

EFFECT OF GOVERNMENT CROP REPORTS
ON THE PRICE OF WHEAT

by

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B. S., Kansas State College of Agriculture
and Applied Science, 1924

A THESIS

submitted in partial fulfillment of the

requirements for the degree of

MASTER OF SCIENCE

KANSAS STATE COLLEGE
OF AGRICULTURE AND APPLIED SCIENCE

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INTRODUCTION

In the study of this problem, the author has attempted to find out, whether the release of the government crop report affects the price of wheat. And if it does, to what extent and in what manner. Some people have contended that various grain exchanges, speculators and private crop reporters, have at times issued bullish reports on the condition of wheat to depress the price so that they might buy on the lower basis and capitalize on any increase which might follow. Or if they already owned large stocks of wheat they might start a rumor of "crop killing" in the wheat district, which would cause prices to go up, and thereby make extra profits. Evidence that this condition did exist follows. (5) "There is ample evidence in the letters of James T. Earle, President of the Maryland Agricultural Society, and elsewhere to indicate that prior to 1839 farmers were somewhat resentful of profits made by dealers and speculators in farm products through the circulation of misleading reports concerning crops and through producers lack of knowledge of market values."

Also (2) "The 'crop killer' has been killed. Formerly, it was possible to manipulate the market temporarily, by issuing a report or rumor of crop damage. Now, all market rumors of all kinds are strictly forbidden." Also (7) "lack of dependable information permitted abuses to creep in. The better informed attempted to 'corner' the market on a specific crop. Days on which reports of the U. S. Dept. Agr. are released, are known as 'Bureau' days on some of the exchanges. They are characterized by an air of expectancy prevailing among the traders on the several exchanges. Weather is the greatest factor in accuracy. Suspend trading less than 30 minutes after release to prevent violent fluctuations in some exchanges." And "there is no way of determining which is more accurate, private or government, but the magnitude of the government statistical organization would seem to give them the advantage."

The government crop report is issued by the Crop reporting Service of the United States which is an impartial agency, operated in the United States Department of Agriculture in cooperation with 35 states and 300,000 voluntary crop reporters, for the collection, collation

and publication of statistical data relating to acreage, condition and production of crops, number and production of livestock, prices of farm products and related information.

The monthly crop reports containing crop forecasts are prepared and published under strict laws and department regulations which prevent the contents of the reports becoming known except to the Secretary of Agriculture, the crop reporting board and its employees, before the moment previously set for publication. The reporting service has had the following development.

(5) "The crop reporting service of the United States is the result of more than 90 years of gradual development. Some of the important events are:"

- 1839 - \$1,000 appropriated by the Congress to the Patent Office for distribution of seeds and collection of agricultural statistics.
- 1855 - James T. Earle, President of the Maryland Agricultural Society, tried to collect information concerning crops through State Agricultural societies, and he advocated collection of such information by an "agricultural department of the general government."
- 1862 - Orange Judd, editor, American Agriculturist, collected monthly crop reports from his subscribers and published the results.
- 1862 - United States Department of Agriculture was established by act of May 15 (12 Stat. 387-8, An act to

establish a Department of Agriculture), and the agricultural statistical work was taken over from the Patent Office.

- 1863 - Monthly or bimonthly reports on condition of crops were published, based upon voluntary reports from crop correspondents in each county.
- 1866 - Regular reports were begun on condition, acreage, yield per acre, and production of important crops, and on numbers of livestock.
- 1867 - Regular annual reports were begun on prices of farm products.
- 1882 - Part-time State statistical agents were appointed and required to maintain independent corps of crop reporters.
- 1896 - A new, separate, and larger corps of crop reporters, known as township reporters, was established.
- 1900-1914 - Crop specialists and regional field agents were appointed for personal field observation and inquiry.
- 1905 - Crop Reporting Board was organized.
- 1906 - Keep Commission (*) recommended that the United States Department of Agriculture make forecasts of crop production.

(*) The reports of the Keep Commission on department methods relating to official crop statistics and the investigation of the Twelfth Census report on agriculture, in compliance with S. Res. No. 135. (Being transmitted to the Senate on May 29, 1906, by President Theodore Roosevelt and printed as Doc. 464, 59th Cong. 1st Sess.) Reference is to a report dated January 6, 1906, signed by C. H. Keep (Chairman), L. O. Murray, J. R. Garfield, Gifford Pinchot, committee on department methods

- 1911 - Reports of crop acreages on crop reporters' own farms were established as an indication of acreage changes.
- 1912 - The Crop Reporting Board began to forecast production of important crops prior to harvest.
- 1914 - Full-time State Agricultural statisticians were appointed, their duties combining those of the former State statistical agents and regional field agents.
- 1914 - Truck-crop reports were initiated.
- 1919 - First objective field counts were made by the agricultural statistician in South Carolina.
- 1919 - Data were collected concerning numbers of poultry.
- 1922 - Pig survey through rural mail carriers was made for first time.
- 1923 - Livestock-reporting work was organized.
- 1924 - Rural mail carrier acreage survey was initiated.
- 1925 - Highway frontage of crops as measured by a "crop-meter" attached to an automobile was first used to indicate acreage changes.
- 1927 - Dual inquiries from Washington and field offices were discontinued in a few States.
- 1929 - Practical application of correlation methods to forecasts of crop production was made.
- 1932 - Township reports were handled by branch offices and dual system of reports was discontinued, except for cotton.

The primary purpose is to provide adequate, accurate and timely information concerning crops and livestock for crop and livestock producers.

The wheat crop reporting year really begins in

6

December of the calendar year preceding harvest when estimates of acreage planted to winter wheat and rye are made. The government monthly crop reports are issued as of the first of the month but usually do not come out until the eighth, ninth or tenth.

According to Earle (5) "grain dealers and speculators had private reports prior to 1839." Also "many of the agencies that buy farm products have always had their own private sources of information."

The purpose of this study then is to analyze the private and government crop reports over a period of years and find their effect on the price and to try to find out whether the fact that the government crop report was released about the tenth would be a market factor at that time.

