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IRISH POTATO FUTURES TRADING

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HEARING BEFORE A SUBCOMMITTEE OF THE COMMITTEE ON AGRICULTURE AND FORESTRY UNITED STATES SENATE

EIGHTY-EIGHTH CONGRESS
FIRST SESSION

ON

S. 332

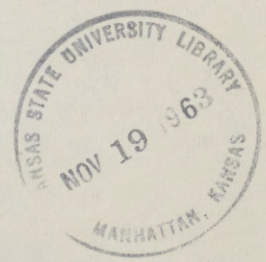
A BILL TO PROHIBIT TRADING IN IRISH POTATO
FUTURES ON COMMODITY EXCHANGES

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SEPTEMBER 30, 1963

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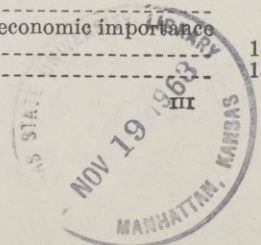
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IRISH POTATO FUTURES TRADING

MONDAY, SEPTEMBER 30, 1963

U.S. SENATE, SUBCOMMITTEE ON
AGRICULTURAL RESEARCH AND GENERAL LEGISLATION
OF THE COMMITTEE ON AGRICULTURE AND FORESTRY,
Washington, D.C.

The subcommittee met, pursuant to notice at 10 a.m., in room 324, Old Senate Office Building, Senator B. Everett Jordan, of North Carolina (chairman of the subcommittee) presiding.

Present: Senators Jordan of North Carolina, Young of North Dakota, and Walters.

Also present: Senator Muskie and Representative McIntire.

Senator JORDAN. The subcommittee will come to order.

Today's hearing is on S. 332, and the report from the Department of Agriculture will also be made a part of the record.

(S. 332 and the report are as follows:)

[S. 332, 88th Cong., 1st sess.]

A BILL To prohibit trading in Irish potato futures on commodity exchanges.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That (a) no contract for the sale of Irish potatoes for future delivery shall be made on or subject to the rules of any board of trade in the United States. The terms used in this Act shall have the same meaning as when used in the Commodity Exchange Act.

(b) Any person who shall violate the provisions of this section shall be deemed guilty of a misdemeanor and upon conviction thereof be fined not more than \$5,000.

DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, August 27, 1963.

Hon. ALLEN J. ELLENDER,
*Chairman, Committee on Agriculture and Forestry,
U. S. Senate, Washington, D.C.*

DEAR SENATOR ELLENDER: This is in reply to your request of August 9, 1963, for a report on S. 332, a bill to prohibit trading in Irish potato futures on commodity exchanges.

Activity in potato contracts on the Chicago Mercantile Exchange is of negligible proportions. Trading in potato futures on the New York Mercantile Exchange, practically all of it in Maine potatoes, has expanded and is of considerable volume.

The potato futures market on the New York Exchange appears to be sufficiently large and broad based to constitute a representative market. Value of potato contracts traded in futures markets in 1960-61 and 1961-62 was six to seven times the sales value of Maine potatoes. During the same seasons, value of futures trading averaged more than 10 times the value of actual sales for soybeans, 4 to 5 times for soybean oil and for oats, and 2 to 3 times for wheat, corn, and cottonseed oil.

Available data indicate that persons engaged in the financing, growing, and handling of the Maine potato crop make considerable use of the futures market. The bulk of use by growers and handlers appears to be hedging, but there also appears to be at times quite a volume of speculation.

The Department of Agriculture, several years ago, conducted a study of the economic importance of futures trading in potatoes. The study was coordinated with research done on potato futures trading at the Maine Agricultural Experiment Station. In a sample survey in Aroostook County, Maine, it was found that during the 1954-55 season 19 percent of the growers negotiated contracts on the exchange. But 60 percent of the growers with 80 or more acres used the exchange. Of all growers reporting the purpose of futures transactions, about 57 percent used the exchange for hedging, 28 percent to obtain short-term credit, and 14 percent for speculation. The particular season for which data were obtained followed a season of very low prices and may not be in all respects representative of uses in other seasons. However, growth in volume of trading and subsequent, less complete, surveys of trader positions indicate that the exchange is being used increasingly by those in the industry.

A survey by the Commodity Exchange Authority, as of the end of October 1962, showed that there were 1,563 traders in the potato futures market. Of this total, 436 traders were identified with the potato industry; 288 of these were classified as hedgers and held 2,010 carlots long and 5,077 carlots short, compared with 1,835 carlots long and 801 carlots short held by the 148 speculators. Traders identified as potato growers were more numerous than those in any other occupational classification in the potato industry. There was a total of 188 potato growers, of whom 40 were speculators and 148 were hedgers.

The exchange generally appears to perform satisfactorily in crystalizing market information and in disseminating futures price quotations which furnish a basis for cash trading. Expressions of many persons familiar with the Maine potato industry indicate that this might be done as well at country shipping points in spot bargaining between buyers and sellers. On the question of price, it is not clear that either longrun price changes or shortrun changes would be greatly altered if there were no trading in potato futures. But many of those engaged in growing and handling Maine potatoes feel that the exchange disrupts orderly marketing by encouraging growers to hold potatoes until late in the season, thus abandoning early season markets to other producing areas.

Last year the Maine Potato Council surveyed 3,200 potato growers and received replies from about 55 percent. Of those replying, about 90 percent were opposed to futures trading in potatoes. It might be expected that many growers having financial problems and not using and often not fully understanding the operations and functions of the futures market would be opposed. But the opposition vote indicates substantial objection among the growers; and the growers in Maine retain ownership of the bulk of potatoes until they are sold into distribution channels and consequently assume most of the price risk involved.

The Bureau of the Budget advises that there is no objection to the presentation of this report from the standpoint of the administration's program.

Sincerely yours,

ORVILLE L. FREEMAN, *Secretary.*

Senator JORDAN. We are glad to have Senator Muskie, who is the author of this bill, with us this morning on this side.

We will be glad to hear from you first.

And then, Mr. McIntire, we will be glad to hear from you next.

Senator Walters, we are mighty glad that you took the time to be with us this morning.

You may proceed, Senator.

STATEMENT OF HON. EDMUND S. MUSKIE, A U.S. SENATOR FROM THE STATE OF MAINE

Senator MUSKIE. Mr. Chairman, I appreciate the opportunity to testify here this morning. I am most appreciative to you and the subcommittee for arranging hearings on S. 332. I know how very busy you are, as are all of us here in the Congress, as we try to find

the time to apply ourselves to all of these problems that are before us.

I appreciate the fact, also, that at noon it is possible that this hearing may have to be ended, because of the floor situation. And so I would like to file my prepared statement, Mr. Chairman, in order to leave as much time as possible for these folks who are here from out of town.

Senator JORDAN. That will be perfectly agreeable. You can comment on it in any way you like.

(The prepared statement of Senator Muskie is as follows:)

Mr. Chairman, I appreciate this opportunity to testify in support of legislation which I have introduced to prohibit the trading of potato futures on commodity exchanges.

The U.S. Department of Agriculture has described the potato industry as an "important segment of the farm economy" that has "long been plagued by a serious economic problem," caused by "sharply fluctuating prices and income * * * and a relatively low average level of income." This accurate observation is reflected by the present economic plight of the potato industry in Maine.

During the course of my study of this problem, supplemented by discussions with agricultural economists, potato growers and dealers, I have come to the conclusion that, on balance, futures trading is exerting a detrimental effect on the Maine potato industry. Many agricultural experts are of the opinion that there is a relationship between increased price fluctuations that have developed in recent years and the expansion of futures trading, and that use of futures trading has tended to distort the orderly marketing of potatoes from Maine.

In testimony submitted to the House Agricultural Committee by Mr. Douglas Bagnell, Maine Potato Council consultant, it was statistically established that wholesale potato prices in Maine, over a 14-year period has fallen in comparison with comparable Idaho and Michigan prices. This does not imply that the sole factor in such a decline is the trading of futures. However, it seems certain that futures trading is one of the causes for the relative deterioration of Maine potato prices.

I want to make it very clear that I am not questioning the value of futures trading for storable commodities such as cotton and wheat, but, perishable crops such as potatoes are ill suited to the mechanics of futures trading. If the grower is dissatisfied with the established price there is a temptation to roll back the due date of the contract. This has a pronounced effect on the orderly marketing of the potato crop. Delayed marketing has resulted in spoilage and losses to the growers. These losses duplicate the past experience of futures trading in the onion industry. Elimination of onion futures trading 4 years ago is generally conceded to have had a beneficial effect on the industry. Experts in the field are convinced that the same results could be achieved in the Maine potato industry if futures trading is prohibited. The existence of a potato futures market has distorted the marketing situation. The futures market has, in effect, become a crutch for many growers and dealers. Too often, the grower hedges his potatoes on the exchange hoping to increase profits. In his desire to speculate, the grower often loses sight of the factors that make up an orderly production and marketing program. When this action of one individual grower is multiplied by the activities of thousands of growers, you create an unnatural situation which in many cases is not an accurate reflection of market conditions. Speculation more often than not results in losses for the grower who has envisioned increased profits through futures trading.

If we could be sure that every Maine potato farmer had the time and opportunity to obtain full and complete market information, the situation might be different. However, too often the grower is a victim of circumstances over which he either has no control or no source of accurate knowledge.

Maine potato farmers have lost confidence in futures trading. In a poll conducted in May 1962 by the Maine Potato Council, 90 percent of the 1,593 growers who expressed opinions cast their votes in opposition to continued futures trading. In addition to the growers, several important farm organizations including the American Farm Bureau Federation, the National Council of Farm Cooperatives, the National Potato Growers Association, and the United Fresh Fruit and Vegetable Association have expressed support of the bill.

I do not subscribe to the theory that the operators of the merchantile exchange are the "villains" in a conspiracy against the Maine potato industry. But the use of the exchange by Maine growers, dealers, and processors has, in effect, created a system of marketing which has not resulted in improved prices for Maine potatoes, and has contributed to a depressed market.

Finally, Mr. Chairman, I wish to call attention to a question which has been raised on the impact of termination of potato futures trading on farmers, dealers, brokers, and buyers of contracts. The bill, as written, would prohibit trading in potato futures. It contains not termination date. Some provision should be made for an orderly termination of such trading so as to protect those who, in good faith, have entered into future contracts on potatoes. I do not have appropriate language to present at this time, but I shall submit it to the committee as early as possible. I do want to make it clear that I consider this a real problem, which should not be overlooked.

Elimination of the mercantile would not in itself be a cure-all to the industry's problems. But, this action, combined with the development of a stable and orderly production and marketing program, would be a big step forward in the establishment of a healthy Maine potato industry.

Senator MUSKIE. I would like to say just these words as a preface to what is to be said here this morning.

The issue that is covered by S. 332 has been a controversial one in Aroostook County, our great potato-growing county in Maine, for a number of years.

There are people with very deeply held convictions on both sides of the issue.

This controversy came to a head last year when the growers of the county were polled relative to their position on it. As a result of that poll, they indicated overwhelmingly their support for this legislation which would eliminate trading in futures on Maine potatoes on the New York Mercantile Exchange.

I know you will hear both points of view expressed here very articulately and very forcefully, and with a deeply held sense of conviction on both sides.

I have the feeling that on balance—I am not, of course, a grower or in the potato industry—but I have a feeling that on balance the merits of the issue are on the side of this legislation and so I would urge the subcommittee's consideration of it, and I would urge that the subcommittee report it out as soon as it may be possible.

I would like to call attention to just one problem that is not covered by the legislation as written, and that is that if the legislation is enacted, we ought to identify a termination date which would have the least disruptive effect upon the exchange and upon the market.

I have not worked out the answer to that problem yet. Congressman McIntire may have some views on it which would be useful. I am sure as a man who has spent his life in the industry he is more knowledgeable in this respect than I am.

The companion bill to S. 332 in the House is Congressman McIntire's bill, H.R. 904, which has been reported out by the House committee by a rather substantial vote. And Congressman McIntire can perhaps tell us its present status in the legislative process on that side.

With that, Mr. Chairman, I would like to again express my appreciation to you for holding these hearings, and for the giving of your time to this very difficult problem which confronts these people from Maine, which has confronted them for many, many years now.

It is an issue that they would like to see resolved. The vote taken by the growers was taken over a year ago. I think that in the light

of the fact that they are on the threshold of another marketing season, that they ought to be given consideration, and the resolution of this issue should be made as soon as possible.

Thank you, Mr. Chairman.

Senator JORDAN. Thank you very much.

Senator, do you have any questions to ask Senator Muskie?

Senator WALTERS. No; none whatever.

Senator JORDAN. Mr. McIntire, we will be glad to hear from you at this time.

Your entire statement will be included in the record.

**STATEMENT OF HON. CLIFFORD G. McINTIRE, REPRESENTATIVE
IN CONGRESS FROM THE SECOND DISTRICT OF THE STATE OF
MAINE**

Mr. McINTIRE. Thank you, Mr. Chairman, and Senator Walters. I appreciate this opportunity.

I would like to make a comment or two, and ask unanimous consent that my statement be filed in the record.

Mr. Chairman, I would like to register my keen interest in S. 332 by saying that I have introduced companion legislation (H.R. 904) to the Congress, legislation which—on July 24—received an overwhelming endorsement of the House Committee on Agriculture through a 23 to 8 vote.

Also, with an interest in conserving the time of this committee, I would like, with the chairman's permission, to introduce a short statement to the record of these proceedings.

(The prepared statement follows:)

This legislation, S. 332, is designed to accomplish for Irish potatoes the same thing that was obtained for onions on August 28, 1958, through Public Law 85-839, the elimination of futures trading.

And I would like to point out that the factors which convinced the Congress that futures trading was detrimental to the best interests of the onion industry are essentially the same as those that are present in futures trading on Irish potatoes.

The unsuitability of the Irish potato for futures trading principally comes from its perishability, a condition which invites price sensitivity and speculation in the marketplace. And, as is indicated in House Report No. 765: "Potato growers point out that the use of the futures market by speculators and manipulators prompts erratic and convulsive price fluctuations which are totally unrelated to the supply-demand situation for potatoes. They point out that the futures market is, in effect, an adjunct market, one whose activity is premised on "ticker tape" trade rather than on economic forces operating in the potato marketplace."

Mr. Chairman, the potato producer has, over an extended period of time, been concerned about the degree of influence which mercantile exchange activities have exerted on the market price of the commodity he produces, an influence that has not been in the grower's best interests.

And it is not as though the potato grower is not, in the normal course of things, bothered by a host of other day-to-day problems, for as one who has some familiarity with potato farming, I can vouch for the many hazards that abound in the potato field and the potato marketplace.

Many of the problems confronting the potato farmer are beyond his control, for presently he does not have the ability to cope with the quirks of nature. The problems associated with futures trading are, however, ones that he can solve, providing, of course, he gets the necessary assistance from the Congress.

In a large sense, this issue resolves itself into being one of the interests of the potato farmer as contested with those who are engaged in the futures trading activity. And any objective analysis would dictate against assigning to the

futures trading activity an economic weight superior to that of the physical production and distribution of the potato commodity.

Mr. Chairman, there is evidence to show that the erratic price gyrations of the futures market have an unstabilizing effect on the potato market. In the light of this, futures trading in Irish potatoes should be eliminated.

In 1958, the Congress saw fit to enact legislation prohibiting futures trading in onions. In so doing, it gave tacit approval to an elimination of futures trading in potatoes for, from the standpoint of futures trading, onions and potatoes are, in effect, companion commodities.

And before I conclude my statement, Mr. Chairman, I would like to direct a brief comment to the opposition view contained in House Report 756, this view asserting that legislation prohibiting futures trading "does violence to the American free enterprise system."

Mr. Chairman, it is quite obvious that the type of legislation that is before this committee accomplishes just the opposite to this dissenting view, for it serves to remove an influence which, on a historical base, has proved to interfere with the freely operating forces of supply and demand in the potato marketplace.

Furthermore, I would also like to emphasize that there is no question on the constitutionality of the legislation that is before this committee, for on December 2, 1959, the law eliminating futures trading in onions successfully met the test of constitutionality in proceedings before the U.S. District Court, Northern District of Illinois, Eastern Division.

Mr. Chairman, it is quite obvious, then, that there is ample legal and practical precedents for the enactment of the legislation here before you, legislation designed to eliminate futures trading in Irish potatoes.

I will conclude my statement by saying that potato growers in Maine in particular and throughout the country in general are interested in having the Congress remove the undesirable influence of futures trading from the potato market scene. Then would there be a better chance for the grower's potato crop to go to market with a price established through the interaction of supply and demand forces in the marketplace—and not by the cold and unrelated device called a ticker tape.

Mr. Chairman, I deeply appreciate having the opportunity of presenting this statement to the proceedings of this committee.

This situation, as Senator Muskie has so well expressed, is a matter of very long and very deep interest as far as the potato growers in Maine are concerned.

Having been born and brought up in this potato production area, on a farm that I continue to live on, having been very active in the farming business and the marketing of my own crop, and having had all of this experience prior to the time that there was any futures trading activity, I can observe this situation from a period when there was no futures trading and compare this view with a period in which there has been very active futures trading.

On balance, I have felt that this legislation is sound, and the support of it has been very aptly expressed by the growers in the area.

As will be pointed out, I am sure—but just to emphasize the point at this time—while the Chicago Board of Trade has a contract through which it could trade on potatoes delivered from the State of Idaho—this contract has been opened for many years—there is virtually no trading on this contract.

The New York Mercantile has a contract on which it could take delivery from Long Island. This contract was developed in more recent years, and there is very little, if any, activity in that contract.

The only contract in which there is any activity as far as the potato industry is concerned is a contract which requires delivery of Maine potatoes.

This is the reason why the interest in this contract arrangement—a futures contract on Irish potatoes—centers in a Maine interest. To no place else in the United States does a potato grower, actively in-

terested in or having any basis upon which he could be actively interested in a contract, turn his attention, because the only contract that is engaged in to any degree is a contract requiring delivery from Maine.

I would also like to say to the committee that as a member of the House Committee on Agriculture, and also of a special subcommittee that was set up to study the futures trading in perishables, particularly onions and potatoes, that out of the work of this subcommittee, of which I was a member, with hearings having been held in Chicago and Washington and in Maine, the Congress passed legislation eliminating futures trading on onions. A precedent, then, for this legislation has been clearly established.

And the constitutionality of legislation of this type has been tested and upheld in the Federal courts.

So we are dealing here with a piece of legislation that has precedence and that has had its constitutionality established in the courts.

In further confirmation of Senator Muskie's observation, the bill which I introduced in the 88th Congress has had hearings before our House Committee on Agriculture. It was reported by that committee by a vote of 23 to 8.

The report on this bill, H.R. 904, has been filed. There were majority and minority views—two members of the committee signed the minority views.

That, then, is the status of this type of legislation on the House side.

May I express my deepest interest in the legislation before you, and my appreciation that you have set this legislation down for hearing?

I strongly urge your careful analysis of the bill, and I will hope for your favorable report.

Thank you, Mr. Chairman.

Senator JORDAN. Mr. McIntire, how long has it been since the Onion Exchange was closed?

Mr. McINTIRE. 1958, I think it was, that the law was passed.

Senator JORDAN. What has been the results of that? Or do you know—in the handling of onions?

Mr. McINTIRE. There has been the usual fluctuation in prices, as is true of perishable commodities.

But I have in my file statements from producers, and also the Onion Association president, in which they all seem very well satisfied with the steps which were taken, not wanting to see trading restored. This was a part of the hearing on the House side.

Senator JORDAN. Thank you.

Senator WALTERS. What percentage of the vote—I believe you said you had a poll of the farmers in the growing area—what percentage of the farmers were in favor of this legislation? Do you have that information?

Senator MUSKIE. May I suggest, Senator, that you have before you, I think, the departmental report, which shows the results of that poll.

Last year the Maine Potato Council surveyed 3,200 potato growers and received replies from about 55 percent of those polled. And of those replying, about 90 percent were opposed to futures trading in potatoes.

Senator WALTERS. That is the information I was seeking.

Thank you.

Senator JORDAN. Any other questions, Senator?

Senator WALTERS. No further questions.

Senator JORDAN. Thank you for being with us this morning.

Mr. Alex Caldwell, Administrator, Commodity Exchange Authority, U.S. Department of Agriculture.

Mr. Caldwell, we are glad to have you with us this morning. We would be glad to hear from you.

Do you have a written statement for the record?

STATEMENT OF ALEX C. CALDWELL, ADMINISTRATOR, AND RONALD C. CALLANDER, DIRECTOR, TRADING DIVISION, COMMODITY EXCHANGE AUTHORITY, U.S. DEPARTMENT OF AGRICULTURE

Mr. CALDWELL. Thank you, Mr. Chairman.

I am accompanied here this morning by Mr. Ronald C. Callander, who is Director of the Trading Division of the Commodity Exchange Authority. We are appearing here on behalf of the Department of Agriculture.

I have no formal statement to make. The Department's views have been stated in the Secretary's letter of August 27 to Senator Ellender.

My purpose here today is to answer any questions that the committee may have regarding those views.

Senator JORDAN. Senator Walters, have you had the opportunity to read this statement from the Secretary of Agriculture?

Senator WALTERS. No, sir; I have not. I have been out of town.

Senator JORDAN. I know you have—and, of course, you have not been here very long, either.

You have, I am sure, Senator Muskie.

Senator MUSKIE. Yes; I have known of the Department's position of course, as this legislation has proceeded.

Mr. Caldwell, when was it that the Department first took the position stated in the letter of August 27, do you recall?

Mr. CALDWELL. That was in the early part of 1963.

Senator MUSKIE. Prior to that time, the Department had a different position or no position?

Mr. CALDWELL. There was an identical bill introduced by Congressman McIntire in the previous Congress, and at that time the Department took a position in opposition to the bill.

Senator MUSKIE. So it has now changed its position, as indicated by the letter of August 27?

Mr. CALDWELL. Yes, sir.

Senator JORDAN. They have changed it now to no position.

Mr. CALDWELL. Yes, sir.

Senator JORDAN. They are not taking a position—is that correct?

Mr. CALDWELL. The Department takes the position that it is neither for nor against the bill.

Senator WALTERS. What was your previous position?

Mr. CALDWELL. The Department's previous position was in opposition to the bill.

Senator JORDAN. Mr. Caldwell, can you furnish us with any information as to the trend of onions since the close of the onion exchange?

There is some bearing between the two—both exchanges dealing in a specific commodity.

Mr. CALDWELL. I have no figures before me at the moment. But since futures trading in onions was discontinued, there have been three seasons of relatively low prices, and one season of fairly good prices for onions.

During the seasons of low prices, there were less fluctuations than ordinarily. That is to be expected. Whenever there are low prices there is less room for the price to move.

During the season of high prices, the fluctuations were comparable to those we had during the period of futures trading.

In essence, we see no real change in price movements since futures trading was discontinued.

Senator JORDAN. Did you have anything to add to that, Mr. Callander?

Mr. CALLANDER. Yes, sir; we have made studies in the Department on this question of onions. There is no discernible difference in price variability when there was futures trading and since it was prohibited.

I have a chart here—it is a very, very rough one—which shows what Mr. Caldwell—merely confirms what he says. We have had 3 years of substantially low prices, and 1 year, 1961–62, of a very substantial price rise, as the season progressed.

Senator JORDAN. And that has all occurred since the exchange was closed?

Mr. CALLANDER. Yes, sir.

The exchange was closed in 1958—November 5, 1959, actually it was closed, because that is when the injunction was lifted by the court.

Mr. CALDWELL. The bill was actually passed in 1958, as I recall, and they operated for about a year under an injunction.

Senator JORDAN. Senator, do you have any further questions?

Senator WALTERS. Do you have any information as to the variation of prices on potatoes from the Maine area?

Mr. CALDWELL. As compared with other areas, Senator?

Senator WALTERS. Yes.

Mr. CALDWELL. We have made some studies on that. The price variability of the Maine potatoes seems to be just about the same as the potatoes from other areas, or perhaps a little less.

Our study included potatoes in western New York, in the Idaho area, and in the Red River Valley area.

Senator JORDAN. And did they seem to follow pretty well along with the prices quoted on the exchange in their crops?

Mr. CALDWELL. Not with prices on the exchange. There is no futures trading to amount to anything in these particular potatoes. And they would not follow Maine prices.

I was speaking of the variability of cash prices.

Senator JORDAN. Senator Muskie, do you have any questions?

Senator MUSKIE. Well, I wondered in connection with that—page 74 of the House hearings there is printed what appears to be, and I think is, a document entitled “Comparative Range of Prices, Maine and Idaho.”

You have that before you, Mr. Caldwell.

I notice the first paragraph reads, "An examination of the average annual wholesale price movements of Maine 'mostly Katahdin' potatoes as compared to Idaho Russet Burbanks shows that Maine prices reflected greater changes relative to Idaho as futures trading increased in volume."

That is described as coming from the annual bulletins, "Fresh Fruit and Vegetable Prices," Agricultural Marketing Service, U.S. Department of Agriculture.

Mr. CALDWELL. The figures to which I was referring are in a document published by the CEA entitled "Futures Trading in the Marketing of Maine Potatoes, 1961-62."

Table 18 of this publication shows the variance in price of Maine potatoes, western New York potatoes, Idaho Russets, and potatoes from the Red River Valley.

As you can see in the percent columns, in 4 out of those 5 years, the percentage of change was less in the Maine than it was in the other three areas.

Senator MUSKIE. I think that the table that is in the House hearings differs from this one.

The one to which you refer covers the period 1957 to 1962, as I read it, which is 5 or 6 years.

Now, the thrust of the table which appears on page 74 of the House hearings is this—that in the 5 years just before futures trading reached a significant volume, Idaho prices showed an average annual change of 39 percent as compared with the previous year, and during that period, Maine enjoyed relatively more stable prices with a fluctuation rate of only 23 percent.

In the first 5 years of active futures trading, however, the situation reversed, with Idaho showing a slightly larger movement of 41 percent, but Maine's percentage rate of fluctuation more than doubled to reach 52 percent.

And then in the last 5 years shown, which is roughly the period to which your chart relates, both areas reflected less violent annual average price movements. Idaho dropped from 41 to 33 percent, while Maine dropped from 52 to 32 percent. Still a more volatile market, both actually and relatively, than Idaho.

I guess that covers a total of about 15 years.

Senator JORDAN. Yes, 15 years—three 5-year periods.

Senator MUSKIE. So over the long range, there seems to be a relationship between futures trading and the relative activity of the two markets. But short range, over the 5-year period to which your chart refers, you suggest there is a lesser range.

Mr. CALDWELL. That would be my interpretation of the figures, Senator.

Senator JORDAN. I am going to order that this report here on page 74 of the House hearings—that is, the "Comparative Range of Prices, Maine and Idaho"—from that beginning down through the chart, where it says, "Source: Annual bulletins" be included in the record at this point.

(The excerpt from the House committee hearings follows:)

COMPARATIVE RANGE OF PRICES, MAINE AND IDAHO

An examination of the average annual wholesale price movements of Maine "mostly Katahdin" potatoes as compared to Idaho Russet Burbanks shows that Maine prices reflected greater changes relative to Idaho as futures trading increased in volume.

In the 5 years just before futures trading reached a significant volume, Idaho prices showed an average annual change of 39 percent as compared with the previous year. During that period Maine enjoyed relatively more stable prices, with a fluctuation rate of only 23 percent.

In the first 5 years of active futures trading the situation reversed, with Idaho showing a slightly larger percentage of movement of 41 percent, but Maine's percentage rate of fluctuation more than doubling to reach 52 percent.

In the last 5 years shown (1957-61) both areas reflected less violent annual average price movements. Idaho dropped from 41 to 23 percent while Maine dropped from 52 to 33 percent, still a much more volatile market, both actually and relatively, than Idaho.

Comparison of changes in average annual wholesale prices Idaho Russet and Maine Katahdins

[Dollars per hundredweight]

Year	Idaho			Maine		
	Average prices	Change from previous year	Percent change	Average prices	Change from previous year	Percent change
1947	\$2.84			\$2.50		
1948	4.43	\$1.59	56	3.06	\$0.56	22
1949	3.07	-1.36	31	2.50	-.56	18
1950	2.03	-1.04	34	1.91	-.59	24
1951	2.77	.74	36	2.42	.51	26
5-year average			39			23
1952	4.62	1.85	66	3.65	1.23	50
1953	3.99	-.63	32	1.49	-2.16	60
1954	1.96	-2.03	38	1.23	-.26	17
1955	3.10	1.14	58	2.65	1.42	117
1956	2.77	-.33	11	2.17	-.48	18
5-year average			41			52
1957	2.23	-.54	19	1.60	-.57	27
1958	2.56	.33	15	2.14	.54	33
1959	2.66	.10	4	1.80	-.34	16
1960	3.93	1.27	47	2.57	.77	42
1961	2.60	-1.33	33	1.35	-1.22	47
5-year average			24			33

Source: Annual bulletins "Fresh Fruit and Vegetable Prices," Agricultural Marketing Service, USDA.

Senator JORDAN. And I think it would be well, also, to include that one page which you have there of the last 5 years, Mr. Caldwell.

Mr. CALDWELL. I don't have a copy of that with me.

Senator JORDAN. Could you submit that for the record?

Mr. CALDWELL. Yes, sir.

