from daily cash closing prices, but from prices of each sale each day weighted by quantities sold. In a period of sustained falling prices, the reverse would be true because the daily cash closing price would tend each day to be lower than the prices recorded in the earlier hours of the day. The net effect of employing daily cash closing prices is thus to show weekly weighted average prices sometimes too high and sometimes too low. From available data one cannot estimate how much too low or too high the weighted averages may be; but, since sustained upward or downward movements are uncommon, one may suppose that the effect is unimportant. In most weeks of any year, prices move upward in some days and downward in others.

3. The omission from the weighted average of prices of various grades of wheat sold on the Winnipeg market, notably durum and rejected hard red spring, is not a serious matter. These grades do not bulk large in the total quantities of wheat inspected in any year; consequently they cannot bulk large in the sales on the Exchange. They have never amounted to more than 8.4 per cent of total inspections in the Western Division. The effect of their omission is to raise the weighted average price very slightly above what it would be if they were included, for the several grades of rejected hard red spring and of durum wheat tend to sell for less than the equivalent grades either of straight or tough hard red spring wheat.

4. Included in the calculation of the weighted average are estimated prices of Nos. 4, 5, 6, and feed. As we have seen, these prices as estimated are perhaps slightly too low in most weeks of the period covered. If so, the weighted average prices are slightly too low, though the amount is not susceptible of measurement and is unquestionably small because the weights assigned to these grades happen always to be relatively small. To employ unduly low prices of these grades tends to correct the upward bias caused by disregarding the prices of the grades mentioned in the preceding paragraph.

Estimated Weights for Prices of Tough Wheats

5. Since weekly inspections data yield only a single figure for no grade wheat covering the quantity of the several grades of tough, damp, and wet wheat, whereas price statistics are quoted or may be estimated for seven grades of tough wheat, it was necessary to estimate how much of the no grade wheat was classified as of each of the grades tough No. 1 to tough feed. Estimates were based on the assumption that the total no grade wheat was actually distributed among the various tough grades in the same proportions, week by week, as the total straight-grade wheat was distributed among the several straight grades. This assumption seems, on the whole, a reasonable one, and we see no reason for preferring another. But it can hardly be invariably correct, and we know of no method of testing its accuracy. Hence it is probable that the weighted averages are rendered somewhat inaccurate by inexactness in the estimated weights applied to prices of tough wheat.

The inexactness is enhanced by the fact that, in order to shorten the computations, the percentage weights applied to prices of the several tough grades were derived by the use of monthly inspections in the Western Division rather than by weekly inspections at Winnipeg. But we see no reason to suppose that the errors introduced into the weighted averages by these estimates are large in any year, or that a consistent bias in either direction is created. The possibility of error is greatest in the years 1925–26, 1926–27, and 1927–28, when wheat classified as no grade constituted far larger proportions of the total inspections than in other years.

Weighting by Inspections Rather Than Sales

6. The practice of weighting by Winnipeg inspections rather than by the volume of actual sales is potentially the largest source of error, and calls for more extended comment. Undoubtedly the proportion of total inspections grading No. 1 will not in any

week correspond precisely to the proportion of total sales of No. 1 wheat; and so with other grades. There may be periods several weeks in length when sales of any grade are either more or less in proportion to totals than are inspections of identical grades in proportion to totals. But on the whole it seems probable that divergences are not large. The crop has to be moved to export rapidly; it is handled by many individuals and organizations; and there is no reason to suppose that, if price adjustments are quickly made, either buyers or sellers will consistently cause sales of a particular grade to be small in relation to inspections and receipts of that grade.

The present year perhaps furnishes an extreme example. Inspections of No. 6 wheat ran exceptionally heavy, but this wheat tended to move to export rather more slowly than other grades, at least in the earlier weeks of the season. One may suppose that, for a time at least, sales of No. 6 on the Exchange were smaller in proportion to total sales than were inspections of No. 6 wheat to total inspections. Even this is not clear in the absence of data on sales, but the inference seems reasonable. The effect on the weighted average price would be to render it too low in weeks when sales of No. 6 were smaller in proportion than were inspections, too high in weeks when, after price readjustment, sales of No. 6 became larger in proportion than inspections of No. 6.

Evidence respecting similar occurrences applicable to other grades in other years is not available. Weighting by inspections probably does not create a consistent bias in either direction, for no single grade of wheat can consistently remain unsold over a period of years if it is inspected and received at terminal elevators. Presumably the bias is of the same sort as that created by the use of daily cash closing prices: in some weeks the weighted average is made too high, in others too low; but one cannot ascertain in which direction the bias operates in particular weeks. Nor can one measure the probable amount of the inaccuracy in reflection of the range of Winnipeg prices caused by weighting by inspections rather than sales. Doubtless it varies from week to week. In our judgment it cannot be enough markedly to affect the course of weighted average prices shown by our series; but the possibility that it may do so constitutes the chief reason for not regarding the series as fully representative of terminal cash wheat prices at Winnipeg.

However, in so far as wheat mixed in private terminal elevators is sold on the Exchange, our system of weighting by primary inspections causes the weighted average prices to run somewhat too low. Mixing is practiced chiefly in order that an elevator company may have more wheat of the higher grades, and less of the lower, to sell. Hence, from this cause alone, the proportion of sales of upper grades of wheat tends to be larger than the proportion of primary inspections of the upper grades; and the reverse is true of the lower grades. We have no way of measuring the effect upon our price series of the practice of mixing. But in view of the fact that much wheat is sold unmixed, and that extreme changes in grade through mixing are unlikely,[1] we assume that the weighted average prices are only a trifle lower than they would be if mixing were not practiced.

Again, although we employ Winnipeg inspections as weights, not all of the wheat inspected at Winnipeg is sold on the Winnipeg Exchange, while a given parcel of wheat may be sold more than once in the course of a week. Some wheat inspected at Winnipeg may pass directly to Pool or other elevators at Fort William and Port Arthur, and may be sold directly (by cable) to a foreign buyer, or even consigned unsold, without any record of the cash transaction being made on the Exchange. The absolute amount of wheat so handled by the Pool may constitute a fairly large fraction of the Canadian crop. The use of inspections as the weighting factor would lead to decidedly inaccurate results if there were good reason to suppose that wheat so sold or consigned consisted predominantly of only one or two grades; for in this event the prices of these grades would be given more weight by the use of inspections than

[1] Adequate information on the results of mixing are difficult to obtain. Our conclusion that extreme changes in grade are unlikely is based upon evidence contained in the *Report of the Royal Grain Inquiry Commission*, Ottawa, 1925, pp. 90–91.

by the use of sales on the Exchange. But there seems no reason to suppose that any particular grade is selected for direct sales; and we have therefore assumed that this factor does not disturb such general correspondence as otherwise exists between inspections by grades and sales by grades. The same assumption seems reasonable to apply to the matter of resales of particular lots of wheat: one can see no good reason why any one grade should be resold on the Exchange relatively more than any other, at least to an appreciable degree.

Here we are seeking a single price series adequately representative of the actual range of cash wheat prices at Winnipeg, and so far as possible in Canada. We are not concerned to secure what might be significant for some purposes—a price series accurately representative of the range in export prices. The shipment of wheat consigned or unsold is in itself an interesting and important matter. But we are unable to perceive that such shipments seriously prejudice the principle of weighting Winnipeg prices by Winnipeg inspections in order to reach a cash price series adequately representative of the range of terminal cash wheat prices at Winnipeg.

August and September are the months of the year when our weekly weighted average prices seem least likely to correspond to a weighted average based upon actual sales. In these months inspections are always relatively small in absolute amount; and they consist of old-crop wheat in the earlier weeks, of new-crop wheat in the later weeks. Partly because the total inspections are small, so that relatively heavy receipts of any given grade are possible, and partly because new-crop wheat may grade quite differently from old-crop, weighting by inspections may give rise to anomalous movements in the weighted average price. Thus, to take the most extreme example, a marked change in the distribution of inspections occurred between the last week of August and the second week of September 1924. In the week ending September 1, only 18.2 per cent of the inspections graded No. 1; but in the following week 67.9 per cent graded No. 1. Thus the relatively high price of No. 1 received a much heavier weight in the second week, while the lower prices of Nos. 2, 3, and 4 received lighter weights; and as a result the weighted average price advanced more sharply than the prices of any single grade. Apparently the percentage of inspections grading No. 1 each year tends sometime in August or September suddenly to increase, and thereafter to decrease more gradually; hence the weighted average price moves sharply upward and then declines. If sales on the Exchange corresponded precisely with inspections, such a movement in the weighted average price would represent the facts. But at this season of the year especially, when so little of the crop is moving, one may suspect that sales by grade may deviate further from inspections by grade than in other months when the movement is larger. Consequently our weighted average price probably is less representative of the general movement of Canadian prices in this period of transition than in other months of the year.

The shortcomings in our series that arise from weighting by inspections rather than actual sales are less important in weekly weighted average prices than in monthly weighted average prices, and the errors introduced into weighted annual averages might be still larger. Inspections are largest in volume early in the crop year, but sales probably tend to be spread out more evenly throughout the year. If low prices prevail early in any year and high prices later, an annual average weighted by inspections will presumably yield an appreciably higher annual average than would be obtained in an average weighted by sales. At best, however, statistical difficulties are encountered in getting highly reliable annual average prices. Since we are here concerned primarily with obtaining a useful weekly series, it is unnecessary to go deeply into the special problems involved in deriving monthly and annual series.

The Series as Representative of Canadian Prices

Our series of weighted average Winnipeg prices is subject to further qualifications as a series representative of terminal prices throughout Canada. Winnipeg is by all odds the dominant terminal market of Canada, but it is not the only one, and in

constructing the series we have ignored other markets than Winnipeg.

Vancouver is the only other important terminal market where sales of cash wheat in Canada are recorded. It has become important only recently, but its importance is increasing.

The relations of Vancouver prices to Winnipeg prices are not consistent from year to year or from week to week; at times all grades sell for somewhat higher prices at Vancouver, at times all grades sell for lower prices; and at times some grades sell for higher prices while other grades sell for lower. Consequently, even if inspections at Vancouver, Calgary, and Edmonton were such that in each week each grade bore the same proportion to total inspections at these points as each grade bears to the total at Winnipeg, a weighted Vancouver price would not correspond with the weighted Winnipeg price. As a matter of fact, inspections of wheat sold at Vancouver do not contain the same proportions of the several grades as are found in Winnipeg, and even if prices at Vancouver and Winnipeg were the same for each grade, a weighted Vancouver price would differ from a weighted Winnipeg price for this cause alone.

It is not feasible to ascertain the amount by which the Winnipeg weighted price falls short of representing a weighted terminal price for Canada as a whole. Probably the difference would not exceed a cent or two; for, though both prices and inspections by grade are not the same at Winnipeg and Vancouver, the differences are not striking. The Winnipeg weighted price is more representative of terminal prices throughout Canada in 1922–23 and 1924–25 than in other years of the period, because wheat sold at Vancouver was relatively smaller in amount in those years.

IV. GRAPHIC COMPARISONS

Our object in this study is primarily to present the series we have constructed, with an explanation of the methods employed and due consideration of the qualifications regarding its use as representative of the range of terminal prices in Winnipeg and in Canada as a whole. Even the presentation of the series is hardly complete without a graphic representation of it in relation to some other available series. Accordingly we submit a few charts which will reveal, among other things, something of the significance of the series of weighted average prices at Winnipeg.

Chart 1 shows weekly average prices of No. 1 Northern, No. 5, and feed wheat at Winnipeg, in comparison with the weighted averages. No. 1 Northern is the highest priced grade sold on the Winnipeg Exchange except for a little No. 1 Hard and a little winter wheat; feed wheat is normally the cheapest grade except for tough feed, some grades of durum, and a few "off" grades, none of which has ever been offered in appreciable quantities.

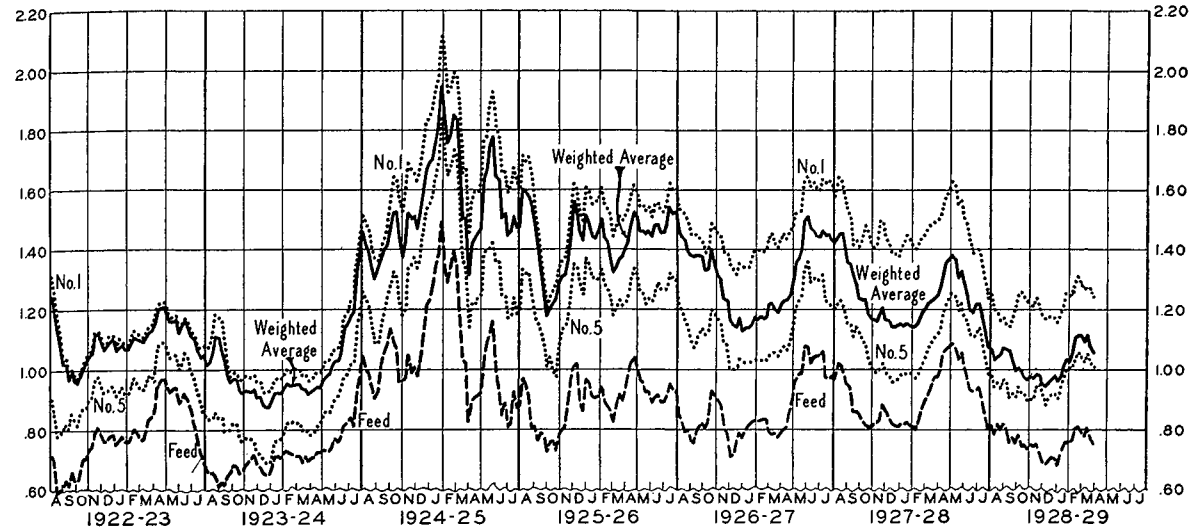
The chart is designed primarily to indicate roughly the position of the weighted average in the general range of cash wheat prices at Winnipeg. The range between the prices of No. 1 and feed wheat is always wide, never below 24 cents and on occasion over 80 cents. The difficulties involved in using price ranges in following the general movement of Winnipeg prices, or of comparing this movement with movements in other markets, are made readily apparent on consideration of the width of the range. One finds some such range in other large terminal markets, though presumably not so wide a one in Argentina and Australia; and the ranges almost always overlap considerably.