REVIEW OF LITERATURE

Owing to the scarcity of published reports on this subject requests for information were sent to the following: B. W. Snow of Bartlett & Frazier Company, Chicago Illinois, one of the first private crop estimators; to the Food Research Institute of Stanford University, California, which is conducting a series of Wheat Studies; and to W. F. Callander, Principal Statistician in charge of Agriculture Economics, Washington D. C.

Mr. B. W. Snow in his personal letter states that "broadly speaking, I would say that the private reports and the government report have a very decided effect in stabilizing knowledge of our own crop situation, but that our own crop situation is only one and frequently a minor factor in price determination."

Callander (5) gave a good account of the history of the government and private reporting services. He also gave a good account of the operation of each, but did not draw any conclusions as to the effect of either.

Babson (1) says: "It has been well proved that

this forecast made by the government is better than any forecast which at the present time can be made by any association of merchants or bankers independently."

Schoenfeld (7) states that there is usually some air of expectancy existing just previous to government reports.

Boyle (2) gives evidence that there was possibly some temporary manipulating of the market before the present development of crop reporting.

Clark and Weld (4) have this to say: "News gathered by the government is not always so timely as that obtained by large individual firms, so that these are often in possession of essential facts some time before those who depend on the government. On the other hand the news gathered by the government is likely to be much more extensive and accurate. This is partly due to the greater resources which may be made available to cover the expense involved, and sometimes due to the feeling that governmental agencies are disinterested, to the greater spirit of cooperation which is likely to prevail among those with facts to contribute."

As one can see all of these references are closely

related, but do not go into the effect of the reports on price. So, with what information was helpful and using prices from the Chicago Board of Trade Year book and Kansas City Grain Market Review, the author proceeded to analyze the problem more thoroughly.

DEFINITIONS OF TERMS USED

For the sake of brevity and uniformity of understanding as used in this study the following terms have been defined as follows:

1. Government Crop Report. - A report of the condition of wheat, given in percentage, and the estimated yield given in millions of bushels, issued the eighth, ninth or tenth of each month except January and February by the Division of Crop and Livestock Estimates, U. S. D. A.
2. Private Reports. - An average of the private crop estimators, including B. W. Snow, Nat C. Murray, H. C. Donovan, E. H. Miller, R. O. Cromwell and G. C. Bryant, giving a report on the percentage condition of winter wheat and the estimated yield in millions of bushels.
3. Contract Wheat. - Wheat of a grade that may be delivered at contract price.

4. Future Price. - The price of contract wheat to be delivered in future months, usually May, July, September and December.
5. Current Active Future. - The next delivery month price.
6. Previous Four Day Period. - The third, fourth, fifth and sixth of each month, which is just before the government report period.
7. Government Report Period. - The seventh, eighth, ninth and tenth of each month, which is the period in which the government crop report is released.
8. Following Four Day Period. - The eleventh, twelfth, thirteenth and fourteenth of each month, which is just after the government report period.

METHOD OF ANALYSIS

This problem was studied from six different angles, each being a different method of approach in trying to solve the solution. The results were compared, and in this manner it should increase the reliability of the final summary.

The six methods used are:

1. To find the per cent difference of previous four day period, government report period, and following four-day period, from the monthly average for the years 1910 to 1933 inclusive.
2. Find the number of times the previous four day period and following four day period are above or below the government report period for the years 1910-1933 inclusive.
3. Private crop reports compared to government crop reports.
4. Trends of the market the first fifteen days of each month, using the May and December futures price 1924-1933.
5. Trends of the market the first fifteen days of each month, using the current futures price 1883 to 1933.

6. Relation between the per cent government condition on the tenth is of private condition reports on first, and the per cent price on the tenth is of price on the first for April and May.

To Find the Per Cent Difference of Previous Four-day Period, Government Report Period, and Following Four-day Period, from the Monthly Average for the Years 1910 to 1933 inclusive

It was suggested by Professor R. M. Green, that the author use the daily price quotations of cash number two yellow hard wheat. These were secured from the Chicago Board of Trade Yearbook for the years 1910 to 1933 (3) inclusive.

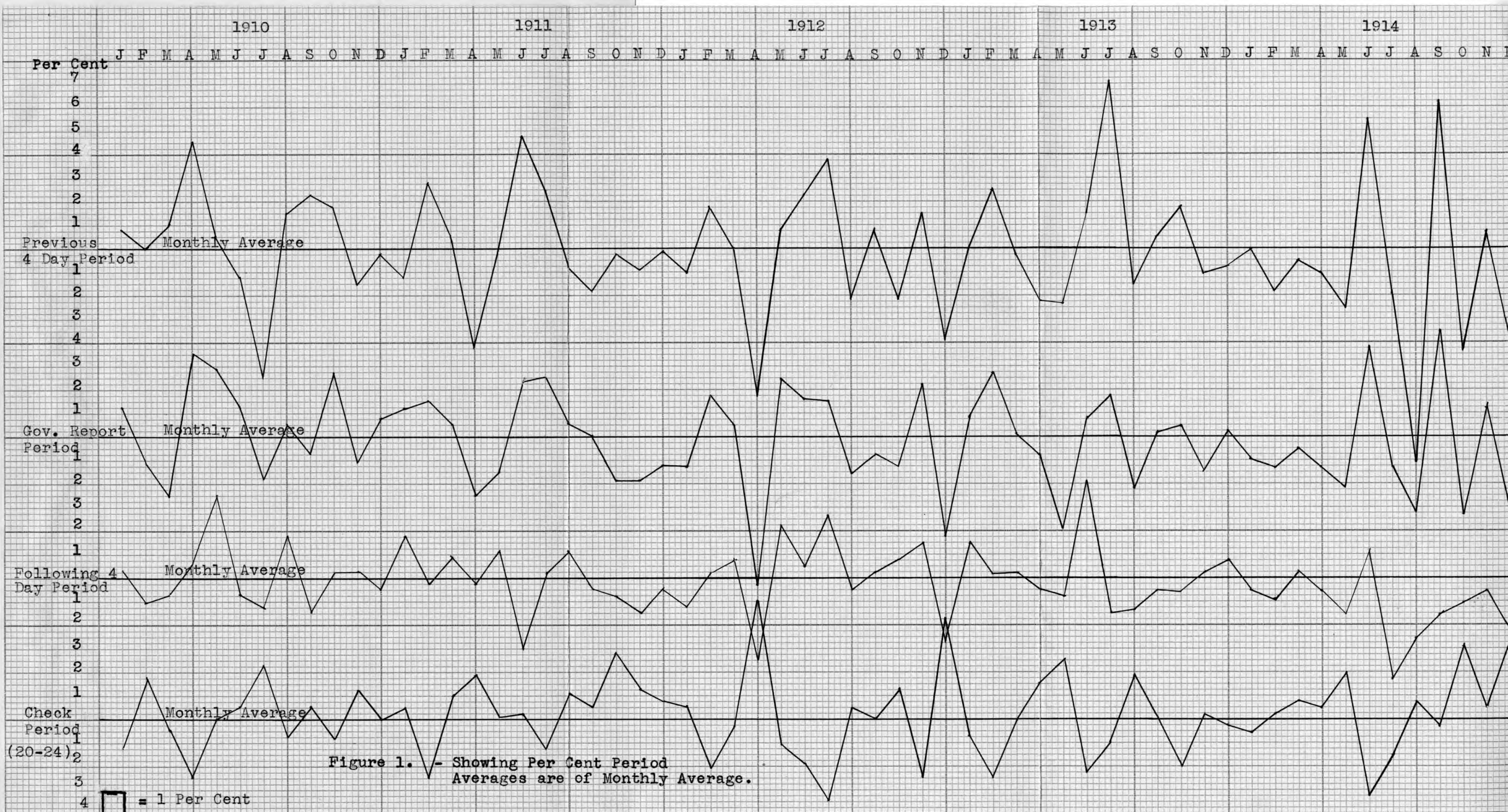
Then from a table secured from the crop reporting board of the United States Department of Agriculture was found the exact day and hour each government crop report was released for this same period of years 1910-1933. It was found that all government crop reports were issued on the seventh, eighth, ninth or tenth of each month excepting in January and February when no report was