(The table referred to follows:)

TABLE 18.—Potatoes: Annual average midpoint of weekly price range, average of weekly price range, and range as percent of midpoint, typical grade, 4 fall areas, marketing seasons, 1957-58—1961-62

Season	Maine ¹			Western New York ²			Idaho Russets ³			Red River Valley ⁴		
	Midpoint of range	Range	Range as percent of midpoint	Midp int of range	Range	Range as percent of midpoint	Midpoint of range	Range	Range as percent of midpoint	Midpoint of range	Range	Range as percent of midpoint
1957-58	Dollars per hundred-weight 2.30	0.33	Percent 14.3	Dollars per hundred-weight 2.64	0.35	Percent 13.2	Dollars per hundred-weight 2.83	0.32	Percent 11.3	Dollars per hundred-weight 2.81	0.30	Percent 10.7
1958-59	2.38	.38	16.0	2.52	.42	16.7	2.72	.39	14.3	1.43	.26	18.2
1959-60	2.56	.22	8.6	2.88	.46	16.0	2.78	.32	11.5	2.11	.24	11.4
1960-61	1.57	.13	8.3	2.32	.48	20.7	3.58	.32	9.1	1.85	.26	14.1
1961-62	1.17	.18	15.4	1.49	.33	22.1	2.18	.37	17.0	1.67	.26	15.6

¹ U.S. No. 1, size A, 2 1/4 inches to 4 inches, except "Chef's," unwashed, various varieties, mostly Katahdins, plain paper 50's (price doubled to convert to hundred weight), f.o.b. central Aroostook County points, table stocks; in 1961-62 to Jan. 2, 1962, 2 inches to 4 inches, mostly 2 1/4 inches to 4 inches.

² U.S. No. 1, size A, some or mostly washed, various varieties, mostly Katahdins, 50-pound paper sacks (price doubled to convert to hundred weight), f.o.b. western New York shipping points and/or delivered sales, less all transportation charges.

³ U.S. No. 1, size A, mostly 2-inch minimum diameter or 4-ounce minimum weight, 100-pound sacks, 20 to 30 percent 10 ounces and larger, Idaho potatoes, sales f.o.b. shipping point, delivered sales shipping point basis.

⁴ U.S. No. 1, size A, 2-inch minimum, washed, graded, 100-pound sacks, Pontiacs in 1957-58—1959-60, and Round Reds in 1960-61—1961-62, Red River Valley potatoes, f.o.b. shipping point, or f.o.b. delivered shipping point basis.

Source: USDA, AMS, Federal-State Market News Service, Presque Isle, Maine, Rochester, N. Y., Idaho Falls, Idaho, and East Grand Forks, Minn., annual summaries on potatoes.

Senator JORDAN. Is there any other pertinent information you would like to supply?

Senator MUSKIE. I think it might be useful, Mr. Chairman, if that report were made an exhibit in the hearings. It is a useful report, "Futures Trading in the Market for Maine Potatoes."

Senator JORDAN. That is satisfactory to me but let's refer to this page which you indicated there.

Mr. CALDWELL. Fine, we will have that prepared. And there is one later report prepared as of the end of October of last year that might be of use to you.

Senator JORDAN. I would like to have that, also, if it gives us any information, throws any light on this subject—we would like to include it right along behind this one.

Mr. CALDWELL. Yes, sir.

Senator MUSKIE. May I ask one or two more questions, Mr. Chairman?

Now, as I understand it, Maine potatoes are the only potatoes in the country subject to futures trading; is that correct?

Mr. CALDWELL. You might say that, Senator. There is a contract on Chicago Mercantile Exchange for Red River Valley potatoes, and a contract for Idaho potatoes, and a contract on the New York Mercantile Exchange for Long Island potatoes, but all of these contracts are relatively inactive.

Senator MUSKIE. Is trading on the Maine futures market indulged in by people other than Maine growers or Maine people, or representatives of the Maine industry? Is the market used by others throughout the country? Is it used in Idaho, for example, for hedging purposes? Is it used by New York growers for hedging purposes? Is it used for growers outside of Maine for hedging purposes?

Mr. CALDWELL. For hedging purposes, it is used primarily by growers within the State of Maine and others who are involved in one way or another in the handling of Maine potatoes.

I am speaking of shippers, merchandisers, processors, people of that nature.

On table 10, page 20, of this report entitled "Trading in Maine Potato Futures, June–December 1962," there is a breakdown of the people in the potato industry who were using the market as of the end of October 1962; that is potato growers, potato shippers and warehouses, potato receivers, merchants and jobbers, grocery and chainstore organizations, and potato processors.

At that particular time, there were open contracts for about 8,700 cars. Of that total, the groups in the potato industry to which I referred held a total of 3,800 cars on the long side, and 5,800 cars on the short side.

Senator MUSKIE. Do these tables indicate the breakdown by geographical area of those that used the market?

Mr. CALDWELL. Yes, sir. Table 9 of that same report gives a breakdown by geographical areas. Of that same total open commitment of 8,700 cars, as of the end of October 1962, Maine traders held long positions totaling 1,500 cars, and short positions totaling 4,800 cars.

Senator MUSKIE. I would like to suggest, Mr. Chairman, these tables be printed in the record.

The point is that these tables, as I understand it, indicate that the trading in futures on Maine potatoes is indulged in all over the country; that it is used not simply for the purpose of providing a useful device for Maine potato growers to hedge, or to otherwise protect their position. But it is used countrywide, as I understand it from the House hearings and elsewhere, one, by both growers in other parts of the country, to hedge their own crop; and second, by speculators, or investors, however you may wish to describe them, all over the country.

(The charts referred to follow:)

TABLE 10.—Maine potato futures—Occupational distribution of traders, by number and class of trader, New York Mercantile Exchange, Oct. 26, 1962¹

[Positions in carlots]

Occupational group	Speculators			Hedgers			Total		
	Number of traders	Positions		Number of traders	Positions		Number of traders	Positions	
		Long	Short		Long	Short		Long	Short
POTATO INDUSTRY									
Potato growers ²	40	228	64	148	156	560	188	384	624
Potato shippers and warehouses.....	40	450	148	91	1,059	4,177	131	1,509	4,325
Potato receivers, merchants, and jobbers.....	54	1,069	503	41	455	238	95	1,524	741
Grocery and chainstore organizations.....	9	12	40	2	0	34	11	12	74
Potato processors.....	5	76	46	6	340	68	11	416	114
Subtotal.....	148	1,835	801	288	2,010	5,077	436	3,845	5,878
NONINDUSTRY									
Farmers (other than potato growers).....	51	252	102	0	0	0	51	252	102
Brokerage firms and employees.....	29	471	338	0	0	0	29	471	338
Floor traders and professional speculators.....	33	784	528	0	0	0	33	784	528
Employees of potato shippers, receivers, and processors, and others in the potato trade.....	11	66	11	0	0	0	11	66	11
Manufacturers, merchandisers, and wholesalers (other than in potatoes), capitalists, financiers, and bankers.....	211	928	532	0	0	0	211	928	532
Retailers.....	63	272	152	2	5	2	65	277	154
Sales managers, purchasing agents, and administrative personnel.....	85	456	184	0	0	0	85	456	184
Manufacturers' agents, and salesmen.....	80	330	136	0	0	0	80	330	136
Clerical employees, craftsmen, and service workers.....	90	297	108	0	0	0	90	297	108
Physicians, lawyers, teachers, engineers, contractors, and other professional occupations.....	241	499	475	0	0	0	241	499	475
Housewives.....	62	250	54	0	0	0	62	250	54
Retired.....	127	297	190	0	0	0	127	297	190
Other.....	42	45	35	0	0	0	42	45	35
Subtotal.....	1,125	4,947	2,845	2	5	2	1,127	4,952	2,847
Total.....	1,273	6,782	3,646	290	2,015	5,079	1,563	8,797	8,725

¹ Some positions as of Oct. 31, 1962.

² Grower classification does not include grower-shippers who are here classified as shippers.

TABLE 9.—Maine potato futures: Distribution of traders and open contracts by geographic areas, New York Mercantile Exchange, Oct. 26, 1962¹

[Positions in carlots]

State, division, and country	Speculators			Hedgers			Total		
	Number of traders	Positions		Number of traders	Positions		Number of traders	Positions	
		Long	Short		Long	Short		Long	Short
Maine.....	78	439	112	191	1,091	4,690	269	1,530	4,802
New Hampshire.....	3	0	12	1	15	0	4	15	12
Vermont.....	2	5	1	0	0	0	2	5	1
Massachusetts.....	45	126	54	9	50	12	54	176	66
Rhode Island.....	4	42	41	1	10	0	5	52	41
Connecticut.....	46	169	169	0	0	0	46	169	169
New York (excluding New York City).....	91	521	245	20	126	33	111	647	278
New York City.....	204	1,602	1,100	8	261	206	212	1,953	1,306
New Jersey.....	54	342	143	9	43	5	63	385	143
Pennsylvania.....	97	350	193	14	152	5	111	472	198
North Atlantic.....	624	3,656	2,070	253	1,748	4,946	877	5,404	7,016
Ohio.....	38	28	63	1	25	0	39	53	63
Indiana.....	9	46	12	0	0	0	9	46	12
Illinois.....	58	1,173	435	1	11	6	59	1,184	435
Michigan.....	29	141	51	4	0	36	33	141	87
Wisconsin.....	15	155	79	0	0	0	15	155	79
East North Central.....	149	1,543	640	6	36	36	155	1,579	676
Minnesota.....	6	22	5	2	9	0	8	31	5
Iowa.....	2	2	3	0	0	0	2	2	3
Missouri.....	7	23	38	0	0	0	7	23	38
North Dakota.....	2	1	1	0	0	0	2	1	1
South Dakota.....	1	2	0	0	0	0	1	2	0
Nebraska.....	3	1	2	0	0	0	3	1	2
Kansas.....	3	6	0	0	0	0	3	6	0
West North Central.....	24	57	49	2	9	0	26	66	49
Delaware.....	4	8	4	0	0	0	4	8	4
Maryland.....	8	28	0	1	2	0	9	30	0
District of Columbia.....	4	3	3	0	0	0	4	3	3
Virginia.....	12	21	18	2	8	15	14	29	33
West Virginia.....	1	10	0	0	0	0	1	10	0
North Carolina.....	18	135	139	1	16	0	19	145	139
South Carolina.....	4	9	3	0	0	0	4	9	3
Georgia.....	8	32	26	1	10	0	9	42	26
Florida.....	40	322	32	8	83	0	48	405	32
South Atlantic.....	99	568	225	13	113	15	112	681	240
Kentucky.....	1	1	0	0	0	0	1	0	0
Tennessee.....	7	22	18	0	0	0	7	22	18
Alabama.....	4	64	7	0	0	0	4	64	7
Mississippi.....	2	7	0	0	0	0	2	7	0
Oklahoma.....	5	1	8	1	5	0	6	6	8
Texas.....	19	61	16	0	0	0	19	61	16
South Central.....	38	156	49	1	5	0	39	161	49
Montana.....	3	9	0	0	0	0	3	9	0
Idaho.....	16	168	69	4	37	5	20	205	74
Wyoming.....	1	0	1	0	0	0	1	0	1
Colorado.....	7	5	13	0	0	0	7	5	13
New Mexico.....	1	0	1	0	0	0	1	0	1
Arizona.....	10	29	11	0	0	0	10	29	11
Nevada.....	1	0	7	0	0	0	1	0	7
Utah.....	6	26	17	0	0	0	6	26	17
Washington.....	20	106	69	0	0	0	20	106	69
Oregon.....	14	41	72	0	0	0	14	41	72
California.....	193	182	304	1	4	0	194	186	304
Western.....	272	566	564	5	41	5	277	607	569
Hawaii.....	4	6	7	0	0	0	4	6	7
Puerto Rico.....	1	0	1	0	0	0	1	0	1
Total.....	5	6	8	0	0	0	5	6	8
Canada.....	58	214	41	10	63	77	68	277	118
Lebanon.....	1	10	0	0	0	0	1	10	0
Mexico.....	2	2	0	0	0	0	2	2	0
Switzerland.....	1	4	0	0	0	0	1	4	0
Total.....	62	230	41	10	63	77	72	293	118
Grand total.....	1,273	6,782	3,646	290	2,015	5,079	1,563	8,797	8,725

¹ Some positions as of Oct. 31, 1962.

Mr. CALDWELL. There is very little hedging by potato growers outside of the State of Maine. There is a little, but not much.

There is in this market, as in every futures market, a substantial amount of speculation. You really have to have speculation to make a market function.

Hedgers' trades don't offset each other. Hedgers are usually predominantly on the short side of the market.

You need somebody to take the opposite side of these transactions. That is the role of the speculator in any futures market.

Senator JORDAN. Isn't it a fact that a commodity market of any description has a tendency to acquaint the buying public with the price at any time he wants to secure that price? For instance, the Chicago Board of Trade on wheat or corn or oats, whatever it is—you know what it is at any hour of the day.

Mr. CALDWELL. That is one of the primary uses of the futures market, Senator, to disseminate information about price, so people will know at all times just what the price is on that particular exchange.

Senator JORDAN. Senator?

Senator WALTERS. I was going to ask a question—why would it be necessary to maintain a futures market in Maine and none of the other areas of the United States on the future of potatoes?

Mr. CALDWELL. I cannot answer the question as to why the other areas have never had an active market, Senator.

A few years back there was some activity in the Long Island contract and there was some activity in the other two, but it has pretty well died out now.

Senator WALTERS. Well, it would look like on the surface that Maine would be maintaining a market for some other section of the country.

Mr. CALDWELL. Well, the Maine market, of course, is for Maine potatoes, and would not seriously affect markets in other areas.

Senator WALTERS. Well, as Senator Muskie pointed out, they could use it for hedging purposes.

Mr. CALDWELL. The Maine people can use it for hedging purposes.

Senator WALTERS. So could anybody else.

Mr. CALDWELL. Not very well, Senator, because the difference in price relationships—people who grow potatoes in California, for example, could not use the Maine market for hedging.

Senator JORDAN. They might call for the delivery of the potatoes, and then they would be in bad shape with a lot of potatoes they could not eat.

Mr. CALDWELL. They might. And then, too, the California market is somewhat different from the Maine market. Prices don't necessarily follow each other.

Mr. CALLANDER. It is very typical in futures markets, not only in potatoes, but in all other commodities in which there is trading, for them to trade in the commodity which is deliverable. In other words, in a commodity such as cotton—they would not try to hedge low grades of cotton. I don't believe that they try to hedge feed wheat in the Chicago Board of Trade.

So the tendency would be for the Maine people to hedge Maine potatoes, because they have them on hand to deliver if they have to deliver them.

Senator MUSKIE. What proportion of the potatoes, Maine potatoes, which are traded on the market are actually delivered?

Mr. CALDWELL. A very small proportion. That is true of any futures contract, Senator. Overall, I would say not more than 1 percent of the contracts on any futures market are settled by delivery.

Senator MUSKIE. Would you explain the relationship between this fact and the statement you made earlier—that hedging in Maine potatoes is not useful to growers in other parts of the country because of the possibility they may have to deliver?

If that small a percentage is actually delivered, what is the relationship between hedging and delivery?

Mr. CALDWELL. There is always the possibility of having to deliver. Most hedgers try to get out of their futures position before the delivery month. The real purpose of hedging is to hedge until you have disposed of your cash commodity, and then cover your position in the futures market. But any hedger has to be in a position where he can deliver if he has to.

Senator JORDAN. And the purchaser can call for delivery if he demands it?

Mr. CALDWELL. Yes, sir.

Senator JORDAN. You have to deliver on it?

Mr. CALDWELL. Yes, sir.

Senator JORDAN. Or you would lose your exchange seat, or whatever you want to call it.

Mr. CALDWELL. There is a default penalty for failure to deliver or failure to receive delivery.

Senator MUSKIE. I just picked out of the House hearing two statements by people from other parts of the country. We have a statement here by Mr. Sidney Reese, of Idaho, and another one from Mr. Anthony Zambito, from New York, both involved in the potato industry in their States, opposing this bill.

Now, I am interested in knowing why these gentlemen find the trading in Maine potato futures so important to them that they would take the time to come down to Washington to oppose a bill that involves not their potato industry, not their potatoes, but potatoes in Maine.

What is it that they derive in the way of benefit from trading in Maine potatoes that makes this legislation so important to them that they go out of their way to oppose it?

Mr. CALDWELL. Where are these people located?

Senator MUSKIE. Well, here is a gentleman from American Falls, Idaho. He is manager of the fresh sales department of Lamb-Weston, Inc.

Reading from his testimony, he says:

We handle 1,500,000 hundredweight sacks of potatoes which we process into french fried, dehydrated flakes, and fresh baking potatoes.

Mr. Zambito is from Elba, N.Y. He describes himself as a partner with his four brothers in a muckland potato and onion growing and shipping operation.

"We ship our own and buy and ship other potatoes."

Mr. CALDWELL. Well, I really could not say why the gentleman from Idaho is particularly interested in this. I can see more of a reason why the gentleman from New York would be, because New York

and Maine serve roughly the same market. Their general market is the eastern section of the United States. So the price relationships between New York potatoes and Maine potatoes are somewhat comparable.

Senator MUSKIE. Is there any reason why trading in potatoes futures should be available with respect to Maine potatoes, but not with respect to New York potatoes?

Mr. CALDWELL. I don't really see any distinction. It seems to me you could trade in Idaho potato futures, just the same as you could Maine potatoes. I don't think there is anything peculiar to the Maine situation that sets it apart.

Senator MUSKIE. Well, it would seem to me as a layman, if that is true, and if two of these three areas which are comparable have not found sufficient merit in the proposition to adopt it, two areas which I think have had a better market and profit experience with their potatoes, then perhaps their decision has been wiser over the years than Maine's decision.

Mr. CALDWELL. As I say, I really don't know why they have not. Perhaps they have been wiser, perhaps not.

I am not in a position to judge.

Senator JORDAN. Well, why was there ever an exchange started in the first place on the Maine potatoes? Who started it?

Mr. CALDWELL. It was started by the New York Mercantile Exchange back in, I think, 1941. Just what demand there was from the industry at that time to start trading in Maine potatoes, I do not recall. That was before my tenure of duty with the Department of Agriculture.

Senator JORDAN. Somebody had to create a demand for it, or else there would not have been one.

Mr. CALDWELL. There would have to be a demand.

Now, where that demand came from, I just do not know.

Senator JORDAN. Senator Young—you got here a little bit late. We are delighted you did get here. This is an important subject.

Senator YOUNG. Yes; I did come in a little bit late.

This is a question in which the potato growers of the Red River Valley, in both Minnesota and North Dakota, are quite divided on. I think they are about 50-50 on this, half for and half against.

I have been interested in the testimony on it. I have not taken a position on it myself yet.

Senator JORDAN. Are there any questions you would like to ask Mr. Caldwell?

Senator YOUNG. No; I don't think so.

Senator JORDAN. Senator?

Senator WALTERS. No.

Senator JORDAN. Senator Muskie, any further questions?

Do you have anything else further to supply for the record?

Mr. CALDWELL. No, sir.

We appreciate the opportunity of appearing before the committee.

Senator JORDAN. We appreciate your being here.

If you will furnish us those reports that you have we will have them as exhibits in the record, so that they will be available for the subcommittee to study this whole issue.

We appreciate it very much.

Mr. CALDWELL. Thank you, sir.

Senator JORDAN. I believe we would like to hear Mr. Bryant next.

Mr. Bryant, we are glad to have you with us, sir.

Have a seat.

State your full name and position.

STATEMENT OF HAROLD E. BRYANT, EXECUTIVE VICE PRESIDENT, MAINE POTATO COUNCIL, PRESQUE ISLE, MAINE

Mr. BRYANT. My name is Harold E. Bryant. I am executive vice president of the Maine Potato Council, which is a trade association of potato growers—all of the potato growers in Maine are members.

Also, I am consultant to the commission that handles the State advertising fund, advertising Maine potatoes.

I have a prepared statement which has been distributed. But I would like to, in the interest of saving time, speak from notes, and not cover it exactly as written, but get the main points.

Senator JORDAN. Would you like to have your statement put in the record?

Mr. BRYANT. Yes, we would like to have this statement put in the record.

Senator JORDAN. We will include that in the record, and let your remarks follow right after that.

(The prepared statement of Mr. Bryant follows:)

My name is Harold E. Bryant. I am executive vice president of the Maine Potato Council and consultant to the Maine Potato Commission. The council is a trade association having as its members all growers in the State of Maine and serves as spokesman for potato growers on industry problems and programs. The commission is a State commission charged with the responsibility of spending funds raised for advertising and research by growers by means of a self-imposed State tax. The consultant to the commission is similar to that of a manager.

Twelve years ago I was general manager of Maine Potato Growers, Inc., which organization at that time sold and shipped approximately 20 percent of all the potatoes being shipped out of the State of Maine. Shortly after that date I left Maine to work on the west coast handling all types of fresh fruits and vegetables. In March of 1962 I returned to Maine to serve in the dual capacity mentioned above.

On returning to Maine I could not help but be impressed with the marked change that had taken place in the marketing and, more particularly, in the pricing of potatoes. In the former period our potato market for a perishable commodity was comparatively stable. It normally didn't change more often than once a day and in many cases might hold to the same general price level for 1 or 2 weeks. At that time if a chainstore buyer wanted to obtain a price on a block of 20 or 25 cars to hold good for 2 or 3 weeks most any shipper could furnish him with such a price.

On returning I found that conditions have changed entirely and that the cash prices of Maine potatoes are definitely affected and, to a certain degree, are tied to the prices quoted for futures on the New York Mercantile Exchange. I soon found that these prices fluctuate from day to day, from hour to hour, and even at times from minute to minute. The net result is confusion and chaos as far as the cash market is concerned. If the relationship between the cash market and the futures market remained constant, it wouldn't be as serious as it is now when the relationship between the two may vary greatly, thus making it at times impossible to translate the cash market into a true hedge in the futures market. I found among all growers of the State a widespread opposition to futures trading.

In checking the council records, I found that between 1957 and 1962 several polls had been conducted by the council and other organizations to obtain growers' opinions with reference to the value of futures trading. On every poll returns average approximately 50 percent of the growers in the State and on

every poll at least 90 percent of the growers indicated that they opposed futures trading of their commodity. In watching the day-to-day operations and talking with growers, I soon realized that they sincerely believed, in my opinion with ample justification, that too often brokers, shippers, and sales agencies, whose avowed purpose was to try to obtain the best price possible for the growers' potatoes, were engaged in the practice of selling short on the futures market. As a result in many cases these same sales agencies talked prices down and, as has been pointed out in publications by the mercantile exchange, failed to support the market because it was to their interests to see to it that the market declined. For a grower whose success or failure rests on receiving a fair price, the thought that many of the people who were supposed to be working for him in selling his potatoes were trying to pull the market down was a bitter pill.

Again in checking the records I found that in 1958 a bill had been introduced into Congress to prohibit the trading of Maine potatoes on the New York Mercantile Exchange. However, officers and leaders of the mercantile finally persuaded leaders of the council and others influential in the industry that elimination was not the answer but rather correction in the form of new rules and regulations. Some new rules and regulations were adopted but the unsatisfactory influence of the mercantile on the price of Maine potatoes continued and the conviction on the part of growers that they could have a satisfactory marketing program only by elimination of futures trading continued to grow.

This feeling grew until in March of 1962 the council appointed a committee whose responsibility it was to try to persuade the Congress that our industry should be relieved of this burden. The first thing the committee did was to conduct another poll of growers. This time they did what may appear to be undemocratic, but which they felt was necessary and practical. They asked the growers to sign the ballot and give their address. The ballot contained two questions: Do you favor the elimination of futures trading? Yes or No. The other one: If necessary in order to accomplish this, are you willing to support State legislation to voluntarily tax growers 1 cent a barrel (165 pounds to a barrel) for the next 3 years in order to raise funds with which to present our case to Congress to attain this end? This ballot was sent out to 2,560 potato growers. Returns were received from 1,637 growers, representing a little over 64 percent returned. This, by the standards of any poll, is a tremendous return. Of the 1,637 ballots returned, 1,443 voted for elimination of futures trading and 117 for continuation. Thus 92 percent asked and signed their name to a ballot requesting that futures trading be eliminated. At the House hearing on a similar bill we submitted for the confidential use of the committee, which naturally would apply to this committee, the complete list of the names and addresses of the growers voting and how they voted. In addition to this, 84 percent of those voting stated that they were willing to tax themselves in order to obtain relief from the effects of futures trading.

We submit to you that this constitutes one of the strongest mandates that has ever come to our attention. This poll is backed up not only by the leadership of the potato industry in the State of Maine but, as will be brought out later, by the agricultural leadership of the country.

Obviously, based on the polls, growers are opposed to futures trading. Our committee, together with a consultant, attempted to find out if, from an economic standpoint, growers were justified in their position. We compared the relative position of Maine to that of Idaho and Michigan, two States that have comparable marketing and harvesting periods, over a 15-year period, 5 years before futures trading attained any importance in Maine, and then 10 years after futures trading became heavy. This study revealed that in comparing price relationships for the two periods that Maine's position declined compared to the other States to the extent of \$15 million a year, over the 10-year period for a total of \$150 million. We would like to introduce into the records a series of exhibits showing how this comparative decline was arrived at, together with explanations of the exhibits. These exhibits will be explained in more detail by later testimony.

Representatives of the mercantile exchange extoll the virtue of the exchange as a hedging operation for growers. It is true that occasionally an individual grower may be able to hedge successfully. However, there is a great fallacy to the idea that the futures market can be used for hedging for any substantial portion of the crop. I have a tabulation here showing the stocks held by growers and dealers on March 1, 1959, to 1962 as compared to the total short open contracts reported as hedging on these dates. These figures show that as of March 1, 1962, the 8 Eastern States had storage stocks of 53,340 carlots and the total open contracts were 6,355 carlots, indicating that 11.9 percent of the March 1

stocks could have been hedged. If an attempt had been made to hedge even 50 percent of the March 1 stocks, which, of course, had been greatly reduced since harvest, it would have been necessary to have short hedging contracts of more than 26,000 carlots instead of just 6,000. If the farmers had followed the advice to hedge at about the time of planting we might assume that they would want to sell about one-half or more of the total anticipated production, which would mean short futures contracts of some 67,000 carlots. If the volume of business in open contracts on the New York Mercantile Exchange was expanded to anything remotely approaching the figures necessary for such generalized hedging that market would unquestionably be in an utterly chaotic condition. Anyone who knows futures trading knows that the price would fall under such pressure and that price gyrations would be completely uncontrollable with some 10 or 20 times as many doctors, housewives, retired persons, and so forth churning around in the market.

We find again on the matter of hedging great stress has been placed on the value of hedging to processors. Out of six processing concerns operating in Maine, we find only one concern using the futures market to any degree at all. Recently we have been in contact with four processors who account for at least 80 percent of the potato processing in Aroostook County. All four told us they do not use futures at all in connection with their business. These are highly competent and successful people. They have seen the futures market in operation and no doubt have had its uses and benefits extolled to them many times. Despite all this they apparently prefer to devote their talents to the processing of potatoes rather than throwing much of their energy toward outguessing the futures market.

When hearings were being conducted on a former bill to prohibit futures trading in 1958 we were warned that processing could not develop without futures trading. We would point out that processing has been developed to the greatest extent in the State of Idaho where trading of futures is not practiced.

One of the claims made by opponents of this bill is that growers do not understand futures trading and that their lack of understanding is the reason for their opposing futures trading. May we point out to this committee that we have on record letters from the leading sales agencies handling over 50 percent of the Maine potato crop protesting the futures trading of Maine potatoes. These people have been forced by necessity to trade thousands upon thousands of cars on the New York Mercantile Exchange and they know all of the tricks of the trade, yet they are still opposed to futures trading.

Also I would like to call to your attention a list of organizations, regional, area, and national, who are supporting us in our desire to have potatoes eliminated from future trading. For the record I submit this list consisting of 34 regional, National, and State organizations. It is interesting to note that all four of the big farm organizations are supporting our position. Surely these organizations understand the situation and know whereof they speak. Our Maine State Legislature unanimously passed a memorial asking this Congress to grant relief to the potato industry. The Secretary of Agriculture has expressed no opposition to this bill. Certainly if they felt this was vital to potato growers they would so indicate.

As consultant to the Maine Potato Commission it is my job to direct the State of Maine potato merchandising program. If our advertising and merchandising programs are to be effective we must have orderly marketing. To improve our merchandising program we have nine marketing specialists who are traveling in the terminal markets throughout the season promoting the sale of Maine potatoes. The work of these men and the work of the Maine Potato Commission is being very nearly nullified because of the violent fluctuations in the market as a result of futures trading. When these marketing specialists submit their reports time after time they will report buyers as saying "I can't use Maine potatoes because the market fluctuates so much that it is important for me to develop a merchandising program." They will point out that many times they are unable to get a quotation from Maine at any price because growers and shippers are so afraid of a violent market swing that they do not dare to give a firm quotation. In one particular instance a chain buyer reported to one of our marketing specialists that he wanted to conduct a merchandising program over a 2-week period. Yet he was unable to get anyone in the State of Maine to quote him a firm price to hold for the 2-week period so that he, in turn, would be able to advertise a definite retail price. He was so frustrated at this situation that he turned to another State to obtain his supply of potatoes.

At the House hearing I made this statement and some of the people testifying in favor of the mercantile stated that this was incorrect. Under questioning by

Members of Congress one of the opponents of this legislation admitted that this condition was true and that he himself at times was in a similar position.

Those people who understand the actual marketing of Maine potatoes realize that to attain any degree of success we must have orderly marketing. I would like to submit for the record a copy of the front page of our September house organ, the Potato Councillor. You will note that we headline the fact that the potato commission is developing a new dynamic merchandising program for this coming season. You will also note a plea for orderly marketing of the crop by one of our leading growers. We are going to attempt both of these projects, but the operations of the New York Mercantile Exchange will definitely hurt and make it difficult for either project to succeed.

Another damaging effect that the mercantile has on our industry has been stated by the president of the Maine Potato Council, Art Thompson, himself a young, capable farmer, who states that the mercantile exchange and its violent fluctuations keeps potato growers generally so confused, mixed up, and demands so much of their attention, that they are unable to give proper attention and support to improve marketing programs such as the two programs illustrated on the first page of our house organ.

Members of the committee, our growers have to be free to develop better producing and merchandising programs. The Maine potato situation is desperate. Last year 1 credit agency alone had 105 growers quit operations. In a few cases the growers were forced by the agency to discontinue, but in most cases the growers quit voluntarily and walked off their farms because they were so discouraged.

A representative of one of the governmental credit agencies who has covered the major agricultural producing areas of the United States recently reported that in his opinion conditions in the potato industry in Maine were the most depressed of anywhere in the country.