The weighted average price changes its position relative to other grades from year to year. Sometimes, as in 1922–23, it is close to the price of No. 1 Northern; sometimes, as in the latest years, it is nearer to the price of No. 5. The manner in which the weighted average price changes its relative position suggests the dangers involved in employing the price of a single grade for the purpose of measuring changes in the general course and level of Winnipeg prices. But this point is made clearer by reference to prices of other grades than No. 1, No. 5, and feed, and particularly by reference to spreads between prices of the various grades.

Chart 2 shows certain of these spreads, measured from the prices of No. 3 Northern. As appears from the chart, the normal relations between prices of the various

CHART 1.—APPROXIMATE RANGE OF CASH WHEAT PRICES AT WINNIPEG, AND POSITION OF THE WEIGHTED AVERAGE PRICE WITHIN THE RANGE, WEEKLY FROM AUGUST 1922*

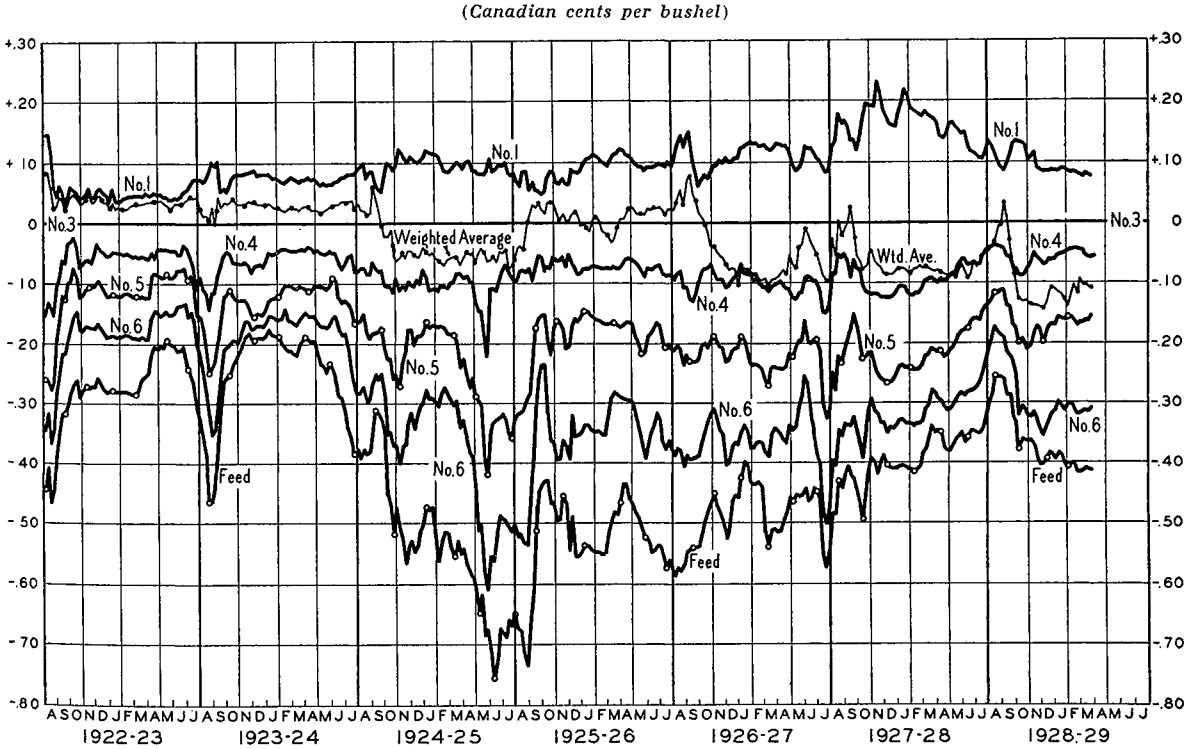
(Canadian dollars per bushel)



* Data from Appendix Table I.

CHART 2.—RELATIONS BETWEEN CASH PRICES OF VARIOUS GRADES OF CANADIAN WHEAT AT WINNIPEG, IN TERMS OF DEVIATIONS FROM THE PRICES OF NO. 3 NORTHERN MANITOBA, WEEKLY FROM AUGUST 1922*

(Canadian cents per bushel)



* Derived from data in Appendix Table I.

grades there shown are as follows. No. 1 Northern always brings higher prices than No. 3 Northern, occasionally only 3 cents more, occasionally as much as 23 cents more. No. 4 always brings less than No. 3 Northern, sometimes only 2½ cents less, sometimes more than 20 cents less. No. 5 has sold between 7½ and 42 cents below No. 3 Northern; No. 6 between 13½ and 61 cents below; and feed between 17½ and 75½ cents below. The prices of No. 2 Northern and of tough Nos. 1, 2, 3, 4, 5, 6, and feed are not shown on the chart, chiefly because inclusion would result in a tangle of lines in the upper part of the range. The prices of No. 2 Northern, however, would fall between the prices of No. 1 Northern and of No. 3 Northern, closer to No. 1 than to No. 3 in most years. The position of the prices of tough grades is less consistent. No. 1 Northern tough always brings lower prices than No. 1 Northern straight, and so with the prices of tough and straight wheat of each particular grade. But tough No. 1 is usually cheaper than straight No. 2, and sometimes cheaper than straight No. 3; tough No. 2 is always cheaper than straight No. 1, tough No. 1, and straight No. 2; it is usually cheaper than straight No. 3, but seldom as cheap as straight No. 4. Tough No. 3 is always cheaper than equivalent or higher grades either tough or straight, and is often as cheap as straight No. 4 but never as cheap as straight No. 5.

In general, there is a fairly consistent step-like relationship between the prices of the straight grades; the prices of these grades never overlap, though spreads vary considerably from year to year. There is also a fairly consistent step-like relationship between prices of the several tough grades. Overlapping in the general Winnipeg wheat price structure occurs only with respect to the relationships of prices of tough grades to prices of straight grades.

The causes of variations in spreads need not detain us here. They rest fundamentally upon three facts. (1) Differences in quality are not consistent, on the one hand because nature imposes differences not taken into account by the statutes defining the three higher grades, and on the other hand because the four lower grades are defined differently for each crop year. (2) The several grades constitute widely different proportions of the crop in successive years. (3) Changes in the wheat price level are probably also influential, causing differentials to be larger when prices are high than when they are low. Furthermore, rules of the Exchange establishing fixed discounts at which grades Nos. 2 and 3 Northern and No. 4 may be delivered on futures contracts may possibly affect the spreads between prices of these grades.

Chart 2 serves further to demonstrate the fact that measurement of changes in the general course and level of Winnipeg wheat prices is necessarily inexact if one is to select the cash prices of any single grade as accurately representative of the range of cash prices. For reasons set forth above, our weighted average price may be regarded as representative of the range within a fairly small margin of error, which is largest in the months of August and September. The chart makes apparent the fact that the weighted average price does not consistently coincide with the price of any particular grade. In 1922–23, for example, the weighted average price was close to the price of No. 1 Northern. In 1923–24 and 1925–26 it was closer to No. 3 than to No. 1; in 1924–25 it lay about midway between No. 3 and No. 4; in 1926–27 and 1927–28 it lay closer to No. 4 than to No. 3; and in the present crop year, 1928–29, it has lain below No. 4, about as near to No. 5 as to No. 4.

To employ the prices of No. 1 Northern as representative of the range of Canadian prices would prove satisfactory enough for the year 1922–23; but in 1927–28 this series would show the general level more than 20 cents too high. To employ the prices of No. 3 Northern as representative would result in levels only about 2–4 cents too low in 1922–23, 1923–24, and 1925–26, but about 5–10 cents too high in 1924–25, 1926–27, and 1927–28, and 10–15 cents too high in 1928–29. A glance at the chart shows clearly enough that the weighted average prices do not consistently correspond with the prices of any particular grade. Errors in measurement of changes in the price may easily exceed 5 per cent, if one chooses to employ the prices of any particular grade as representative.

The changing position of the weighted average prices in relation to the prices of particular grades is naturally explicable largely by reference to data on inspections, since inspections constitute the weights. The following figures show, so far as we are able to estimate, the percentages of all wheat inspected which fell into the higher-priced grades Nos. 1, 2, and 3 and tough Nos. 1, 2, and 3 in the past seven crop years:[1]

Year	Percentage	Year	Percentage
1922–23	94.3	1926–27	78.2
1923–24	86.9	1927–28	56.3
1924–25	64.0	1928–29[a]	33.5
1925–26	90.1		

[a] September–March.

With from 86.9 to 94.3 per cent of the crop falling within the six high-priced grades in 1922–23, 1923–24, and 1925–26, the weighted average naturally stood higher in the range of Winnipeg prices in these years than in others. It has stood lowest in the current year, 1928–29, because inspections have shown the lowest percentage, up to March 1929 only 33.5 per cent, in the six high-priced grades.

Taken alone, the figures given above fail to explain why, with 90.1 per cent of the crop grading straight and tough Nos. 1–3 in 1925–26, and 86.9 per cent in 1923–24, the weighted average was on the whole higher in the range of prices in 1923–24. On reference to more detailed figures, one finds that in 1923–24 very little of the crop graded tough, and more of the crop graded No. 1 Northern. Again, the similar positions of the weighted average prices in 1926–27 and 1927–28 is at first glance inconsistent with the fact that the crop of 1926 contained 78.2 per cent of the six high-priced grades, while the crop of 1927 contained only 56.3 per cent. These figures taken alone suggest that the weighted average prices ought to have stood considerably higher in the range in 1926–27 than in 1927–28. The explanation lies chiefly in the fact that the lower grades (as appears from Chart 2) brought relatively higher prices in 1927–28, and such was the case with the several tough grades, which were plentiful in both years. It should be noted also that the position of the weighted average prices in relation to the prices of No. 3 Northern was higher in 1927–28 than in 1926–27 only in a few months, not throughout the year; and in relation to the prices of Nos. 1, 6, and feed, the weighted average was not so high in 1927–28 as in 1926–27 practically throughout the year.

Thus year-to-year changes in the proportions of the Canadian crop falling within the principal grades, together with partially resultant changes in price differentials, are the chief factors creating the necessity for a weighted average price series if one is to seek something like precise measurement of changes in the course and level of the range of Canadian prices. If each grade constituted an unvarying percentage of the crop in each year, one could measure changes in both the level and the course of Canadian prices with moderate precision by reference to the prices of a single grade. But even in this event, only moderate precision would be possible for price relationships within the range would presumably shift from year to year partly in response to fluctuations in world prices, partly in response to variations in foreign demand for particular grades, and partly in response to other influences less readily apparent.

Chart 3 (p. 190) is designed to show that futures prices provide an unsatisfactory picture of the movement of the general range of Winnipeg cash wheat prices. This chart shows the spreads between weekly average prices of No. 3 Northern and No. 1 Northern, No. 3 and the weighted average, and No. 3 and the active futures. Thus, as in Chart 2, prices of No. 3 Northern constitute the base from which deviations are measured. Futures prices are plotted in such a manner that both the closing future and the future next to close are shown in the closing month; but for convenience we have omitted November futures in such years as they were quoted, and have employed only the May, July, October, and December futures.

With many interesting features of the chart we are not here concerned—for example, the erratic behavior of the July future in May-June 1925; or the low position ordinarily taken by the October future in

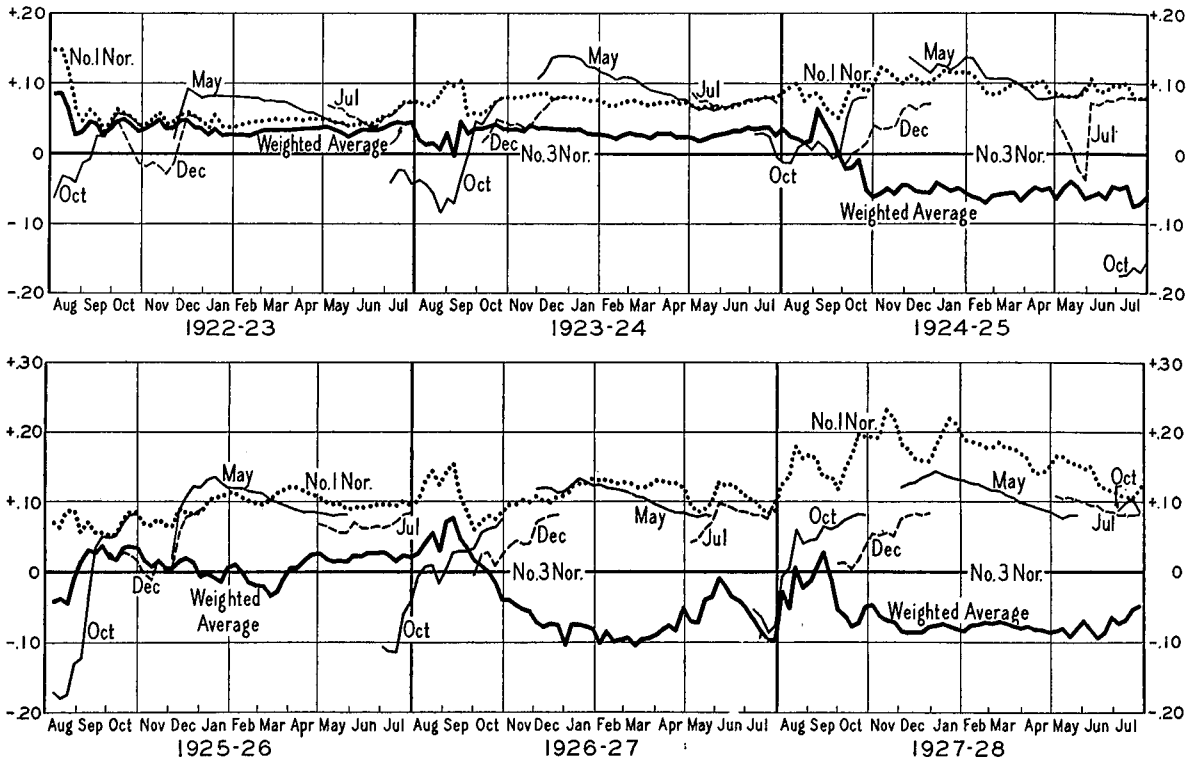
[1] Based on data in Table 1, p. 178, and on assumptions set forth on p. 181 respecting the detailed classification of no grade wheat.