issued. Also that two reports are issued in December, one of which gives the final crop estimates for the year, which usually comes out about the twelfth, and the other giving the per cent condition of the new crop which usually comes out on about the twentieth.

The average price for the four day period, seventh to the tenth, which hereafter will be referred to as the government report period, was then computed for each month of each year. Likewise the average price for the previous four-day period, third to sixth, and the average price for the following four-day period, eleventh to fourteenth, was found. Then the per cent change of each of these three periods, from the monthly average was secured by dividing the monthly average into the period averages. (See Figure 1.)

This brings out the fluctuation of the market in these periods compared to the monthly average. This should show whether the price is consistently lower the previous four day period and higher the following four day period or vice versa, or that there is little or no change.

The graph shows that (see Figure 1) from the representative five year period selected, the government report period does not fluctuate from the monthly average



as much as does the previous four-day period, and that the following four-day period has still less fluctuation. (See Table I.)

Table I. - Showing Fluctuations of Each Period from the Monthly Average.

	:Previous: :Four-day: :Period	Government: Report Period	:Following: :Four-day: :Period	Check :Period :(20-24)
Greatest per cent above monthly ave.:	7.2	4.5	4.1	5.
Average per cent above	2.36	1.57	1.06	1.37
Greatest per cent below monthly average	8.8	6.2	4.2	3.5
Average per cent below	2.06	1.9	1.23	1.54

In summarizing these data, one can say that the price does not fluctuate as much during the government report period and the following four-day period as it does during the previous four-day period, and that the government report tends to have a slight steadying influence on price.

To Find the Number of Times the Previous Four-day Period and Following Four day Period
Are Above or Below the Government Report Period, for the Years 1910
to 1933

The same prices for cash No. 2 yellow hard wheat secured from the Chicago Board of Trade were used in this approach as in the first. Also the same averages for the different periods were used. In this method, all of the marches for the entire period, and each of the following months were charted on a scatter diagram. This will also show whether some months run consistently above or below the government report period. Assuming the government crop report had no effect on prices, it would be expected that fifty per cent of the time the price of the previous four-day period would be above and fifty per cent of the time below the price of the government report period. Likewise the same for the following four-day period. (See Figure 2.)

In the following chart, the heavy middle line equals the average of the government report period. Each small square equals one time above or below. The numbers are

Previous four day Period

Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	
6	10	10	8	7	6	7	6	7	9	Total Above 76
7	4	5	10	10	13	12	10	10	6	Total Below 87

Following Four day Period

6	12	11	3	9	11	7	9	10	8	Total Above 86
8	5	5	14	9	8	12	8	7	7	Total Below 81

Figure 2. - Showing Number of Times Previous and Following Four Day Period is Above or Below Government Report Period.

(Data-Chicago Board of Trade Yearbook
1910-1933.)

the times the prices are above or below the average of the government report period. Adding these for ten months March to December for the previous four-day period, there were 76 times when the price was above that of the government report period, and 87 times when it was below. This shows some tendency for the price to be lower more often before the government report period. During the four-day period following the good report there were 86 times that the price was above the average of the government report period, and 81 times that it was below. This shows some tendency for the price to be higher more often after the government report period.

By analyzing further it was found that in two months, August and November this was particularly true. Taking the Augusts of the previous four-day period there were thirteen of the nineteen years that the price was below the government report period. In the following report period in eleven of the nineteen years the price was higher than the government report period. Likewise for November in the previous four-day period in ten of the nineteen years the price was below the government report period, while in the following report period in ten of the nineteen years the price was above the government report period. This, however, is probably due to the

fact that August is the end of a period of weakness due to the movement of winter wheat in the United States. The first of the month prices are still low but have started to improve by the middle of the month. The same is true of November, which is a weak spot, due to the movement of new Canadian wheat and of spring wheat in the United States, but is recovering by the middle of the month.

It will be noted that April and May are above the government report period in both cases. Then in June, both below. This shows that the seasonal trends are strong enough not to be influenced to any great extent by the government crop report.

In summarizing these data it would seem that on the average there is a slight tendency for the market to decline in price, until the government crop report is released, then work back up slightly.