Winthrop C. Libby, dean of the College of Agriculture of the University of Maine, stated in a public meeting recently, "The total debt of our potato farmers is estimated at \$60 million, which averages out to \$400 per acre for every acre of potatoes produced. We face widespread liquidation among our farmers."

Now, members of the New York Mercantile Exchange and proponents of futures trading will admit that the industry is in desperate shape and then go on to say that growers are making a scapegoat out of the exchange and blaming all of their problems to futures trading. This is not correct. We in the industry realize that there are many things wrong. Many things that have to be corrected by growers, by suppliers, marketers and allied industries, and to that point I would like to submit for the record a flyer depicting a new program just started 2 weeks ago by the Maine Potato Council, known as Operation Bootstrap. This is a self-help program of, as it states here, a proud industry who is fighting back. We are enlisting the support of businessmen, financial leaders, public agencies, as well as the growers themselves. Outlined on the various bags of potatoes being carried up the hill are 11 points that we believe necessary to correct the financial problems of this industry. I will not elaborate on them other than to point out that we have not included in this list the elimination of futures trading on the New York Mercantile Exchange, the reason being that this is a self-help program that we are attempting to do ourselves, but relief from futures trading on the New York Mercantile Exchange can be had only by an act of Congress. Gentlemen, we ask your support to attain this along with the other 11 points that we ourselves are going to carry out. Incidentally, this program has been endorsed by business leaders throughout the area, the Governor of our State, our congressional delegation, and many other outstanding leaders as an outstanding example of an industry trying to help itself. Will you also help us by relieving us from the speculation of potatoes in the futures market?

To show you just how damaging futures trading is to successful marketing, may I submit for the records a statement made in the September issue of the New England Grocery Merchandiser magazine by Malcolm McCabe, secretary of the Massachusetts Retail Grocers Association. In discussing a number of the Maine potato problems, including varietal problems and others, he had this to say concerning futures trading: "Another problem is the crap-shooting futures market which trades only in Maine potatoes. The result is that in place of steady flow at fair prices you always have a gang of the boys holding back for the high dollar and then trying to unload." He goes on to say, "Look, fellows, all we want is finely sized, washed, high-quality potatoes in neat consumer packages during the entire marketing season." This man, a highly respected individual in the grocery field, obviously feels that it is impossible to obtain satisfactory marketing conditions with this highly speculative element of futures trading.

In conclusion, we ask you to analyze who wants this legislation and who doesn't. Obviously the legislation is of importance primarily to Maine people and people trading in Maine potatoes.

Now, listing those people who favor this bill and do not want futures trading. Obviously our survey shows that 90 percent of the potato growers in Maine are asking for this legislation and want to be freed of futures trading. By a memorial our State legislature and Governor have respectfully requested passage of this legislation. Only one processor out of six uses the mercantile, so obviously the others do not care particularly. The fruit and vegetable trade, as represented by wholesalers and jobbers, clearly are opposed to futures trading as evidenced by letters we have introduced into the records and as evidenced by the stand taken in favor of elimination by the United Fresh Fruit & Vegetable Association, the national trade association representing the entire fruit and vegetable association. It is obvious from Mr. McCabe's statement and the reports of our marketing specialists that retailers are violently opposed to this futures trading program.

Now, then, who does want futures trading? We can name only one major group, other than the exchange itself, and that is the brokers and traders in Maine and New York. We don't blame them for wanting continuation of futures trading. We have estimated that they will average between \$2 and \$4 million a year in brokerage and fees. Naturally no one wants to give up a lucrative plum such as this. However, when you consider the fact that this activity is affecting 2,500 farmers in Maine and costing these farmers \$15 million a year, we submit to you that both justice and economics will be served best by the passage of S. 332.

EXHIBIT I. LIST OF ORGANIZATIONS WHO HAVE SUBMITTED LETTERS, STATEMENTS,
OR ARE TESTIFYING IN OPPOSITION TO FUTURES TRADING OF MAINE POTATOES

NATIONAL ORGANIZATIONS

American Farm Bureau Federation.
The National Grange.
The National Council of Farmers' Cooperatives.
Farmers' Union.
The National Potato Council.
The United Fresh Fruit & Vegetable Association.

OTHER POTATO ASSOCIATIONS AND GROWERS FROM OTHER AREAS

Massachusetts Potato Growers Association.
The Empire State Potato Club, Inc., of New York State.
R. C. Boelter Potato Co., East Grand Forks, Minn.
Clyde K. Eshelman & Sons, Lancaster County, Pa.
Sam Pugh & Son, Muncie, Ind.
Matuszko Farms, Inc., North Amherst, Mass.
Elias Etheridge & Son, Norfolk, Va.
North Carolina Potato Association.

ONION GROWERS

Paul D. Jones, Inc., Hollandale, Minn.
Howard P. Dunlap, Marshall, Mich.
Dyk Bros. Co., Grant, Mich.
Hank Peterson Farms, Moorhead, Minn.
W. E. McGillivray, Inc., Stockton, Calif.
Veril Baldwin & Sons, Stockbridge, Mich.
W. J. Piowaty, Fort Pierce, Fla.
J. R. Rose, former secretary of the National Onion Association.
Ike Griffin, Holder & Thomas, Rocky Ford, Colo.
Robert DeBruyn, Zeeland, Mich.

OTHER VEGETABLE GROUPS

New York State Vegetable Growers' Association
Florida Fruit & Vegetable Association
Berwick Vegetable Cooperative, Berwick, Pa.
Pennsylvania Vegetable Growers' Association

TERMINAL MARKET RECEIVERS WHO HAVE PROTESTED VIGOROUSLY FUTURES TRADING

Wm. J. McCormick, Philadelphia, Pa.
 F. H. Vahlsing, New York City
 M. F. O'Connell, Fargo Potato Co., Boston, Mass. (Procurement agency of potatoes for Stop & Shop)
 Schley Bros., Baltimore, Md..
 Smiling Jim Potato Co., Philadelphia, Pa.
 A. C. Hazlett, director of procurement, P. & C. Stores, Inc., Syracuse, N.Y.

[From Potato Councillor, September 1963]

PROJECT SELMOR TO PROMOTE MAINE POTATOES—NEW AND AGGRESSIVE APPROACH WILL BEGIN IN MID-JANUARY

PRESQUE ISLE.—The Maine Potato Commission has voted to give complete support to "Project Selmor," a dramatic new proposal and program for marketing State of Maine potatoes, according to an announcement recently by Joseph R. LaPointe of Van Buren, chairman of the commission.

The recommendations were submitted to the Maine Potato Commission by Harold E. Bryant, consultant to the commission in collaboration with Charles F. Hutchinson, Inc., Boston advertising and public relations agency, recently appointed to handle the Maine potato account.

NEW APPROACH

"Project Selmor" is an all-inclusive promotion embracing all levels of the potato industry and represents a new approach in produce promotion, designed to make Maine's potato marketing more progressive and more competitive.

It is scheduled to begin in mid-January and continue for a 3-month period in all major markets. The program will stress the use of blue, white, and red Maine potato trademarks.

One of the features of the new 1963-64 program will be a display contest for all retailers with two prizes of the 1964 Chevrolet Corvair, and five prizes of lightweight GE portable television sets, going to those retailers, or storeowners who submit photographs of displays which show the most originality, sales appeal and sales promotion techniques. All displays entered must contain potatoes with the blue, white, and red trademark on the package.

In order to assure maximum retailer participation, duplicate prizes will be awarded to chain headquarters, distributors, or wholesalers servicing the winning retail outlets.

FOUR CARS, TEN TV SETS

A total of 4 Corvairs and 10 television sets will be awarded to the grocery trade in "Project Selmor."

A second all-important aspect of "Project Selmor" will be a consumer sweep-stake which will run simultaneously with the retail display contest. Consumers, through point-of-sale, in-store promotion material and advertising will be invited to enter their names for prizes, the winners to be drawn at random at the end of the promotion. Each entry must be accompanied by the word "Maine," taken from the blue, white, and red package or trademark. There is no limit to the number of entries a person may submit. The prizes, consisting of 4 Chevrolet Corvairs and 10 lightweight television sets are restricted 1 to a family.

Commenting on the upcoming marketing program, Mr. Bryant said, "The enthusiastic endorsement of the Maine Potato Commission of "Project Selmor" represents a new step forward in the aggressive and competitive program the commission is developing to improve our products and build our industry. The entire food industry will realize that the Maine potato industry means business as a result of this new, creative marketing approach."

ORDERLY MARKETING GOALS

PRESQUE ISLE.—Owen H. Smith, chairman of the Maine Potato Council orderly marketing committee, announced during a meeting here the 1963-64 goal for orderly marketing of Maine potatoes.

Growers of the 1962-63 season who participated in the orderly marketing program through various local groups were reported satisfied with results of the season's marketing. Smith emphasized "Two Maine advantages" of orderly marketing. The grower, if he follows the goal by months, is assured an average

price for his crop, Smith pointed out. He added: "We can have a healthy potato market only if the Maine potato industry is considered a reliable source of supply by buyers in terminal markets. Shippers and brokers are unable to become a source of supply unless growers are willing to market their potatoes in an orderly manner."

SUPPLY DRIES UP

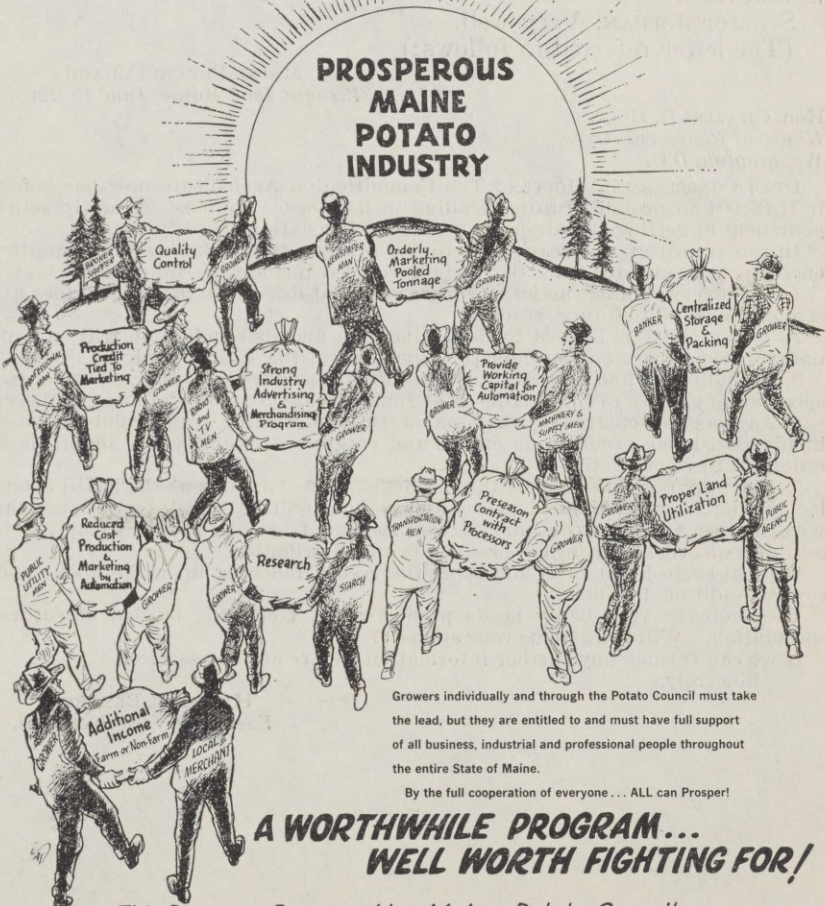
Smith said that one complaint in terminal markets is that many times during the year chain and wholesalers are using Maine potatoes when all at once they cannot get Maines. When this happens, he said, these buyers go to another area to get their supplies and once buying in another area it is extremely difficult to have them use Maines again. Through orderly marketing of Maine potatoes this could be avoided, it was stressed.

The committee recommended that the growers watch shipments carefully and "if the goals are not being reached it would be to their advantage to move more potatoes under any given month."

Goals for 1963-64 were listed as follows: October, November, 10 percent; December, 10 percent; January, 10 percent; February, 15 percent; March, 18 percent; April, 13 percent; May, 10 percent; June, July, 9 percent.

OPERATION BOOTSTRAP

A PROUD INDUSTRY FIGHTS BACK



Growers individually and through the Potato Council must take the lead, but they are entitled to and must have full support of all business, industrial and professional people throughout the entire State of Maine.

By the full cooperation of everyone... ALL can Prosper!

**A WORTHWHILE PROGRAM...
WELL WORTH FIGHTING FOR!**

This Program Proposed by Maine Potato Council-

[Excerpt from New England Grocery Merchandiser, September 1963]

McCABE'S SPOT SHOTS

(By Malcolm McCabe, secretary, Massachusetts Retail Grocers Association)

Maine potatoes.—Maine potato growers are among the smartest growers in the country when it comes to raising potatoes, but they are lousy marketers and are missing the boat entirely because they have their noses in the dirt and their brains in the deep freeze. Sure they have problems. They had to get out of Green Mountains and Cobblers because of a disease factor and turn to Katahdin varieties. They look good and grow like the dickens, but simply don't measure up to the former varieties and competing varieties in taste. Another problem is the crap-shooting futures market which trades only in Maine potatoes. The result is that in place of steady flow at fair prices you always have a gang of the boys holding back for the high dollar and then trying to unload. Look fellows, all we want is finely sized, washed, high-quality potatoes in neat consumer packages during the entire marketing season. This way you will have a chance to compete with the lower freight rates down below you in this region. Get those centralized packing houses "a'crackin'" now.

Mr. BRYANT. I would like to also introduce into the record a copy of a letter sent to all of the members of the House committee following the testimony there, which analyzes the various points brought out at that time.

Senator JORDAN. Very well.

(The letter referred to follows:)

MAINE POTATO COUNCIL,
Presque Isle, Maine, June 19, 1963.

HON. CHARLES B. HOEVEN,
*House of Representatives,
Washington, D.C.*

DEAR CONGRESSMAN HOEVEN: The Committee on Agriculture now has before it H.R. 904 to prohibit futures trading in potatoes. We most earnestly solicit your help in getting this desperately needed legislation speedily enacted.

In the record of the hearings before the Domestic Marketing Subcommittee on April 8, 9, and 10, 1963, the facts developed include the following:

1. The overwhelming majority of growers and dealers in actual potatoes are strongly opposed to futures trading.
2. This activity is limited to the Maine area and its elimination will have no unfavorable impact on the industry anywhere in the United States.
3. Actual prices and unwarranted price gyrations have been affected by futures speculation greatly to the detriment of rank-and-file growers and merchandisers.
4. As was demonstrated when onion futures trading was prohibited such highly perishable products as onions and potatoes are simply not adaptable to orderly futures marketing.
5. The only possible relief is through legislation. As long as the board exists, its speculatively determined prices and rumors will be broadcast through the wire houses and will continue to confuse and frustrate those attempting to establish an orderly pattern of production and distribution.

We are enclosing a brief digest of the record touching upon the above and several additional points.

The industry very badly needs prompt relief from this burden of futures speculation. Will you give us your support?

If we can furnish any further information we are at your service.

Sincerely,

HAROLD E. BRYANT,
Executive Vice President.

NUMBER AND ANALYSIS OF ORGANIZATIONS, INDIVIDUALS AND FIRMS TESTIFYING OR FILING STATEMENTS IN THE HEARINGS ON H.R. 904

*Favoring H.R. 904**Opposing H.R. 904*

1. Poll conducted by Maine Potato Council in May 1962

For—1,443

Against—117

2. Farm and marketing organizations presenting testimony

National Council of Farm Co-ops (Tr. 82). New York Merchantile Exchange (Tr. 153).

National Potato Council (Tr. 83).

American Farm Bureau Federation (Tr. 86).

Maine Potato Council (Tr. 7).

For—4.

Against—1.

3. Farm and marketing organizations filing statements

Pomona Grange No. 17 (Tr. 6).

Massachusetts Potato Growers Association (Tr. 18).

Berwick (Pa.) Vegetable Co-op (Tr. 20).

Pennsylvania Vegetable Growers Association (Tr. 20).

Empire State Potato Club (Tr. 21).

Florida Fruit & Vegetable Association (Tr. 23).

Rocky Mountain Farmer's Union (Tr. 61).

United Fresh Fruit & Vegetable Association (Tr. 152).

Limestone-Caswell Potato Growers Association (Tr. 6).

For—9.

Against—0.

4. Individuals presenting testimony

Hon. Clifford McIntire (Tr. 11-5).

Harold E. Bryant (Tr. 6-23).

Arthur Thompson (Tr. 24-35).

Hershel Smith (Tr. 35-54).

Robert De Bruyn (Tr. 54-59).

Douglas Bagnell (Tr. 61-82).

Kenneth D. Naden (Tr. 82-83).

A. E. Mercker (Tr. 83-86).

John C. Datt (Tr. 86-88).

Smith McIntire (Tr. 89-91).

Arling C. Hazlett (Tr. 91-93).

For—11.

John L. Baxter, Jr. (Tr. 93-104).

Thomas J. Findlen (Tr. 104-128).

Sidney Reese (Tr. 129-130).

J. F. Donald (Tr. 131-134).

Anthony Zumbito (Tr. 135-140).

Jack Roth (Tr. 140-144).

C. L. Brown (Tr. 144-150).

Seth Bradstreet (Tr. 150-151).

George McCluskey (Tr. 151-152).

Llewellyn Watts (Tr. 153-183).

Against—10.

5. Statements filed by persons directly engaged in the production, marketing, or processing of potatoes

For—96.

Against—64.

In tabulating the number of statements only names which actually appear on the statements were counted. For example on page 6 of the transcript is a statement that 102 members of the Limestone-Caswell Potato Growers Association favor elimination of futures. This communication is treated as only one statement. It would not be possible for us to determine the number of individuals represented in the case of the several organizations set forth in these tabulations or the degree of unanimity of opinion of the members.

6. Statements filed by persons connected with the onion industry

For—6.

Against—1.

Total number indicating views for or against H.R. 904

For—1,569.

Against—193.

The tremendous preponderance of favorable opinion is, of course, most pointedly brought out by the May 1962 poll. Of equal significance, however, is the number and character of farm and marketing organizations presenting strong favorable views both through testimony and the filing of statements.

 HEARINGS ON H.R. 904 TO PROHIBIT FUTURES TRADING IN POTATOES APRIL 8, 9, AND 10, 1963

(Published as "Serial G" Domestic Marketing Subcommittee, House Committee on Agriculture)

Nine principal points developed by those favoring enactment, together with record citations of some of the testimony, statements, and exhibits presented for and against this legislation and discussion of the evidence, from proponents' point of view:

Point 1.—An overwhelming majority of growers and dealers in actual potatoes are strongly opposed to futures trading and urge its immediate elimination.

Evidence favorable to H.R. 904

USDA report, "substantial objection (to futures) among the growers" (Tr. 2). Poll of May 1962. Ballots sent to 2,560 active growers: 1,637 or 64 percent replied; 1,443 or 90 percent of those replying favored elimination; 117 favored continuation of futures (Tr. 10). Earlier polls in 1957 and 1961 showed about the same returns though not quite as pronounced as in 1962 (Tr. 8, 62). List of names and addresses in files of Marketing Subcommittee (Tr. 10).

Evidence opposed to H.R. 904

Opponents of futures "few but persistent" (Tr. 179). "Weighted opinion ballots" (Tr. 179).

Discussion

A return of 64 percent of ballots sent out is unusually high, and the 90 percent of these expressing urgent desire to get rid of futures speculation is most significant.

The reference to "weighted opinion ballots" might well be applied in reverse. Those polled were warned of the danger of a long, hard, and expensive battle and, most significant of all, were challenged as to their willingness to submit to an additional tax of 1 cent per barrel to finance the effort. About 83 percent indicated they were ready to do so.

There can be no reasonable doubt of the feeling of the rank-and-file people in the industry. As expressed by one witness "why in a democracy such as ours must it continue to exist?" (Tr. 92). Democratic system is to let growers decide (Tr. 182).

Point 2.—Futures trading in potatoes is limited to Maine. About 85 percent of the producing areas in the United States do not use futures. Elimination of futures will have no unfavorable impact on any area.

Evidence favorable to H.R. 904

Table of geographic distribution of traders (Tr. 27, 28). More than 80 percent of processing in Maine does not involve use of futures (Tr. 28). Neither the Idaho contract or the Long Island used or needed by the industry (Tr. 32, 85). Processing has grown fastest where there is no futures trading (Tr. 90).

Evidence opposed to H.R. 904

Some do not use futures because of lack of understanding (Tr. 96). Chicago brokerage firm handles large volume of futures hedging outside of Maine (Tr. 103). Idaho processor in business 2 years hedged 19 cars in 1962 and if it worked expected to try 100 to 150 cars next year. (Tr. 129, 130).

Discussion

The implication that a significant volume of hedging occurs in the Chicago area is in conflict with the CEA figures which show four hedgers in Illinois (Tr. 27). The experimental processor-hedger from Idaho does not indicate the results of his 19-car testing of the market. The Maine growers have tried to attain understanding for quite a long time but seem unable to become sufficiently enlightened to reap anything but loss and frustration from the board.

Point 3. Maine's situation as regards both actual price and price stability has deteriorated in relation to competitive areas as futures activity has increased in Maine potatoes. Expressed in terms of money value the price deterioration amounts to about \$15 million per year for the 10 years 1951-52 to 1960-61. Growers in the 85 percent of the country where there is no use of futures trading have consistently fared better than those in Maine and the Maine growers' position has progressively worsened as futures speculation has tightened its hold on that market.

Evidence favorable to H.R. 904

"Maine had the Mercantile and very low prices. The other States had no Mercantile and good prices, as well as a surplus" (Tr. 5, 6.). Prices of actual potatoes in Maine declined in relation to other areas and price fluctuations increased in relation to other areas as futures trading volume grew in the 10-year period 1951 to 1960 (Tr. 65 to 69).

Evidence opposed to H.R. 904

The comparison with other areas is incorrect. If the comparison was with the same variety grown in Maine it would show that the prices were not that radically apart (Tr. 141, 142).

Discussion

The point of figures presented on this subject is not the fact that Idaho Russets may be expected to bring a higher price than Maine Katahdins. The point is the change in this relationship from 88 percent before futures trading took hold to 69 percent in the current years of heavy futures activity. It would be rank conjecture to contend that all of this decline in Maine's competitive position is due to futures, but there is every reason to believe that the board played a very important part in it. No other significant reason has been found or advanced.

Point 4. Perishable products such as potatoes and onions are not adaptable to constructive and orderly futures trading.

Evidence favorable to H.R. 904

Perishability causes price volatility which attracts, and is exaggerated by, reckless speculation (Tr. 17, 44, 73). Purchasers afraid to take delivery of perishable products (Tr. 38, 56). Onions and potatoes not suitable for futures trading (Tr. 87). Volatility as compared to storable products (Tr. 78). Onion market stabilized and greatly improved since futures eliminated (Tr. 45, 46, 47, 48, 57). Legislation required to get relief from futures burden (Tr. 57, 58). Not compatible with orderly marketing (Tr. 50).

Evidence opposed to H.R. 904

The 1962 onion market demonstrated that eliminating futures was a mistake. Many growers formerly opposed to futures would welcome its return. Government regulations destroying our individual liberties (Tr. 136 to 139).

Discussion

The opinions of such responsible and well-informed persons as Robert De Bruyn, F. H. Vahlsing and others of their type throw the great preponderance of evidence to the conclusion that Congress acted most wisely in prohibiting futures trading in onions, and that the onion market has greatly benefited.

Point 5. The potato futures market is used only to a negligible extent for hedging and much of this is done in a manner damaging to the price structure and to the average grower.

Evidence favorable to H.R. 904

Attempts to hedge often give poor results (Tr. 24 to 26). Eighty percent of potatoes processed in Maine without any use of futures (Tr. 28). Market could not absorb a fraction of the volume if all farmers tried to sell when the price was right (Tr. 36, 37, 50). So-called hedging often used to depress prices (Tr. 38, 39, 14). Hedgers "avoid supporting the price" (Tr. 41, 48). All other producing areas get along well without attempts to hedge (Tr. 27, 28, 65, 69). Ample financing available without futures (Tr. 29, 30).

Evidence opposed to H.R. 904

Hedging is an integral part of the operations of one Maine processor (Tr. 95). Farmers can fix price at any time (Tr. 102). Mechanics of a hedge in potatoes involve forcing down price of raw materials (Tr. 103). Gives the farmer reasonable price guarantee if commonsense judgment are used (Tr. 105, 140, 141). Bank finances hedges at times profitably. Good for customers. Need educational program (Tr. 131). Hedging has little influence with this bank one way or the other (Tr. 132). Bank handles very few, not more than half a dozen production loans (Tr. 133). Loans made on financial standing of borrower (Tr. 134). Farmers would not have extreme difficulty in financing otherwise (Tr. 132).

Discussion

It would appear that a very small number have been able to get any real benefit from hedging and that even this has been to the detriment of a much greater number. The suggestion that all growers could assure a profit by selling at the right time seems completely refuted as was the contention that obtaining justifiable credit would be difficult.

Point 6. Futures trading causes confusion, disorder and price gyrations.

Evidence favorable to H.R. 904

Wide price swings in short periods of time (Tr. 7, 71, 72, 83, 84). Longer term price movements greater with futures than without (Tr. 74, 75). Causes price movements not justified by supply and demand (Tr. 88).

Evidence favorable to H.R. 904

Overproduction, not futures, causes price gyrations (Tr. 104).

Discussion

It is of course true that changes in production are reflected in changes in price from one year to another. Only speculation however can account for such radical movements as 40 cents in one trading session or 15 cents in a few minutes.

Point 7. The potato futures market is often completely dominated and controlled by speculative interests.

Evidence favorable to H.R. 904

Occupational distribution of traders (Tr. 39). Rumors and manipulation (Tr. 38, 39). Speculators take control (Tr. 18, 19, 20, 21).

Evidence opposed to H.R. 904

Speculation is essential ingredient in any market (Tr. 103).

Discussion

While speculation must be present in a futures market the type of speculation attracted to potatoes, as was the case in onions, results in destroying the stability of the market.

Point 8. Growers are demoralized and confused by the antics of the futures market, causes failure to make constructive efforts to solve other problems.

Evidence favorable to H.R. 904

Many quitting the effort, 1,400 dropped away in 7 years (Tr. 10, 30). "What's the use" attitude (Tr. 30, 52).

Evidence opposed to H.R. 904

The growers need to be educated in proper use of the futures market (Tr. 96, 105, 131). Misunderstanding by producers (Tr. 180).

Discussion

After more than 12 years of exposure to "education" offered by the supporters of futures trading it seems unlikely that the Maine potato industry will realize its purported benefits in time to prevent complete bankruptcy.

Point 9. Legislation as was the case in onions is the only remedy. Those burdened with this activity cannot simply ignore it.

Evidence favorable to H.R. 904

Prices are "keyed to the Board" (Tr. 31, 35, 36). Forced to use as a matter of self-protection (Tr. 84, 85). Forced to buy a seat on the onion exchange (Tr. 57, 58). Changes in rules have accomplished nothing (Tr. 26).

Evidence opposed to H.R. 904

More changes will be made (Tr. 94, 108, 171). CEA is effective police force against manipulation (Tr. 135, 169).

Discussion

Any changes or new rules that would actually curb the undesirable speculative activities would of themselves kill the market. Changes have been talked about and some have been made for 6 or 8 years. None of these has materially improved the market or made it any more palatable to the grower. The CEA has diligently policed this market with all the authority permitted by the law. It has issued some 15 or more special reports, surveys and complaints, but the basic volatility of potatoes makes all efforts to achieve lasting stability unsuccessful. The necessarily slow process of investigation, prosecution, and appeals to the courts simply cannot keep up with the reckless type of speculative activity which existed in onions and still exists in potatoes.

Senator JORDAN. You mean those were after the hearings there?

Mr. BRYANT. Yes. And they constitute an analysis made by our staff of the points which we considered important, having been brought out in the House hearing.

Senator JORDAN. You may proceed, sir.

Mr. BRYANT. I had the experience, up until 1950, of being general manager of Maine Potato Growers, Inc., which handled about 20 per cent of all the potatoes shipped out of Maine.

For the past 10 years I have been on the west coast, handling all other types of fruits and vegetables.

Last March, or March of 1962, I returned to Maine to take up the post I mentioned before.

On my return, I found there had been a very substantial change in the marketing of Maine potatoes, particularly in the matter of pricing.

Formerly, prices for a perishable commodity, the Maine potato prices, remained fairly constant. They did not change for the most part more than once a day. Quite often you would have prices that would hold for a week or 2 weeks.

I found on returning that our pricing was pretty much tied to the mercantile exchange and the trading on the exchange, and that it has a tendency to fluctuate from hour to hour and minute to minute.

This makes for a very difficult situation in marketing.