July-September; or the fact that at some time in the closing months, the closing future has always sold at a level 8 cents or less above No. 3 Northern, never consistently higher.

therefore, a series of futures prices would misrepresent the general range of Winnipeg cash prices by showing it markedly too high in these months of most years. By comparison with the weighted average the

CHART 3.—RELATIONS BETWEEN FUTURES PRICES AND WEIGHTED AVERAGE CASH PRICES OF WHEAT AT WINNIPEG, IN TERMS OF DEVIATIONS FROM THE PRICES OF No. 3 NORTHERN MANITOBA, WEEKLY, CROP YEARS 1922–23 TO 1927–28*

(Canadian cents per bushel)



* Based on cash prices in Appendix Table I and futures prices from the *Grain Trade News*.

For present purposes the chart serves merely to emphasize the fact that futures prices cannot be regarded as representative of the general range of cash wheat prices at Winnipeg even to the extent that prices of a single grade can be regarded as representative. With a few exceptions, prices of the active futures always run above the prices of No. 3 Northern; the principal exceptions are the prices of the October future during August–September. The May future during the mid-winter months ordinarily runs higher even than cash prices of No. 1 Northern, at least in years when supplies of No. 1 Northern are not distinctly short, as they were in 1927–28. On the whole, level shown by May futures was less than 10 cents too high in 1922–23, 1923–24, and part of 1925–26, but it was 15 cents or more, sometimes over 20 cents, too high in 1924–25, 1926–27, and 1927–28. If cash prices of No. 1 Northern misrepresent the range of Winnipeg cash prices, futures prices misrepresent it still more noticeably.

Obviously one could not by a simple mathematical process "splice" or link together the prices of the various futures in order to obtain a continuous series of any significance. For example, with the gaps between July and October futures prices in July usually exceeding 10 cents per bushel, to average July and October futures prices

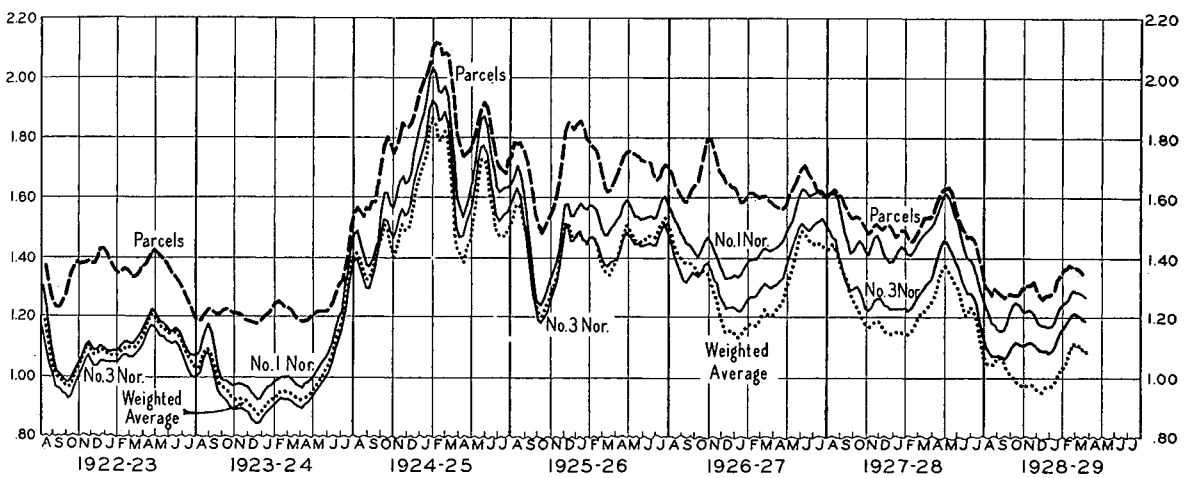
and to regard the result as showing the general course of Winnipeg cash prices would obviously be fallacious. The series would have no meaning. In each year except 1928 a sudden and extensive decline (in relation to actual cash prices) in the course of Winnipeg prices so determined would be made to appear in July–August, followed by a sudden rise in September–October. The linking operation would be less objectionable between October and December, December and May, and May and July futures in most years; but it would result in a price series unreal in every sense and quite undependable as a guide to changes in the general course and level of Winnipeg prices.

Chart 4 shows Winnipeg weekly weighted average prices in relation to prices of No. 1 Northern, No. 3 Northern, and British parcels prices. Here all series are presented in the form of three-week moving averages; the smoothed curves give a clearer picture of significant movements. The chart serves several purposes. Sometimes one desires to make broad comparisons of changes in the level and course of wheat prices in Canada and in the greatest wheat-importing country, the United Kingdom. Although it is not a weighted average series, the British parcels price series serves fairly well, in our judgment, to represent the weekly range of wheat prices in the United Kingdom—certainly that of imported wheat, and fairly closely that of all wheat used, since the United Kingdom imports nearly six times as much wheat as she produces. Broad comparisons between Canadian and United Kingdom prices are made more trustworthy and significant by the Winnipeg weighted average than by the use of the prices of a single grade of Canadian wheat. Further, the chart illustrates, in a manner different from Chart 2, certain erroneous conclusions which may be drawn if one employs the prices of any single grade of wheat as representative of the general range of Canadian terminal prices.

It is perhaps worth while again to emphasize some of these faulty inferences. The chart shows clearly that Winnipeg prices in the five years 1924–25 to 1928–29 are made to appear far higher by comparison with prices in 1922–23 and 1923–24 if one employs the prices of No. 1 Northern than if one employs the weighted average prices, and these obvious contrasts scarcely require further comment. But even between No. 3 prices and weighted average prices there are marked differences. Using the highest

CHART 4.—WEIGHTED AVERAGE CASH PRICES AT WINNIPEG IN COMPARISON WITH THE PRICES OF NO. 1 NORTHERN MANITOBA AND NO. 3 NORTHERN AT WINNIPEG, AND WITH BRITISH PARCELS PRICES, WEEKLY FROM AUGUST 1922*

(U. S. and Canadian dollars per bushel; 3-week moving averages)



* Canadian prices derived from data in Appendix Table I, expressed in Canadian dollars per bushel; British parcels prices are weekly average prices based upon all sales of wheat parcels in the United Kingdom, expressed in U.S. dollars per bushel.

weekly prices in December of each of the years for which prices are shown, one may reach such varying conclusions as the following. Between December 1923 and December 1924, Canadian prices rose 85 cents per bushel if No. 3 prices are the basis of comparison, but 76 cents per bushel if weighted average prices are the basis. Canadian prices declined 31 cents per bushel, No. 3 basis, between December 1925 and December 1926, but 39 cents as judged by the weighted averages. More striking still, December prices were 22 cents higher in 1928 than in 1923 as judged by No. 3 prices, but only 7 cents higher as judged by the weighted averages.

No elaborate analysis of the relationships between Canadian and British prices need be attempted here. One does not expect, of course, that the spread between Canadian and British average prices should remain constant. Transportation costs vary, and ordinarily Canadian wheat is relatively less important on the British market in February–April and July–September than in other months. Here we need only point out several inferences respecting Canadian-British wheat price relationships which look reasonable if one employs prices of No. 1 Northern as representative of the range of Canadian prices, but which appear unsound when the weighted average is used. One might, for example, be led to suppose that Canada was not in a position to export wheat to the United Kingdom during most weeks in early 1925 and most weeks after April 1927, unless transportation costs were extremely low; for spreads between the prices of No. 1 Northern and of British parcels usually fell below 10 cents in these periods. In July–August 1927, indeed, the use of No. 1 Northern prices as representative of the range of Winnipeg prices would lead to the faulty inference that Canadian prices in general were fully as high as British import prices. On the same assumption one might be led to the conclusion that Canadian prices tended upward from mid-December 1927 to mid-February 1928, at a time when British parcels prices were tending downward. A similar inference might be drawn with respect to the course of prices in October 1928. During this period the prices of both of No. 1 and No. 3 Northern moved upward while parcels prices remained stable; but the weighted average moved downward. On the whole, a far more consistent spread appears between parcels prices and weighted average prices than between parcels prices and No. 1 prices. Similarly the spread between parcels prices and Winnipeg weighted average prices is more consistent than that between parcels prices and No. 3 prices; striking anomalies are less often found when one uses No. 3 than when one uses No. 1. However, one might infer, in using No. 3 prices as representative, that Winnipeg wheat prices rose further between 1923–24 and 1924–25 in relation to United Kingdom prices than they did in fact; or that they fell relatively less between 1925–26 and 1926–27 and between 1927–28 and 1928–29, than they did in fact.

Further comparisons, and more elaborate analyses of the comparisons already presented, might be undertaken; but they are not germane to the present study. The foregoing pages perhaps serve to demonstrate that a weekly series of weighted average cash prices at Winnipeg has virtues for certain purposes, and also to suggest that our method of constructing the weighted averages leads to fairly significant results. We believe that this series provides a more satisfactory picture of week-to-week changes in the general level and course of both Winnipeg and Canadian cash wheat prices than is available from other price quotations, cash or futures. The series is least trustworthy during the months of transition from old to new crop; and it is subject to other qualifications. For comparisons in which errors of two or three cents are of vital importance, it is not satisfactory. But in broad comparisons of wheat price movements in various countries throughout the world, or in analyses of changes in the level of the broad range of Canadian prices, it seems both useful and significant.

This study is the work of M. K. Bennett, with the assistance of Janet Murray and P. S. King

APPENDIX

TABLE I.—AVERAGE CASH CLOSING PRICES OF 10 GRADES OF CANADIAN WHEAT AT WINNIPEG, AND WEIGHTED AVERAGES WEEKLY FROM AUGUST 1922*

(Cents per bushel)