Private Crop Reports Compared to
Government Crop Reports

The actual reports of the private crop estimators were secured from the (6) Grain Market Review of Kansas City Missouri since 1921. These reports are released on the first of each month unless it is a holiday, in which case it is released the next market day. The private report is an average of the four or five private crop estimates taken for each month, excepting January and February when no crop report is issued. These private reporters were usually B. W. Snow, Nat C. Murray, H. C. Donovan, E. H. Miller, R. O. Cromwell and G. C. Bryant.

The government crop report was secured from the same publication. It is usually released the eighth, ninth, or tenth of each month except January and February.

These reports were tabulated for each of the crop reporting months, for the years 1921 to 1933.

(See Table II.)

Table II. - Showing Per Cent Condition of Crop and Millions of Bushels of Wheat Forecast by Government and Private Crop Estimators for the Years 1921-1933.

Year	April		May		June		July		December
	Per Cent	Per Cent	Millions	Per Cent	Millions	Per Cent	Millions	Final	
	Con-	Con-	Bushels	Con-	Bushels	Con-	Bushels	December	
	dition	dition	Forecast	dition	Forecast	dition	Forecast	Estimate in	
	:	:	:	:	:	:	:	Millions of	
:	:	:	:	:	:	:	:	Bushels	
1933 P*	61.1	64.1	350	65.3	357	60.6	323	:	
1933 G*	59.4	66.7	337	64	341	57.8	336	351	
:	:	:	:	:	:	:	:	:	
1932 P	79	75.8	463	67.2	427	66.3	426	:	
1932 G	75.8	75.1	440	64.7	411	64.7	432	462	
:	:	:	:	:	:	:	:	:	
1931 P	88.6	90.2	658	88.	683	86.4	689	:	
1931 G	88.8	90.3	652	84.3	649	82.3	713	787	
:	:	:	:	:	:	:	:	:	
1930 P	81.4	77.5	543	74.5	537	76.4	551	:	
1930 G	77.4	76.7	525	71.7	532	73.8	558	604	
:	:	:	:	:	:	:	:	:	
1929 P	81.2	85.9	618	81.7	632	78	601	:	
1929 G	82.7	83.6	595	79.6	622	75.9	582	578	
:	:	:	:	:	:	:	:	:	
1928 P	73.7	75.7	475	74.1	513	74.3	519	:	
1928 G	68.8	73.3	479	73.6	512	75	544	579	
:	:	:	:	:	:	:	:	:	
1927 P	86.2	85.5	595	75.3	559	73.7	561	:	
1927 G	84.5	85.6	513	72.2	537	75	579	552	
:	:	:	:	:	:	:	:	:	
1926 P	86.9	86.2	565	79.7	561	79.2	562	:	
1926 G	84.1	84	549	76.5	543	77.4	567	627	

* (P) Private Crop Reports

(G) Government Crop Reports

Table II. - (Con't.)

		April		May		June		July		December	
Year		Per Cent	Per Cent	Millions	Per Cent	Millions	Per Cent	Millions	Final		
		Con-	Con-	Bushels	Con-	Bushels	Con-	Bushels	December		
		dition	dition	Forecast	dition	Forecast	dition	Forecast	Estimate in		
									Millions of		
1925 P*	74	74.1	437	69.6	426	64.5	396				
1925 G*	68.7	77	444	66.5	407	65.9	404		398		
1924 P	83.9	82.4	560	79.7	549	75.7	527				
1924 G	83	84.8	553	74	509	77.9	543		590		
1923 P	74.8	79.5	576	80.4	612	78.2	591				
1923 G	75.2	80.1	578	76.3	581	76.8	586		572		
1922 P	----	82.3	575	81.1	607	76.7	560				
1922 G	78.4	83.5	584	81.9	607	77	569		586		
1921 P	92.2	89.3	642	80.9	601	77.5	576				
1921 G	91	88.8	629	77.9	578	77.2	574		587		

(*) Private Crop Reports

(*) Government Crop Reports

The accuracy of both the government and private crop reports were tested by correlating the estimates in millions of bushels for the months of May and June with the final December estimate. The following coefficients of correlation were obtained. (See Table III.)

Table III. - Coefficient of Correlation.

	:	May	:	June
Private estimates	:	.84	:	.88
Government estimates	:	.86	:	.875

As is shown, the coefficient of correlation for government estimates during the month of May is slightly higher (.86) than the private estimates for the same month (.84), and, as one would expect, the nearer they approach the harvest month, the higher will be their coefficient of correlation. This also shows that the coefficient of correlation between private and government estimates is high.

An informal way to use the same set of figures is to chart the fluctuations of the private and government forecasts from the actual production of each year, during the months of May, June and July for the years 1921

to 1933. This will show which is the nearest to the actual production. (See Figures 3, 4 and 5.)

The final December estimate was used for the actual production of each year and is represented by the heavy median line in the chart. Then for each of the three months, May, June and July the number of million bushels the private estimate was above or below the actual for each year was marked with a black dot. Likewise the number of millions of bushels the government estimate was above or below the actual for each year, was marked with an "x". This shows plainly which is closest to the actual each year for each of the three months. During the months of May and June the private estimates were closer to the actual in eight of the thirteen years, while in July the government estimate was closer to the actual in ten of the thirteen years. For the total of all three months of the thirteen years, the government report was closer to the actual twenty times and the private report closer nineteen times. There appeared to be practically no difference in forecasting ability.