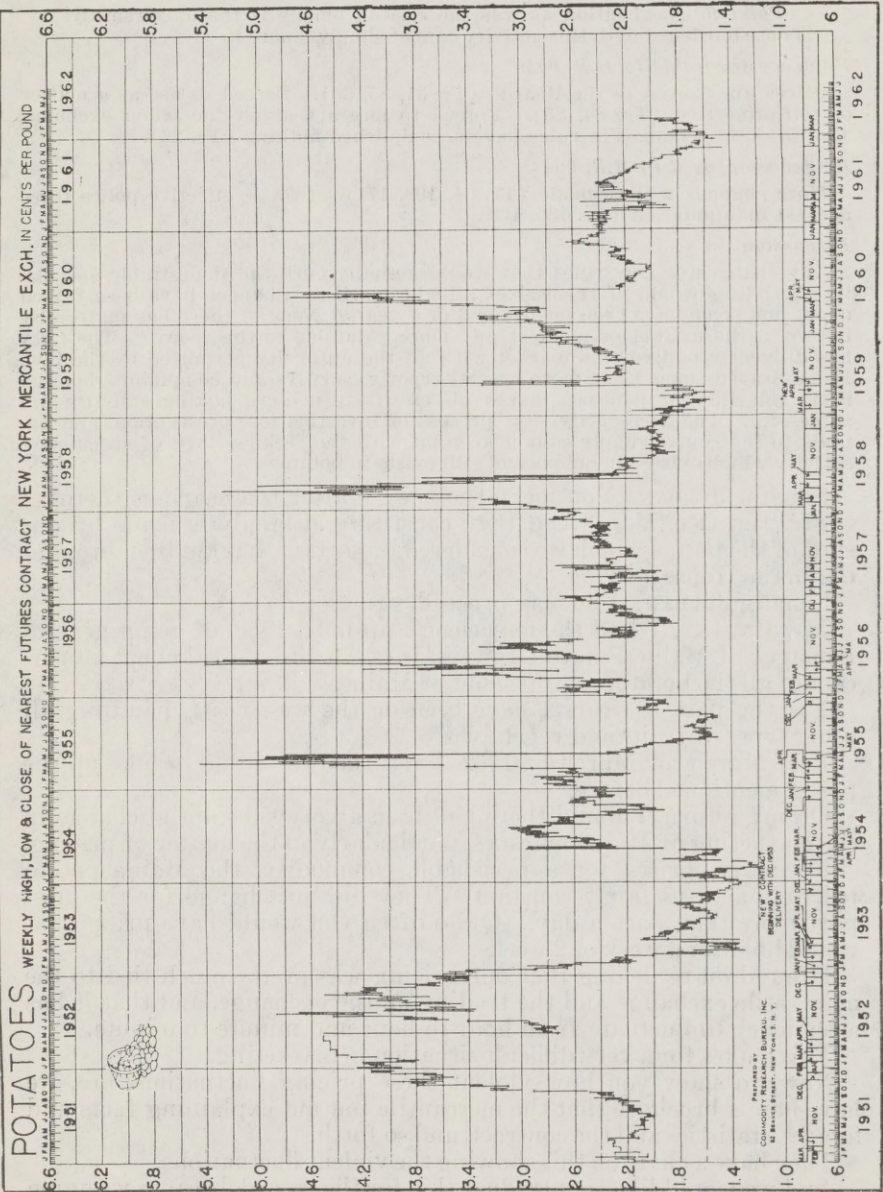
Now, to show you how violent these pricing fluctuations are, we have here a brochure that the mercantile put out explaining facts and figures, statistics and the contract, and so forth.

They have a chart on this showing the violent fluctuations.

And we would like to introduce this for the record, because we agree with the point brought out there.

Senator JORDAN. That will be included in the record.

(The chart referred to follows:)



Mr. BRYANT. Now, when I returned, I found that the growers were very much opposed to futures trading. They had been opposed since 1957. And since that time there have been any number of polls taken, and practically every time we got about 50-percent return, and about every time approximately 90 percent of the growers were opposed to futures trading.

In 1958, a bill similar to this one was introduced into the Congress.

However, the leaders of the mercantile exchange apparently got together with the leaders of the council and the potato industry, and they decided that maybe the contract was wrong, or rules and regulations, and rather than elimination they could change the regulations—which they did.

But we have noticed no substantial change in the erratic movement of prices.

And, as a result, growers have continued to be in opposition to this futures trading.

In May of 1962, we formed a committee in the council whose responsibility it was to try to get legislation passed to stop trading in Maine potatoes on the futures market.

The first thing the committee did was to conduct a poll in which they asked the growers, not only to vote but to sign their name and address.

We polled 2,560 growers. We had returns from 1,637, or 64 percent.

Of that amount, 1,443, or 92 percent, voted in favor of elimination; 117 voted for continuation.

Now, in addition to asking a question whether they favored continuation of trading or not, we also asked if they would be willing to support State legislation to impose a tax of 1 cent a barrel to be carried on for 3 years to raise funds with which to carry on this presentation and try to accomplish this legislation.

Eighty-four percent voted to tax themselves—and you don't very often get growers, or anybody, willing to tax themselves.

So it is obvious that growers are and have been opposed to futures trading.

Now, when our committee started investigating this matter, we tried to determine if growers were justified, from an economic standpoint, in their position. And to do this, we compared, over three 5-year periods, the prices of Maine potatoes with that to Idaho and Michigan.

Now, this revealed that Maine's position had declined to the extent of \$15 million a year for the past 10 years.

Senator JORDAN. Is that on a bushel basis?

Mr. BRYANT. Yes, that is based on a hundredweight.

Senator JORDAN. Well, some specific weight or measure?

Mr. BRYANT. Yes, same weight.

Senator JORDAN. Rather than State against State?

Mr. BRYANT. No. It is merely the comparison of the returns, or the percentage that Maine's price was to Idaho's, earlier and what it was later.

And I have here, which we would like to introduce, several copies of the way that these figures were arrived at, both in Michigan and Idaho.

Senator JORDAN. They will be included in the record.

(The information referred to follows:)

COMPARISON OF MAINE WITH IDAHO

The comparison of wholesale prices of Maine and Idaho potatoes for the 15-year period from 1946-47 through 1960-61 shows the steadily worsening competitive position of the potato industry of Maine as compared with that of Idaho.

Idaho was selected for this comparison because the harvesting season and volume of production make it more similar to Maine than are any of the other producing areas.

There was no futures trading of any significance in Idaho potatoes at any time during the period, and during the first 5 years there was no such trading of any consequence in the Maine contract. In this 5-year period the wholesale prices of "mostly Katahdin" potatoes at Arrostock County points averaged 88 percent of the prices of Russet Burbank's at Upper Valley points in Idaho. During the next 5 years (1952-56) futures trading in Maine potatoes on the New York Mercantile Exchange began to reach sizable proportions, averaging 106,536 carlots per year. During this period the Maine price declined in relation to Idaho and averaged 76 percent of the latter.

In the third period shown (1957-61) futures trading in Maine potatoes continued to increase, averaging 178,997 cars per year, and this was accompanied by a further decline in Maine's relationship to Idaho to 69 percent.

During the most recent 3 years shown (1959-61) futures trading averaged about 190,000 cars per year and wholesale prices in Maine declined to an average of 64 percent of those in Idaho.

While the general price level in the two areas may be presumed to reflect a usually higher price for Russets as compared with Katahdins the striking change in the relationship in 15 years seems most significant. It was considered that an increase in Maine production as compared with Idaho production might be expected to bring lower Maine prices as compared to Idaho prices.

The fact is, however, that during the first 5-year period of heavy futures trading, Maine produced an average of 34,690,000 hundredweight or 124 percent of Idaho's average of 28,066,000 hundredweight.

During the next 5 years (1957-61) Maine increased production only slightly to an average of 35,797,000 hundredweight, failing to approach Idaho's increase to an average of 42,318,000 hundredweight. Maine's percentage of production declined drastically from 124 to 85 percent. Thus Maine's position (with futures trading) deteriorated sharply in relation to Idaho (without futures trading) both pricewise and productionwise.

The financial effect of the striking deterioration of Maine's competitive position can be to some extent judged by a calculation of what the Maine crop would have brought if for the 10-year period of heavy futures trading the same relationship with Idaho had existed as during the 5 years before such trading had become an important factor.

If instead of being on a 76-percent basis with Idaho during the 5 years (1951-56) as shown the tabulation Maine had been able to maintain its prefutures position of 88 percent the wholesale price of \$2.42 shown on the tabulation would have been \$2.79, a difference of 37 cents per hundredweight. Applying this difference to the 5-year total production of 173,454,000 hundredweight gives the startling figure of \$64,177,980 as the additional amount at wholesale prices which would have gone to the Maine potato industry in the 5 crop years (1951-52 to 1955-56). The average is \$12,835,000 per year.

During the next 5-year period of heavy futures activity the financial disadvantage to Maine continued. Applying the figure of \$1.89 per hundred to the production of 178,988,000 hundredweight results in a valuation of \$338,287,320 or \$67,657,464 average per year.

If Maine had remained on its prefutures 88-percent basis with Idaho the price would have averaged \$2.39, exactly 50 cents per hundred more than that shown by the table. This would have increased the valuation for the 5-year production by \$89,494,000 or \$17,898,800 per year.

To summarize, it appears that the decline in Maine's position in relation to Idaho amounted to a financial disadvantage to Maine of an average of \$15,366,900 per year over the 10-year period from 1951-52 to 1960-61.

Wholesale potato prices f.o.b. shipping point Idaho compared with Maine, crop years 1946-47 to 1960-61

Crop year	Idaho ¹	Maine ²	Percent, Maine to Idaho
1946-47.....	\$2.37	\$2.13	90
1947-48.....	3.89	2.93	75
1948-49.....	2.90	3.20	110
1949-50.....	2.77	1.91	69
1950-51.....	1.73	1.82	105
Average.....	2.73	2.40	88
1951-52.....	4.06	3.61	89
1952-53.....	3.96	2.51	63
1953-54.....	1.82	.95	52
1954-55.....	3.36	2.43	72
1955-56.....	2.67	2.58	96
Average.....	3.17	2.42	76
1956-57.....	2.16	1.54	71
1957-58.....	2.65	2.27	85
1958-59.....	1.97	1.57	80
1959-60.....	3.58	2.53	71
1960-61.....	3.26	1.56	47
Average.....	2.72	1.89	69

¹ Russet Burbank No. 1, size A, sales f.o.b. shipping point Idaho Falls, Twin Falls district.

² Mostly Katahdin type, U.S. No. 1, size A, sales Aroostook Co. Points, Presque Isle, f.o.b. shipping point.

Source: "Fresh Fruit and Vegetable Prices," Agricultural Marketing Service, USDA.

Summary of financial effects of decline in Maine prices in relation to trade

Period	Pro-duction hundred-weight	Average price per hundred-weight		Value of crop					
		As reported	88 percent of Idaho	As reported		88 percent of Idaho		Maine under Idaho basis	
				Total	Average per year	Total	Average per year	Total	Average per year
	<i>Thousands</i>			<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>
1951-52 to 1955-56.....	173,454	\$2.42	\$2.79	\$419,750	\$83,951	\$483,936	\$96,787	\$64,178	\$12,836
1956-57 to 1960-61.....	178,988	1.89	2.39	338,287	67,657	427,781	85,556	89,494	17,898
10-year total.....	352,442	2.15	2.59	758,045	75,804	911,717	91,172	153,672	15,367

Mr. BRYANT. The New York Mercantile Exchange claims that this is very necessary for hedging for processors.

We have six processing firms in the State of Maine. Only one of them used this device for hedging.

We have contacted four firms that account for 80 percent of all the processing in the State of Maine. None of them use future trading.

We also note that processing in potatoes has developed to its maximum extent in Idaho. Idaho has no future trading. And a report of CEA reveals that they have only had five trades on the Maine exchange.

Now, many times people interested in future trading will say that the growers do not understand this, that they do not understand how it works.

We want to submit for the record that we have in our records letters from sales agencies that handle 50 percent of all of the potatoes in the State of Maine, and they have worked the exchange, they have used it, traded, and they are opposed to future trading.

Now, those people are very knowledgeable, and they know whereof they speak.

In addition to these, you will find attached to my presentation a list of organizations supporting us in asking for this elimination. And it is interesting to note that we have 34 regional and State and National organizations supporting us.

It is interesting to note that all four of the big farm organizations are supporting us in this.

Our State passed a—unanimously, a memorial requesting Congress to grant us this relief.

We have noted the Secretary of Agriculture has not opposed this bill.

Now, in my position as consultant to the Maine Potato Council, we have nine market specialists traveling in the markets throughout the marketing season, trying to promote the sale of Maine potatoes. And they tell us that invariably their work is interfered with and very materially damaged because of future trading, and this violent price fluctuation that is involved.

Now, those of us who have studied the potato industry believe we must have an orderly marketing program. We feel this is essential for any fruit and vegetable group.

In that connection, attached to my presentation is a copy of the front page of our house organ, the last issue, in which we are announcing a new merchandising program. That program will be relatively ineffective if we have future trading continuing.

The Maine potato situation is very desperate financially, economically.

Last year, in one credit organization alone, over 105 growers quit doing business. That is just one credit agency.

In some cases the agency forced them to discontinue. But in most cases the growers discontinued just because they were so discouraged and had lost so much money.

The dean of our college, Winthrop C. Libby, has stated, in effect, that the debt structure of the potato industry is approximately \$60 million, which amounts to \$400 per acre potatoes produced. And he goes on to say our growers face widespread liquidation.

The exchange will claim or may claim that they are being made a scapegoat because of this economic situation. And it is only natural, when growers are in difficult shape, that they will blame most any organization that is around for their problems. However, to show you that the growers realize that this is an overall problem, I would like to have you note attached to my presentation a filler of a new program we have developed which we call Operation Bootstrap. This is a self-help program, and it has 11 points to it, which we are inaugurating to try to bring this industry back into some degree of prosperity.

You will note that we do not have elimination of future trading as one of those points, because this is a self-help program, and only the Congress can help us on this future trading matter.

Now, I would like to—

Senator JORDAN. What are those 11? Are they included in your statement?

Mr. BRYANT. Yes, they are included.

Senator JORDAN. All right. Then I will read it.

Is one of them a subsidy of your crop?

Mr. BRYANT. No.

Senator JORDAN. You know that potatoes got in trouble one time with that.

Mr. BRYANT. No, it is not. This is all self-help—things we have to do ourselves. Better marketing, research, better credit, automation, what-have-you.

You can review it. I think it is pretty clearly explanatory.

For the record, I have here a statement made by Malcolm McCabe, Secretary of the Massachusetts Retail Grocers Association, in the September issue of the New England Grocery Merchandiser. This is a well-respected man in the grocery industry. And he is commenting some of our problems, some of our many problems, including these. He says—

Another problem is the crap shooting futures market which trades only in Maine potatoes. The result is that in place of steady flow at fair prices you always have a gang of the boys holding back for the high dollar and then trying to unload.

And we pushed our marketing period back, back, back, until we have backed into North Carolina, Virginia, Alabama, and those early producing States.

So we do need some way of getting an orderly flow to market, and this makes it very nearly impossible.

Now, in conclusion, I think it would be well to list the people who are in favor of this legislation, and the people who are opposed to it—in other words, the people who favor the elimination of futures trading.

Obviously, from the poll, the growers are in favor of it. In only one case do processors use them.

The trade associations of the fruit and vegetable industry, wholesalers and jobbers, are all opposed to it. And now we find in Mr. McCabe's statement that retailers are all opposed to it.

This same thing is backed up by our market specialists.

Now, who is in favor of it?

Obviously, the exchange. Obviously the brokers and traders who trade in it. And we don't blame them. We estimate that they take—get in fees and brokerage between \$2 and \$4 million a year. And we cannot blame them for not wanting to give up that income.

However, when you stack that up against \$2,500 growers in the State of Maine, and \$15 million, we think both justice and economics will be best served by passing this bill.

Thank you.

Senator JORDAN. Do you know, your Maine potato may be a little like Long Island duck. Have you ever eaten a duck that didn't come from Long Island?

And all the hams come from Virginia.

Senator MUSKIE. All the lobsters come from Maine.

Senator JORDAN. And all the potatoes came from Idaho.

I have never seen a Maine potato on a menu yet. But maybe you can get that going.

There is a lot to that. It is a peculiar situation. Somebody gets these things going, you know. We have the same problem with potatoes in North Carolina that you have.

Florida overlaps our market a great many times, and there is chaos for both markets.

Mr. BRYANT. And we are backing up on North Carolina all the time, too. This is undesirable, from both the standpoint of Maine and North Carolina.

Senator JORDAN. It is a serious problem in not only your State but also a great many other States. And I am sorry to say there are a lot of other commodities in trouble about as bad as potatoes.

Senator, do you have anything you want to add to his statements.

Senator MUSKIE. No, I want to hold down my questioning so we can get all of the testimony in.

First of all, I would like to welcome Harold Bryant here to Washington again. We see him quite a bit from time to time in the course of the year, as he briefs us on problems of the potato industry of Aroostook County. I must say he is a dedicated fighter for his area, and for his people.

I would like to call to the attention of the committee the analysis which Mr. Bryant has made of the House hearings. I think it is a very interesting capsule of the people and organizations who are for and against the bill, and of the evidence, or the testimony for and against the bill. I think it is an excellent analysis, which is most useful and understanding of the issues that are involved here.

Senator JORDAN. Senator Walters?

Senator WALTERS. Nothing, sir.

Senator JORDAN. Senator Young?

Senator YOUNG. I would like to ask the witness: Who are you speaking for, what organization?

Mr. BRYANT. The Maine Potato Council.

Senator YOUNG. Just them alone?

Mr. BRYANT. They compose all of the potato growers in the State of Maine. Every grower in the State is a member.

Senator YOUNG. What position have the general farm organizations taken?

Mr. BRYANT. This is it. Our membership is composed only of farmers.

Senator YOUNG. I mean what position have the general farm organizations taken on this?

Mr. BRYANT. Practically all of them are in favor of it—the big four farm organizations support us.

Senator YOUNG. The Farm Bureau?

Mr. BRYANT. Yes, American Farm Bureau, National Council of Farmer Co-ops, Farmers Union.

Senator YOUNG. Have they registered their testimony here?

Mr. BRYANT. Yes; as a matter of fact, Mr. Naden, of the national council, agreed to let me come on in his place, because he wanted to make sure we got this part of the testimony in.

Senator JORDAN. Any further questions?

Senator YOUNG. No; that is all.

Mr. BRYANT. Mr. Chairman, I would like to ask permission, in the event we do not have time to put all of our testimony in, to submit in orderly fashion, in a period allowed, additional evidence.

Senator JORDAN. I might add right here if we do not get to hear all the witnesses this morning, we are going to have another hearing, because I think this is important enough to have everybody here who has information to be heard—both sides. And you may add anything to the record that you would like.

Mr. BRYANT. Thank you.

Senator JORDAN. Now we will call on Mr. Naden.

**STATEMENT OF KENNETH D. NADEN, EXECUTIVE VICE PRESIDENT,
NATIONAL COUNCIL OF FARMER COOPERATIVES**

MR. NADEN. A copy of my short statement, Mr. Chairman, has been distributed to the committee. And since I can read it in about 5 minutes, I would like to read it directly, if I may.

Senator JORDAN. You may.

Will you give your full name?

MR. NADEN. I am Kenneth D. Naden, executive vice president of the National Council of Farmer Cooperatives.

This organization is a national federation of farmer-owned and farmer-controlled cooperative marketing and purchasing associations. Our affiliates include 5,700 farmer cooperatives throughout the Nation, which serve approximately 3 million farmer memberships. Our member organizations market for their farmer members varying percentages of most commercial farm commodities and purchase for their farmer members their basic production supplies.

We appreciate the opportunity to bring to this subcommittee the views of this organization on S. 332. The National Council of Farmer Cooperatives is appearing before you today on behalf of one of its direct affiliates—Maine Potato Growers, Inc., of Presque Isle, Maine. We support the bill, S. 332, to prohibit trading in Irish potato futures on commodity exchanges and urge the committee to give a favorable vote to the bill.

Maine Potato Growers, Inc., is one of the largest and most influential agencies in the marketing of potatoes grown by Maine farmers. Its marketing objective is to sell its members' products through such channels, agencies and methods that yield the highest returns to the grower. This organization has been in existence for 30 years and during that period has been an important influence in the orderly marketing of potatoes from this area. During this period of time it has marketed varying amounts up to 20 percent of the total Maine potato crop. It is one of the largest shippers in that area and has used the commodity exchanges extensively in the sale of its members' products. It has tried to live with the exchange as an institution and has tried to use it constructively in an effort to support orderly marketing of potatoes.

It feels, however, that the existence of the exchange is not compatible with orderly marketing. The potato marketing cooperative has sought to establish gradual changes in potato prices but feels that the existence of the exchange has created erratic changes in price movements—up to 40 cents per hundredweight in 1 day—indicating speculative buying and selling which are not related to the value of the product. Changes in price not related to fundamental changes in supply and demand are not in the interest of farmers. This kind of

erratic fluctuation in prices attracts people that are uninformed and who are not regularly operating in potato markets.

It is our understanding that the commodity exchange operations for potatoes are used almost exclusively by the growers, shippers, and other operators in the Maine area. It appears that other major potato-growing regions do not need the futures market and have been able to improve their economic position over the years because of changes in the value of their product and other considerations. This indicates to us that the existence of the exchange is in nowise essential for progress of the potato industry.

After consideration of all of these things and after trying for many years to live with and utilize the facilities of the exchange, Maine Potato Growers, Inc., reluctantly believes that the authority to trade in Irish potato futures should be prohibited.

We support this view and again urge the committee to approve S. 332.

Mr. Chairman, we appreciate the opportunity to be with you and present this view.

Senator JORDAN. Thank you very much, Mr. Naden.

Senator WALTERS?

Senator WALTERS. No questions.

Senator JORDAN. Senator Young?

Senator YOUNG. I have no questions.

Senator JORDAN. Senator Muskie?

Senator MUSKIE. No questions, Mr. Chairman.

Senator JORDAN. Mr. McIntire?

Mr. McINTIRE. I have no questions.

Senator JORDAN. You are certainly one of the fine members of the delegation from that State, and you are welcome to participate in this hearing. Thank you very much.

Mr. NADEN. Thank you, Mr. Chairman.

Senator JORDAN. Mr. Mercker, we are glad to have you, sir. We will be glad to have your statement.

I believe you have a prepared statement. You can either present it, or you may comment on it, as you wish.

STATEMENT OF A. E. MERCKER, EXECUTIVE DIRECTOR, NATIONAL POTATO COUNCIL

Mr. MERCKER. This is a short statement, Senator. It just goes through some of the testimony and resolutions that were passed at the various meetings of the National Potato Council, endorsing the bills that have gone prior to S. 332. We fully support the measure. (The prepared statement of Mr. Mercker is as follows:)

The potato industry is grateful that this committee has granted a hearing on S. 332, which the industry believes it needs if the marketing of potatoes is to be operated for the benefit of the producers, dealers, and the public.

My name is Albert E. Mercker, executive director of the National Potato Council since November 1956. Prior to that time I was an employee of the U.S. Department of Agriculture for 36 years, working in various capacities in the Fruit and Vegetable Marketing Division, such as a market news representative, inspector, and supervising inspector. In 1929 I was assigned to work on potatoes, including work under the Steagall amendment during the years 1942-59. I had been chief of the division of markets in the State of New Jersey, and in the early part of the century I was active in the marketing of fresh fruits and vegetables in the metropolitan area of New York City for a period of years.

The National Potato Council is a nonprofit organization established by potato growers to look after the interests of all aspects of potato production, marketing, and processing. Its offices are located in Washington, D.C.

This testimony is presented in response to a resolution adopted on the floor at the ninth annual meeting held November 19-21, 1957, at Washington, D.C., which reads:

"Be it resolved, That the National Potato Council support legislation prohibiting futures trading of potatoes on the commodity exchanges."

This resolution was reaffirmed by the steering committee of the National Potato Council at a meeting held at Los Angeles, Calif., on February 10, 1963, as follows:

"Be it resolved, That the National Potato Council reaffirms its stand to eliminate futures trading of potatoes."

The National Potato Council has a mailing list of about 12,000, including growers, dealers, and processors throughout the United States, and a few additional in other countries.

Apparently the potato growers and dealers in Maine are convinced that they would be better off without futures speculation in their product. Their 92-percent vote is conclusive on that score. I have considered the effect which the elimination of futures trading in potatoes might be expected to have on the industry, not only in Maine but particularly in the other producing areas.

My contacts with the trade in Maine substantiate the views of Mr. Bryant that the erratic price movements in potato futures, especially near the end of the marketing season, cause a great deal of confusion and disorder in the most critical period of marketing. There is every indication that when the market is basically weak futures speculation tends to accentuate the downward movement. It seems rather obvious that the well-informed professional speculators, and the persons who advise the amateur speculators, will favor the selling side when the market is weak, just as they would be buying if the market was basically strong. Unfortunately for potato growers, their market has not been basically strong for quite a while.

I was not surprised at the material already presented to this committee showing the wild gyrations which have occurred in potato futures and it seems to me that such price movements just about nullify any usefulness of the market either for price registration or hedge protection. It is true, I believe, that some few highly skilled operators with the economic knowledge and necessary capital have been able to show gratifying results on some of their hedging operations. I am convinced, though, that this is not possible as regards the average merchandiser or grower. Many of those who do use the market I believe are simply trying to protect themselves against an unfavorable situation brought about by the market itself, and I am also convinced that they would much prefer to have a sufficiently orderly marketing situation so that they would not have to resort to these measures.

I am particularly impressed by the fact that the vast majority of potato producers and dealers throughout the United States have always conducted their marketing operations, and are doing so now, on what appears to be a satisfactory basis with no use of futures. This is clearly indicated by material developed by the Department of Agriculture showing the geographic location of the persons who use the New York futures market for either hedging or speculation. In a bulletin put out by the Department under date of April 12, 1962, it is shown that as of October 27, 1961, there were 1,470 traders with positions. Of these 1,170 were classified as speculators and 300 as hedgers. Of the 300 represented as being hedgers 121 were located in the State of Maine and 112 in the other North Atlantic States. In other words, a total of 233 of the 300 shown as hedgers were in the area including the New England States, New York, New Jersey, and Pennsylvania, leaving only 67 accounts scattered among all the remaining States and 6 foreign countries.

Looking at the States outside of the North Atlantic area where heavy production occurs, I have found that there was no indication of any significant use of the futures market in connection with merchandising. In Idaho; for example, with an average production since 1957 exceeding that in Maine, only five accounts were reported as hedging. These on October 27, 1961, had a total of 36 contracts long and 15 short. In California, the third largest producing State, 2 accounts appeared as hedging and they had a total of 30 contracts short. This information, which appears in table 8 on page 18 of the report I mentioned, seems to me to completely dispel any fear that the elimination of futures trading in Maine

potatoes on the New York Mercantile Exchange would have any adverse effect on the overwhelming majority of potato producers and merchandisers.

While there are those persons in the industry scattered all across the United States who do not, and I believe cannot, use the New York market in their operations, they nevertheless feel the effects of the price movements on that market.

Many people say that supply and demand determines price for agricultural products. Supply and demand might determine price if knowledge were perfect; however, for perishable agricultural products at any time or place there is imperfect knowledge as to what the supply is, combined with imperfect knowledge as to what demand is.

The lack of definite knowledge and the many statements emanating from traders that may be correct or that may be incorrect brings further uncertainty into the price equation. As potatoes are a perishable commodity, buyers discount for any uncertainty so that they discount the price to the disadvantage of the farmer, the shipper, and the consumer.

Probably one of the reasons that futures trading is concentrated in Maine potatoes is that the industry in Maine has an outstanding reputation for delivering on their contracts, even when the potatoes are sold at prices considerably below the current market. In order to be fair to all parties concerned, it is recommended that should this legislation be enacted into law, provisions be made in this bill to permit those who have traded in potatoes to fulfill all existing contracts, both on the part of the seller and the buyer.

The trading on the futures markets practically eliminates the native bargaining ability of the producer. It cramps his style. In the past he would meet the buyer or the broker who has an offer for his potatoes face to face, or by telephone, and discuss the merits of that particular offer. He could decline it or he could receive several competitive offers from several brokers and take the best one. Now his potatoes may be sold without his consultation, and without his participating in the bargaining discussions.

As an organization that is interested in the welfare of the rank and file potato producers throughout the Nation, we feel strongly that there will be less confusion and disorder and a better atmosphere of orderly marketing in potatoes if this futures speculation is eliminated, just as was done in onions some 5 or 6 years ago.

The National Potato Council went on record in 1958 in support of a bill, H.R. 10282, then before Congress, to stop this trading. The lack of any improvement in the market's operations since that time makes us feel even more strongly on the subject now.

I want to emphasize again, that the National Potato Council strongly supports the passage of S. 332 which would eliminate many uncertainties, particularly pricewise, in the marketing of potatoes not only in Maine but in the United States as a whole.

Mr. MERCKER. Because of shortness of time, I would like to, however, read part of my last page.

Senator JORDAN. All right, sir, you may proceed.

Mr. MERCKER. The trading on the futures market practically eliminates the native bargaining ability of the producer. It cramps his style. In the past he would meet the buyer or the broker who has an offer for his potatoes face to face, or by telephone, and discuss the merits of that particular offer. He could decline it or he could receive several competitive offers from several brokers and take the best one. Now his potatoes may be sold without his consultation, and without his participating in the bargaining discussions.

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I want to emphasize again, that the National Potato Council strongly supports the passage of S. 332 which would eliminate many uncertainties, particularly pricewise, in the marketing of potatoes not only in Maine but in the United States as a whole.

I would like to add on page 4, at the bottom.

The question has been raised as to why trading in Maine. And I state probably one of the reasons that futures trading is concentrated in Maine potatoes is that the industry in Maine has an outstanding reputation for delivering on their contracts, even when the potatoes are sold at prices considerably below the current market. In order to be fair to all parties concerned, it is recommended that should this legislation be enacted into law, provisions be made in this bill to permit those who have traded in potatoes to fulfill all existing contracts, both on the part of the seller and the buyer.

Mr. Chairman, I appreciate your giving us the time. I know that you have a lot of testimony to receive. Thank you.

Senator JORDAN. Senator Young, do you have any questions?

Senator YOUNG. No questions.

Senator JORDAN. Senator Muskie, any questions?

Senator MUSKIE. I have no questions.

Senator JORDAN. Mr. McIntire?

Representative McINTIRE. I have no questions. I only want to say, Mr. Chairman, that Mr. Mercker is probably one of the most experienced men in the potato industry in the United States, and he has worked with the Department of Agriculture for many years. We of the potato industry have known him personally for many, many years and consider him the best informed man in the industry in the country.

Senator JORDAN. If I understand it correctly, your association covers the whole United States.

Mr. MERCKER. Yes, sir. And we are supported by the North Carolina Potato Growers Association, too, morally and financially.

Senator YOUNG. I would like to join Congressman McIntire in his statement on behalf of Mr. Mercker.