Week ending	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	Feed	Tough No. 1	Tough No. 2	Tough No. 3	Weighted average
1922 Aug. 5[a]	130.9	121.3	116.2	101.0	90.2	81.7	71.7	115.7[b]	110.7[b]	106.5[b]	124.5
12[a]	124.9	115.9	110.2	97.0	84.0	78.4	69.4	110.2[b]	105.5[b]	101.0[b]	118.7
19	117.1	111.0	105.8	91.9	78.0	69.1	59.0	103.2	100.5	96.4	112.0
26	110.8	107.6	104.8	89.6	78.4	70.3	60.2	98.1	96.8	95.1	107.3
Sept. 2	103.2	101.5	98.8	88.3	79.9	70.5	60.5	93.8	91.6	89.1	101.8
9	103.5	101.1	97.4	88.3	81.6	72.7	63.0	94.2	91.7	88.4	101.9
16	97.8	97.5	92.6	86.5	80.7	71.0	61.0	86.9	87.7	84.5	96.6
23	100.6	100.1	97.6	91.1	85.0	75.9	65.9	95.5	93.8	90.4	99.9
30	97.5	95.9	92.9	89.5	83.1	73.6	62.9	93.9	92.3	89.1	96.5
Oct. 7	97.1	95.9	91.1	88.0	81.5	73.8	62.9[c]	93.2	92.3	88.0	95.8
14	98.9	98.1	93.2	90.8	85.8	77.8	66.6	96.1	94.5	90.1	98.1
21	101.7	100.8[c]	96.6	92.7	87.2	82.1	70.6	99.0	97.4	93.0	100.7
28	103.7	102.8	99.7	92.5	87.3	82.1[b]	70.6[b]	100.5	99.0	94.5	102.9
Nov. 4	105.4	104.2	101.2	94.4	89.4	83.3	73.3	102.0	100.9	96.8	104.6
11	106.3	104.8	101.5	95.4	90.7	84.4	74.4	103.0	102.0	98.0	105.5
18[c]	112.4	110.5	106.7	100.7	96.1	89.4	79.4	108.0	107.0	103.1	111.6
25[c]	112.4	110.5	108.2	101.7	97.7	90.8	81.1	108.5	107.5	103.5	111.7
Dec. 2	109.9	108.0	105.5	100.2	95.1	88.0	78.4	107.4	106.4	102.4	109.1
9	107.2	105.5	101.7	98.3	92.3	85.0	76.0	104.6	102.9	98.5	106.4
16	108.7	105.8	102.9	98.4	92.4	85.4	76.4	103.9	101.0	97.5	107.5
23	110.8	107.9	105.5	100.6	94.1	87.1	78.1	105.6	102.6	98.6	109.2
30	111.0	108.7	106.3	100.8	94.3	87.3	78.3	108.4	105.4	101.4	109.9
1923 Jan. 6	106.9	105.5	103.4	98.0	91.5	84.5	75.5	105.2	102.5	98.9	106.0
13	109.8	106.6	104.3	99.4	92.5	85.5[c]	76.5	106.1	103.6	99.9	107.7
20	109.4	107.8	105.7	100.8	93.8	86.8	77.8	107.3	104.8	101.3	108.1
27	107.9	106.3	104.1	99.1	92.1	85.1	76.1	105.6	103.1	99.6	106.7
Feb. 3	108.0	106.4	104.1	99.1	92.1	85.1	76.1	106.4	103.9	100.4	106.6
10	110.1	108.5	106.0	100.8	94.3	87.3	78.0	108.5	106.0	102.8	108.5
17	112.6	110.8	108.3	103.3	96.8	89.8	80.3	110.8	108.3	105.3	110.6
24	111.8	109.8	107.2	102.0	95.5	88.4	79.0	109.5	107.0	104.0	110.1
Mar. 3	110.8	108.8	106.2	100.6[c]	94.1	87.1	77.6	108.1	105.6	102.7	109.4
10	110.4	108.4	105.6	100.1	93.6	86.6	77.1	107.6	105.1	102.1	108.9
17	112.2	110.2	107.4	101.7	95.2	88.2	80.0	109.3	106.8	103.8	110.6
24	113.8	112.3	109.2	103.7	97.3	90.3	83.4	111.5	109.0	106.0	112.4
31	114.5	112.5	109.5	103.8	97.3	90.3	84.3	111.3	109.0	106.0	112.8
Apr. 7	116.6	114.7	111.8	105.9	99.6	92.6	86.9	112.9	111.0	108.0	115.3
14	121.1	119.4	116.3	111.4	107.5	100.4	94.4	117.0	115.5	112.5	119.8
21	122.0	120.2	117.0	111.2	108.7	102.7	96.7	117.9	116.4	113.4	120.6
28	122.2	120.3	117.3	113.0	108.6	102.6	96.5	118.1	116.5	113.5	120.9
May 5	119.7	117.6	114.8	110.4	105.7	99.6	94.5	115.2	114.2	111.2	118.7
12	117.3	115.3	112.8	108.4	103.8	97.8	92.3	112.8	111.8	109.3	116.2
19	117.3	115.3	112.8	108.5	104.3	98.3	93.3	112.8	111.8	109.3	115.8
26	118.1	116.7	114.2	109.6	105.1	99.1	94.1	113.6	112.6	110.1	116.6
June 2	113.3	112.3	109.3	104.7	100.2	94.2	89.1	108.8	107.8	105.3	112.2
9	115.1	114.2	110.9	106.3	102.3	96.3	90.3	110.2	109.2	106.7	114.3
16	117.2	116.2	113.1	108.0	105.5	99.5	92.0	112.0	111.0	108.5	116.3
23	115.7	114.0	111.0	105.9	103.4	97.4	89.9	109.9	108.9	106.0	114.2
30	112.5	110.5	107.3	103.5	99.9	93.9	86.5	107.5	105.9	102.9	110.9
July 7	111.9	110.4	106.4	102.2	96.9	90.9	82.1	106.9	105.4	101.9	110.5
14	108.2	106.7	101.9[c]	96.4	93.2	87.2	77.4	103.2	101.7	96.9	106.3
21	106.8	104.2	99.6	92.5	89.5	83.8	72.8	100.8	98.1	93.5	103.8
28	107.6	104.7	100.4	89.6	85.1	80.1	69.3	100.4	97.7	93.0	104.8

* Data from *Canadian Grain Statistics*.

[a] Averages of daily quotations in *Annual Report*, Winnipeg Grain Exchange.

[b] Interpolated.

[c] Averages of daily quotations in *Weekly Market News*.

TABLE I.—WINNIPEG PRICES—*Continued*

(Cents per bushel)

Week ending	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	Feed	Tough No. 1	Tough No. 2	Tough No. 3	Weighted average
1923 Aug. 4	106.9	102.6	99.7[a]	90.8	84.3	77.8	66.8	100.4	96.9	93.1	101.6
11	108.0	102.5	101.2	90.6	83.4	76.4	65.4	101.6	97.6	95.6	102.3
18	111.5	107.3	104.4[a]	92.7	83.7	76.7	65.7	104.9	100.9	98.2	105.7
25	118.5	114.5	110.2	96.0	85.4	78.4	63.6	108.8	104.8	101.8	110.8
Sept. 1	117.5	112.5	107.5	96.0	83.5	72.5	61.1	106.0	101.0	99.0	110.3
8	116.3	110.5	106.8	95.3	83.7	72.7	62.5	105.0	99.3	97.3	106.4
15	109.3	103.9	99.1	90.6	79.6	69.1	61.5	95.3	90.6	88.6	103.6
22	101.1	98.2	95.7	88.9	80.2	70.9	64.7	88.6	87.6	86.7	98.4
29	97.9	95.9	92.1	86.9	80.2	71.2	65.9	87.6	86.6	83.3	95.7
Oct. 6	98.9	96.9	93.5	88.8	81.9	72.9	67.9	89.4	88.4	85.8	97.0
13	99.0	97.3	92.8	87.7	81.7	72.7	67.7	89.5	88.5	86.5	96.6
20	96.5	94.0	89.0	82.5	77.1	69.6	65.3	87.4	86.4	82.6	93.1
27	96.7	94.0	88.7	82.1	76.1	69.1	66.2	87.3	86.7	82.7	92.1
Nov. 3	97.8	94.8	89.8	83.1	77.1	70.1	68.3	88.6	87.6	83.6	93.0
10	97.4	94.4	89.4	82.6	76.6	71.4	69.2	88.4	87.4	83.9	92.7
17	97.4	94.3	89.3	82.9	76.8	73.2	70.4	88.3	87.3	84.3	92.3
24	97.8	94.6	89.5	82.6	76.0	73.1	71.3	88.5	87.5	84.5	93.3
Dec. 1	95.6	92.6	87.1	79.0	71.9	69.4	68.1	87.0	86.0	82.2	90.6
8	95.7	92.6	87.0	79.9	71.5	69.6	67.6	87.8	86.8	81.3	90.6
15	92.4	89.4	84.5	77.6	69.6	67.5	65.5	85.4	84.4	78.9	87.9
22	92.1	89.1	84.1	77.3	69.1	67.1	65.1	85.1	84.1	78.9	87.4
29	92.3	89.3	84.3	77.2	69.2	67.2	65.2	86.2	84.2	79.2	87.5
1924 Jan. 5	94.2	91.2	86.2	79.9	71.9	69.7	67.5	88.3	86.3	81.3	89.4
12	96.6	93.6	88.6	83.6	75.8	73.4	70.9	91.1	89.1	84.1	91.9
19	96.9	93.9	89.3	84.1	76.9	73.8	70.8	91.8	89.8	85.2	92.1
26	96.9	93.8	89.2	84.1	76.9	73.4	70.4	91.8	89.8	85.3	91.8
Feb. 2	98.3	95.2	91.0	86.2	78.9	75.1	72.1	93.1	91.1	86.6	93.7
9	99.9	96.9	93.0	88.7	82.1	77.2	73.1	95.2	93.2	88.7	95.4
16	99.4	96.4	92.6	88.3	82.4	78.6	71.9	94.7	92.7	88.6	94.6
23	99.9	96.9	92.7	88.3	82.3	76.5	71.5	95.0	93.0	89.0	95.2
Mar. 1	99.9	96.9	92.3	87.7	81.9	76.1	71.1	94.6	92.6	88.6	95.1
8	100.0	97.0	92.5	87.8	81.8	75.9	70.9	94.4	92.4	88.4	95.0
15	97.9	94.9	90.8	86.1	79.9	73.9	68.9	92.5	90.5	86.5	93.3
22	98.1	95.1	91.2	86.7	80.7	75.2	71.2	92.7	90.7	86.7	93.2
29	96.1	93.1	88.9	84.5	78.3	73.6	69.6	90.5	88.5	84.5	91.6
Apr. 5	96.6	93.7	89.5	85.0	78.6	74.6	70.6	92.1	90.1	86.1	92.3
12	97.9	94.7	90.4	86.4	79.2	75.1	71.1	93.1	91.1	87.1	93.2
19	98.9	95.8	91.8	87.7	80.7	76.5	72.3	94.3	92.3	88.3	93.9
26	99.1	96.1	91.8	86.9	81.4	76.3	72.3	94.4	92.4	88.2	94.0
May 3	101.0	97.9	94.2	89.7	83.8	77.7	73.0	96.0	94.0	90.9	96.3
10	102.8	99.5	96.3	91.3	85.8	79.0	73.0	97.5	95.5	93.1	98.0
17	103.0	99.7	96.3	91.2	85.7	79.2	72.7	97.7	95.7	93.2	98.3
24	105.6	102.1	99.1	94.0	88.2	81.7	74.3	100.0	98.2	96.1	101.4
31	106.9	103.6	100.3	95.5	90.2	83.5	77.0	101.9	99.9	98.0	102.9
June 7	106.8	102.9	100.2	95.2	91.0	84.4	76.0	101.7	99.7	97.3	103.1
14	110.5	106.7	103.6	98.6	93.9	88.3	77.9	105.7	103.7	100.6	106.7
21	117.5	113.9	110.5	104.0	98.1	92.6	81.6	112.6	110.6	107.4	113.6
28	119.1	115.9	111.5	103.9	98.4	92.9	82.4	113.7	111.7	108.1	115.2
July 5	122.9	119.9	115.2	108.5	102.4	96.8	84.0	117.0	115.0	111.9	118.7
12	123.3	120.3	115.3	109.7	102.1	94.7	81.1	117.2	115.2	112.2	118.9
19	136.0	133.0	128.0	122.8	113.8	103.5	92.3	129.3	127.3	124.3	131.7
26	144.0	140.3	136.0	128.0	119.3	108.5	97.5	134.5	132.5	130.0	138.5

[a] Averages of daily quotations in *Weekly Market News.*

TABLE I.—WINNIPEG PRICES—*Continued*

(Cents per bushel)

Week ending	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	Feed	Tough No. 1	Tough No. 2	Tough No. 3	Weighted average
1924 Aug. 2	150.8	145.1	141.9	134.0	125.5	113.6	104.3	140.5	137.6	136.1	145.3
9	148.5	141.1	139.1	131.6	122.9	110.9	99.9	137.9	134.9	133.9	141.3
16	146.7	139.6	136.7	129.3	121.7	109.4	99.2	137.5	133.6	131.7	138.7
23	140.2	135.3	132.8	124.3	114.5	103.2	94.5	131.5	127.9	125.9	134.1
30	136.6	131.6	128.2	119.7	109.1	98.9	90.4	126.4	122.4	120.4	129.9
Sept. 6	136.0	131.5	127.5	121.0	109.2	100.8	92.9	127.6	123.9	121.7	133.6
13	138.7	135.1	132.1	124.7	113.9	107.2	101.0	132.5	128.5	125.9	136.3
20	142.9	139.9	137.1	129.1	119.1	111.1	105.6	136.3	133.2	130.4	139.6
27	146.6	143.5	141.5	133.7	123.7	116.5	108.5	141.3	138.9	136.8	141.1
Oct. 4	156.6	153.0	148.9	138.6	128.3	120.3	113.6	151.6	149.0	144.9	146.7
11	164.2	159.1	154.3	143.8	131.8	119.2	109.0	159.2	155.3	150.0	152.2
18	163.3	158.9	153.6	143.1	130.9	118.9	106.6	158.6	154.0	149.0	152.6
25	156.8	153.0	148.0	136.4	122.1	111.0	96.1	152.6	148.6	143.1	142.6
Nov. 1	153.0	148.3	143.3	134.0	118.2	106.3	96.0	148.5	144.4	138.9	137.2
8	159.7	153.3	147.6	136.3	120.5	107.4	96.9	152.8	148.3	142.8	141.9
15	168.4	162.5	156.7	146.3	133.6	119.7	104.3	162.7	158.3	152.7	151.7
22	166.3	161.1	155.6	144.6	134.2	119.0	99.0	161.6	156.8	151.5	149.9
29	165.3	160.7	155.3	145.5	137.6	122.3	101.2	161.3	156.5[a]	151.4	150.7
Dec. 6	162.3	156.8	151.3	141.0	133.7	119.9	98.3	157.8	152.8	147.3	146.5
13	167.9	162.0	157.5	146.9	137.3	123.3	103.0	163.4	157.6	152.6	152.2
20	175.0	169.8	165.0	155.5	146.1	133.0	111.4	169.9	165.4	161.1	159.3
27	182.2	177.1	172.1	162.0	153.2	141.6	120.9	177.1	171.5[a]	168.1	166.5
1925 Jan. 3	184.0	178.1	173.1	165.3	154.7	143.1	123.1	178.8	173.6	168.9	169.0
10	186.7	179.8	174.8	165.8	158.3	147.2	127.5	181.1	175.3	170.9	170.0
17	193.0	186.3	181.3	170.2	164.0	152.1	133.5	187.0	181.4	176.9	176.0
24	197.4	191.5	185.9	174.9	168.9	156.7	138.5	191.9	186.5	181.7	180.9
31	211.6	205.9	200.1	189.2	183.1	170.4	149.1	206.4	200.9	195.4	194.4
Feb. 7	200.6	194.6	189.4	178.2	172.2	159.0	133.3	195.6	189.6	184.4	183.3
14	191.9	186.1	182.0	171.6	165.0	153.9	129.0	186.9	181.1	177.0	175.4
21	194.1	188.9	185.4	175.0	168.1	158.1	134.1	189.5	184.3	180.8	178.4
28	199.2	194.4	190.9	180.0	172.4	162.4	139.4	194.1	189.4	185.8	184.9
Mar. 7	197.6	193.1	188.9	179.0	170.3	159.4	134.9	189.1	184.6	180.4	183.1
14	184.4	179.3	175.0	165.3	156.3	144.6	119.6	175.4	170.3	166.0	169.3
21	165.8	160.2	155.8	147.3	136.0	126.2	103.0	155.9	150.4	145.9	150.2
28	166.7	161.5	157.0	148.6	133.0	123.0	102.0	154.7	149.5	145.0	150.1
Apr. 4	145.6	141.2	136.6	127.4	113.8	103.8	82.5	133.6	129.2	124.6	130.9
11	156.5	150.9	146.5	137.8	121.3	110.7	89.4	144.5	138.9	134.5	141.6
18	159.0	153.4	148.9[a]	139.0	121.6	110.6	90.6	147.3	141.8	137.3	143.7
25	158.9	155.1	150.3	140.3	124.6	111.2	91.2	148.9	145.1	140.2	145.3
May 2	161.9	158.4	153.4	140.5	124.5	109.3	92.0	148.8	145.4	140.4	146.7
9	176.4	173.3	168.3	153.7	138.6	117.2	103.4[a]	163.9	160.9	155.9	163.3
16	178.0	175.0	170.0	155.3	139.7	119.8	108.4	166.2	163.2	158.2	165.9
23	187.6	184.6	179.6[a]	160.3	140.2	121.7	111.3	172.1	169.1	163.1	174.7
30	192.6	189.0	183.8	161.6	141.8	123.0[a]	116.2	174.6	171.0	165.0	177.4
June 6	180.8[a]	175.5	170.4	159.3	135.7	115.0[a]	99.1	167.9	165.1	157.4	164.3
13	177.3	173.8	168.8	157.8	135.6	112.5	93.1	164.9	163.8	156.1	163.1
20	165.9	162.3	156.9	145.6	124.2	105.1	84.6	154.5	152.4[a]	145.1	150.4
27	166.0	161.6	156.3	146.8	124.0	107.7	88.7	155.2	151.6	145.9	151.4
July 4	158.9	154.7	149.4	141.6	117.6	100.0[b]	81.0[b]	148.6	144.6	139.4	144.4
11	160.9	156.5	150.9	144.0	118.1	101.2	82.0[b]	148.1	146.4	140.8	146.2
18	166.8	163.6	158.7	150.9	123.7	108.0	92.7	154.0[b]	151.0[b]	146.0[b]	151.1
25	161.9	159.3	154.0	145.1	118.3	102.6	87.0[b]	150.0[b]	147.0[b]	142.0[b]	146.9