Another observation made in connection with this approach was that 90 of the 140 government condition reports studied were lower than the private figure. This

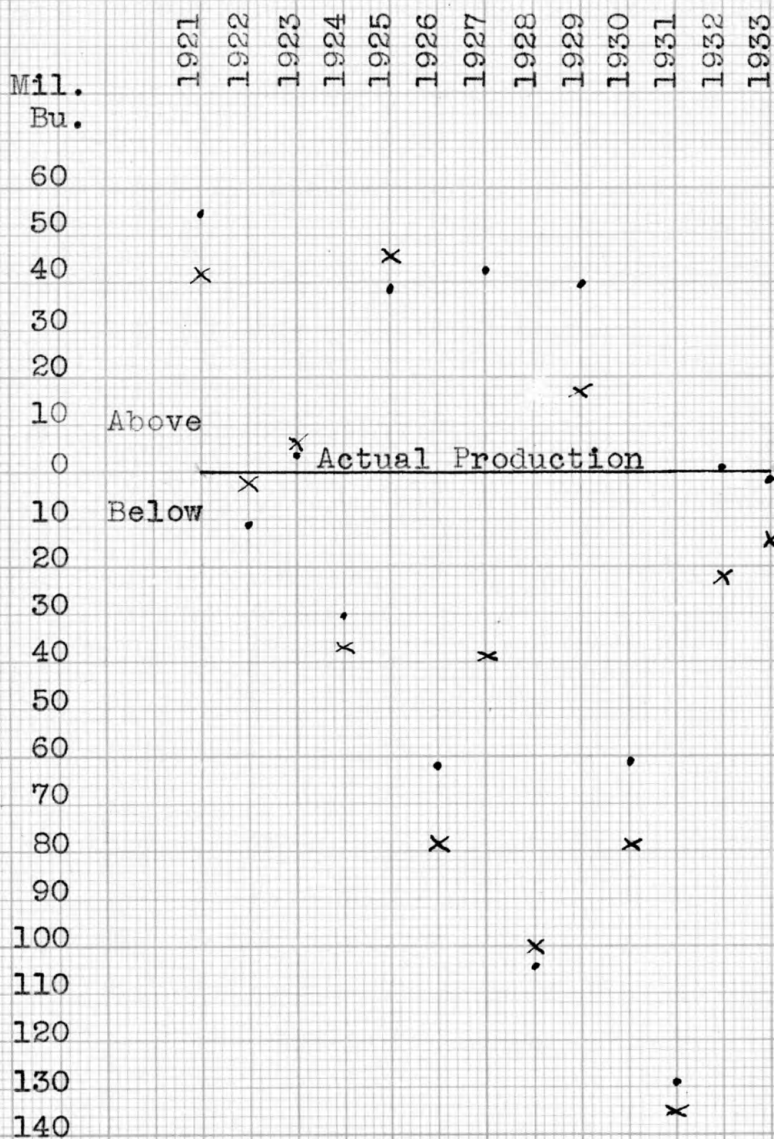


Figure 3. - Private and Government Estimate in Millions of Bushels Above or Below Actual Production for the Month of May

Private . Closer to Actual 8 times
 Gov., x " " " 5 "

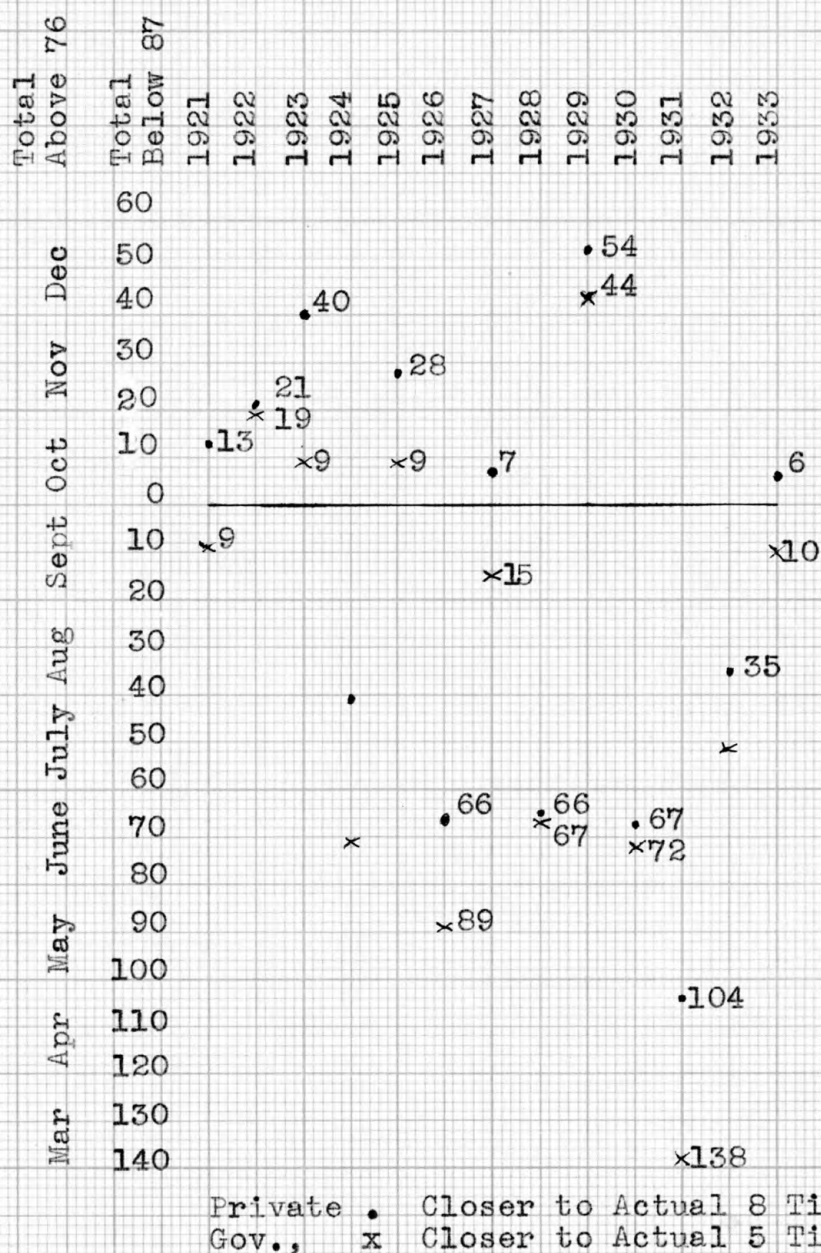


Figure 4. - Private and Government Estimates in Millions of Bushels Above or Below Actual Production for Month of June