Mr. Mercker helped me with our potato problems going back I believe 15 to 17 years ago. He is an old hand at this business, and a very good one.

Mr. MERCKER. Back in 1932, 1933, Senator, when the grasshoppers and locusts were all over the State.

I thank you, sir.

Senator JORDAN. Thank you.

Mr. Bishop and Mr. Bagnell, will you both come up and appear together.

Since you are both on the same subject here, we will be glad to hear from both of you at this time. Whichever wants to go first, is all right with me.

STATEMENT OF DOUGLAS B. BAGNELL, FAIRHOPE, ALA., ON BEHALF OF THE MAINE POTATO COUNCIL

Mr. BAGNELL. My name is Douglas Bagnell. I live now in Fairhope, Ala., where I have been since my retirement from the Commodity Exchange Authority about 4 years ago.

I am working with the Maine Potato Council in its attempt to eliminate futures trading on potatoes, as provided by this bill.

My first contact with the futures market was in 1928, down in Amarillo, Tex., auditing the Wheat Growers Association. I am a certified public accountant of Texas and Alabama.

Since 1928 I have been in quite close touch, almost continuously, with the futures trading operations.

About 6 years, I toured Maine and discussed the potato futures trading with groups of growers while I was still with the Department of Agriculture. They expressed some dissatisfaction, and the Department wanted to find out as much as possible of what it was all about.

In talking to these growers in Aroostook County and elsewhere in Maine, I found that they were almost unanimously opposed to futures trading.

About a year ago, after my retirement, the Maine Potato Council asked me to come up there and see how the situation looked at that time. I did so and talked to many of the same people, and also other people, whom I talked to 6 years before.

I found that they were still opposed to futures trading. In fact, it seemed to me a little bit more so than they had been before.

These people I talked to, I think, are representative of the industry. Many of them are growing potatoes—they are college graduates, some in economics, some in law. They obviously had the interests of the State of Maine, Aroostook County, definitely at heart. And my approach to this thing was to try to find out why they were opposed, and whether there was some sound basis for this extremely widespread opposition.

In studying potatoes, we have a rather fortunate situation. I found that the test of the operation of any market is what happens in that market—not an academic approach of what could have or should have happened, but what did happen.

Well, these growers combined both. They knew the theoretical aspects, and they bought and sold and raised potatoes. So they had both.

Now, Maine, as has been touched upon a little bit here—we have the fortunate situation of having a 15-year period to study.

For 5 years there was practically no futures trading in Maine, or anywhere else, to amount to anything.

The next 5 years, Maine futures market had begun to more or less take hold and have a definite influence.

The last 5 years, ending in 1961, futures had still further accelerated their influence in Maine.

We also are able to compare Maine with sections of the country where there is no use of futures trading. Roughly 15 percent of the crop is produced in Maine. And it is the only portion of the crop on which the full impact of futures trading appears. The other 85 percent does not have it, apparently does not want it, because of the Idaho situation—they could trade in Chicago if they wanted to.

So with that approach, I tried to look at some of these complaints I have heard.

One of the commonly heard complaints was that growers and dealers there felt that their competitive position had deteriorated as regards the rest of the country as futures trading developed.

That has been touched upon a little bit here. And there is a tabulation in the record. In the interests of time, I am not going too far into how it was done. But the essence of it was a comparison of actual cash potato prices at important shipping points in Maine as compared to Idaho.

It showed that in 1946 to 1951, during which there was no futures trading anywhere to amount to anything, Maine potatoes brought about 88 percent of the price of Idaho potatoes. Possible various reasons for that—Russet Burbanks, Katahdins in Maine, and so forth. But they brought about 88 percent.

Senator JORDAN. That was prior to the advent of the exchange?

Mr. BAGNELL. Prior to the exchange having any influence at all. There was still a little trading, but it did not amount to anything.

Now, coming down to 1951, to 1956, there was still in Idaho and never has been. But in 1951-56 the trading had picked up in Maine to a very sizable extent.

The ratio of Maine to Idaho, instead of being 88 percent, had dropped to 76 percent during that 5 years.

Senator JORDAN. That is 76 percent of the price per hundred pounds; is that correct?

Mr. BAGNELL. Yes; that is correct. And then coming down to 1956-61, which is the period in which futures trading in Maine had increased still further, the percentage had dropped to 69 percent there.

To repeat that—88, 76, and 69.

Now, I attempted and did convert those percentages into dollars based on the volume of production and the result was that if Maine had maintained its 88-percent ratio to Idaho during these next two 5-year periods, the return to the Maine potato industry would have been roughly \$15 million a year more than it was.

Now, I think I want to say right here that I would certainly not attempt to contend that that whole thing was due to futures trading.

As you well know, there are dozens and dozens of influences affecting price.

But it strikes me it was a very strong presumption, at least on my part, that futures trading played an important part, if not a dominant part, in that.

I made the same type of comparison for Michigan and found substantially the same result.

I won't burden you with the details of that.

Now, another thing that occurred to me was the possibility that changes in production pattern might have been a factor. If, for example, I found that Maine had greatly increased its production in relation to Idaho, that would seem to me to be some reason for Maine's deterioration in price position.

I found, however, that the exact opposite was the case.

In 1952, just before futures trading took hold, Maine produced about 15 percent of the U.S. crop. Idaho produced about 12 percent.

In 1961, at the end of the 10-year heavy futures activity, Maine's percentage had dropped to 13 percent of the U.S. crop, Idaho's had gone up to 19 percent—from 12 to 19, Maine down from 15 to 13. So it did not seem to me that production was the answer.

I have seen enough books on economics of futures trading to know that you could write treatises on what was the answer. I have not attempted to do so.

In addition to this question of price relationship, the Maine people felt that the prices—the gyrations of prices, or the price movement was also related to futures trading.

I prepared some data showing the actual price movement in the futures market from day to day as compared to the change in volume of trading from day to day.

I have it here in chart form. I want to take a minute to discuss the point.

The chart at the back of that thing, I think, is all we need to talk about at the moment.

You will note that on that chart the two bottom lines are almost identical—almost are mirror reflections of each other.

The one at the bottom is the volume of futures trading. This is from the 1st of March down to the middle of May in 1962. The line above is the daily price range.

It shows that as volume increased, price range increased also.

Now, there are all sorts of schools of thought on that—whether the hen came before the egg. But it is my view that very clearly shows a direct relationship.

The table attached shows that on some days there was 40 cents per hundredweight change in one trading session. And that was the days when there was heavy trading. When trading declined, the price movement declined similarly.

To sum that up, to me, both pricewise and as regards market stability, the Maine situation worsened as futures trading increased.

Now, a point occurred to me, as I indicated a while ago—I have been associated with futures markets for 30 years—why has this deficiency persisted in Maine and in potatoes? I have seen wheat, corn, oats, soybeans, cotton become a very useful and necessary tool in marketing of those products. I have always been basically sold on the value of futures trading.

The only thing that I have been able to—or the principal thing, at least, that I have been able to attribute in potato trouble is that it, like onions, is a highly perishable and volatile commodity. It moves and always will move through relatively wide ranges as compared to wheat, corn, and cotton. And it comes to a termination every year—there is a deal under which about in May potato futures trading practically comes to a close, because the last year's crop which they are harvesting right now is getting to a place where it has to be harvested—it has to be sold—it has already been harvested. So that the activity in that market is an annual thing that goes up and down.

And when May comes along, you have an accumulation of potatoes that those people have held throughout the year, watching the board all the time, hoping against hope that the price will be better.

When May comes, something has got to be done. And you have frequently a wild and disorderly scramble in May to get out of the market, get rid of the potatoes.

Now, to ad lib a little bit here—it has been emphasized that this is mainly a Maine problem. It is mainly. But it does affect us—my interest rate now is down in Alabama. We harvest our crop along in May, too, and have to sell it.

Now, as long as these potatoes have to be held over through the winter in Maine, and are dumped on the market in the early spring, we have a glut that affects Alabama and North Carolina and all potato-producing areas, it seems to me.

Some years ago there was a rather notorious operation in Maine which was developed into a manipulative case that the CEA handled, I think properly, in which some speculative—they were in the potato business, incidentally. Along in May, they threatened heavy deliveries on the New York exchange—not only threatened heavy deliveries, but went so far as to call up the Department of Agriculture and ask them to have people out there ready to inspect these potatoes. They did not have many potatoes sent down there actually. These people they called for—it was strictly a phony. But it crashed the New York market and created a great disorder in the Alabama market, with which I was somewhat familiar.

So perishability to me is one of our principal explanations.

As was indicated in the brochure of the exchange, it is a highly fluid market. Now, that attracts speculation. And the more highly fluid it is, the more likely there are to be speculators in for a quick turn, a quick grab for the fast dollar, if I may express it that way.

We find from an occupational tabulation put out by the CEA that the people in this market comprise many people who have not the faintest idea of what potatoes are all about.

There were 241 physicians and professional people, 62 housewives, and 127 retired persons.

Now, that in itself does not mean too much, because all futures markets have people from all walks of life in them, and you need to have to have a liquid market.

But I think that that has a great influence on potatoes than it would on a more stable commodity.

Another factor is the margin required to get into the potato market on a speculative basis.

Of the 26-odd commodities traded in futures, only \$220 is required to take a speculative position in potatoes, which is lower than any other commodity. But I want to say that while it is lower money-wise, percentagewise the amount you put up for potatoes is as high and in many instances higher than some other commodities.

But the average small speculator is not so much interested in percentages. He wants to know, or she wants to know how much to save out of the household money to get into a potato deal, and takes \$200.

Now, there is another sideline to that. That is the minimum margin required by the exchange. Many of the conservative brokerage houses won't let anyone in for that amount. But most of them do charge a little bit more.

I do think, however, that the low margin is a factor in this sort of situation.

Now, quite a bit of matter I plan to put in here was pretty well covered by Mr. Caldwell and the questions by Senator Muskie.

But I will wind this up by saying this: after looking at all of these factors and figures that I have commented on very quickly here, it seems to me that the Maine industry, consisting of these well-informed men who are interested in the State of Maine—that they were well justified, and, to me it fully explains their wish to get this particular burden out of the way so they can concentrate on other and perhaps more basic problems, such as those Mr. Bryant touched on in his 11-point program, Operation Bootstrap.

I would like to ask this if I may, Mr. Chairman.

We have been changing this stuff pretty rapidly the last few days.

Could we have permission to file for the record substantially what I am talking about here, after we get it in order in the next 2 or 3 days?

Senator JORDAN. Yes, you may. We will give you ample time to get in what you want.

Mr. BAGNELL. Thank you, sir.

(The material referred to follows:)

PRICE RANGE AND VOLUME OF FUTURES TRADING

This tabulation and the chart which accompanies it sets forth the relationship between prices movements within each day in the May 1962 futures contract and the volume of futures trading daily from March 1, 1962, to the end of trading in the May contract on May 14, 1962.

It is clear that prices move more widely as futures trading becomes more active. During March the trading averaged 1,534 cars per day and the average price range was 9 cents. In April trading increased to an average of 2,003 cars per day with the price range moving up to 13 cents. The peak was reached in May with trading averaging 2,337 cars accompanied by average daily price swings of 17 cents.

Relationships on individual days are striking. On 2 days, April 17 and May 14, the price moved 40 cents per hundredweight. These also were the days of heaviest futures volume, with trading of 6,053 carlots and 4,215 carlots, respectively.

IRISH POTATO FUTURES TRADING

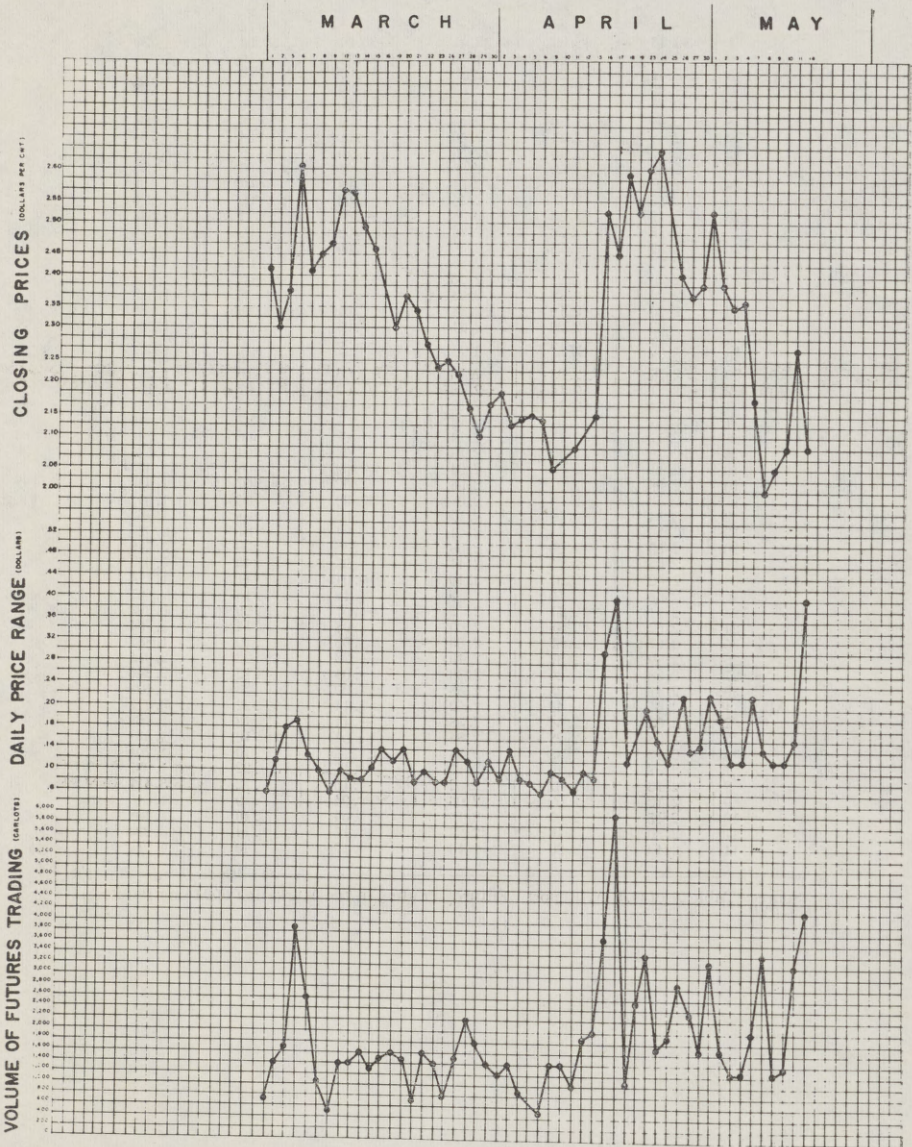
Price range and volume of trading of May 1962 potato futures,
Mar. 1 to May 14, 1962

[Dollars per hundredweight]

Date	High	Low	Close	Change from previous close	Range during day	Volume of trading (carlots)
<i>1962</i>						
Mar. 1	\$2.43	\$2.39	\$2.41	-\$0.01	\$0.04	739
2	2.40	2.30	2.30	-.11	.10	1,471
5	2.42	2.26	2.37	.07	.16	1,677
6	2.69	2.52	2.61	.24	.17	3,938
7	2.46	2.35	2.41	-.20	.11	2,600
8	2.44	2.36	2.44	.03	.08	1,066
9	2.48	2.44	2.46	.02	.04	766
12	2.57	2.49	2.56	.10	.08	1,386
13	2.57	2.50	2.55	-.01	.07	1,370
14	2.53	2.46	2.51	-.04	.07	1,499
15	2.52	2.43	2.45	-.06	.09	1,289
16	2.47	2.35	2.38	-.07	.12	1,573
19	2.35	2.26	2.30	-.08	.09	1,616
20	2.37	2.25	2.36	.06	.12	1,487
21	2.37	2.31	2.33	-.03	.06	776
22	2.30	2.22	2.26	-.07	.08	1,565
23	2.24	2.18	2.23	-.03	.06	1,421
26	2.25	2.19	2.24	.01	.06	839
27	2.32	2.20	2.21	-.03	.12	1,500
28	2.24	2.14	2.15	-.06	.10	2,182
29	2.14	2.09	2.10	-.05	.05	1,746
30	2.18	2.08	2.16	.06	.10	1,254
Apr. 2	2.21	2.14	2.18	.02	.07	1,198
3	2.24	2.12	2.12	-.06	.12	1,451
4	2.14	2.07	2.13	.01	.07	946
5	2.17	2.11	2.14	.01	.06	724
6	2.16	2.12	2.13	-.01	.04	536
9	2.11	2.03	2.04	-.09	.08	1,473
10	2.08	2.01	2.06	.02	.07	1,456
11	2.09	2.04	2.08	.02	.05	1,042
12	2.14	2.06	2.10	.02	.08	1,862
13	2.15	2.08	2.14	.04	.07	2,028
16	2.50	2.20	2.50	.36	.30	3,716
17	2.65	2.25	2.44	-.06	.40	6,053
18	2.42	2.31	2.40	-.04	.11	1,114
19	2.65	2.50	2.59	.19	.15	2,567
23	2.71	2.51	2.52	-.07	.20	3,393
24	2.62	2.48	2.60	.08	.14	1,734
25	2.67	2.57	2.63	.03	.10	1,882
26	2.59	2.37	2.40	-.23	.22	2,915
27	2.38	2.26	2.36	-.04	.12	2,346
30	2.41	2.28	2.38	.02	.13	1,629
May 1	2.65	2.43	2.52	.14	.22	3,373
2	2.52	2.34	2.38	-.14	.18	1,768
3	2.38	2.28	2.34	-.04	.10	1,338
4	2.43	2.33	2.34	-----	.10	1,294
7	2.38	2.16	2.17	-.17	.22	1,997
8	2.13	2.01	2.02	-.15	.12	3,417
9	2.12	2.02	2.06	.04	.10	1,340
10	2.15	2.05	2.10	.04	.10	1,408
11	2.30	2.16	2.27	.17	.14	3,222
14	2.40	2.00	2.10	-.17	.40	4,215

Source: Table 27 of C.E.A. Report "Futures Trading in the Marketing of Maine Potatoes, 1961-62."

PRICE RANGE AND VOLUME OF TRADING OF MAY 1962
 POTATO FUTURES. MARCH 1 TO MAY 14, 1962.



IRISH POTATO FUTURES TRADING

TABLE 15.—Season average prices received by farmers for selected commodities and percentage change from previous season's price, 1929-30 through 1955-56

Season	Onions		Potatoes		Wheat		Corn		Oats		Soybeans		Cotton		Eggs		
	Average price	Percent change	Average price	Percent change	Average price	Percent change	Average price	Percent change	Average price	Percent change	Average price	Percent change	Average price	Percent change	Average price	Percent change	
	Dollars per 50-pound sack		Dollars per bushel		Cents per bushel		Cents per bushel		Cents per bushel		Dollars per bushel		Cents per pound		Cents per dozen		
1929-30	0.74	-35.1	1.30	-32.5	167.6	-35.2	78.9	-23.2	41.8	-23.0	1.88	-27.1	16.78	-27.1	29.8	-20.5	
1930-31	.48	-38.0	.88	-41.7	30.1	-46.3	32.1	-46.3	21.3	-33.9	1.37	-63.5	9.46	-43.6	23.7	-25.7	
1931-32	.63	-15.6	.48	-38.2	38.2	-41.7	32.1	-46.3	21.3	-33.9	.50	+7.0	5.66	+34.0	17.6	-19.3	
1932-33	.41	+55.9	.38	+113.2	74.4	+94.8	32.0	+1.6	33.5	+113.4	.54	+8.0	110.17	+36.0	14.2	+2.8	
1933-34	.64	+4.7	.81	+42.4	81.2	+14.0	32.0	+54.9	33.5	+113.4	.94	+6.3	12.36	+21.5	17.0	+37.6	
1934-35	.71	+6.0	.59	+40.5	83.1	-2.0	31.6	+16.6	26.1	+46.1	.29	+26.3	11.09	+10.3	23.4	+6.8	
1935-36	.43	-39.4	.50	+18.9	104.4	+59.4	30.2	+19.4	44.6	+61.1	.27	+3.0	12.36	+32.2	21.8	-2.9	
1937-38	.66	+53.5	.50	-6.1	151.8	-6.1	148.6	-50.4	30.2	-31.2	.85	+27.7	18.61	+32.2	21.3	-2.9	
1938-39	.55	-16.7	.54	+8.0	156.2	-41.6	148.6	-6.2	23.8	-31.2	.67	+20.9	16.60	+27.7	21.3	-2.9	
1939-40	.45	-18.2	.69	+27.8	169.1	+23.0	156.8	+16.0	31.0	+30.3	.81	+20.9	16.09	+27.7	21.3	-2.9	
1940-41	.70	+55.6	.51	-26.1	188.2	-1.3	161.8	+8.8	30.3	+30.3	.90	+17.5	19.89	+8.8	18.4	+1.3	
1941-42	.79	+12.9	.79	+26.1	188.2	-1.3	161.8	+8.8	30.3	+30.3	.90	+17.5	19.89	+8.8	18.4	+1.3	
1942-43	.99	+10.0	1.14	+44.3	110.0	+85.4	175.1	+21.5	41.1	+48.8	1.55	+73.2	17.03	+72.9	23.5	+30.6	
1943-44	1.68	+69.7	1.26	+10.5	1136.0	+16.5	1112.0	+22.1	72.2	+48.0	1.61	+3.6	19.03	+11.9	30.0	+27.7	
1944-45	1.20	-28.6	1.44	+14.3	1141.0	+3.7	1109.0	+22.1	72.2	+48.0	1.81	+15.4	19.90	+23.7	37.1	+12.4	
1945-46	1.69	+40.8	1.38	+4.2	150.0	-6.4	127.0	-2.7	70.9	-1.8	2.05	+13.3	20.73	+4.5	32.5	+12.4	
1946-47	.89	-47.3	1.21	+12.3	191.0	+27.3	156.0	+16.5	66.7	-5.9	2.08	+1.5	22.52	+8.6	37.7	+16.0	
1947-48	2.08	+133.7	1.60	+32.2	229.0	+19.9	166.0	+22.8	80.9	+21.3	2.57	+23.6	32.64	+44.9	37.6	+3.0	
1948-49	1.32	-36.5	1.52	+5.0	1199.0	-13.1	1130.0	-39.8	105.0	+31.1	3.33	+29.6	31.93	-2.2	45.3	+20.5	
1949-50	1.47	+11.4	1.27	-16.4	1188.0	-5.5	1125.0	-3.8	65.7	-9.1	2.16	-4.8	28.58	-5.9	45.2	+4.2	
1950-51	1.87	+40.8	.90	-29.1	1200.0	+6.4	1153.0	+22.4	179.1	+4.0	12.47	+14.4	40.07	+40.2	36.3	-19.7	
1951-52	1.67	+20.0	1.63	+81.1	1211.0	+5.5	1166.0	+8.5	82.3	+4.0	12.73	+10.5	37.88	+5.5	47.8	+31.7	
1952-53	2.31	+38.3	1.95	+19.6	1208.0	-9.9	1153.0	-7.8	178.6	+4.5	12.73	+10.5	34.59	-8.7	41.6	-13.0	
1953-54	.68	-70.6	1.78	+60.0	1204.0	-2.0	1149.0	-2.6	74.3	-5.5	12.72	-9.6	32.25	-6.8	47.7	+14.7	
1954-55	1.07	+57.4	1.30	+66.7	1212.0	+3.9	1143.0	-2.0	171.4	-3.9	2.46	-0.6	33.61	+4.2	36.8	-22.9	
1955-56	1.31	+22.4	.94	-27.7	1199.0	-6.1	1131.0	-8.4	59.2	-17.1	2.10	-14.6	433.00	+1.8	16.1	-30.6	
Average		45.8		37.8		17.9		23.0		26.9		23.4		18.2		16.1	

1 Includes allowance for unredeemed loans.
 2 Includes an allowance for all cotton put under loan.
 3 Preliminary.
 4 Aug. 1, 1955, to Dec. 1, 1955.
 5 Disregarding algebraic signs.
 6 1929-30 through 1954-55.

NOTE.—Averages are for crop marketing seasons, which overlap calendar years for all commodities shown, except eggs, in which data are on a calendar year basis for the 1st year shown.

Source: For 1929-30 through 1952-53, USDA Agricultural Statistics, and AMS Statistical Bulletin No. 140, "Potato Prices." For 1953-54, USDA, Agricultural Marketing Service—potatoes, wheat, corn, oats, and soybeans, "Field and Seed Crops," May 1955; onions, "Agricultural Prices," Feb. 15, 1955; cotton, "Cotton Production," May 9, 1955; eggs, "Crops and Markets," 1955. For 1954-55 and 1955-56, Agricultural Marketing Service, "Crop Values," Dec. 19, 1955.

Minimum initial margins prescribed by exchanges as of Sept. 28, 1962, on speculative futures transactions in specified commodities

Commodity	Market	Contract		Price 1 Per contract	Margin		Contract	Percent of price
		Amount	Unit		Price per unit			
					Cents	Unit		
Corn	Chicago Board of Trade	5,000	Bushel	\$5.363	5.0	Bushel	\$250	4.7
Cotton (port)	New Orleans Cotton Exchange	50,000	Pound	16.575	500.0	Bale	500	3.0
Cotton	New York Cotton Exchange	100	Bale	16.025	500.0	do	500	3.0
Cottonseed meal	Memphis Board of Trade Clearing Association	100	Ton	5.700	400.0	do	400	7.0
Cottonseed oil	New York Produce Exchange	60,000	Pound	7.470	2.7	Dozen	400	5.4
Eggs (shell)	Chicago Mercantile Exchange	15,000	Dozen	5.805	2.3	Dozen	350	6.0
Eggs (frozen)	do	30,000	Pound	7.071	1.2	Pound	350	4.6
Lard (drummed)	Chicago Board of Trade	40,000	do	3.360	1.0	do	400	11.9
Oats	do	5,000	Bushel	3.181	5.0	Bushel	250	7.9
Potatoes (Maine)	New York Mercantile Exchange	1,000	50-pound bag	2.050	40.0	Hundredweight	200	9.8
Rye	Chicago Board of Trade	5,000	Bushel	6.025	8.0	Bushel	400	6.6
Soybeans	do	5,000	do	11.856	8.0	do	400	3.4
Soybean meal	do	100	Ton	6.125	400.0	do	400	6.5
Soybean oil	do	60,000	Pound	4.836	8	do	500	10.3
Wheat	do	5,000	Bushel	9.981	8.0	Bushel	400	4.0
Do	Kansas City Board of Trade	5,000	do	10.369	7.0	do	350	3.4
Do	Minneapolis Grain Exchange	5,000	do	11.450	9.0	do	350	3.9
Wool	Wool Association of New York Cotton Exchange	6,000	Pound	7.620	10.0	Pound	600	7.9
Wool tops	do	5,000	do	8.300	10.0	do	500	6.0
Milled ³	Merchants' Exchange of St. Louis	5,105	Ton	4.358	600.0	Ton	630	14.5

COMMODITIES NOT INCLUDED UNDER THE COMMODITY EXCHANGE ACT

Cocoa beans	New York Cocoa Exchange	30,000	Pound	\$5.913	2.5	Pound	\$750	12.7
Coffee (B)	New York Coffee & Sugar Exchange	32,500	do	10.611	2 3/4	do	1,000	9.4
Hides	Commodity Exchange, Inc., New York	40,000	do	6.468	1.5	do	600	9.3
Rubber	do	22,400	do	6.216	2 1/8	do	400	6.4
Sugar (8)	New York Coffee & Sugar Exchange	112,000	do	3.618	2.4	do	400	11.1
Frozen tom turkeys	Chicago Mercantile Exchange	30,000	do	9.780	2 1/7	do	500	5.1

¹ Actual or approximate closing price of nearby futures as of Sept. 28, 1962.

² Approximate.

³ Basis: Chicago.

Source: Commodity Exchange Authority.

THE NATIONAL ONION ASSOCIATION,
East Lansing, Mich., August 19, 1963.

Congressman CLIFFORD McINTIRE,
*House Office Building,
Washington, D.C.*

DEAR MR. McINTIRE: We in the onion industry have great sympathy for the potato people in their efforts to be free from the adverse effects due to futures trading. We well remember the years we spent pushing legislation through Congress.

All phases of the onion industry were almost unanimously united in opposition to futures trading, the only exceptions were those directly benefiting from lucrative commissions or those being financed by such interested people.

No one expected elimination of futures trading to cure the evils of overproduction and other industry problems, which it has not done. However, the onion industry now enjoys a stability and tranquility in marketing unknown and impossible under futures trading. We see no change in sentiment or opinion now on the merits of futures trading. The same small percent are in favor and all others are opposed for the same reasons originally applying.

It seems that perishable and semiperishable commodities, also comparatively small or limited volume commodities, do not lend themselves to futures trading. Such are too susceptible to the pressures of trading—too easy to manipulate.

Under futures trading handlers of onions, shippers, brokers, also buyers had no time to conduct an orderly marketing program. They from necessity spent all their time trying to follow the yo-yo market caused by pressure group trading on the exchange.

Futures trading, especially in commodities like onions and potatoes, accentuates or exaggerates trends. Pressure groups are able to distort markets to extremes with little regard to supply and demand. Efforts on the part of exchange at regulations seem unable to prevent such abuses.

Perhaps the one most pertinent argument against futures trading in commodities like onions and potatoes is that in theory the speculator is supposed to be the buyer and carry the risk. In practice exactly the opposite is true.

The first objective of a trader is to make money. Traders become smart, they learn that more money can be made on the down side than on the up or constructive side of the market. Therefore, the only time speculators are buyers is when there is a distinctive shortage, a time when extra buying support is not necessary and actually undesirable. At all other times the speculators are short sellers, thus instead of carrying the risk for the producers the speculator is the producer's worst enemy and the producer in many instances in order to protect the value of his commodity is forced to enter the futures market as a buyer, a position exactly opposite to what he should do. This happened repeatedly in onion trading history.

The onion industry wishes the potato industry luck and success in their efforts for economic freedom.