[a] Average of daily prices given in *Grain Trade News*.
[b] Interpolated.

TABLE I.—WINNIPEG PRICES—*Continued*

(Cents per bushel)

Week ending	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	Feed	Tough No. 1	Tough No. 2	Tough No. 3	Weighted average
1925 Aug. 1	160.9	158.6	152.9	143.3	120.2	102.7	87.9	146.3	143.8	138.3	146.8
8	171.2	170.0	164.3	154.7	132.5	111.9	96.9	158.8	157.4	151.6	160.0
15	168.9	164.9	162.9	154.9	131.4	111.0[a]	95.0[a]	155.8	152.9	150.3	159.0
22	170.7	165.7	162.3	154.4	131.2	109.0[a]	91.0[a]	158.2	153.7	150.3	157.7
29	163.2	158.9	154.7	146.4	125.2	101.2	81.2	151.2	146.9	142.7	153.9
Sept. 5	152.1	150.0	146.6	139.1	118.1	100.8	80.8	139.5	137.6	134.2	147.9
12	145.2	141.2	138.4	128.6	115.0	98.7	76.7	132.8	128.4	126.4	141.4
19	135.6	132.6	130.2	122.7	112.7	99.2	79.0	125.0	121.8	119.7	132.8
26	128.4	126.3[b]	123.1	117.6	107.4	97.4	78.2	118.4	116.3	113.1	126.5
Oct. 3	120.9	118.2	116.1	110.3	100.9	92.2	72.5	114.4	111.6	109.5	118.1
10	124.0	121.1	118.9	110.9	103.9	95.3	75.9	118.8	115.8	113.7	120.5
17	126.2	123.1	119.0	111.7	99.5	87.4	76.0	121.2	118.0	113.9	122.2
24	128.3	125.1	119.9	112.3	97.9	83.8	73.1	122.8	119.6	114.5	123.3
31	133.5	130.2	125.3	119.7	107.9	88.9	78.6	125.9	123.2	118.2	128.5
Nov. 7	136.1	132.6	129.4	123.1	113.1	89.9	79.9	129.3	127.1	123.8	130.7
14	137.0	133.4	130.5	124.2	114.0	91.2	81.2	129.1	126.6	124.7	131.0
21	141.9	138.4	134.7	129.2	117.1	98.7	89.2	134.9	132.1	129.1	136.1
28	151.3	147.8	144.8	137.4	123.9	107.8	97.8	144.1	140.4	137.4	145.2
Dec. 5	161.5	157.3	155.2	150.1	134.7	115.7	100.8	156.2	152.0	149.1	155.6
12	159.4	155.1	150.6	143.8	133.7	118.8	102.0[a]	153.8	147.0	143.0	151.9
19	152.1	148.8	143.8	136.3	128.0	108.4	88.4	146.5	140.8	136.8	145.6
26	149.6	146.5	141.5	132.9	125.2	106.2	86.2	142.7	138.2	134.2	142.7
1926 Jan. 2	159.9	156.5	151.5	143.0	135.8	116.8	96.8	153.5	148.8	144.5	150.8
9	158.7	154.0	149.0	141.3	134.3	115.4	95.4	152.3	148.2	143.2	148.7
16	155.2	149.7	144.7	137.1	130.1	111.1	91.1	147.7	143.7	138.7	143.8
23	155.5	149.9	144.9	137.3	129.6	110.6	90.6	146.5	142.1	137.1	143.5
30	156.6	150.5	145.5	138.4	129.8	110.9	90.9	148.3	143.5	138.5	146.1
Feb. 6	159.9	154.0	148.9	141.8	132.8	114.3	94.3	151.8	146.7	141.7	149.9
13	154.7	149.1	144.1	136.9	127.9	109.4	89.4	146.9	141.4	136.3	144.2
20	153.3	148.0	143.3	135.8	126.7	108.2	88.2	145.7	140.2	134.8	142.0
27	150.9	145.9	141.1	133.5	124.3	106.1	86.1	143.3	138.1	132.9	139.2
Mar. 6	144.1	139.5	134.6	127.1	117.9	102.6	82.6	136.7	131.6	126.4	132.5
13	147.5	142.4	137.3	129.5	120.6	108.1	88.1	139.1	133.3	128.8	133.9
20	150.6	144.8	139.5	132.4	122.9	111.4	91.4	141.6	135.4	131.4	136.5
27	149.6	143.1	138.1	130.6	121.1	109.6	89.6	140.6	133.8	129.8	137.3
Apr. 3	151.2	144.2	139.2	131.7	121.9	110.3	92.5	142.0	135.1	130.7	139.8
10	153.2	146.3	141.3	134.5	124.3	112.0	97.8	144.5	138.0	133.2	141.8
17	157.4	151.2	146.2	140.1	129.7	116.7	102.7	149.3	144.7	139.7	147.8
24	160.9	155.0	150.0	144.1	133.4	120.4	103.9	152.9	149.4	144.5	152.3
May 1	158.6	153.1	148.0	142.0	131.2	118.2	101.2	150.7	147.1	142.4	150.6
8	154.3	149.5	144.5	138.0	125.5	112.5	96.2	145.6	142.8	138.1	146.2
15	154.3	149.9	144.8	137.8	124.9	111.0	95.8	145.0	143.0	138.3	146.1
22	152.9	148.6	143.5	135.2	121.7	107.2	92.7	142.9	140.6	136.6	144.9
29	153.7	150.0	145.0	136.0	123.5	105.6	92.7	143.3	141.2	138.0	146.2
June 5	150.7	146.6	141.6	134.0	122.7	105.1	89.1	141.2	139.3	136.1	143.8
12	154.7	150.6	145.6	137.9	127.2	110.9	90.7	145.3	143.8	140.8	147.6
19	154.8	150.6	145.6	137.9	127.9	112.1	91.3	148.1	145.3	142.2	148.2
26	152.3	148.0	142.9	135.8	126.2	111.2	89.2	147.1	143.0	139.2	145.4
July 3	152.4	147.5	142.8	135.8	125.8	110.4	88.9	147.2	142.8	139.6	145.5
10	155.8	150.6	146.4	137.8	126.8	110.3	91.3	146.2	143.8	140.0	148.5
17	162.0	157.5	152.8	143.8	132.1	115.1	95.5	151.5	150.0	146.0	154.2
24	159.7	155.2	149.7	141.0	129.6	113.6	93.6	148.4	147.7	143.7	151.9
31	159.9	155.6	150.5	141.8	129.5	112.9	92.9	149.2	148.5	145.1	152.5

[a] Interpolated.
[b] Averages of daily quotations given in *Grain Trade News*.

TABLE I.—WINNIPEG PRICES—*Continued*

(Cents per bushel)

Week ending	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	Feed	Tough No. 1	Tough No. 2	Tough No. 3	Weighted average
1926 Aug. 7	153.4	149.4	143.3	133.6	122.2	104.6	84.6	143.0	142.0	136.3	145.7
14	152.6	148.6	139.8	131.3	119.4	102.4	82.4	141.6	140.6	132.6	143.8
21	151.3	146.6	137.2	129.1	116.3	99.3	79.3	139.9	138.9	131.8	142.6
28	148.9	143.4	136.6	125.9	112.9	95.9	79.9	133.2	132.2	129.9	139.5
Sept. 4	145.1	139.7	130.9	120.2	109.1	92.1	76.2	128.8	128.2	125.6	137.9
11	145.1	136.7	130.1	117.5	107.1	90.7	75.7	125.6	124.7	123.3	137.7
18	143.9	138.1	133.4	120.3	110.3	94.3	79.3	127.2	126.6	124.9	138.1
25	143.3	139.2	134.9	123.2	111.9	95.9	80.9	129.8	128.8	126.4	138.2
Oct. 2	142.1	139.2	136.1	126.3	113.3	97.3	82.3	131.2	130.1	128.2	137.7
9	138.9	134.8	131.8	123.8	111.3	95.3	80.3	131.2	129.2	125.2	132.7
16	140.5	136.5	132.7	125.2	112.7	97.9	82.9	132.9	129.5	125.1	132.8
23	148.3	144.5	141.0	133.6	120.1	108.1	93.1	140.1	136.3	132.2	139.7
30	146.7	142.8	138.3	131.5	118.7	106.7	91.7	137.4	133.9	129.7	134.3
Nov. 6	144.7	140.0	135.2	127.0	116.3	104.3	90.1	135.7	131.6	127.2	131.2
13	144.1	139.5	134.5	124.9	114.8	102.1	87.5	135.7	131.1	126.3	129.6
20	139.3	134.2	129.2	119.7	108.6	94.8	80.7	130.8	125.7	120.4	123.7
27	138.6	133.7	128.7	119.2	107.9	93.5	79.2	131.5	125.5	119.4	122.9
Dec. 4	134.3	130.0	123.6	112.8	100.5	83.4	70.9	128.8	122.2	115.4	116.4
11	132.9	128.9	122.9	112.5	100.2	83.0	71.5	128.2	121.7	114.7	115.0
18	131.5	127.5	121.5	111.9	100.3	84.5	74.8	127.1	120.6	113.6	114.0
25	135.1	130.5	124.4	115.6	103.5	88.1	79.1	130.5	123.3	116.3	116.8
1927 Jan. 1	133.9	129.2	123.1	114.4	102.3	86.3	77.3	128.9	122.4	115.4	112.7
8	133.4	128.7	121.3	114.5	102.3	86.5	79.0	128.1	122.3	115.3	113.7
15	133.7	128.8	121.3	113.0	101.9	87.8	81.4	128.9	122.9	115.7	113.7
22	135.8	130.9	123.0	114.5	102.5	88.5	82.5	130.8	125.2	117.6	115.1
29	139.4	134.8	126.3	117.5	102.9	88.9	82.9	134.4	128.3	120.6	118.1
Feb. 5	139.6	135.2	126.7	118.2	103.0	89.5	83.0	134.5	128.2	120.7	116.5
12	139.4	134.9	126.4	117.8	102.9	89.9	82.9	133.7	128.2	120.7	117.8
19	139.3	134.9	126.7	116.6	102.8	90.3	83.3	133.3	127.3	120.3	116.8
26	140.0	135.3	127.4	116.8	102.8	90.8	83.3	134.1	128.0	121.2	117.7
Mar. 5	143.4	137.8	130.7	119.9	104.5	92.5	79.4	136.7	129.9	123.4	121.3
12	144.3	138.6	132.2	120.9	105.1	93.1	78.3	136.9	131.1	124.3	121.9
19	141.7	136.9	129.8	119.0	105.7	94.8	78.7	134.7	129.1	122.0	120.1
26	140.9	136.4	128.7	118.2	104.7	94.7	77.7	133.2	128.2	120.8	119.2
Apr. 2	143.6	138.5	130.7	120.5	106.3	96.2	79.1	135.0	130.2	122.7	121.7
9	144.3	139.9	131.5	121.6	107.3	96.6	80.1	136.1	132.2	124.0	123.2
16	143.5	139.9	130.9	120.6	106.6	94.9	81.2	135.6	131.5	123.0	123.1
23	145.9	142.4	133.3	122.4	109.4	96.7	85.4	136.4	132.8	124.2	124.8
30	146.9	143.0	135.1	124.0	113.4	101.4	89.4	137.7	133.5	125.6	129.7
May 7	152.2	148.4	142.6	130.1	120.3	108.3	96.3	143.0	138.0	131.4	135.5
14	152.6	149.4	144.1	131.4	123.2	110.3	98.7	143.7	137.5	133.8	136.8
21	153.2	149.7	144.2	132.7	124.6	113.7	98.5	144.4	138.4	134.5	140.1
28	162.9	159.4	153.0	141.5	133.3	124.1	107.5	153.2	147.5	143.6	149.3
June 4	164.2	160.2	151.7	142.5	135.4	126.4	107.2	153.9	149.7	144.7	150.8
11	160.9	156.6	148.7	139.7	128.8	122.0	102.3	149.8	146.1	141.1	146.7
18	162.1	157.6	149.9	140.7	129.8	119.2	104.0	150.3	147.3	142.6	146.2
25	160.3	156.0	148.7	138.8	129.3	113.3	104.3	149.2	145.5	141.5	144.5
July 2	160.0	156.0	149.4	139.5	129.9	111.0	104.7	150.5	146.0	142.7	144.1
9	162.9	158.1	152.8	141.6	131.3	112.8	106.1	152.8	148.4	145.5	145.9
16	162.0	157.9	152.9	138.2	122.7	104.7	97.7	150.2	147.6	144.7	144.3
23	162.3	159.2	154.2	139.2	121.4	103.9	96.9	147.1	146.8	142.7	144.4
30	161.2	158.2	152.5	138.7	121.4	105.1	97.8	148.3	147.4	140.7	142.7