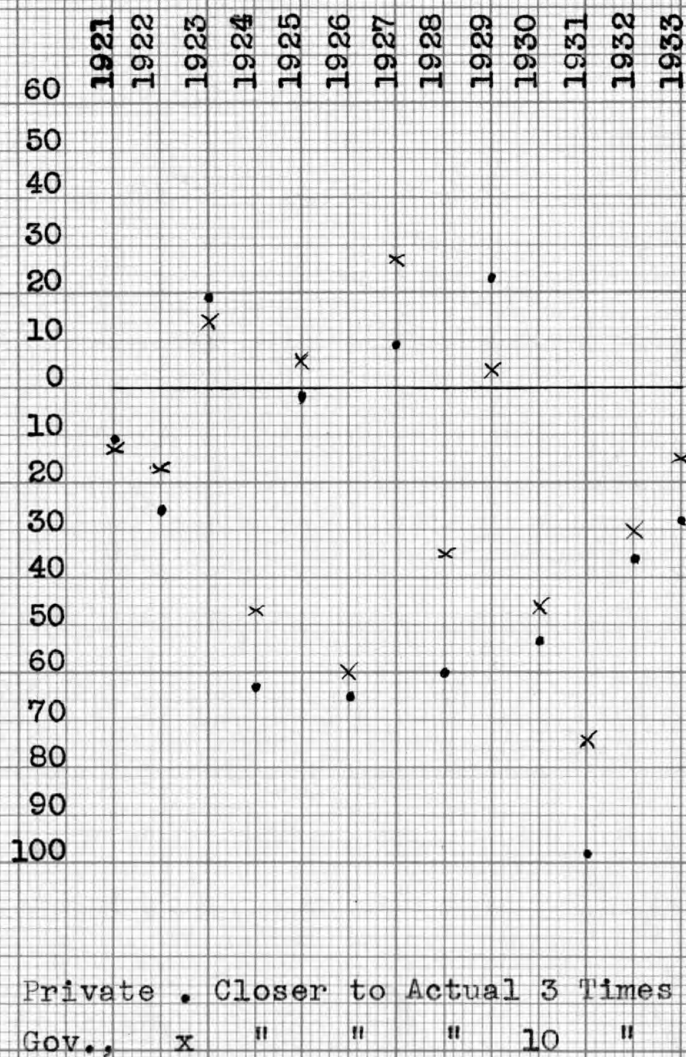


Figure 5. - Private and Government Estimates in Millions of Bushels Above or Below Actual Production for Month of July.

might furnish a partial explanation of the slightly declining prices until the tenth and the slight recovery after the tenth, which was found in the second method of procedure. In other words if two-thirds of the time the private estimates forecast a higher per cent condition on the first of each month than the government report forecasted on the tenth we might naturally expect a decline in price until the tenth and then when the government report showed a lower condition figure, there would be a slight increase in price.










In summarizing it would seem that with the coefficient of correlation between private and government reports being high, that any effect a government report might have, would be partially felt on the first of the month, when the private estimates are released. The charts show that there is little difference in the number of times the private reports and government reports were closer to the actual production.

Trends of the Market the First Fifteen Days
of Each Month, Using the May and Decem-
ber Futures Price 1924-1933

The fourth method of procedure was to find the trends of the market the first fifteen days of each month, using the May and December future prices. A chart showing the Chicago May and December future prices for each month for the years 1924 to 1933 inclusive was compiled from the data in the Chicago Board of Trade Yearbook. With the chart, one could see at a glance, the trend of the price several days before the government report was released, and the trend several days after it was released.

There are nine possible trends before and after the government report day. (See Table IV.)

Table IV. - Possible Trends.

	One	Two	Three	Four	Five	Six	Seven	Eight	Nine
Day of Month	: 5 10 15	: 5 10 15	: 5 10 15	: 5 10 15	: 5 10 15	: 5 10 15	: 5 10 15	: 5 10 15	: 5 10 15
Trends	: 	: 	: 	: 	: 	: 	: 	: 	: 
Number of times each occurred:	: 16	: 10	: 4	: 18	: 5	: 8	: 15	: 15	: 8

The first of each trend representing the fifth to the tenth of the month, and the last of the trend the tenth to fifteenth of the month. The number of times each type of trend occurred during the 99 months covered is shown directly below each trend.

Number of times trends were down before the 10,	trends 4, 6, 8, = 41
" " " " " up " " " "	" 1, 3, 7, = 35
" " " " " down after " " " "	" 4, 5, 7, = 38
" " " " " up " " " "	" 1, 2, 8, = 41

This table shows that the prices are downward more times before the tenth than they are upward. Likewise, that prices are upward more times after the tenth than they are downward. This substantiates the findings in the first method of procedure.

A further analysis was made by separating the four important market reporting months for wheat, which are April, May, June and July for the ten years 1924-1931 inclusive. By taking the government crop report condition figure, and noting whether it was higher or lower than the private report, and then noting the trends when it was higher or lower, it was hoped that this would show some definite relation.

In other words, if the government condition report was lower than the private report, the natural expectation would be for a slight increase in price. The unexpected effect would be for prices to drop.

Likewise, if the government condition report was higher than the private report, the usual expectation would be for prices to decline. The unusual effect would be for prices to rise.

Each trend then after the tenth was classified as usual trend or unusual trend. In 20 of the 40 months

studied, the price trend was usual, and in twenty months it was not. In other words, one-half the time when the government condition report was lower, price increased as we would naturally expect, but the other half of the time it declined.

In summarizing these data, analysis of the trend before and after the tenth confirmed the findings and conclusions of the first method of procedure. And that fifty per cent of the time the effect of government report on prices after the tenth was usual and fifty per cent of the time it was not.

Trends of the Market the First Fifteen Days
of Each Month Using the Current
Future Price, 1883 to 1935

The fifth method of procedure was to find the trend of the market during the first fifteen days of each month using the current future prices. The data used were secured from the Wheat Studies Pamphlet (8) published by the Food Research Institute of Stanford University. The current future prices since 1883 were used.

The same group of possible trends before and after the tenth was used as in the preceding methods. (See Table IV. P. 30.) As these prices were quoted only in weeks the second week was used as the government report week. Price trends were taken before and after the price quoted for the second week.

The following table gives data for the months of April, May, June and July. (See Table V.) It shows the number of times each trend existed, in each of the four fourteen year periods. There was little difference in the April's of each of the four periods. The same was true for the other three months. But in comparing the

Table V. - Showing Number of Trends for
April, May, June, July.
1883-1935.