Yours truly,

IKE GRIFFIN,
President, National Onion Association.

Senator JORDAN. Well, if you have not found it out, I want to tell you something. The Idaho boys are not up on the rooftops shouting about the prices they get, either. They have been in here wanting legislation every year since I have been here, wanting to do something for the Idaho potatoes. And the North Carolina delegation has been up here to see me, too.

Mr. BAGNELL. I was born on a cotton plantation down in Mississippi, and I lived out in Nebraska when corn was selling for 10 cents a bushel and wheat for 30 cents a bushel. I do not believe I have ever seen a time when agricultural prices were high enough.

Senator JORDAN. That sort of goes with it, doesn't it?

Thank you very much.

Mr. McIntire, do you have have any questions?

Representative McINTIRE. I have no questions, Mr. Chairman.

Senator MUSKIE. I have no questions, Mr. Chairman.

Senator JORDAN. Mr. Bishop, do you have something you want to add here, sir?

STATEMENT OF JAMES BISHOP, MERCANTILE ELIMINATION COMMITTEE, MAINE POTATO COUNCIL, PRESQUE ISLE, MAINE

Mr. BISHOP. Mr. Chairman, I am James Bishop of Presque Isle. I am a lawyer. But I am not here in any professional capacity. I am a member of the Mercantile Committee of the Maine Potato Council. I am also a very small potato grower, about 30 acres, with a partner.

My main interest here is as an Aroostook County businessman.

I have filed a statement. In order to conserve time, I would like to just pick out a few of the things that I would like to emphasize from the statement, and I won't read the entire statement.

Senator JORDAN. We will insert your statement in its entirety, and then your remarks will be added to it at the conclusion of it.

(Mr. Bishop's prepared statement referred to follows:)

I am James Bishop of Presque Isle, Maine. I am a lawyer and also raise around 30 acres of potatoes on shares with one of my neighbors. I am a member of the Mercantile Elimination Committee of the Maine Potato Council. There are many people who would be far better qualified to speak in behalf of this bill. Unfortunately this date comes at the very height of our harvest season, and many interested growers including Mr. Smith, the chairman of our committee, and Mr. Thompson, the president of the Maine Potato Council, found it impossible to leave.

That is the reason I have been pressed into service, and incidentally I would like to anticipate a comment heard after the hearing before the House subcommittee in April to the effect that the opposition brought down many more witnesses than the proponents. As far as sheer numerical support is concerned, if it were physically and financially possible, we could descend upon this committee with the more than 1,400 Maine potatoes growers who voted for the elimination of futures trading in the poll which Mr. Bryant has described. We have chosen instead to use a limited number of representative witnesses in the interest of making a meaningful presentation, and of conserving the committee's time.

We want to make it plain that we are not opposed to futures trading generally. We believe that its use in connection with nonperishable crops may be desirable. However, we believe that the people most closely associated with the production of these crops should have a voice in deciding whether they shall have trading or not. Most of us in Maine have become convinced that futures trading is harmful to us. Because futures prices are generally higher in the later months, the growers hold their stocks for these higher prices and orderly marketing is discouraged. Because potatoes are a perishable commodity, all trading relative to any particular year's crop must end in May. As the deadline approaches, there is feverish activity as both sides, short and long, seek to liquidate their contracts. Rumors fly, and the ever-present threat of actual delivery to the board of several hundred cars of potatoes serves to depress the cash market during these last weeks of trading in each year's crop. As soon as May trading closes, the cash market almost invariably starts to rise.

The characteristics of the Maine potato futures contract seem designed to discourage buyers. For example: When the time comes to liquidate his contract, the seller has the option of buying back his contract or actually delivering a car of potatoes to the exchange. The buyer, on the other hand, may not have this choice. If, due to difference in price between the merchantile market and the cash market, it is to the shipper's advantage to deliver he will do so, in which case the ultimate buyer is forced to accept a car of potatoes. In many cases the buyers are not equipped to handle these actual deliveries, resulting in, as happened a year ago in May, 800 cars being thrown indiscriminately on the New York market. Many of these cars sat on track for

days without refrigeration in temperatures of 90 degrees. The resulting deterioration made for further congestion in the market. Also, the contract calls for delivery in 50-pound bags at Harlem River Yards, New York City. The 50-pound bag is a convenient unit as far as the seller-shipper is concerned, but it is not always a desirable package for the buyer. He knows that should he be compelled to take delivery, he will have a limited market for disposing of his purchase. That it is not attractive as a hedge to buyers of large quantities of potatoes such as processors and retail grocery chains is shown by the last reported distribution of futures contracts (Aug. 31, 1963). Of the 3,598 contracts classified as hedges held by large traders (25 carloads or more) only 669 or about 18 percent were long, that is, purchases; the balance of 2,929, or 82 percent were sales, that is, short. In other words, it appears that the big money, presumably the smart money is not interested in the "buy" side of the contract. This results in a continually depressed market.

The "buy" side of the contract is taken up by small speculators, not just in Maine, but all over the country. I am not an expert on commodities trading, but I fail to see how the price established by the merchantile is merely a reflection of supply and demand, as its supporters claim, when the bidding is being done not by the big users of potatoes, but by a retired physician in Baltimore, and an elevator operator in New York City. I also cannot believe that the forces of supply and demand alone would cause prices on the exchange to change as much as 40 cents per hundred in 3 hours, or 19 cents in 15 minutes as happened not long ago.

The point is often stressed by the representatives of the Mercantile Exchange that futures trading is under the supervision of the Commodity Exchange Authority. Everything, therefore, must be proper and legal. We have a high regard for the Commodity Exchange Authority and the efforts they have made in supervising futures trading in potatoes. However, unfortunately the Commodity Exchange Authority does not have authority to issue cease-and-desist orders or any other summary procedure which could be used to stop abuses or improper practices without the filing of a formal complaint followed by the opportunity for hearing. We have had one or two proven flagrant violations with potato contracts and about the only action the Commodity Exchange Authority could take was to deny the offenders the privilege of trading. One of the most flagrant cases ever to be recorded was in connection with onion futures and here, again, when illegal acts were proven the Commodity Exchange Authority could only deny trading privileges. Since 1954 the CEA has issued some 13 special reports and surveys of the potato futures market and has brought charges in some of these cases involving manipulation or attempted manipulation. We believe this is ample evidence that perishable commodities like potatoes lend themselves to speculation and possible attempted manipulations which, generally speaking, cannot be detected or cannot be corrected except in very extreme cases.

For a moment may I speak not as a grower but as a businessman located in Aroostook County. The potato industry accounts for by far the greatest percentage of our total cash income for the area. To all practical purposes, it is a one-crop area with potatoes being that crop. The economy of practically all business and industry in the area is tied to potatoes. If, as we sincerely believe, the trading of Maine potatoes on the futures market is one substantial factor contributing to depressed prices, then I appeal to you to give relief not only to the potato growers, but to the entire business community of northeastern Maine.

In closing, I would like to repeat the conclusions of the report of the House Committee on Agriculture on H.R. 904, the companion House bill to prohibit trading in Irish potato futures on commodity exchanges. The report states:

"The committee's decision to report this bill favorably to the House was made only after the most thorough deliberation because it realizes that the effect of this bill is to prohibit and make illegal with respect to a particular commodity a commercial transaction that is, in itself, perfectly legitimate and bona fide. The committee's decision was based upon the following conclusions:

"1. The basic economic activity involved is the physical production and distribution of potatoes—not the trading in potato future contracts.

"2. The cash prices that thousands of farmers in every part of the country receive for their potatoes, and that millions of consumers must pay, are determined in part by the prices established on a futures market which represents only a very small portion of total potato production.

"3. Since this futures market deals in only a very small part of actual potato production, since it is used relatively little for hedging and very largely for speculation, and since it deals in a commodity which is perishable and in which length of storage becomes an important factor, the conclusion is inescapable that prices established on this market will frequently be influenced by factors other than supply and demand.

"4. To the extent that prices on the futures market are established by factors other than supply and demand, those prices operate to the detriment of both potato producers and potato consumers.

"5. The committee has serious doubts that a perishable vegetable, such as potatoes, is an appropriate commodity for futures trading. In this connection, see House Report No. 1036, 85th Congress, reporting favorably on H.R. 376, prohibiting futures trading in onions, and also the special committee study of September 1956 on this subject."

I believe that the House committee report sets forth the essence of our arguments in these conclusions and I am hopeful that this committee, after due deliberation, will also report favorably on this bill.

Mr. BISHOP. I would like to mention at the beginning that this is the very peak of our harvest season in the county. For that reason, some people who would be much better qualified than I am to speak could not make it.

The president of the council and the chairman of this mercantile elimination committee are both in the midst of harvesting, and could not leave.

Now, at another time, or if we had the money, we, I suppose, could bring down here and parade the 1,400 growers who voted in favor of eliminating trading. Obviously, you would not enjoy that, and we could not afford it. So we have tried to make a selective choice of witnesses. I know that the Committee won't be impressed by numbers, or even by the volume of testimony that is filed.

We do want to emphasize we are not opposed to futures trading in general. We believe that in nonperishable crops it serves a purpose—because there is not this cutoff date caused by this year's crop coming to an end in May or June and it becomes unfit to use. In nonperishable crops you can have a stable market.

We insist that perishable crops, such as potatoes and such as the onion people found, are not suitable to futures trading.

I do not believe it has been mentioned—perhaps it has—but there is at present no perishable vegetable being traded other than potatoes. And no potatoes are being traded other than Maine potatoes.

We feel that we are too small to stand pressure of that interest.

There are to many people interested in what we are doing. And we are not big enough to cope with the other interests.

It is just as though all the neighbors on my street got up a pool every week to bet whether I would be drunk or sober Saturday night—I do not know that I could stand that pressure.

Another thing I would like to mention is that the hedging part of it is almost entirely on the short side. I think that has been mentioned before. But I think one reason for it is that the contract has been designed to discourage the buyer, because of this threat of delivery. And I might add, too, that in the contract the seller does have a choice. He can either buy back his contract or deliver. The buyer does not have a choice. He may be forced to take delivery, but he cannot choose it.

The other thing is that the contract calls for 50-pound bag of potatoes which is a convenient package for the seller to put out, but not necessarily a desirable package for the buyer.

Most of our trade, retail trade, is in smaller packages. And if you are forced to take delivery of 50-pound bags, you may have to take them down and repack them in order to sell them. So it is not necessarily a desirable package from the buyer's standpoint.

The large retail buyers, such as chainstores, don't use it, as near as I can determine. The processors don't use it. With all the large trading is on the sell side, there is no corresponding big interest on the buy side to balance that.

This I believe leads to a continual pressure to depress prices.

In closing, I would like to particularly call your attention to the conclusions in the report of the House committee on Mr. McIntire's bill, H.R. 954, in which I believe the committee issued a favorable report of 23 to 8 in favor of the bill.

I would like to read a portion of the conclusions of the report, because I think it is important.

The committee's decision to report this bill favorably to the House was made only after the most thorough deliberation because it realizes that the effect of this bill is to prohibit and make illegal with respect to a particular commodity a commercial transaction that is, in itself, perfectly legitimate and bona fide. The committee's decision was based upon the following conclusions.

And this first one to me is one of the most important.

1. The basic economic activity involved is the physical production and distribution of potatoes—not the trading in potato future contracts.

In other words, even though the exchange and the dealers and people who have used it may feel that they have a vested interest in this trading, I think what the Congress and the country would be most concerned with is the production and distribution of potatoes. That is, what is the best legislation to accomplish that.

Among other reasons—and I will skip along—

3. Since this futures market deals in only a very small part of actual potato production, since it is used relatively little for hedging and very largely for speculation, and since it deals in a commodity which is perishable and in which length of storage becomes an important factor, the conclusion is inescapable that prices established on this market will frequently be influenced by factors other than supply and demand.

Finally they call attention to the hearings on H.R. 376, on trading in onion futures.

It has been testified that Congress did vote to eliminate that. And they call attention to the special committee study, September 1956, on that subject.

Thank you.

Senator JORDAN. Do potatoes have to be refrigerated to be kept over any great length of time?

Mr. BISHOP. During the cold season, they have to be heated.

Senator JORDAN. I know that, to keep them from freezing.

Mr. BISHOP. Starting about in April I think—someone connected with it should correct me—but I think starting in April they start using refrigeration, and from there on through the conclusion of the season.

Senator JORDAN. Is there any drying process for your potatoes, like there is in sweet potatoes, to drop the moisture content of the potatoes?

Mr. BISHOP. You mean a process deliberately—no, other than in processing plant, where they would be putting up a package to product.

Senator JORDAN. One of the problems with our potatoes, as you well know, and your potatoes, too, is the early potatoes contain such a high percentage of moisture, they deteriorate very, very rapidly. And they have to move quickly.

Mr. BAGNELL. That is the reason we have to market ours at the same time that these are being put out.

Senator JORDAN. Any questions, Senator?

Senator MUSKIE. No, thank you.

I would like to welcome Mr. Bishop personally to the hearing here this morning. He is a friend of many years standing. He is involved in potatoes more than I am—and in law much more than I am now. But we used to work together. It is a pleasure to have him here in Washington.

Mr. BISHOP. Thank you.

Senator JORDAN. Thank you very much, Mr. Bishop.

Next we have Dr. Roger Gray, with the Food Research Institute at Stanford University.

Dr. Gray, we are glad to have you with us.

We will be glad to hear your testimony.

Do you have a prepared statement?

Mr. GRAY. I have submitted a prepared statement, Mr. Chairman. I do not know how your time is. I would far prefer, since it has bearing on some things that have been said, that I be permitted to read my full statement.

Senator JORDAN. How long would it take?

Mr. GRAY. I think it would take 25 minutes, sir, for reading and discussion.

I have also prepared a summary, if you would prefer that, which I could read much more briefly.

Senator JORDAN. I am perfectly willing to put in the 25 minutes, if we can get permission to sit. But we go in session at 12 o'clock, and we would have to get permission to sit beyond that—wouldn't we, Senator Muskie?

Senator MUSKIE. Yes. Is there any indication of what is going to go on on the floor?

Senator JORDAN. All right. Suppose we proceed, and if we do not get through, we can take it up later. That is the only thing we can do.

I am perfectly willing to hear you through. I am perfectly willing to give whatever time is necessary to this question. You may proceed as you desire.

STATEMENT OF ROGER W. GRAY, PROFESSOR AND ECONOMIST, FOOD RESEARCH INSTITUTE, STANFORD UNIVERSITY, STANFORD, CALIF.

Mr. GRAY. I am Roger Gray. I am an economists and a professor at Stanford University. I appreciate very much the opportunity to speak to this committee.

It is my judgment, based upon familiarity with the problems of potato marketing, studies of a number of commodity futures markets, and careful study of the performance of the potato futures market as well as the arguments made against it, that this is a useful market, and that the arguments against it do not stand up to evidence or reason.

In the interest of conserving the time of this committee, I have limited this statement to a defense of the market in terms of some of the major arguments employed by those who attack it, but I would be glad to provide other evidence as well.

The four main lines of argument around which my statement is made are the following:

(1) That the futures market has been detrimental to the Maine potato industry, causing a deterioration in its competitive position. That is the argument just presented by Mr. Bagnell.

I propose to show that this argument is faulty, that it makes bad use of evidence, and that the futures market has been particularly beneficial to the Maine potato industry.

(2) That speculation in potato futures is harmful, that speculators are the chief beneficiaries of the market, or that, through manipulation or other advantage, they cause price computation of trading results, by classes of trader, over semimonthly intervals for 10 years.

(3) That the potato futures market could not absorb large additional amounts of hedging without serious price effects. I shall present contrary evidence, some of which emerges in the computation mentioned above.

(4) That a contract which permits devility of only Maine potatoes is too narrow. Again, evidence which refutes this contention will be briefly shown.

A major argument found in the hearings printed for the House Committee on Agriculture assesses the deterioration in Maine's competitive position relative to Idaho, under the influence of futures trading, at more than \$15 million a year for a 10-year period. The crucial flaw in this analysis is that the 10-year period is compared with the period 1946-61 to show deterioration.

In this 5-year base period almost exactly half of Maine's potato sales were to the Government; in contrast to 15 percent of Idaho's sales. Maine of course lost that large portion of its market which had been provided by Government, and for which no commercial demand existed, even at 60 percent of parity in the last 2 base-period years, during which Maine producers made more than half of their sales to Government.

It is manifestly inappropriate to attribute to the advent of futures trading deterioration from a position so greatly enhanced by price supports. The relevant figures are shown in table 1.

TABLE 1.—Sales to Government and commercial sales, Maine and Idaho, 1946-51

[Thousand bushels]

	1946-47	1947-48	1948-49	1949-50	1950-51
Potato production:					
Maine.....	78,402	65,100	75,075	70,380	63,360
Idaho.....	46,286	28,660	45,600	30,162	49,200
Sales to Government:					
Maine.....	35,868	14,310	42,706	29,765	34,966
Idaho.....	5,935	4	9,490	3,097	8,197
Commercial sales:					
Maine.....	36,539	45,681	26,022	33,500	22,329
Idaho.....	34,435	24,809	30,863	27,010	35,843
Commercial sales as percent of total sales:					
Maine.....	45	76	38	-----	39
Idaho.....	85	100	76	90	81

Any consideration of the performance of the Maine potato economy under the influence of actively traded futures contracts requires, first, that the era of that influence be appropriately defined, and secondly that the available historical evidence place the immense impact on the price-support program in its proper perspective.

The annual volume of trading and average of open contracts in potato futures jumped to about their present levels in 1952-53, as is shown in chart 1.

(The chart referred to is on p. 61.)

Mr. GRAY. Accordingly, the period beginning then is taken as that of futures trading influence.

I might say that the period beginning a year earlier than that taken by Mr. Bagnell.

In order then to get a price-support program into perspective, a long historical series of harvested acreages is employed, as the best single indication of the producers' intentions to grow potatoes, and of their competitive relationship with other producing areas.

In chart 2 the record for Maine is broken down into its several phases.

(The chart referred to is on p. 62.)

Mr. GRAY. The first of these (1909-26) was one of rather wide fluctuations around an average of 131,000 acres, with no discernible trend.

Prices in 1925-26 were exceptionally high, and this encouraged a shift in the level of harvested acres that could not quite be sustained, resulting in a gradual downward drift during the second phase, 1927-42.

The price-support phase was quite another story. The response of Maine producers to 90 percent of parity prices was dramatic, with acreages remaining high even during 1947-48, when allotments were sharply reduced.

CHART I. VOLUME OF TRADING AND OPEN CONTRACTS IN POTATO FUTURES, N.Y. MERCANTILE EXCHANGE

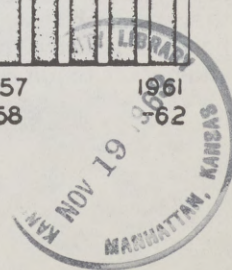
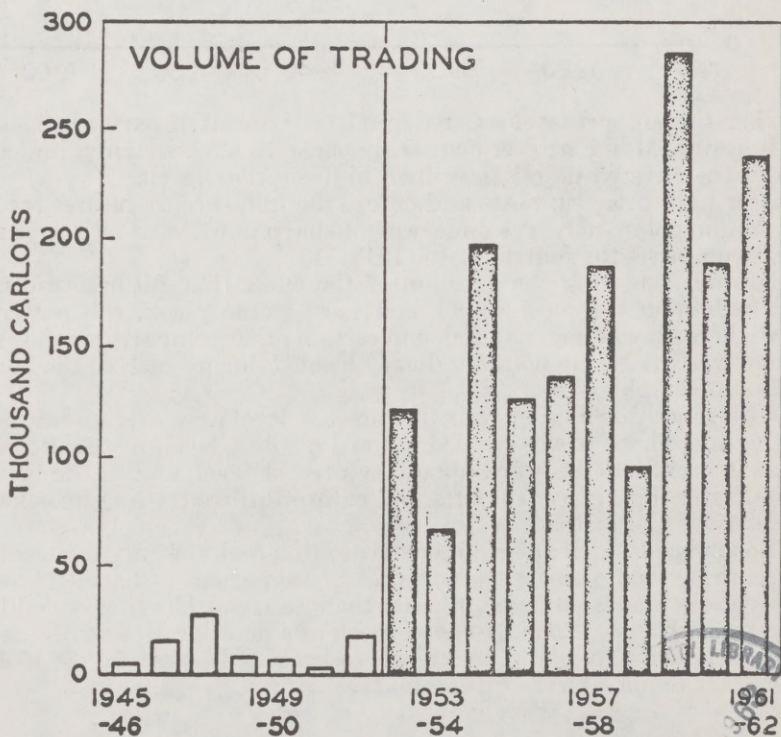
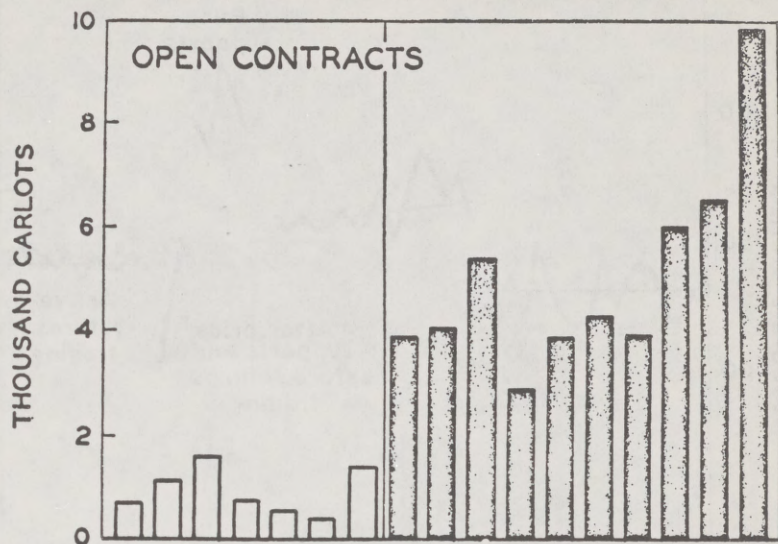
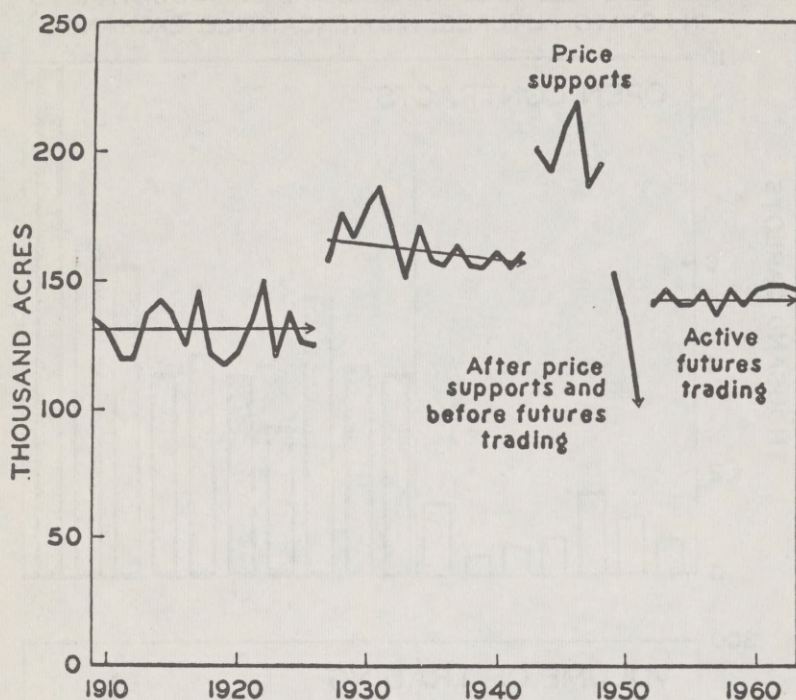


CHART 2.-HARVESTED ACRES OF POTATOES IN MAINE



When the support level was reduced to 60 percent of parity in 1949-50, however, Maine growers cut their acreages back sharply, indicative of their erstwhile reliance upon high-support levels.

After high price supports and before the influence of futures trading, Maine potato acreages underwent a sharp downward adjustment, which comprises the fourth phase (1949-51).

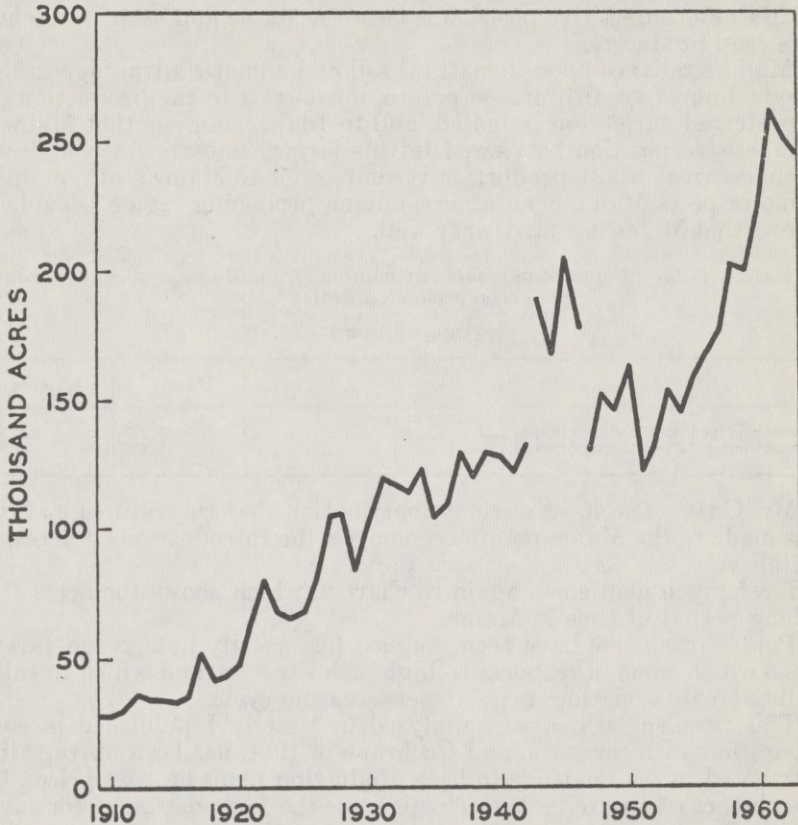
Before considering the question of the effect that futures trading had had upon the most recent and most stable phase, the pattern shown here may be summarized, and certain other comparisons shown. Where was the Maine potato industry headed during each of the non-price-support phases?

Clearly nothing higher than its present level was ever indicated. In the first phase it was headed toward a lower level, in the second phase it was headed toward about the present level, and in the brief period after high price supports and before futures trading it looked headed toward disaster.

The analysis which alleged its deterioration took the only irrelevant phase, the period of price supports, as a base period. Chart 3, showing Idaho's harvested acres, reveals that its trend has been steadily upward, such that, if one wishes to speak of a deterioration in Maine's position relative to Idaho, one must go back at least as far as 1909, and not try to pin it on the futures market.

(The chart referred to follows:)

CHART 3.-HARVESTED ACRES OF POTATOES IN IDAHO



Mr. GRAY. A better comparison than that with Idaho was partially drawn in the House hearings, and a still better one can be drawn here. There were presented some price data purporting to show a decline in Maine's competitive relationship to Michigan as well as Idaho.

It is unnecessary to carry this comparison back any farther than was done there to show that, in fact, Maine's relationship to Michigan has improved markedly. The value of potatoes sold commercially by producers in Maine and Michigan for the periods there chosen is shown in table 2.

TABLE 2.—Value of commercial sales of potatoes from Maine and Michigan

[Thousands of dollars]

	Maine	Michigan
Annual average, 1946-47 through 1950-51.....	39,189	9,461
Annual average, 1951-52 through 1960-61.....	53,529	9,636

Mr. GRAY. The value of annual average commercial sales from Maine has increased by more than one-third, while that of Michigan has remained stable. A still broader comparison for the assessment of Maine's competitive position is between Maine and all of the other late crop producers.

Maine's reliance upon its natural soil and climatic advantage in the production of an all purpose potato, in contrast to the production of a preferred variety on irrigated land in Idaho, suggests that Maine's competitive position be viewed in this larger context which at least includes areas whose production is comparable to Maine's, although in some respects Maine is an almost unique producing region. Table 3 shows that Maine has fared very well.

TABLE 3.—Value of commercial sales of potatoes from Maine and all other late crop producing States

[Thousand dollars]

	Maine	All other
Annual average 1946-47 through 1950-51.....	39, 189	218, 591
Annual average 1951-52 through 1960-61.....	53, 529	195, 543

Mr. GRAY. The most obvious contribution that the futures market has made to the Maine potato economy is the introduction of acreage stability.

I refer you gentlemen again to chart 2, which shows the acres for a long period of time in Maine.

Potato producers have been plagued historically by acreage variations which came in response to high or low prices, and which in turn induced price variations in a self-perpetuating cycle.

This problem, which was analyzed in a study I published in collaboration with Sorenson and Cochrane in 1954, has been universally attributed to the tendency to base production plans on past prices, in the absence of any reliable mechanism for the formulation of forward prices.

The pattern shown in chart 2, for the 12-year futures market period, reflects the fact that growers now have a reliable mechanism for the formulation of forward prices. Many growers hedge their planned production in futures contracts, thereby obtaining the fullest and most direct advantage of the market; but the larger number of growers, who do not hedge, nevertheless have a reliable forward price to guide their production intentions. Nor has this opportunity, and this effect, been limited to Maine producers.

The futures market has already facilitated a substantial reduction in year-to-year acreage fluctuations below what these had been, and would have continued to be, in response to recent prices.

The more the market is used, both directly and indirectly, the greater will be such reduction, with a consequent improvement in price stability. The central conclusion from this part of my analysis is that in comparing the era of futures trading with earlier periods, the Maine potato economy is at least as strong competitively, and certainly more stable, under futures trading.

The next piece of evidence was prepared to meet the unfounded allegations about the domination of the futures market by speculators, but it has a bearing on other issues as well. The evidence is summarized in table 4, showing annual financial results of futures trading for the various classes of traders, as computed from official data. The computations were done as follows:

(1) For every semimonthly interval (consisting of about 11 trading days, on the average) throughout the 10-year period, a weighted average price change in all futures was calculated. Each price change was weighted by the open contracts in that future at the beginning of that interval.