TABLE I.—WINNIPEG PRICES—*Continued*

(Cents per bushel)

Week ending	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	Feed	Tough No. 1	Tough No. 2	Tough No. 3	Weighted average
1927 Aug. 6	157.5	153.1	145.1	136.7	120.3	105.7	96.7	149.5	148.3	139.9	142.2
13	163.9	158.7	150.4	141.9	122.4	111.0	102.0	154.2	152.7	144.6	145.1
20	162.6	157.6	144.7	139.3	122.6	110.6	101.6	150.8	150.6	140.8	145.1
27	158.6	153.6	142.5	136.6	119.1	107.1	98.1	147.4	146.4	139.3	140.3
Sept. 3	153.7	147.3	136.9	131.7	115.5	103.5	94.8	140.3	137.2	133.7	135.5
10	150.4	144.6	134.6	128.2	115.2	101.0	94.0	136.6	135.4	131.6	135.0
17	141.7	139.6	128.2	118.9	110.5	94.6	86.2	130.7	129.6	124.9	130.9
24	142.7	139.2	129.1	122.9	113.9	97.0	86.2	131.2	129.5	124.3	128.1
Oct. 1	140.9	137.4	129.1	121.3	111.9	94.9	84.7	129.3	127.9	122.6	123.7
8	144.0	137.4	129.6	121.6	109.6	92.8	82.8	131.4	129.9	122.4	123.2
15	147.3	140.4	130.7	120.1	108.1	91.6	81.4	134.4	132.8	122.8	122.9
22	145.4	137.9	125.8	114.2	103.5	91.6	80.8	134.4	130.7	118.4	118.6
29	141.2	133.9	122.0	110.1	100.4	90.8	80.8	132.3	126.7	116.4	116.9
Nov. 5	140.4	131.7	121.1	109.2	99.6	91.9	81.9	134.6	127.4	117.2	116.3
12	141.5	135.0	122.5	110.7	98.8	91.4	82.5	136.9	131.8	118.6	116.1
19	148.8	141.1	125.6	113.8	100.6	93.8	83.6	142.6	138.0	120.1	118.6
26	149.6	143.7	127.8	115.7	101.9	94.6	87.8	143.6	140.9	123.3	120.6
Dec. 3	143.5	139.2	125.0	112.5	98.8	91.7	86.2	136.5	134.5	118.8	116.4
10	142.2	136.8	124.8	112.4	98.1	89.9	84.4	135.7	129.2	119.0	116.0
17	138.9	134.4	122.8	110.3	96.2	88.8	81.9	132.8	130.2	118.1	114.1
24	138.4	133.4	122.5	110.4	96.4	88.4	81.5	132.4	129.5	118.3	113.8
31	138.1	133.6	122.3	110.9	97.0	88.7	81.3	132.3	129.7	117.5	114.4
1928 Jan. 7	140.6	136.2	122.7	112.2	98.7	89.8	82.2	134.6	132.6	118.0	115.0
14	142.1	136.6	122.1	111.6	98.4	89.4	81.8	136.0	133.0	116.7	114.5
21	144.9	138.0	123.1	112.4	99.0	89.9	82.5	137.4	134.5	117.5	115.3
28	143.6	136.6	122.7	110.9	98.6	89.3	81.7	136.4	133.4	116.7	114.5
Feb. 4	141.1	135.1	122.2	110.1	98.1	88.8	81.1	135.1	132.1	116.5	113.8
11	140.1	134.4	121.6	109.5	97.1	87.8	80.1	134.1	131.4	116.2	113.9
18	141.7	136.6	123.5	111.9	99.0	90.0	82.4	135.7	133.2	118.6	115.8
25	144.2	139.4	126.4	114.7	102.0	93.0	85.9	138.2	136.1	121.6	119.2
Mar. 3	145.3	140.2	127.6	116.7	104.0	94.6	89.1	139.0	136.9	122.7	120.1
10	147.4	141.9	129.1	119.4	107.0	98.2	91.8	141.3	138.6	124.2	121.9
17	148.0	142.7	130.3	120.9	108.4	100.1	94.7	142.0	139.4	125.0	122.8
24	148.9	143.6	131.5	122.3	110.6	103.7	97.7	142.9	140.4	125.9	123.6
31	149.6	144.3	132.6	122.8	111.5	104.3	97.7	143.6	141.0	126.4	124.5
Apr. 7	151.0	145.7	134.9	124.8	113.4	105.7	100.4	145.0	142.2	128.7	127.0
14	154.5	150.0	140.3	130.9	119.0	110.5	105.6	148.5	145.7	134.1	131.9
21	158.0	153.7	144.1	134.3	121.9	113.4	106.8	152.0	149.0	137.8	135.7
28	160.0	155.1	145.3	135.7	123.4	114.2	107.4	152.7	149.7	139.4	136.6
May 5	162.9	156.9	146.7	137.6	125.5	115.7	108.7	154.0	151.3	141.0	138.1
12	161.2	154.7	144.7	135.8	123.9	114.3	107.5	152.7	149.4	138.9	136.4
19	155.2	148.2	139.6	131.1	119.7	110.0	103.6	147.7	143.2	133.7	130.3
26	155.9	149.4	140.7	133.6	121.9	112.0	105.4	148.4	144.4	134.9	132.6
June 2	150.1	143.8	135.5	129.2	117.4	107.2	100.8	140.5	136.4	129.5	128.5
9	148.1	141.5	133.2	126.9	115.3	104.4	96.7	138.1	133.4	126.8	125.0
16	141.8	136.8	129.2	122.2	111.5	100.9	93.6	131.8	129.8	122.7	119.8
23	139.2	134.9	127.6	120.7	111.1	99.6	92.9	129.2	128.1	121.5	118.8
30	139.3	134.9	127.9	121.0	111.9	100.1	93.2	129.2	128.3	121.6	121.3
July 7	140.1	136.1	129.1	122.1	113.1	101.9	94.1	130.0	129.1	122.6	121.7
14	134.8	131.1	124.3	117.2	107.9	98.0	89.3	124.8	123.9	118.2	117.3
21	128.6	126.3	118.2	112.6	103.5	93.6	84.1	118.9	118.6	113.1	112.7
28	124.0	122.3	112.3	107.7	98.6	89.7	80.5	114.2	113.7	107.2	107.3

TABLE I.—WINNIPEG PRICES—*Concluded*

(*Cents per bushel*)

Week ending	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	Feed	Tough No. 1	Tough No. 2	Tough No. 3	Weighted average
1928 Aug. 4	124.7	121.6	111.5	107.2	97.9	90.7	81.4	114.7	112.9	105.6	106.6
11	119.8	117.1	107.3	103.2	94.4	88.3	78.7	109.8	108.8	101.5	103.3
18	118.8	116.0	107.4	103.6	95.6	90.0	81.8	109.3	108.3	102.8	103.9
25	116.1	113.1	105.9	101.9	94.2	87.6	80.2	107.9	105.5	101.7	105.2
Sept. 1	116.9	114.1	107.8	103.6	96.6	89.1	82.1	109.1	105.1	103.1	107.1
8	115.0	112.7	106.7	102.2	95.5	87.5	80.5	107.7	105.5	101.9	106.5[a]
15	114.3	109.9	104.8	99.1	91.0	83.1	76.1	107.6	104.1	100.3	105.8
22	117.6	112.5	106.3	100.5	92.2	84.2	77.5	109.8	105.9	101.9	103.1
29	120.9	114.0	107.9	99.9	90.9	85.0	75.7	112.7	109.7	104.4	99.9
Oct. 6	124.8	118.6	111.5	103.8	93.9	85.9	78.3	117.3	115.7	108.8	100.7
13	125.3	118.7	112.2	103.3	92.2	80.2	74.3	118.1	115.7	109.2	99.5
20	123.8	116.3	110.8	101.8	91.4	80.3	74.8	116.8	113.3	107.8	97.6
27	122.4	114.8	109.7	101.1	89.4	78.4	73.5	115.7	111.8	106.9	96.7
Nov. 3	121.4	116.2	111.2	103.4	90.2	79.1	74.9	116.4	113.2	108.7	97.8
10	121.2	115.5	110.5	103.9	90.0	78.2	74.3	115.5	112.5	108.0	96.9
17	123.5	117.0	112.2	107.1	93.8	80.7	75.0	116.9	114.0	109.7	98.6
24	120.6	116.3	111.7	105.8	94.5	78.8	72.1	115.4	113.3	109.0	97.9
Dec. 1	118.0	114.0	109.4	102.9	91.5	75.2	69.1	113.0	111.0	106.7	95.4
8	116.9	113.4	108.6	101.5	88.7	73.3	68.4	112.4	110.4	105.9	94.3
15	117.4	113.9	108.9	102.1	90.5	74.6	69.6	112.9	110.9	106.4	95.6
22	117.0	113.5	108.7	102.6	91.6	75.8	70.6	112.5	110.5	106.4	97.1
29	117.3	113.4	108.7	102.5	91.7	76.9	70.0	112.4	110.2	106.4	97.8
1929 Jan. 5	115.6	111.5	107.3	101.2	90.3	76.0	67.9	110.6	108.5	105.0	96.2
12	118.0	113.8	109.7	104.2	93.9	79.8	71.5	113.5	110.8	107.8	98.1
19	121.4	116.9	112.6	107.5	96.6	82.1	73.8	116.4	113.9	110.6	100.7
26	124.9	120.7	116.2	111.2	100.1	84.9	75.9	119.9	117.4	114.2	103.6
Feb. 2	124.7	120.9	116.4	111.7	100.5	86.1	75.7	119.7	117.8	114.5	102.5
9	124.8[b]	121.4	116.8	112.3	101.0	86.5	76.7	120.0	118.4	114.8	105.3
16	128.5	125.2	120.4	116.1	104.1	89.3	80.1	124.3	122.3	111.8	110.2
23	130.7	127.4	122.7	118.2	105.6	90.8	81.2	126.2	124.1	121.1	111.1
Mar. 2	128.3	125.3	120.5	115.8	103.9	88.8	78.9	123.7	121.7	118.7	110.9
9	126.8	123.7	119.2	113.7	102.7	88.0	77.9	122.4	120.5	116.7	108.7
16	129.3	125.8	121.3	115.4	105.0	90.0	80.3	125.8	122.8	118.8	111.2
23	126.5	123.1	118.7	112.8	102.4	87.3	77.5	123.4	120.4	116.5	107.9
30	124.1	120.8	116.4	110.7	101.1	85.6	75.1	121.6	117.8	114.3	105.5

[a] Interpolated.

[b] Averages of daily quotations in *Weekly Market News*.