APRIL'S									
14 Year : Periods	Trends								
	One	Two	Three	Four	Five	Six	Seven	Eight	
1921-1934	: 5	: 0	: 0	: 3	: 0	: 1	: 4	: 1	
1900-1913	: 5	: 0	: 1	: 5	: 0	: 0	: 2	: 1	
1893-1906	: 5	: 0	: 0	: 6	: 0	: 0	: 1	: 2	
1883-1896	: 5	: 0	: 0	: 3	: 0	: 1	: 2	: 3	
Total	: 20	: 0	: 1	: 17	: 0	: 2	: 9	: 7	
MAY'S									
1921-1934	: 2	: 0	: 0	: 2	: 1	: 0	: 1	: 6	
1900-1913	: 3	: 0	: 0	: 2	: 0	: 0	: 3	: 6	
1893-1906	: 3	: 0	: 0	: 1	: 0	: 0	: 3	: 7	
1883-1896	: 2	: 0	: 0	: 4	: 0	: 0	: 5	: 3	
Total	: 10	: 0	: 0	: 9	: 1	: 0	: 12	: 22	
JUNE'S									
1921-1934	: 3	: 0	: 0	: 8	: 0	: 0	: 2	: 1	
1900-1913	: 2	: 0	: 0	: 4	: 0	: 0	: 5	: 3	
1893-1906	: 3	: 0	: 0	: 5	: 0	: 0	: 2	: 4	
1883-1896	: 0	: 0	: 0	: 9	: 0	: 0	: 2	: 3	
Total	: 8	: 0	: 0	: 26	: 0	: 0	: 11	: 11	
JULY'S									
1921-1934	: 5	: 0	: 0	: 2	: 0	: 1	: 4	: 2	
1900-1913	: 5	: 0	: 0	: 4	: 0	: 0	: 3	: 2	
1893-1906	: 3	: 0	: 0	: 6	: 0	: 0	: 3	: 2	
1883-1896	: 0	: 0	: 0	: 3	: 0	: 0	: 4	: 7	
Total	: 13	: 0	: 0	: 15	: 0	: 1	: 14	: 13	
Grand Total	: 51	: 0	: 1	: 67	: 1	: 3	: 46	: 53	

different months, in April the price continues upward (trend number one) more times than any other month, and that the number of times the market goes in the opposite direction after the tenth, (trends seven and eight) are smaller than for any other month, and that two-thirds of the time in April, the market continues to follow the trend after the tenth that it had before the tenth.

The characteristic thing about the month of May is that about two-thirds of the time the price goes in the opposite direction after the tenth from what it had been going before the 10th.

In the month of June trend number four or the downward trend predominates, appearing 26 times or 46 per cent of the time.

And in July trends one, four, seven and eight appear about the same number of times.

With the government crop report coming out on the tenth of each month, and being lower than the private report 70 per cent of the time, one would expect prices to increase after the tenth 70 per cent of the time. But this table shows that it does not. An increase after the tenth would be shown by trends one and eight. The sum of the totals for trends one and eight is 104. A decrease in price after the tenth would be shown by trends

four and seven. The sum of these totals is 113.

It would seem that from these data that the government crop report had no effect on the price of wheat.

Relation Between the Per Cent Government Condition on the Tenth is of Private Condition Reports on First, and the Per Cent Price on the Tenth is of Price on the First for April and May

The condition figures in Table II were used in securing the per cent condition the government figure was of the private.

The July futures prices were secured from the Chicago Board of Trade Yearbooks for the corresponding years, which were 1921-1933.

The figure used to represent the price on the tenth is an average of prices on the eighth, ninth, tenth, eleventh and twelfth. Likewise the figure used to represent the price on the first is an average of prices on the thirtieth, thirty-first, first, second and third. These two groups of figures were then charted (See Figure 6) for the month of April.