(2) The average net position (long or short) for each class of trader during each interval was calculated by averaging the net positions at the beginning and end of the interval.

(3) The financial results, for each class of trader for each semimonthly interval, were computed by multiplying the average net position during the interval by the price change over the interval.

(Table 4 referred to follows:)

TABLE 4.—Financial results of potato futures trading, by classes of traders

[In dollars]

	Small traders (not specified whether hedgers or speculators)	Speculators	Hedgers
1952-53.....	-1, 219, 165	283, 511	935, 654
1953-54.....	-123, 544	-35, 077	158, 621
1954-55.....	-479, 135	277, 974	201, 161
1955-56.....	799, 676	352, 144	-1, 151, 820
1956-57.....	-410, 794	-126, 893	537, 687
1957-58.....	764, 419	276, 976	487, 443
1958-59.....	-246, 369	50, 018	196, 351
1959-60.....	386, 483	811, 820	-1, 198, 303
1960-61.....	-921, 900	164, 516	757, 384
1961-62.....	-615, 760	-205, 995	821, 755
Total.....	-3, 594, 827	1, 848, 994	1, 745, 833

Mr. GRAY. Certain aspects of the results require brief elaboration. The financial gains to hedgers, and the losses to small speculators, are understated in these figures, for the reason that the nonreporting group consists of some small hedgers, whose positions would always be net short, like those of the large hedgers.

The remainder of this category are small speculators whose losses would be correspondingly increased after allowing for gains to the hedgers. The other matter is that these results apply only to the hedgers' futures positions, and, of course, do not measure the full benefit to hedgers of this market because they always have an offsetting spot position.

These estimates of financial results for hedgers are more reliable than those for speculators, because hedging positions change less frequently, and therefore price changes over intervals of approximately 11 trading days come closer to their actual results.

There can be no doubt, from this evidence, of one important conclusion. Hedgers profited directly from their actual futures trading during this decade, and all other traders, in the aggregate, incurred losses.

The immediate significance of this conclusion is that it destroys the myth of speculative advantage relative to hedgers on this market.

In addition to the more important benefits that accrue to the potato industry from the functioning of this market, a net transfer of funds from the rest of the economy to the potato economy has been affected here. This is not too surprising, as it simply means that the potato economy does a better job of potato price forecasting than does the rest of the economy. Nor do these results differ greatly from those which are found on some other futures markets.

The results are surprising only to those who retain a mistaken image of futures markets as gambling dens in which the city slicker takes advantage of the country bumpkin.

Another argument which the opponents frequently made is that, while those who have hedged have undoubtedly benefited from the futures market, this market is too small to absorb much additional hedging without severe price depression.

The record of this market, as well as the history of other futures markets, effectively refutes such an assertion. If this argument had been made in 1951, when at a much lower level of market use it would have had much greater plausibility, the sharp increase in hedging use in 1952 would have been deemed disastrous, yet, far from having a depressing effect upon prices, this hedging was accomplished at price levels more favorable to the hedger than in any other year.

The reporting speculators, large traders who exercise good and flexible judgments in futures markets, are frequently found trading with the hedgers on the potato market—a sign that there is ample potential to absorb additional hedging at prices realistically related to supply and demand.

The potato futures market has not only accommodated hedging at a net advantage to the hedger, but it has developed rapidly without passing through the phase in which hedgers need to support it.

The postwar development of the soybean futures market, which is today our largest and most useful commodity market, was achieved only at some early sacrifice on the part of hedgers. For a period of about 5 years from 1948 to 1953, hedging was done at a substantial price sacrifice in soybean futures. The average cost of hedging, in terms of price change against the hedgers position, was about 9 cents a bushel. Since that time, as the trade developed, the much larger market has sustained a much larger hedging load with no price sacrifice.

The remarkable situation in potato futures is that now, at a phase comparable to the earlier development in soybeans, the market has developed ahead of hedging use and continues to display unused capacity for additional hedging.

There is no doubt, in the light of the evidence of price behavior in potato futures, that this market can absorb very substantial amounts of additional hedging. In fact the historical evidence from the major futures markets suggests that the more hedging comes to a market, the better the market is for hedgers. Markets which never developed sufficient speculation have been the poorest hedging markets. The defunct futures markets for the mill byproducts, bran and shorts, illustrate this principle cogently. They died out because insufficient

speculation was attracted to provide hedging at a reasonable cost. The evidence is clear that the potato futures market is exceptionally viable.

The data presented in the preceding section (table 4) speak directly to this point. Unused hedging capacity is represented in the fact that buyers of futures contracts have characteristically paid too high a price, representing excess demand for long positions in the futures market.

Consequently the larger speculators have had to move to the hedger's side of the market in order to seek their profits, as they find speculative demand too great and hedging demand too weak at prevailing prices.

Of the 240 semimonthly intervals from which the results in table 4 were drawn, large speculators were on the side of the hedgers 68 times. During those 68 intervals, large speculators had financial gains averaging \$11,671 per interval, compared to an average gain of \$6,136 for the remaining 172 intervals. In other words, even when they moved over to take advantage of excess hedging capacity, they made their best profits, indicative of still greater capacity to absorb hedging. And the most recent major increase in hedging, when it more than doubled in 1961-62, was absorbed at prices very favorable to hedgers.

The final contention with which I take issue here is that the potato future contract, which calls for delivery of Maine potatoes, is too narrow. The best answer to that is that it is used successfully, by growers and merchandisers and processors of not just Maine potatoes, but of other potatoes as well.

There are two considerations in the writing of any futures contract which are superficially conflicting, but which have been reconciled in any successful futures market.

One consideration is that the contract must be very specific and unambiguous in describing a highly standardized form of the commodity. The other is that it must be useful to a wide segment of the commodity trade in question.

When the prices of many other descriptions and varieties of the commodity move in close sympathy with the standardized version, as is the case with potatoes, these two considerations are easily reconciled. It is undesirable to fragment the trading into a number of different contracts when one will serve the purpose.

Historically, the market for barley futures died out because its users found that they could obtain a cheaper and altogether satisfactory hedge in corn futures. Most late crop potatoes, especially the all-purpose varieties, are much more similar to Maine potatoes than barley is to corn.

History records numerous instances in which additional contracts were provided which were not needed, and hence not used. It also records instances in which contracts were broadened to permit delivery of several grades or varieties with the consequence that use was discouraged. The Long Island potato contract is a case of the first sort.

Two relevant instances of the second sort had to do with wheat at Kansas City and coffee at New York. When Kansas City broadened its contract to permit soft as well as hard wheat deliveries it very nearly went out of business because its usefulness to hedgers was impaired. It quickly went back to a hard wheat contract, which is

well used; and added a separate soft wheat contract, which is not used.

The New York Coffee and Sugar Exchange added a so-called universal contract a few years ago, permitting deliveries of both mild and robust coffees, but this contract attracted no trade.

Moving in the other direction, toward a closer specification of a representative grade, has ordinarily been the path toward greater usefulness. Minneapolis recently added a protein specification to its wheat futures contract, for example, with beneficial results to the trade and the exchange.

The Maine potato is a broadly representative and well-defined commodity, in which the major requirements for a useful futures contract are found. It is to be hoped that its potential usefulness to producers and merchants in other areas will become increasingly recognized.

Thank you, gentlemen, very much for bearing with me as I read that long statement.

Senator JORDAN. That's perfectly all right. Thank you, Dr. Gray.

Senator MUSKIE, do you have any questions?

Senator MUSKIE. Yes.

I was interested, Dr. Gray, in the nature of your interest in this legislation. I notice you are identified here on the witness list simply as being of the Food Research Institute in Stanford University.

I wonder how you happened to take an interest in this legislation and was motivated to come here to testify on it.

Mr. GRAY. I will answer that in two parts, Senator Muskie.

First, I have, for the past 9 years, devoted all of my time as a professional student of commodities futures markets. I have published numerous articles concerning commodities futures markets, so I have a very deep professional interest, as I think by and large these markets, when they are well regulated, are fine markets.

Secondly, the exchange, knowing of this, invited me to testify on their behalf, and they, of course, are paying my expenses.

Senator MUSKIE. Do you represent the New York Mercantile Exchange in this?

Mr. GRAY. I really feel, sir, since they have not read my statement or commented on it, I really feel I represent myself. But I certainly am testifying on behalf of the market.

Senator MUSKIE. Would you be here but for their request that you be here?

Mr. GRAY. Had I had any other invitation, I would have been glad to attend, and I would have given the same statement, Senator.

Senator MUSKIE. I am not questioning that. But you are here because they asked you to come. And you would not be here unless they or someone else had asked you to come.

Mr. GRAY. I think that is correct; yes, sir.

Senator MUSKIE. I notice in chart 2, which you use as a basis for questioning the conclusion that there are violent or relatively violent price fluctuations resulting from the impact or the influence of the futures market, that you use a chart which relates to acreage, and not a chart that relates to price.

Is it your conclusion that the relative stability in acreage is a product of the influence of the futures market?

Mr. GRAY. I think that the relative stability in acreage is to be partly attributed, certainly, to the operation of the futures market for the reason I spelled out in my statement, sir, that the producers now have a reliable forward price to aid them in their planning intentions.

I think further that there may be other influences that have contributed to this relative stability.

May I add, sir, that I did not use this chart to indicate that there had been an improvement in regard to price stability. I use this chart to meet the contention which was made that the Maine potato economy had suffered deterioration in its competitive position under futures trading, and that was based upon—that took as a base period the price-support period. I particularly wanted to use this chart to give a clear picture of the dramatic response of the Maine potato grower to the price-support program, and to show the relevancy of that base period.

I do think also that the harvested acres provided us with, as I said, the best single indication we can have of intentions to grow potatoes on the part of the producers.

Senator MUSKIE. Well, is it your argument that stability in acreage is a reflection of stability in price, and a reflection of stability of the Maine potato economy?

Mr. GRAY. Basically, price stability and acreage stability have gone together. I should rather state it the other way around. Historically, price instability and acreage instability have been involved in a continuing cycle.

Now, I do think there is no question but what the furtherance of acreage stability will further price stability. And the year-to-year price stability, which is what would be reflected here, the year-to-year price stability in a measurement which I have not included in my statement, but would be glad to provide for the record—the year-to-year price stability has indeed lessened from what it was in any of the prior historical periods, excepting of course the price support period.

Senator MUSKIE. Well, is acreage stability useful without some relationship being established to yield?

Mr. GRAY. No, sir. I say this is the best single indication of the producer's intentions to grow potatoes, and their own assessment of their own individual competitive position. Certainly production gets into gyrations that come from other sources than acreage.

Senator MUSKIE. Now, your chart No. 2 shows that acreage, harvested acres of potatoes in Maine, from, I gather, about 1952 to date, has been relatively on a line.

Mr. GRAY. Yes, sir.

Senator MUSKIE. Well, is it fair to conclude from that that the picture of the potato economy in Maine during that period has been bright?

Mr. GRAY. Not necessarily fair to conclude that it has been bright, sir. It is fair to conclude that it has been more stable, and that they have apparently found a level at which, looking at reliable forward prices, that they intend to produce a crop.

Now, obviously a thing that influences the price level, and their overall commercial returns on this crop, is going to depend upon the

reactions of producers in other areas as well, as well as the producers in Maine.

Senator MUSKIE. Well, you could not conclude, if I get your evaluation of chart 2, that during the period 1952 to date that the potato economy in Maine has deteriorated. You say it is as good as it was in the beginning of that period.

Mr. GRAY. I said first, Senator, that its competitive position has certainly not deteriorated and it has increased stability.

Senator MUSKIE. And when you speak of stability, you are speaking of stability not only with reference to acres planted, acres harvested, but also price, profit, and ability to stay in business.

Mr. GRAY. Ability to stay in business, I think, must be in part reflected by the producers' intentions to grow potatoes, sir. They make their own assessment under these circumstances of their competitive position, and their assessment has been more level during this era than ever before.

Senator MUSKIE. What would you say—and I think that this can be supported by the facts—if over this period acres harvested has been relatively stable, but number of growers in the business has sharply dropped. Now, what do you say as to that?

Mr. GRAY. I would say that must indicate that individual acreages are getting larger, sir.

Senator MUSKIE. It indicates some farmer is going out of business, doesn't it?

Mr. GRAY. I think this is a process that you are observing in other areas and in the potato economy as well, sir. I think the trend in farming today is to a certain extent toward large units.

Senator MUSKIE. It certainly does not indicate stability.

Mr. GRAY. I think you can have a stable farm economy at the same time you have consolidation of farms.

Senator MUSKIE. You think it is a good thing with these farmers to be going out of business.

Mr. GRAY. To a certain extent, sir, I would argue that farm consolidation is a desirable thing, because you get more efficient-sized units; yes, sir.

Senator MUSKIE. So this would appear to be an argument on your part that the futures market has been a good thing, because it has resulted in stability in the number of acres harvested in Maine, even though another factor in the situation is that the number of growers has markedly dropped, and the number of acres harvested has been concentrated in fewer and fewer hands.

Mr. GRAY. I think, sir, this latter is probably a technical factor which is unrelated to futures trading. The futures trading as a matter of fact affords the same opportunity to the smaller grower as to the large. But I presume that the smaller grower does not have the same technical efficiency of production as has the large grower.

Senator MUSKIE. Well, it seems to me if you can attribute the stability of the number of acres to the market, it is as logical to attribute the drop in the number of growers.

Mr. GRAY. I would like to look at the trend there, sir. What I have done here is to try to isolate in terms of one series the futures marketing period and compare it with another. I would not be surprised, sir, that one would not find such sharp breaks in the trend. I would not

be surprised if it would not break down into these several phases if you look at farm consolidations and expansion in the size of individual units. I do not know the answer to that, however.

Senator MUSKIE. You are using what on its surface is simply a coincidence—either there is a cause-and-effect relationship between the stability and number of acres, or it is a coincidence. Now, if there is a cause-and-effect relationship, then it seems to me that it is justifiable to say that the cause and effect relationship also resulted in a drop in the number of growers.

Mr. GRAY. I do not know what rationale, sir, you would use in justifying that latter relationship. The rationale is clear, however, in the relationship which I intend to establish here; that is, that the single largest influence on production is acres harvested. When production is high, we know directly that this causes, through supply and demand, price to be low, and vice versa. So the relationship between acres harvested and price stability I think is quite clear. I do not know what would be the relationship, sir, between the stability of price or the acres harvested and this matter of farm consolidations.

Senator MUSKIE. Would it be fair to suggest that the relationship is that the smaller grower does not find the futures market the protection that the large grower, who can then accumulate acreages, finds it to be?

Mr. GRAY. I doubt this, sir. I doubt that it would be fair to suggest that. I am rather inclined to feel that you find the reason for the movement to larger units in terms of efficiency of production. On the surface of it, it is certainly true that the exchange affords an opportunity, the same opportunity to the small grower as to the large, and I think probably the preceding marketing arrangement did not always afford it. I think if you went back to a nonfutures trading marketing arrangement, you would not afford to small growers the same marketing opportunity.

As was mentioned earlier this morning, one of the gentlemen testifying said that it is desirable for the grower to meet face to face and negotiate in price. I think in face to face negotiations, the small grower certainly does not have the bargaining power that the large grower does.

Senator MUSKIE. Looking at chart 3, which is your Idaho chart on harvested acres, over the same period that Maine's harvested acreage is relatively stable or level—and you attribute that to the impact of the futures market—Idaho's curve shows a sharp uptrend without any futures trading in Idaho potatoes.

It would seem to me, as a layman, from those two charts that the potato economy without the benefit of this benign influence, the futures trading market, has been more prosperous over 12 years than the potato economy that had the benefit of the futures trading.

Mr. GRAY. I do not question, sir, that Idaho continues to improve its competitive advantage relative, not only to Maine, but to most other producing areas.

I showed this chart and interpret it in the following way—that Idaho's improvement relative to Maine has been a steady one, their competitive position has gone up steadily ever since 1909. We had no futures trading influence until 1952. So I count this a steadily rising trend, and an improvement in Idaho's competitive position in the production of potatoes.

Senator MUSKIE. Well, if I look at that curve, it is steady from 1910 to 1952, and then there is a marked difference in its direction after 1952. It is much sharper from 1952 to date than it was prior to that time.

Mr. GRAY. One difference that helped to explain that, sir, is the fact that in the last 2 years of the price-support program, with prices at 60 percent of parity, Maine cut its acreages back very sharply, which they had not done in the 2 prior years when acreage allotments were reduced.

The Idaho growers do have certainly other alternative uses of their land that are much closer to potato production than is the case with the Aroostook County growers.

In Idaho, when its acreage allotments were reduced, they complied with the reduced acreage allotments, made their downward shift earlier.

So I think part of the response you are seeing there since 1952, when the trend in the curve undoubtedly does rise a little bit at a somewhat more rapid rate than it did during the whole period of 1910 to 1952—I think part of that is to be explained in the fact that Idaho did comply with acreage allotment and did cut acreages back abruptly, while the price-support program was still on.

You see I define Idaho's price-affected period here as a full-year era, and Maine as a 6-year era.

Senator MUSKIE. If Idaho has had this history, which looks so good on this chart, why would not the history have been even better if Idaho had the benefit of a futures market?

Mr. GRAY. I cannot answer that, sir. I do not know whether it would have been better or not. Apparently what you have manifest here is a steady improvement in the competitive position of a preferred variety of potato which relates, I think, less closely pricewise to the Maine potato than do some others. In addition to this, you have such factors as the westward movement of population. You have the factor that all of Idaho's production is on irrigated land, and they have more steadily improved their yields in recent years than the Maine growers have been able to. The Maine growers, I think, have never gotten their yield levels up above what they were in the price-support era.

Senator MUSKIE. Well, wouldn't the Maine potato economy be more vigorous and healthy in the long run if its prosperity were related not to the operation of the futures market, but upon sound consumer demand for the product related to sound merchandising practices?

Mr. GRAY. I feel, sir, that sound consumer demand and sound merchandising practices are best reflected in the futures market. I feel that the answer to your question is "No," sir. I feel very strongly that the Maine potato industry will be worse off if the futures market is closed.

Senator MUSKIE. It is certainly not reflected in charts 2 and 3. There you have told us that Idaho's relative prosperity as reflected by chart 3 is related to the fact that it has established a sound and growing consumer demand. You say that Maine's relative stability on chart 2 is due to the futures market.

Now, which is more soundly based?

Mr. GRAY. I argue, sir, mainly from these charts that it is not justified to look at the futures market period compared with the price-

support period and argue that there has been a deterioration in Maine's competitive position. I do not deny, sir, ever since 1909 there has been that deterioration.

Senator MUSKIE. I am talking only about your charts 2 and 3, and the period 1952 to date, which has nothing to do with the previous period.

Mr. GRAY. I think, sir, that we cannot take the period 1952 to date in isolation. I think we have to put that period in perspective. And that was my purpose in drawing the charts. I cannot do the period in isolation. I need to place it in the proper perspective.

Senator MUSKIE. I will yield at this time to Congressman McIntire for some questions.

Senator JORDAN. May I ask you a question or two, Dr. Gray.

Do you do research in other commodities, other than potatoes?

Mr. GRAY. Yes, sir; I do, sir.

Senator JORDAN. Well, I am interested in getting all the facts in this thing. But the number of farmers has been going downward very rapidly ever since the end of World War II—we have a great many less farmers total in any commodity than we have had. It is a known fact that acres are being consolidated very rapidly under much larger production units because the little farmer cannot compete on any crop to amount to anything. He doesn't have the equipment, he doesn't have the machinery, he doesn't have the capital, and he doesn't have a great many things that have a direct bearing on total production efficiency.

Now, in the cotton bill that is being contemplated right now, there is a differential in price support for 15 bales, as you well know, Mr. McIntire, because that takes in a small farmer. He cannot compete with the man with 200 acres or 100 acres, for instance. And we have people with thousands of acres. And he does not have a chance. So it is proposed in the cotton bill that he can make a living on it at a better price than would be supported on a large mechanized farm.

The tobacco program is getting into trouble right now—you know as well as I do. And it has been based on acreage. And the acreage is up and down, according to the Secretary of Agriculture, who has the power to set the acreage. But the acreage has not cured our tobacco problem, because we raise more pounds of tobacco per acre—just like in potatoes—and they are doing the same thing with wheat, and they are doing the same thing with corn. The Lord has been mighty good to people, and they are producing more per acre.

I don't know what effect all these things have on all our commodities.

I know the same thing is happening in North Carolina to potatoes. They have a good season, good soil, good fertilizer. They have so many potatoes they don't know what to do with them. If your crop ties into ours, and the Georgia and the Alabama and Florida in particular hits us, there is just no market for them. Nobody will buy it for any price. They won't even haul them off.

You know as well as I do that we have asked through the Department of Agriculture to step in and buy carloads of potatoes. And it might have happened in Maine—I don't know—to take the burden off the market at a particular time.

So it is a complicated situation any way you figure it.

Mr. McIntire?

Representative McINTIRE. Mr. Chairman—Dr. Gray, just one or two points on which I would like to ask your views.

With respect to your testimony and your very obviously deep study of the commodity market I want to commend you on the quality of your analysis.

Mr. GRAY. Thank you, sir.

Representative McINTIRE. Why have you left out of this analysis the issue which has been in the discussion, both on the legislation and with relation to futures—the issue of perishability. Why have you left this out?

Mr. GRAY. May I answer that question and a little more? May I also comment on the issue of perishability?

A direct answer to your question is that I learned 1 week ago today that I would get an opportunity to appear before this group today and I felt that what I had to do was to select the issues.

I had been reading the hearings, and I was conversant with the arguments made. But I felt that I had to pick and choose in order not to use up too much of the time of the committee.

On the question of perishability, I would like to say two things.

First, at the time of the onion and potato hearings earlier, I published at least three articles which have a bearing on this, and at least in one of these I took up the question of perishability.

With the permission of the chairman, I would like very much to introduce that argument into the record, which I am sure I cannot fully reproduce here.

Senator JORDAN. Do you have that with you?

Mr. GRAY. I have a copy of that with me.

Senator JORDAN. That's perfectly all right. You can insert it in the record.

(The information is as follows:)

STANFORD, CALIF., October 9, 1963.

HON. B. EVERETT JORDAN,
Senate Agriculture Committee,
Senate Office Building,
Washington, D.C.

DEAR SENATOR JORDAN: Since appearing before your committee to present evidence concerning S. 332, I have prepared and enclose herewith, some additional evidence which I would like to have introduced into the record if at all possible. I appreciate very deeply the opportunity which you provided for me to testify, and the invitation which you extended to those present to introduce supplementary statements at a later date.

I was particularly invited, during the course of the hearings, to enlarge subsequently upon my contentions that greater stability had been introduced into the Maine potato economy by the futures market, and that the so-called perishability of potatoes does not lessen the effectiveness of the market. The enclosed statement has bearing on the first point, on which I also refer the committee to a study by the Department of Agriculture, "An Economic Study of the U.S. Potato Industry," Agricultural Economic Report No. 6, which in table 8 supports my contention that Maine producers no longer respond to the previous year's price in their planting decisions, and in table 6 shows the price variations compared with the period prior to price supports.

On the second point, regarding perishability, I shall be brief. A futures market acts as a guide to the rate of consumption of existing supplies, which is more important to a commodity like potatoes than to grains, for example; and hence a futures market offers even greater relative advantage to potatoes than to grains. Potatoes are not carried from one crop year to the next, whereas grains normally are. Grains thus have a cushion against extreme shortage in the

form of a carryover. Potatoes, in contrast, must last up to, but not into, the next crop. Without the cushioning effect of carryover, extreme shortage or surplus is therefore always a possibility for potatoes. Therefore, it is even more important to have efficient rationing of existing supplies of potatoes than of grains, which necessitates anticipatory pricing, such as is conducted on a futures market. This very fact that existing supplies of potatoes are more difficult to ration properly because the rationing must be more precise than for grains, has led, in testimony given in congressional hearings and elsewhere, to the mistaken assertion that the potatoes futures market does not perform as well as a grain futures market, or that potatoes do not lend themselves to futures trading. Anticipatory pricing of existing supplies is both more difficult and more important in potatoes than in grains; but no competent evidence that the futures market does it less well for potatoes than grains has ever been presented.

If I can be of any further assistance to the committee in this matter, I shall be more than pleased to cooperate.

Very truly yours,

ROGER W. GRAY,
Professor, Food Research Institute, Stanford University.

TO HEDGE OR NOT TO HEDGE: A QUESTION FOR THE POTATO GROWER

Supplementary statement of Roger W. Gray

Much conflicting testimony regarding the potato futures market has been heard by congressional committees, in recent months as well as a few years ago. A major area of concern has been whether it is harmful or beneficial, or potentially so, to growers, particularly those in the State of Maine. Illustrations and counterillustrations have been presented, purporting to show that it helps or hurts particular growers in one way or another; but no general analysis of the results of grower hedging has been shown. Some have argued that hedging is too complicated for the ordinary grower to comprehend, that it is too costly, and that additional hedging use would so depress prices as to render the hedge ineffective for the great majority of growers. My own earlier testimony included evidence which refutes the latter argument, but I did not deal directly with the first two contentions. In this statement I show the results and costs of three very simple hedging programs, each within the ken of any potato grower, as well as some additional evidence regarding the capacity of the futures market to absorb hedging.

The futures market has been active, as I showed in my earlier statement, since 1952; therefore each of the hedging programs is applied here for 11 years (1952-62). The results are shown in terms of actual prices on certain typical dates, but this in no way limits the results, which would be entirely comparable if other dates had been selected. The dates which I focus upon in the analysis are April 15, October 15, and March 1 of each crop year; but I have made exactly the same computations for alternative dates, with results that do not differ appreciably from those to be shown.

For each hedging program we take a 100-acre grower, attribute to him the State average yields, and compute his financial results hedged and unhedged. Since it is the same typical grower, following the same cultural practices and merchandising his potatoes in the same way in either case, the only result which is measured is that of the hedging program.

I

The first type of hedging program to be measured is that covering the growing season. The underlying basis for this kind of program is that the price of potato futures at planting time is much more stable from year to year than the price at harvest time, and will average out at about the same level over the years. The grower can avoid the feast and famine aspect of potato production in this program. As is seen in chart 1, however, there has been an even stronger basis than this for such a program, for not only has the price at planting time been much more stable, but it has averaged 13 cents higher than the harvest time price, more than covering the costs of hedging. (Commission fees and interest on margin money comes to somewhat less than half of this 13 cents advantage.) All that the grower needs to do is to sell futures contracts at planting time (say, about mid-April, but the results are the same for the entire period between mid-

April and mid-May) and buy them back when his potatoes are harvested and sold (mid-October).

The difference in price, moreover, does not measure the full advantage of this program, because there is an even greater difference in income before taxes, and a still greater difference in income after taxes. Yield fluctuations are such that the grower does not get the full advantage of the high prices that occur occasionally in an unhedged operation, since these tend to come during a year of relatively low yields. This effect is reflected in chart 2, which shows the gross receipts from potato sales, hedged and unhedged. The 76 cents freight cost between Maine and New York has been subtracted from the price, and the price multiplied by the State average yield on 100 acres of potatoes to obtain these results. The grower would sell his actual potatoes at the same price in either case, of course, and for convenience this is taken to be the futures price less 76 cents. No matter what the actual price received, however, the contrast would remain the same. The grower had gross receipts averaging 8 percent higher if he was hedged, although the average price, unweighted by yields, was only 6 percent higher under the hedging program.

No quantitative measurement of the advantages of income stability is undertaken, but its advantage from a tax standpoint alone is considerable, and varies with individual circumstances.

Most growers of 100 acres in Maine have storage facilities available, and therefore do not normally sell their potatoes at harvest time. For them, the growing season hedge just described is desirable, but it is not enough—they also require a storage season hedge. All that this grower needs to do, in order to obtain an even greater benefit from the futures market, is to sell a November future on April 15 and buy it back on October 15 (as above), then sell a March future which he buys back at the end of February when he sells his potatoes. (Obviously this storage period hedge could be in another future, or distributed among several futures, with similar results, but we show the results for only a simple and typical case.)

Not only has this grower protected his income during the growing season, but with his second hedge he protects whatever carrying charges are reflected in futures prices to cover his costs of storage. The March future has averaged 43 cents higher than the November future on October 15 for these 11 years, which has been the assured average return for storing potatoes until late February. But once again, not only has the hedger benefited in this way, but he has benefited, relative to the unhedged grower, in the tendency to profit from his futures position. Whereas the November future was 13 cents higher on April 15 than it was on October 15, during these 11 years, the March future was 34 cents higher on October 15 than it was on February 28. Thus the more typical Maine grower, who stores potatoes, has had much more benefit from hedging than the grower who sells at harvest time.

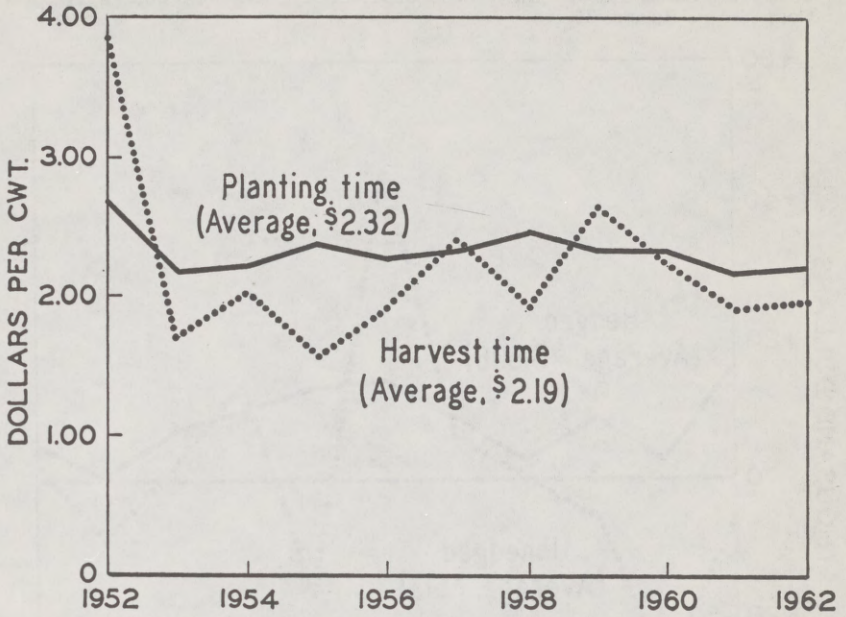
This benefit has been computed to take hedging costs, as well as production and handling costs, into account. Calculated on the basis of \$375 per acre to produce and handle potatoes for late February sale, and \$25 per acre for the cost of the two hedges, the net income before taxes for this grower, hedged and unhedged, is shown in chart 3.