TABLE II.—INSPECTIONS OF WHEAT AT WINNIPEG, BY GRADES, WEEKLY FROM AUGUST 1922*

(*Cars*)

Week ending	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	Feed	No grade	Total	Other	Grand total
1922 Aug. 4	....[a]	....[a]	....[a]	...[a]	..[a]	..[a]	..[a]	....[a]	....[a]	...[a]	....[a]
11	....[a]	....[a]	....[a]	...[a]	..[a]	..[a]	..[a]	....[a]	....[a]	...[a]	....[a]
18	....[a]	....[a]	....[a]	...[a]	..[a]	..[a]	..[a]	....[a]	....[a]	...[a]	....[a]
25	....[a]	....[a]	....[a]	...[a]	..[a]	..[a]	..[a]	....[a]	....[a]	...[a]	....[a]
Sept. 1	....[a]	....[a]	....[a]	...[a]	..[a]	..[a]	..[a]	....[a]	....[a]	...[a]	....[a]
8	....[a]	....[a]	....[a]	...[a]	..[a]	..[a]	..[a]	....[a]	....[a]	...[a]	....[a]
15	....[a]	....[a]	....[a]	...[a]	..[a]	..[a]	..[a]	....[a]	....[a]	...[a]	....[a]
22	....[a]	....[a]	....[a]	...[a]	..[a]	..[a]	..[a]	....[a]	....[a]	...[a]	....[a]
29	8,590	1,602	941	49	10	3	..	1,302	12,497	600	13,097
Oct. 6	7,455	1,937	1,839	130	33	9	4	303	11,710	543	12,253
13	7,933	1,986	1,447	100	31	7	3	132	11,639	550	12,189
20	6,681	1,868	1,263	86	19	10	1	115	10,043	435	10,478
27	6,546	1,781	1,191	97	21	6	3	142	9,787	393	10,180
Nov. 3	7,519	1,907	1,042	73	15	8	5	136	10,705	354	11,059
10	7,311	1,639	772	66	13	4	2	146	9,953	336	10,289
17	7,202	1,402	719	43	7	1	3	111	9,488	292	9,780
24	7,176	1,340	904	56	12	10	..	100	9,598	298	9,896
Dec. 1	7,987	1,522	900	56	27	4	4	130	10,630	326	10,956
8	6,288	1,195	602	40	11	3	2	97	8,238	267	8,505
15	2,883	765	385	15	10	3	1	99	4,161	153	4,314
22	2,496	754	506	29	10	3	2	102	3,902	172	4,074
29	2,945	805	371	26	8	3	2	116	4,276	158	4,434
1923 Jan. 5	1,654	546	254	22	6	3	3	98	2,586	112	2,698
12	824	384	252	11	1	..	..	72	1,544	98	1,642
19	874	408	261	19	4	..	..	79	1,645	107	1,752
26	915	364	241	21	2	3	..	76	1,622	103	1,725
Feb. 2	565	275	224	10	1	1	..	63	1,139	57	1,196
9	383	203	186	10	1	2	..	40	825	44	869
16	159	131	106	6	1	..	..	14	417	22	439
23	328	214	119	9	1	1	1	20	693	40	733
Mar. 2	668	351	181	10	3	1	..	44	1,258	64	1,322
9	1,049	558	318	13	4	..	1	81	2,024	108	2,132
16	1,062	476	309	19	8	2	1	71	1,948	109	2,057
23	812	313	185	10	4	3	1	59	1,387	65	1,452
30	733	294	210	7	5	1	..	46	1,296	57	1,353
Apr. 6	1,317	410	284	17	8	2	..	69	2,107	92	2,199
13	1,351	489	316	12	3	1	..	63	2,235	89	2,324
20	1,199	439	214	20	8	1	1	50	1,932	66	1,998
27	486	169	62	14	1	..	..	21	753	31	784
May 4	1,916	469	280	20	5	3	..	52	2,745	104	2,849
11	1,440	447	284	17	9	3	..	13	2,213	117	2,330
18	929	379	243	24	7	2	..	13	1,597	72	1,669
25	609	327	266	16	7	..	..	11	1,236	69	1,305
June 1	681	263	170	11	8	2	..	13	1,148	43	1,191
8	803	240	132	12	2	..	..	9	1,198	45	1,243
15	1,046	276	196	19	9	1	..	12	1,559	86	1,645
22	1,064	345	151	36	13	6	..	32	1,647	85	1,732
29	1,213	386	194	68	18	3	1	28	1,911	81	1,992
July 6	871	289	136	47	9	1	..	35	1,388	72	1,460
13	750	235	125	56	20	2	..	32	1,220	69	1,289
20	433	173	127	46	14	1	..	16	810	57	867
27	350	162	74	26	7	1	..	15	635	47	682

* Data from the *Grain Trade News*.

[a] Not available. See text, p. 182.

TABLE II.—WHEAT INSPECTIONS AT WINNIPEG—*Continued*

(Cars)

Week ending	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	Feed	No grade	Total	Other	Grand total
1923 Aug. 6	.....[a]	.....[a]	.....[a]	...[a]	...[a]	..[a]	...[a]	...[a]	.....[a]	.....[a]	.....[a]
13	.....[a]	.....[a]	.....[a]	...[a]	...[a]	..[a]	...[a]	...[a]	.....[a]	.....[a]	.....[a]
20	.....[a]	.....[a]	.....[a]	...[a]	...[a]	..[a]	...[a]	...[a]	.....[a]	.....[a]	.....[a]
27	181	77	133	9	11	..	45	12	468	530	998
Sept. 3	84	59	145	6	2	..	94	12	402	626	1,028
10	411	333	393	17	5	8	107	9	1,283	971	2,254
17	2,391	1,442	1,034	80	32	7	186	6	5,178	1,298	6,476
24	5,499	2,951	1,940	258	44	35	119	6	10,852	1,520	12,372
Oct. 1	6,032	3,078	1,876	294	51	22	94	59	11,506	1,170	12,676
8	5,558	3,097	1,500	175	51	11	68	155	10,615	835	11,450
15[b]	5,483	3,127	2,011	336	59	22	68	185	11,291	718	12,059
22	5,407	3,157	2,522	498	67	33	69	215	11,968	600	12,568
29	4,315	2,739	2,948	743	111	18	75	275	11,224	622	11,846
Nov. 5	4,104	2,757	2,824	682	121	42	73	217	10,820	537	11,357
12	3,909	3,053	3,460	829	148	55	94	134	11,682	620	12,302
19	4,092	3,299	3,311	756	146	48	55	162	11,869	582	12,451
26	4,560	2,976	2,976	720	159	47	82	109	11,629	585	12,214
Dec. 3	3,931	2,844	3,094	805	138	44	58	130	11,044	550	11,594
10	3,763	2,776	2,853	736	143	34	55	140	10,500	445	10,945
17	3,644	2,587	2,653	668	107	27	33	129	9,848	339	10,187
24	3,241	2,631	2,646	683	127	26	29	139	9,522	336	9,858
31[b]	1,938	1,608	1,610	414	77	14	17	82	5,760	205	5,965
1924 Jan. 7	634	585	573	146	27	3	5	24	1,997	74	2,071
14	630	590	587	147	33	5	6	25	2,023	97	2,120
21	308	431	432	130	25	8	2	18	1,354	85	1,439
28	298	436	411	120	29	6	6	18	1,324	67	1,391
Feb. 4	490	471	483	115	29	9	3	27	1,627	76	1,703
11	385	309	365	124	24	6	5	21	1,239	62	1,301
18	259	340	423	107	15	5	9	25	1,183	59	1,242
25	326	374	465	95	32	3	6	21	1,322	73	1,395
Mar. 3	330	267	325	73	18	3	6	31	1,053	77	1,130
10	354	267	329	123	20	4	6	31	1,134	71	1,205
17	384	324	427	96	20	2	3	28	1,284	61	1,345
24	352	268	331	87	19	2	3	26	1,088	87	1,175
31	330	244	265	74	14	2	5	27	961	80	1,041
Apr. 7	265	280	301	61	7	1	4	34	953	69	1,022
14	263	210	253	52	14	2	9	16	819	73	892
21	222	226	240	71	13	2	14	31	819	75	894
28	365	426	500	104	21	6	16	61	1,499	113	1,612
May 5	468	616	703	153	28	9	14	32	2,023	123	2,146
12	520	734	725	178	47	1	18	26	2,249	155	2,404
19	708	757	857	214	42	5	28	27	2,638	156	2,794
26	1,090	1,022	1,153	186	25	6	22	18	3,522	163	3,685
June 2	1,054	1,060	1,086	158	32	7	15	15	3,427	146	3,573
9	1,283	1,100	900	157	38	8	9	18	3,513	155	3,668
16	1,361	1,373	920	160	29	4	24	33	3,904	189	4,093
23	1,331	1,281	1,012	148	23	10	21	20	3,846	192	4,038
30	1,299	1,182	788	135	28	9	22	21	3,484	170	3,654
July 7	1,217	1,105	879	138	35	13	14	15	3,416	224	3,640
14	723	589	485	98	33	6	8	10	1,952	127	2,079
21	589	476	423	96	20	7	6	10	1,627	106	1,733
28	339	258	263	72	20	4	6	12	974	71	1,045

[a] Not available. See text, p. 182.
[b] Interpolated.

TABLE II.—WHEAT INSPECTIONS AT WINNIPEG—*Continued*

(*Cars*)

Week ending	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	Feed	No grade	Total	Other	Grand total
1924 Aug. 4	218	156	160	43	6	1	1	6	591	73	664
11	129	94	131	34	4	1	3	6	402	37	439
18	45	56	91	16	4	...	...	...	212	40	252
25	23	49	53	5	2	...	...	7	139	10	149
Sept. 1	18	39	32	5	2	1	...	2	99	10	109
8	416	108	68	17	2	...	2	...	613	22	635
15	577	258	121	32	5	3	...	4	1,000	39	1,039
22	927	630	507	100	19	4	2	38	2,227	128	2,355
29	2,110	1,178	1,310	729	254	124	11	83	5,799	211	6,010
Oct. 6	2,324	1,496	1,486	1,224	621	387	49	181	7,768	244	8,012
13	1,820	1,441	1,194	1,042	480	321	82	351	6,731	213	6,944
20	1,842	1,447	1,134	851	400	221	39	582	6,516	144	6,660
27	1,272	1,312	1,421	1,311	616	341	100	999	7,372	377	7,749
Nov. 3	1,200	1,320	1,473	1,746	822	384	176	632	7,753	466	8,219
10	1,240	1,469	1,501	1,554	739	338	174	472	7,487	306	7,793
17	1,162	1,364	1,362	1,419	759	243	190	463	6,962	276	7,238
24	1,283	1,578	1,583	1,667	1,052	355	185	528	8,231	316	8,547
Dec. 1	1,289	1,532	1,606	1,711	987	313	196	462	8,096	281	8,377
8	807	962	952	1,233	679	240	99	354	5,326	127	5,453
15	518	600	565	747	365	131	55	330	3,311	134	3,445
22	344	344	429	517	359	105	33	199	2,330	101	2,431
29	195	254	217	278	209	55	25	149	1,382	58	1,440
1925 Jan. 5	105	151	150	144	98	18	18	104	788	34	822
12	116	144	169	192	132	37	11	168	969	69	1,038
19	179	184	199	254	159	52	21	192	1,240	65	1,305
26	189	164	188	227	168	57	14	195	1,202	70	1,272
Feb. 2	182	176	193	252	175	60	13	177	1,228	49	1,277
9	227	220	252	287	170	79	24	377	1,636	68	1,704
16	201	202	211	341	171	44	20	508	1,696	53	1,749
23	172	231	226	307	166	62	24	494	1,682	54	1,736
Mar. 2	255	231	237	294	159	53	24	533	1,786	29	1,815
9	337	337	329	284	183	66	31	598	2,165	47	2,212
16	224	233	255	265	137	34	9	438	1,595	35	1,630
23	304	273	344	307	154	47	17	582	2,028	55	2,083
30	360	338	329	339	177	69	22	619	2,253	60	2,313
Apr. 6	245	215	202	182	100	40	11	336	1,331	51	1,382
13	167	123	158	144	41	17	6	214	870	43	913
20	170	188	196	152	76	21	10	184	997	40	1,037
27	359	285	292	247	84	33	12	512	1,824	48	1,872
May 4	319	254	254	233	99	28	18	467	1,672	36	1,708
11	224	170	167	121	64	13	5	172	936	26	962
18	159	198	152	109	37	10	3	144	812	22	834
25	211	138	137	83	30	10	5	116	730	12	742
June 1	267	269	193	155	55	16	8	134	1,097	22	1,119
8	137	152	119	112	51	14	5	171	761	23	784
15	170	159	155	132	54	10	7	177	864	38	902
22	196	147	186	125	83	21	7	221	986	43	1,029
29	229	168	193	174	70	25	8	201	1,068	43	1,111
July 6	304	254	239	223	85	22	12	355	1,494	41	1,535
13	350	310	366	265	127	34	14	327	1,793	42	1,835
20	161	208	268	201	108	30	24	161	1,161	57	1,218
27	139	107	172	166	71	22	11	58	746	30	776

TABLE II.—WHEAT INSPECTIONS AT WINNIPEG—*Continued*

(*Cars*)