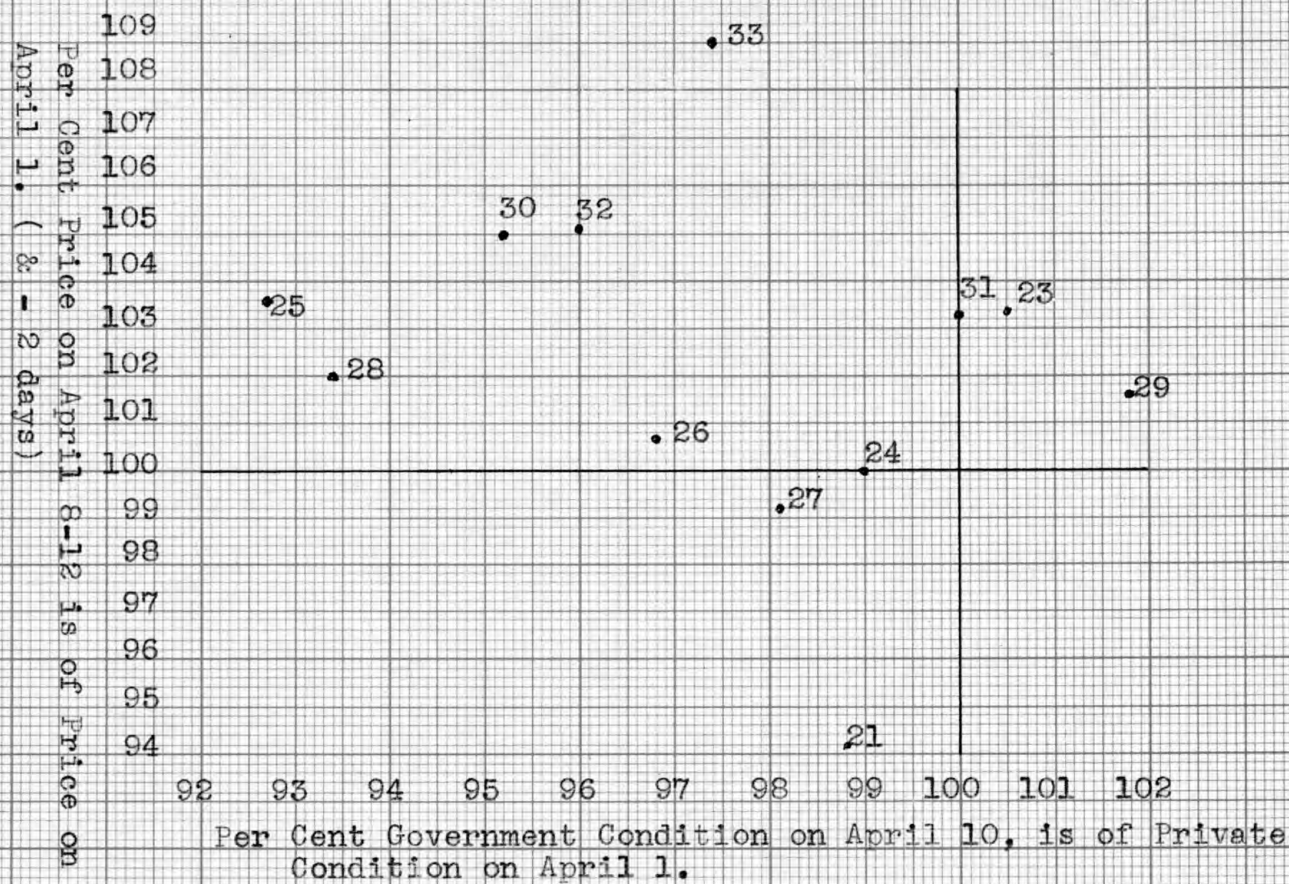


Figure 6. - Relation of Condition to Price
Month of April.

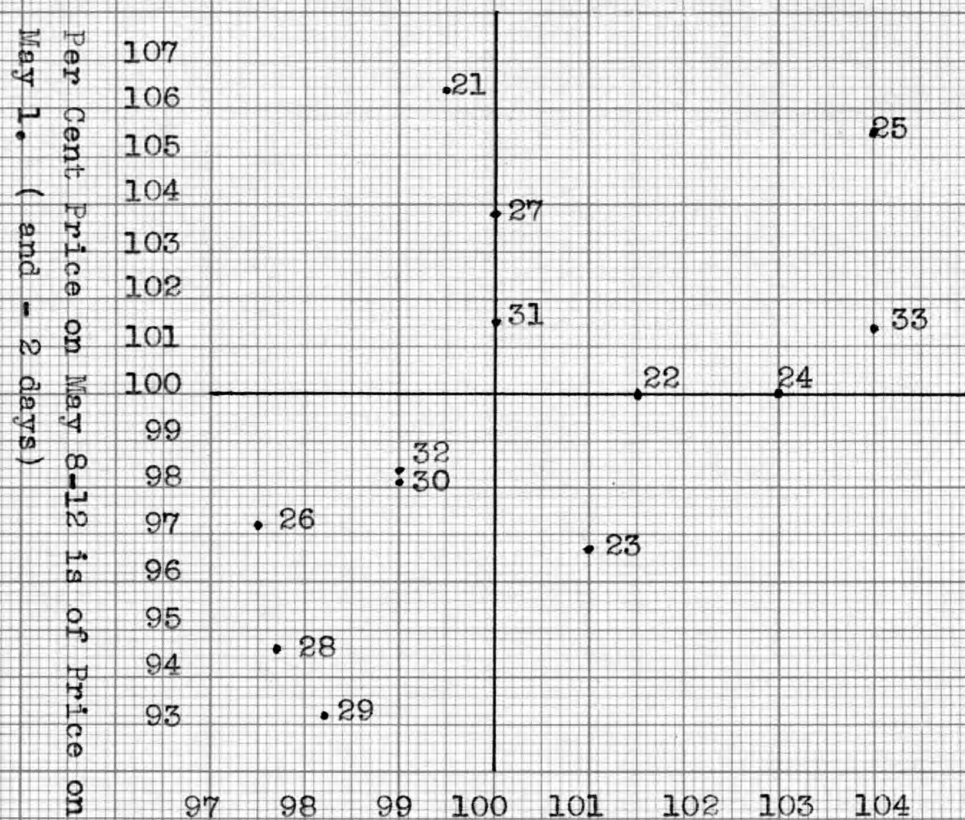
Figure six shows that there is not a positive relationship, for with a positive relationship one would expect a lower price with a higher per cent condition report and a higher price with a low per cent condition report. This shows that there really is not enough difference between the government and private condition reports to affect prices to any great extent.

The same study was made for the month of May. (See Figure 7.)

This study likewise does not show a positive relationship, in fact it appears at first to be negative.

The years 1925 and 1933 show an increase in price with an increase in condition. This can be explained by credit expansion in 1925 along with a short crop in Kansas and in 1933 the price of wheat rose when the United States went off the gold standard.

In summarizing these data it would seem that there is little if any relationship between the per cent government condition figures on tenth are of private condition figures on the first and, per cent price on tenth is of price on first.



Per Cent Government Condition on May 10 is of Private Condition on May 1.

Figure 7. Relation of Condition to Price Month of May

FINAL SUMMARY AND CONCLUSION

1. The price of wheat does not fluctuate as much during the government report period and the few days following it, as it does the rest of the month.

2. There is a slight tendency for the price to decline a few days before the release of the government crop report, then work back up slightly.

3. There is a high correlation between government and private crop reports. This being true, any change in price that one might expect from the release of the government crop report has already been anticipated and partly adjusted by the release of the private crop reports on the first of each month. Also private crop reports are as close to actual production as often as the government crop reports.

4. One-half of the time the price reacts in the expected way to the government crop report, and one-half the time it does not indicating that the government crop report has little or no effect on the price.

5. Seasonal trends are strong enough to show up in this study, which shows that there are other factors that have much more effect on the price than the government

crop report.

In considering these conclusions it should always be kept in mind that the nature of the crop reports would have some effect on price, but that the only time the government crop report would differ from the private crop report, would be when some serious weather condition occurred between the release of both reports.

And finally, that the government crop report gives us a truer picture of conditions as they exist but that the crop situation is only one of many factors, and frequently a minor one in price determination.

ACKNOWLEDGMENT

The writer wishes to express his thanks to Professor Homer J. Henney, his major instructor, Dr. W. E. Grimes, Head of the Department of Agricultural Economics, and R. M. Green, who started the writer on this problem. These men have assisted in outlining and critizing the work, and thus helped to develop it to the fullest extent.

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