Week ending	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	Feed	No grade	Total	Other	Grand total
1925 Aug. 3	46	73	73	67	33	10	2	25	329	16	345
10	45	52	50	45	17	6	2	12	229	12	241
17	42	27	19	32	10	2	..	13	145	4	149
24	26	38	38	42	12	3	..	22	181	6	187
31	44	173	154	36	9	3	..	58	477	29	506
Sept. 7	751	998	985	241	37	2	2	36	3,052	432	3,484
14	3,729	2,154	1,264	529	69	13	..	44	7,802	898	8,700
21	5,844	2,806	1,163	472	81	22	4	504	10,896	974	11,870
28	5,315	4,488	1,436	387	84	18	3	393	12,124	924	13,048
Oct. 5	4,287	4,762	1,618	421	65	25	8	526	11,712	822	12,534
12	2,145	3,652	1,697	327	52	7	3	472	8,355	374	8,729
19	2,100	3,407	1,333	231	53	8	4	650	7,786	275	8,061
26	1,847	3,086	1,481	178	42	7	1	1,226	7,868	297	8,165
Nov. 2	2,032	2,758	949	160	46	12	2	1,423	7,382	360	7,742
9	1,672	2,319	1,010	189	49	9	3	2,185	7,436	375	7,811
16	2,280	2,469	1,099	216	54	12	4	3,700	9,834	471	10,305
23	2,613	2,645	1,139	274	74	17	4	3,638	10,404	498	10,902
30	2,344	2,974	1,315	302	73	23	8	3,755	10,794	411	11,205
Dec. 7	2,247	2,994	1,434	284	62	7	6	4,077	11,111	347	11,458
14	2,350	3,210	1,723	303	96	14	12	4,488	12,196	381	12,577
21	2,442	2,776	1,300	258	62	21	8	3,799	10,666	286	10,952
28	865	1,310	774	123	25	10	3	1,833	4,943	103	5,046
1926 Jan. 4	456	957	474	109	37	5	3	1,632	3,673	85	3,758
11	333	567	390	85	22	3	1	1,550	2,951	188	3,139
18	93	233	199	47	15	3	..	609	1,199	54	1,253
25	65	198	155	35	10	1	..	425	889	31	920
Feb. 1	279	301	193	24	6	1	..	940	1,744	44	1,788
8	444	453	187	40	17	..	..	1,135	2,276	49	2,325
15	275	299	148	31	10	5	..	802	1,570	23	1,593
22	81	175	114	29	10	1	..	508	918	9	927
Mar. 1	26	74	70	15	3	..	..	273	461	14	475
8	36	78	64	9	1	..	..	274	462	6	468
15	31	61	64	12	8	1	..	326	503	8	511
22	36	40	27	7	3	..	..	279	392	5	397
29	87	70	33	17	1	6	..	225	439	4	443
Apr. 5	73	65	27	9	1	..	..	222	397	6	403
12	63	68	53	6	1	..	..	238	429	17	446
19	100	94	85	28	3	1	..	216	527	31	558
26	249	253	110	24	6	1	..	587	1,230	61	1,291
May 3	243	201	99	24	2	1	..	438	1,008	52	1,060
10	332	191	147	40	8	2	2	484	1,206	33	1,239
17	440	631	552	76	17	1	1	878	2,596	104	2,700
24	613	925	630	118	28	7	4	942	3,267	116	3,383
31	692	1,040	581	96	18	7	..	1,042	3,476	98	3,574
June 7	541	906	387	71	55	3	..	630	2,593	56	2,649
14	252	577	251	57	12	2	1	406	1,558	47	1,605
21	304	548	254	39	2	3	..	512	1,662	55	1,717
28	214	564	217	55	19	1	..	511	1,581	49	1,630
July 5	267	455	214	42	13	5	..	405	1,401	60	1,461
12	290	387	185	40	10	2	..	281	1,195	51	1,246
19	190	257	150	31	9	1	2	258	898	37	935
26	164	226	134	33	8	1	..	205	771	40	811

TABLE II.—WHEAT INSPECTIONS AT WINNIPEG—*Continued*

(*Cars*)

Week ending	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	Feed	No grade	Total	Other	Grand total
1926 Aug. 2	109	170	119	17	6	2	...	110	533	28	561
9	50	88	58	10	5	1	...	39	251	10	261
16	13	40	25	5	1	...	...	18	102	7	109
23	24	59	38	4	...	...	...	25	150	4	154
30	38	323	388	9	...	1	...	27	786	53	839
Sept. 6	467	929	602	18	3	...	...	20	2,039	338	2,377
13	1,197	2,288	498	31	5	...	1	142	4,162	320	4,482
20	3,181	3,596	738	102	23	3	...	921	8,564	516	9,080
27	3,132	4,187	1,012	158	48	15	6	1,193	9,751	1,269	11,020
Oct. 4	2,590	3,731	1,084	213	72	18	13	1,131	8,852	1,109	9,961
11	1,741	2,839	837	179	73	23	10	2,319	8,021	852	8,873
18	1,292	2,666	693	151	71	21	10	3,858	8,762	1,936	10,698
25	1,299	2,506	548	118	51	21	11	5,382	9,936	1,227	11,163
Nov. 1	876	1,964	436	70	25	18	4	5,151	8,544	1,101	9,645
8	910	2,360	903	377	110	63	27	6,319	11,069	1,035	12,104
15	942	2,352	1,119	593	221	156	99	6,584	12,066	939	13,005
22	691	1,854	832	484	178	125	77	6,085	10,326	914	11,240
29	559	1,515	755	366	146	88	64	5,640	9,133	922	10,055
Dec. 6	173	466	241	159	52	25	12	2,301	3,429	570	3,999
13	166	533	278	137	52	20	15	3,441	4,642	866	5,508
20	112	252	92	45	18	8	6	2,255	2,788	459	3,247
27	130	332	127	94	36	19	4	2,782	3,524	511	4,035
1927 Jan. 3	126	365	197	220	112	55	23	3,905	5,003	674	5,677
10	117	427	195	164	65	41	11	3,495	4,515	557	5,072
17	79	191	74	40	35	20	3	1,881	2,323	375	2,698
24	44	96	55	38	20	14	2	1,252	1,521	193	1,714
31	84	125	28	20	16	8	5	1,666	1,952	176	2,128
Feb. 7	20	86	41	21	18	11	4	1,146	1,347	201	1,548
14	22	90	41	6	5	2	2	773	941	181	1,122
21	14	120	41	6	4	2	1	1,039	1,227	257	1,484
28	25	138	40	5	2	...	1	1,091	1,302	263	1,565
Mar. 7	21	83	32	22	6	1	2	869	1,036	293	1,329
14	33	131	66	19	6	3	...	1,393	1,651	288	1,939
21	32	140	66	41	10	9	5	1,725	2,028	222	2,250
28	41	103	43	27	6	6	...	1,398	1,624	126	1,750
Apr. 4	39	107	44	30	15	4	3	1,565	1,807	115	1,922
11	28	78	44	26	12	3	3	1,117	1,311	67	1,378
18	30	94	32	15	5	3	1	940	1,120	65	1,185
25	86	286	123	64	24	19	4	2,267	2,873	121	2,994
May 2	74	306	149	80	17	14	...	3,023	3,663	146	3,809
9	50	198	92	54	6	1	1	1,660	2,062	71	2,133
16	74	284	100	40	13	5	...	1,607	2,123	50	2,173
23	121	427	116	36	6	1	...	1,115	1,822	59	1,881
30	141	513	118	17	14	2	1	1,356	2,162	24	2,186
June 6	98	316	72	29	9	4	...	860	1,388	20	1,408
13	49	207	72	19	4	2	1	537	891	29	920
20	44	161	67	19	12	4	...	813	1,120	56	1,176
27	30	184	81	17	19	1	2	832	1,166	83	1,249
July 4	46	235	109	46	25	11	3	1,093	1,568	114	1,682
11	38	207	111	43	28	7	2	1,360	1,796	193	1,989
18	65	266	121	35	30	10	3	1,562	2,092	285	2,377
25	53	203	103	35	13	5	3	875	1,290	191	1,481

TABLE II.—WHEAT INSPECTIONS AT WINNIPEG—*Continued*

(*Cars*)

Week ending	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	Feed	No grade	Total	Other	Grand total
1927 Aug. 1	21	168	66	22	16	5	3	547	848	90	938
8	11	108	48	22	8	5	3	279	484	53	537
15	3	46	32	17	12	4	4	132	250	31	281
22	3	56	22	11	8	2	1	106	209	6	215
29	2	32	31	7	7	3	1	99	182	27	209
Sept. 5	5	27	31	6	6	3	...	83	161	10	171
12	64	165	321	118	26	8	1	183	886	129	1,015
19	240	655	525	201	77	33	9	128	1,868	390	2,258
26	130	535	559	287	118	53	17	644	2,343	1,248	3,591
Oct. 3	169	771	1,186	501	180	61	33	2,953	5,854	1,675	7,529
10	165	907	1,600	721	232	82	27	4,693	8,427	851	9,278
17	126	528	960	454	197	73	13	3,395	5,746	501	6,247
24	90	592	1,330	602	194	78	41	4,259	7,186	560	7,746
31	162	1,378	4,960	2,971	633	267	84	2,981	13,436	766	14,202
Nov. 7	145	1,403	4,197	2,218	609	229	90	2,640	11,531	516	12,047
14	91	1,005	3,045	1,660	564	229	108	3,966	10,668	489	11,157
21	85	890	2,711	1,552	539	238	97	3,933	10,045	494	10,539
28	58	745	2,999	1,543	555	275	108	4,699	10,982	690	11,672
Dec. 5	43	631	2,452	1,189	375	228	76	3,989	8,983	426	9,409
12	19	388	1,662	832	248	106	53	2,933	6,241	405	6,646
19	20	282	1,165	640	203	98	32	3,179	5,619	300	5,919
26	17	216	1,061	598	150	65	28	3,044	5,179	240	5,419
1928 Jan. 2	11	211	913	576	134	50	10	2,314	4,219	164	4,383
9	13	130	822	444	129	43	13	2,396	3,990	146	4,136
16	7	176	695	313	102	41	6	2,763	4,103	143	4,246
23	9	125	587	231	91	23	5	2,008	3,079	98	3,177
30	10	108	384	167	37	13	3	1,569	2,291	96	2,387
Feb. 6	9	105	325	122	34	15	3	1,347	1,960	75	2,035
13	9	187	369	123	32	8	4	1,696	2,428	76	2,504
20	11	158	355	117	36	12	6	1,598	2,293	58	2,351
27	6	148	317	103	28	4	1	1,361	1,968	66	2,034
Mar. 5	8	119	211	70	11	6	2	969	1,396	83	1,479
12	6	84	191	73	13	2	2	798	1,169	78	1,247
19	5	69	166	80	18	6	2	680	1,026	89	1,115
26	...	62	144	48	22	5	1	685	967	101	1,068
Apr. 2	1	43	119	42	12	3	...	453	673	68	741
9	1	33	69	26	4	1	...	270	404	36	440
16	1	50	166	69	21	7	...	554	868	67	935
23	...	28	149	63	10	...	1	376	627	31	658
30	7	56	226	112	36	11	3	615	1,066	135	1,201
May 7	12	88	343	183	54	16	3	710	1,409	74	1,483
14	42	237	716	460	110	54	12	1,450	3,081	157	3,238
21	18	150	656	499	108	39	14	1,702	3,186	100	3,286
28	17	168	747	524	110	44	12	1,297	2,919	98	3,017
June 4	34	128	484	312	98	33	9	618	1,716	107	1,823
11	21	139	601	444	160	54	28	860	2,307	95	2,402
18	19	143	744	473	195	84	29	1,321	3,008	128	3,136
25	13	159	902	492	206	94	28	1,542	3,438	109	3,547
July 2	16	152	871	448	141	88	32	758	2,506	90	2,596
9	7	116	690	327	124	68	22	819	2,173	152	2,325
16	4	117	601	386	137	57	22	592	1,916	125	2,041
23	11	104	594	345	145	51	15	476	1,741	86	1,827
30	7	76	306	188	72	36	16	247	948	67	1,015

TABLE II.—WHEAT INSPECTIONS AT WINNIPEG—*Concluded*

(*Cars*)

Week ending	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	Feed	No grade	Total	Other	Grand total
1928 Aug. 6	3	46	161	100	50	25	6	145	536	23	559
13	2	31	116	68	29	13	5	64	328	15	343
20	1	19	84	14	14	16	3	33	184	27	211
27	5	76	66	32	16	5	3	38	241	27	268
Sept. 3	5	97	114	19	4	5	5	71	320	59	379
10	514	1,506	534	104	24	10	...	333	3,025	905	3,930
17	625	2,958	1,860	753	296	112	10	288	6,902	1,456	8,358
24	225	2,532	3,301	1,926	1,088	765	170	634	10,641	1,819	12,460
Oct. 1	136	2,046	3,062	2,191	1,895	1,845	440	200	11,815	1,937	13,752
8	127	1,652	2,700	2,188	2,230	2,455	722	143	12,217	1,660	13,877
15	175	1,409	2,142	2,015	1,847	1,873	676	91	10,228	1,154	11,382
22	106	1,311	2,215	2,013	1,886	2,115	690	88	10,424	1,407	11,831
29	89	1,479	2,074	2,032	1,833	1,993	656	71	10,227	1,285	11,512
Nov. 5	65	1,285	1,987	1,933	1,779	1,762	743	126	9,680	1,109	10,789
12	126	1,360	2,209	2,162	2,150	2,018	907	169	11,101	1,120	12,221
19	68	1,181	2,244	2,208	2,192	2,146	966	180	11,185	1,021	12,206
26	84	1,180	2,217	2,092	1,994	2,118	934	141	10,760	770	11,530
Dec. 3	90	1,267	2,330	2,347	2,101	2,218	793	152	11,298	736	12,034
10	101	1,003	1,833	1,817	1,803	1,733	523	121	8,934	548	9,482
17	86	778	1,338	1,419	1,440	1,238	341	155	6,795	386	7,181
24	39	529	970	1,077	1,030	754	162	80	4,641	210	4,851
31	16	304	591	624	530	410	100	42	2,617	73	2,690
1929 Jan. 7	3	207	330	421	350	225	65	63	1,637	46	1,683
14	8	148	300	373	347	269	56	28	1,529	59	1,588
21	6	80	193	273	281	186	35	26	1,080	49	1,129
28	4	60	156	163	173	146	31	11	744	31	775
Feb. 4	3	31	125	142	122	141	36	13	613	24	637
11	..	61	128	120	113	104	27	6	559	43	602
18	5	90	176	188	141	119	32	7	758	63	821
25	6	82	190	154	141	140	33	9	755	72	827
Mar. 4	6	128	220	241	184	139	31	14	963	107	1,070
11	17	188	286	349	260	222	51	26	1,399	129	1,528
18	20	219	393	401	346	247	70	31	1,727	105	1,832
25	14	186	372	377	304	244	62	29	1,588	92	1,680
Apr. 1	15	136	257	271	279	205	41	18	1,222	91	1,313

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