This is a staggering difference between hedging and not hedging—in fact, it is the difference between prospering and going broke. Little wonder that the grower who has recognized and used the futures market comes forth to defend it, as even a simple routine hedging program has provided his financial salvation. The seeming wonder is that more have not taken advantage of it; yet, as I pointed out in previous testimony, this market has had very good early growth compared to other markets, with more and more growers using it each year. The great pity and the irony in the situation is that many growers, instead of following the example of their neighbors who have used the market successfully, blame their own misfortunes on the existence of the market. They can gain nothing by closing the market, but they can lose the opportunity to use it, and would cut off their noses to spite their faces.

III

The third hedging program considered here is a slight extension of the second. The grower who stores potatoes can very easily see his storage returns reflected in futures prices and, if he pleases, hedge selectively instead of routinely. It was pointed out that the average difference, on October 15, between the November and March futures prices, was 43 cents. This difference, which the grower

CHART 1.—PRICES OF NOVEMBER POTATO FUTURES ON APRIL 15 AND OCTOBER 15*



* New York Mercantile Exchange; for Maine price, subtract approximately .76 per cwt.

CHART 2.—GROSS RECEIPTS FROM 100 ACRES OF POTATOES IN MAINE, OCTOBER 15 SALE, HEDGED AND UNHEDGED

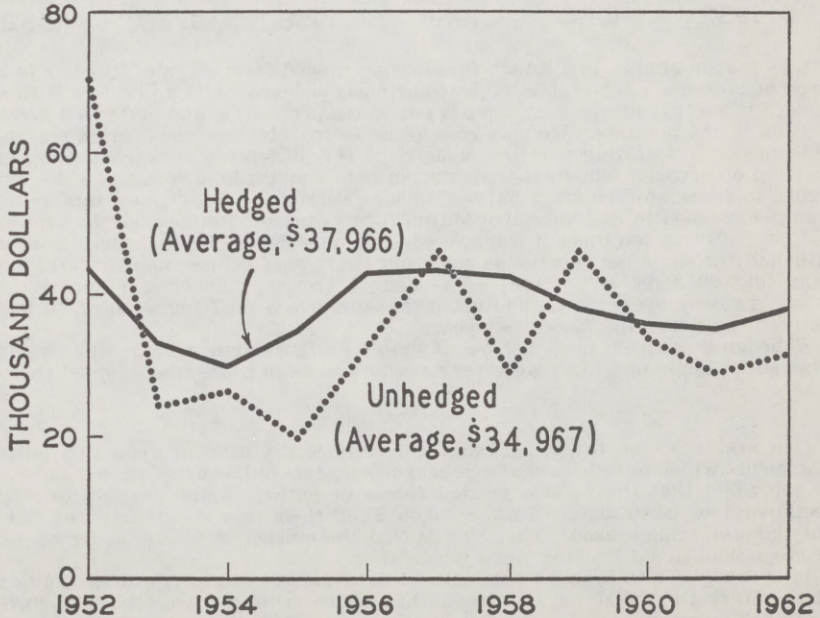
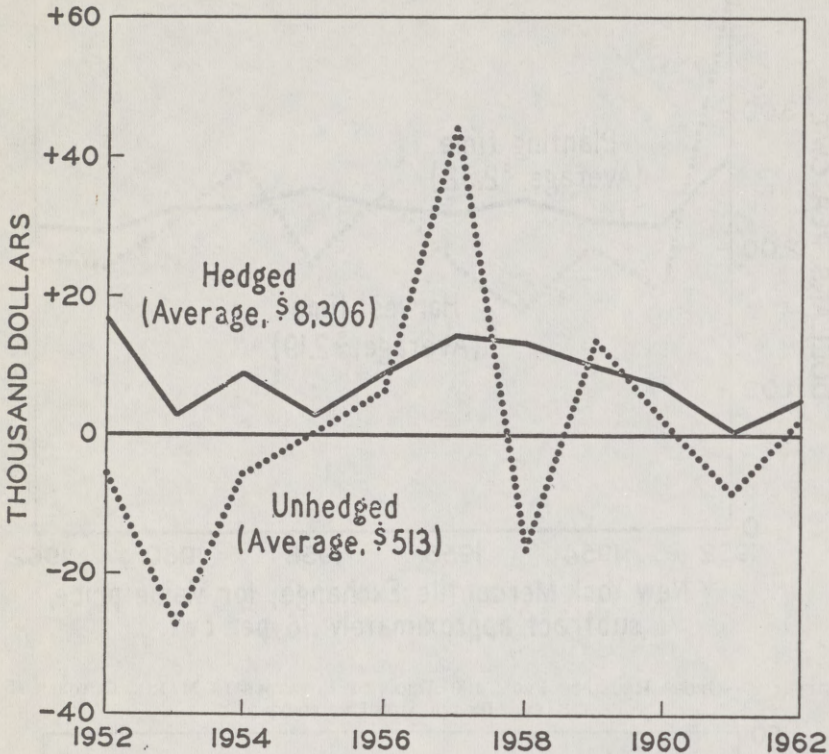


CHART 3.—PROFITS (OR LOSSES) FROM 100 ACRES OF POTATOES IN MAINE, FEBRUARY 28 SALE, HEDGED AND UNHEDGED AFTER COSTS (INCLUDING HEDGING COSTS) AND BEFORE TAXES



can look upon simply as a return for storage, ranged from a low of 21 cents to a high of 93 cents. When it is high it obviously behooves him to protect it in a hedge; when it is low he may deem it not worth protecting, and prefer not hedging his stored potatoes. He may elect some figure which he considers a reasonable reward for storing potatoes, hedging if this difference is reached and not hedging otherwise. The final computation here was made in terms of a 40-cent figure to cover storage from harvest to late February. Four times this figure was not reached in the November-March futures price difference, so the grower did not hedge; seven times it was exceeded, so he hedged. The unhedged grower still had the same net returns as shown in chart 3, of course, namely, \$513 per year for 100 acres of potatoes. The hedged grower, who hedged during the growing season every year, and during the storage season 7 years out of 11, had net returns averaging \$9,841 per year.

A hedging program need not be so simple as those shown here; but clearly even such simple programs were very advantageous to those who adopted them.

IV

One aspect of the foregoing hedging results has a bearing upon two other arguments which have been made in hearings on this bill. One of these has been to the effect that the futures market forces or entices Maine growers to hold their potatoes in storage, when they should sell them in a steady flow throughout the marketing season. The other is that the market would suffer depressed prices if additional hedging were undertaken.

It is true, as was brought out in the USDA (CEA) study "Futures Trading in the Marketing of Maine Potatoes," that Maine growers have tended to store their potatoes for later and later sale. It is also true, as was not brought out there, that this has been accomplished at no sacrifice in the late season versus

early season price; and that an increasingly large proportion of the hedging of potatoes has been done during the storage season as distinct from the growing season. The open interest at the end of February, relative to that at the end of October, has risen considerably over the 11-year period of active futures trading, at the same time that total open interest has been rising. For the period 1952-57 the open interest at the end of February averaged 65 percent of that at the end of October in the same crop year; for the 1957-62 period this percentage was 132.

The hedging opportunity that exists during the storage season has clearly been taken by more and more growers, yet the advantage of this hedge has not diminished. The market has demonstrated a growing capacity for hedging, not only on an annual basis, as was brought out in my previous statement, but on a seasonal basis as well. Yet this shift toward later season sales by Maine producers has not forced a decline in late season potato prices relative to early season prices. Instead of "abandoning early season markets" as the Secretary of Agriculture characterized it in his letter to the chairman of the House Committee on Agriculture, it looks more like Maine producers have been economically attracted to late season markets, and have used the futures market increasingly to protect this move.

The threefold conclusion is that (1) hedged growers have been much better off than unhedged growers for both early and late season sales, (2) unhedged Maine growers who have sold their potatoes late in the season have been better off than those who have sold early, and (3) the relative advantage to the hedged grower has been greater for late season sale.

SOME CURRENT DEVELOPMENTS IN FUTURES TRADING

Roger W. Gray, Food Research Institute, Stanford University

(Journal of Farm Economics, May 1958)

In recent months a great amount of agitation has been manifest concerning trading in onions and potatoes. Committees of both Houses of Congress have held hearings over bills designed to prohibit futures tradings in the two commodities separately.¹ The onion bill² was reported favorably out of the House Agriculture Committee. Testimony has been heard from growers, dealers, Congressmen, representatives of the Commodity Exchange Authority,³ and members and officers of the commodity exchanges, among others. The CEA has conducted special surveys of both markets at frequent intervals and has published the results of these and of their analyses of the markets.⁴ Official and unofficial complaints of manipulation of the onion and potato markets have been aired. Formal disciplinary action has been taken against certain individuals⁵ as a result of some CEA investigations of these markets, but the same may be said of other futures markets which are not currently under direct attack. The current attacks are spearheaded by the national growers' associations, although it is not clear how spontaneous or widespread the antiexchange sentiment may be among growers.

The current attack is the most concerted attack undergone by any futures markets in the United States since the grain markets were placed under Federal regulation in 1922. Prior to that time, more than 100 bills designed to outlaw or restrict futures trading in the United States had been introduced in Congress,

¹ Cf. "Onion Futures Trading," hearings before a subcommittee of the Committee on Agriculture and Forestry, U.S. Senate, 85th Cong., 1st sess., on S. 778, and S. 1514, Aug. 12, 1957, and "Futures Trading," hearings before a special subcommittee of the Committee on Agriculture, House of Representatives, 84th Cong., 1st sess., at Presque Isle, Maine, Dec. 6 and 7, 1955.

² H.R. 376, 85th Cong., 1st sess.

³ Hereinafter abbreviated to CEA.

⁴ Cf. the following publications of the CEA:

(1) "Onion Futures: Survey of Open Contracts on the Chicago Mercantile Exchange," May 31, 1956.

(2) Same title, Oct. 31, 1956.

(3) Same title, Dec. 31, 1956.

(4) "Speculation in Onion Futures," January-March 1957.

(5) "Futures Trading in Onions," December 1956.

(6) "Potato Futures: Survey of Open Contracts on the New York Mercantile Exchange," Oct. 31, 1955.

(7) Same title, June 29, 1956.

(8) "Futures Trading in Potatoes," 1954-55, November 1955.

⁵ Cf. CEA Dockets Nos. 68 and 69, as summarized in Rodger R. Kauffman, Administrator, CEA, "Recent Developments in Futures Trading Under the Commodity Exchange Act," USDA, Agr. Info. Bull. No. 155, June 1956.

but none had passed. A vast amount of information was collected and analyzed by the Federal Trade Commission⁶ preparatory to Federal regulation of the grain markets, and subsequently other future markets were brought under surveillance. The regulatory function itself has entailed continuous data collection and occasional full-scale investigations, with the result that there now exists a substantial amount of published information on futures trading, which provides a foundation for improved understanding.

The purpose here is to show that, in spite of this accumulation of information, the current controversy has been clouded by ambiguity, inconclusive statistical analyses, and incantation. The diversity of hearings testimony and other published materials which carry the present controversy precludes a rigorous statement of the argument, which is polymorphous, against trading onion and potato futures. The best that can be done is to allude to the predominant or recurrent themes, which, it seems to me, are the following:

- (1) There is too much speculation in these futures (or the markets are too speculative).
- (2) Price variability is too great and is caused by futures trading.
- (3) Onions and potatoes are perishable commodities, and are therefore not adapted to futures trading.

The Ambiguity: I. Definition and Measurement

In order to show that these markets are too speculative, it becomes necessary to define and measure speculation. An unambiguous definition of speculation, if by this is meant a definition which draws a sharp line between positions in futures markets which are speculative and those which are hedging, is not easily had for the reason that many such positions contain elements of both hedging and speculation. A definition of hedging which has proper regard for the business uses of futures is that provided by Working: "Hedging in futures consists of making a contract to buy or sell on standard terms, established and supervised by a commodity exchange, as a temporary substitute for an intended later contract to buy or sell on other terms."⁷ Many such contracts contain elements of speculation; in fact, many are undertaken for purposes other than reducing risks. Moreover, many such contracts are classified as speculation in the published reports of the CEA. The importance of this ambiguity varies with the prevalence of the more speculative sorts of hedging in different markets; in the potato and onion markets much of the hedging is partly speculative. Shippers, dealers, merchants, brokers, and processors, as well as fertilizer dealers, have many occasions for buying or selling the standard futures contract as a temporary substitute for an intended later transaction in potatoes or onions, even though the futures contract is not reportable as hedging as an offset to currently held stocks or fixed price sales commitments.

The importance of this ambiguity in the present context may be suggested in a comparison between onion and wheat futures. For certain markets and dates, the CEA obtained the occupational distribution of speculators. Only one such distribution is available for wheat; three for onions.⁸ In the case of wheat futures at Chicago on September 17, 1947, 78 percent of all speculative positions were held by "outside" speculators, and 22 percent by "industry-connected speculators." The distribution for onion futures, a total for three surveys on May 31, October 31, and December 31, 1956, was 50 percent "outside" and 50 percent "industry-connected." Much industry-connected "speculation" is hedging according to Working's definition; yet the greater extent of this category of "speculation" contributes to the impression that the onion market is highly "speculative." On the above dates, 56 percent of all wheat futures commitments and 65 percent of all onion futures commitments were designated speculative; yet if only outside speculation is counted, the wheat market was 46 percent and the onion market 33 percent speculative. If it is difficult, however, to say how much speculation there is, it is not so difficult as it is to say how much is too much.

⁶ Federal Trade Commission, "Report on the Grain Trade," vol. I-VII, Washington, 1920-26.

⁷ Holbrook Working, "Hedging Reconsidered," Journal of Farm Economics, vol. XXXV, November 1953.

⁸ The wheat data are from statement of J. M. Mehl, Administrator, CEA, before Joint Committee on the Economic Report, Nov. 24, 1947 (mimeo); onion data from the first three titles in footnote 4 above.

The Ambiguity: II. How Much Speculation Is Desirable?

One criterion for judging what amount of speculation is desirable is that speculation should be sufficient to create a good hedging market. This criterion, or some variant of it, is implicit in most CEA reports of market investigations, wherein the amount of speculation is appraised in terms of the amount of hedging. But this criterion is not unambiguous. Properly interpreted it is a valid but nebulous criterion; improperly interpreted it is precise but arbitrary. An illustration of improper interpretation of this criterion is found in some of the CEA reports of market surveys, where their comment has been "speculative commitments were far in excess of the amount needed to carry the relatively small amount of hedging commitments"⁹ or words to this effect. When, as in this case, a view is taken of the distribution of commitments only, without regard to the process by which they came into being, the amount of hedging needed can only be the difference between long and short hedging commitments, which would require that speculators be on only one side of the market at any time. This criterion is precise, but irreconcilable with the theory and practice of futures trading.

It is not clear from the context in which the CEA statements (to the effect that speculative commitments exceed amounts needed to carry hedging commitments) appear that they intend a strict interpretation of "needs." I have found such statements only in the circumstance that speculative commitments exceeded hedging commitments, which suggests the inference that total (long plus short) hedging commitments need to be offset by an equivalent amount of total speculative commitments (long plus short). This amounts to the same thing as the strict interpretation of needs in the case where hedging is all on one side (and speculation all on the opposite side), but such a distribution would rarely if ever occur. No futures trading is conducted in such a manner as to give rise to the expectation that hedging and speculative commitments would be equal; hence this interpretation of the criterion is arbitrary.

In short, while the criterion that speculation should be sufficient to create a good hedging market is valid, it is not possible to apply this criterion by observing the distribution of hedging and speculative commitments. A proper interpretation of the criterion must take account of the process by which commitments are undertaken and offset, the "best" hedging market being one in which trades can be made with minimum price effect. Hedgers can trust price quotations only to the extent that speculators defend the quotations. When new information renders a quotation indefensible, hedgers need to rely upon speculators to arrive at a new price which is defensible. A large group of speculators continuously readjusting their positions as conditions change (a liquid market) provides the best assurance to the hedger that he can trust the price. This interpretation of the criterion, which is the common "trade" interpretation, is nebulous in that it offers no way of specifying an optimal amount of speculation.

The full extent of the ambiguity may be appreciated in noting that the onion and potato markets have serious limitations in the view of experienced users of the markets as well as in the view of the CEA, but from opposite standpoints. This is illustrated in interpretations given to the price behavior of the March 1957 onion contract, which was such as to occasion resurgence of the clamor to abolish futures trading in onions. The price of this contract rose from \$1.20 to \$1.50 per 50-pound sack in a week in mid-January, reached \$1.70 in late January, followed by a peak of \$2.20 on February 4, then a steady drop to a low of \$0.85 on March 6, and subsequent recovery to \$1.58-\$1.60 as the contract expired. The CEA concluded with regard to this situation that "the wide price swings * * * appear to have been the result of heavy speculative activity."¹⁰

The interpretation given this price behavior by a customer's man in a large commission firm may be contrasted and perhaps partially reconciled with the CEA interpretation. This individual, who has had much experience in handling the accounts of both hedgers and speculators in onion and potato futures, described to me the situation in the March onion contract while it was in progress and before I had been aware that it had elicited keen interest. He had urgently recommended short sales to his speculative clients when the price was above \$2, but had been unable to place their orders as the price fell precipitously. He recommended purchases at \$1.25 and lower and succeeded in placing orders in this

⁹ "Futures Trading in Potatoes," op. cit., p. 52.

¹⁰ "Speculation in Onion Futures," op. cit., p. iv., the writer's italics.

range. The price had gone to \$0.98 when I talked with him, but he said that his clients would hold fast, even if it dropped still further, as the statistical position had indicated (to him) a price in the \$1.50 range quite consistently. His explanation for the wide swings above and below the equilibrium level was quite simply that there is too little speculation in onions. Developments in the statistical position are commonly overreflected, in his view, because of the paucity of speculation. Further, in his own words, "I can't recommend a trade for a nickel because that trade might move the price a dime."

Reconciliation of the view of too much speculation with that of too little speculation requires reconsideration of what is meant by speculation. Even if all forms of hedging, including the more "speculative," were excluded, the CEA's conception of speculation includes two different kinds of trading done by two quite distinct groups of traders—professional speculation and public speculation. In speaking of speculation, the habitue of futures markets connotes professional speculation as distinct from trading by the public. The class of professional speculators provides the basic defense of price. Where this class is small, as in the onion and potato markets, a wave of public buying or selling meets little resistance; such a market the trade refers to as a "thin market." A sudden expansion of public participation, such as the CEA found in the March onion contract, appears to them as too much speculation; whereas the experienced trader, thinking of the feeble price defense which was thrown up in this event, diagnoses the trouble as too little speculation.

Less than 10 percent of the commitments on the dates of surveys of the onion and potato market have been held by the group designated "brokerage firms and employees, floor traders, and professional speculators." This group includes the class of traders that must provide the basic price defense.

Although the views of "too much" and "too little" speculation are at least partially reconciled by taking account of the ambiguity in the word "speculation," this does not mean that either expression points with equal clarity to the defect in these markets. The inadequacy of the type of speculation which provides price defense owes to the lack of routine hedging in these markets; the emergence of which is the *sine qua non* of highly developed futures trading. From the standpoint of the improvement of these two futures markets there is too much speculation, but it is speculation in potatoes and onions, not in futures contracts. Most of the late crops of potatoes and onions go into storage at harvest time and are left unhedged. Growers and country shippers or dealers speculate on the prices of these stored commodities to the extent that the peak levels of open contracts on futures markets amount to less than 10 percent of the stocks. The price risk in this speculation is inherently very great: movement into consumption channels is not highly coordinated, reporting necessarily lags the fact, and competitive crops are maturing in the South during the out-of-storage movement. Not only is the hedging need pronounced, but the hedging opportunity has been excellent. At potato harvest time (October 15 in Maine, to select a date for a routine hedge) the average carrying charge to February 28 (March future) has been 60 cents a hundredweight in the last 8 years, and the price of the March future has averaged 40 cents a hundredweight higher on October 15 than on the following February 28. Similar relationships have prevailed in onion prices. It may be argued of course that the present market would not maintain this hedging opportunity should most growers and country dealers elect to use it. No theory of futures trading can answer this argument, but the empirical development of major futures markets suggests clearly that the speculators who can and will support these prices will not appear on the scene until such time as this hedging opportunity is seized.¹¹ Given the development of routine hedging in these markets, the public trading which is deemed excessive would be readily absorbed.

The Inconclusive Statistical Analyses

Futures trading, if it is to be condemned, must be shown to have bad effects. Whether it amplifies or reduces price fluctuations is an important question. The CEA concluded from the onion futures price behavior outlined above that "it is clear that futures trading in onions has widened and accentuated price move-

¹¹ Specific evidence on this point is contained in Holbrook Working's "Whose Markets?—Evidence on Some Aspects of Futures Trading," *The Journal of Marketing*, vol. XIX, No. 1, July 1954.

ments over short periods of time within a marketing season."¹² This particular conclusion has not, surprisingly, been seized upon by the opponents of futures trading in onions. That the price swing was wide is without question, and that it was established through the vehicle of organized futures trading is equally clear; but that futures trading has widened and accentuated such a movement is not demonstrated.

Two studies have been undertaken to measure comparative price variability in the present context. One was a study by the Agricultural Economics Division of the U.S. Department of Agriculture¹³ which showed that cash prices farmers received for onions were subject to significantly greater variability during the 1930-40 period when there was no futures trading than during the 1947-55 period when the futures market was operative that the percentage variation explained by production and disposable income was larger in the latter period and that the smaller residuals of the latter period were related to volume of futures trading. The chief reservation which I hold toward these results is that I suspect that the cash onion market has become better organized in recent years, owing to the activity of grocery chains and to increased trucking, whereas there is little evidence of this improvement being closely related to the futures market. These are nevertheless superior results to those which purport to give an opposite indication.

The CEA compared month-to-month variability in onion futures prices directly with farm prices for the 1948-56 period,¹⁴ employing U.S. farm prices, which are a weighted average for all production areas and include all grades and varieties of onions. They concluded that the range of farm prices over the 8-month marketing season was a lower percentage of average monthly price in 6 out of 8 recent years than the same computation for the near future in the Chicago onion contract. For the 8-month season, the near future is 3 months away in 1 month, 2 months away in 2 months, 1 month away in 4 months, and zero months away in 1 month. In each of the 2 years in which the futures price range was a lower percentage of its average price, the seasonal low occurred in the month when the near future was 3 months away and the seasonal high in the month when it was zero months away. In the remaining 6 years in which the futures price range was a higher percentage of its average price, the seasonal lows averaged 0.5 months away from the near future and the highs 1.5 months away from the near future. Since the futures market reflected carrying charges throughout the period, the comparison made by the CEA is inappropriate, embracing as it does varying amounts of carrying charges in the range of the near future price.

The incantation

Another concept which figures repeatedly in the hearings testimony is "perishability." In the context of the hearings, the word "perishability" is an incantation, for although the assertion is reiterated that futures trading cannot work for a perishable commodity, no reason is advanced why this should be so. A typical statement regarding perishability occurs in the testimony of John C. Datt, assistant legislative director, American Farm Bureau Federation, who lists perishability as the leading reason for Farm Bureau opposition to futures trading in onions and potatoes and says, "Onions and potatoes by their very nature are perishable commodities. They cannot be stored for an unlimited length of time. * * * This situation is quite different from wheat, corn, and other storable commodities where the futures market performs a valuable role since hedging provides risk insurance. Because of their perishability * * * we do not believe that onions and potatoes lend themselves to sound futures trading."¹⁵ The statement of Everette B. Harris, president, Chicago Mercantile Exchange, provides sufficient commentary on this assertion: "One of the strongest arguments made against futures trading in onions has been that such trading simply is not adapted to a perishable commodity like onions * * * the reasons why such a market cannot function satisfactorily have never been explained. Actually, an onion futures market does fulfill the primary function of such a market. * * * Why kill it because of a theory?"¹⁶

¹² "Speculation in Onion Futures," op. cit., p. v.

¹³ Summarized in "Onion Futures Trading," op. cit., pp. 50-56.

¹⁴ "Futures Trading in Onions," op. cit., pp. 13 and 52.

¹⁵ "Onion Futures Trading," op. cit., p. 8.

¹⁶ *Ibid.*, p. 41.

Conclusions

The present official view of futures markets for onions and potatoes is a dim one. Hearings reports have been unfavorable to their continued existence. The CEA posture, as reflected in hearings testimony, published reports, and the official position of the Department of Agriculture on H.R. 376 is one of negative neutrality. The testimony and published reports are of a negative tenor, while the official position is that the enactment of H.R. 376, prohibiting futures trading in onions "would not significantly affect the marketing or distribution of onions."¹⁷ To the extent that the present jeopardy of these markets rests upon ambiguity, incantation, or inconclusive statistical analysis, there is danger that they may be abolished for wrong or insufficient reasons. A constructive alternative to abolition, given the state of the evidence, would seem to be an investigation of the potential hedging use of these markets. Given the need and opportunity which exist for hedging, it seems reasonable to expect that improved understanding of hedging procedures would give rise to expanded hedging use. Without the widespread development of routine hedging, these markets are vulnerable to attack from just those quarters where hedging could provide most benefit because of the characteristically erratic price behavior of potatoes and onions during the crop movement season.

MR. GRAY. Now, my general feeling, sir, is that potatoes and onions both are storable over the relevant period of futures trading. It is certainly true that these are not crops with a carryover, like the grains.

It is my feeling that because of this, because you do not have a carryover to smooth out the abruptness of the price change from one season to the next, or from one crop to the next, that it is all the more important that you have an adequate forward pricing mechanism, so that the price changes that are going to occur can be anticipated, producers and consumers alike can make their adjustment to this.

I feel there is a greater need for a futures market in potatoes and onions than there is in the grains, sir. I think that the futures market—I do not for a moment deprecate the use of the futures markets in grains—they are very useful institutions. I feel the case is even stronger in the case of a commodity where you have no carryover.

Representative McINTIRE. Well, I certainly am not questioning the desirability of futures trading in the grains, or storable commodities. But I recall one of my experiences as a member of a committee that was holding hearings on onions. It happened that the Chicago market slugged the onion market in Chicago on deliveries until it drove the price down to 10 cents a 50-pound bag or thereabouts, and it is obvious that the only reason this could be done is because it was a perishable commodity. That was the only possible way they could do it. And the same way in the futures trading on potatoes. The open interest that is lying there just prior to the point of delivery has a great effect on the market because of the product's perishability, and because the contract period is running out.

I certainly could not disagree with you more on anything than your establishment that a perishable commodity has far more reason for a futures trading than a storable commodity. This is completely opposite to any conclusions that I could ever reach in my experience in these hearings or actual experience. I am conversant with how these things work when one finds the seasonal terminal point arriving; that is, the last contract of the period for the season's trading, and one has been bringing contracts forward to avoid deliveries from

¹⁷ "Prohibiting Futures Trading in Onions," H. Rept. 1036, 85th Cong., 1st sess., Aug. 8, 1957, p. 4.

one month to the other. Everybody knows you are coming down to the last month of delivery and also that you have liquidated a great deal of the open interest as you have gone along. There is a cumulative effect there. Certainly we saw this demonstrated in the New York Mercantile very recently when a thousand carloads or more rolled in there and it was impossible to keep them in condition. The carloads' contents deteriorated very badly, leaving hundreds of thousands of dollars worth of claims still unresolved because of the deterioration that took place. And all of this was because of perishability.

Now, do you think that this is a favorable aspect of trading, when a perishable commodity can be concentrated at a single terminal delivery point?

Do you think this is a constructive development in a futures market, and that this is helpful to the market structure as a whole?

Every one of such cars has to go out on sale. And every one of those cars essentially is a distressed car when it arrives at the terminal, because it cannot be put into storage. It has to be moved into a consumer position. And it has got to be moved very rapidly.

I am surprised, in making an analysis here, that you have completely avoided the issue of perishability, because in any study of the issue of futures trading on onions and potatoes, perishability has been a key point in the examination.

Mr. GRAY. AS I say, sir, I have not avoided the issue of perishability. I have dealt with it before. I would be pleased to attempt to deal with it here now.

My feeling once again is that this is certainly an unfavorable, from one standpoint, attribute of the commodity—not an unfavorable attribute of the marketing mechanism. Under any circumstances—

Representative McINTIRE. You are drawing a very fine line when you say it is not unfavorable to trading. I think it is unfavorable to trading because one can't separate the commodity from the trading mechanism.

Mr. GRAY. I am saying that the trading mechanism that you have in futures trading is better adapted to cope with this characteristic of the commodity; namely, that it is storable over a shorter period of time than some of the commodities. It is better geared to cope with that than the preceding marketing mechanism was.

The preceding marketing mechanism, sir, also gave you distressed merchandise, also got merchandise out of position. You had this happen many times before you had futures trading in onions and potatoes.

You cannot prevent men from exercising bad judgment on occasion, and men will exercise bad judgment, I am sure.

But what the futures market does is to provide an opportunity for men of good judgment to do a better job of anticipating the end of the season, and when the North Carolina potatoes are going to be coming on and when the Alabama potatoes are going to be coming on, and when the Maine potatoes are going to be running out. And I say it is particularly necessary to have a mechanism which gives a forward thrust to your pricing of the commodity, so that it can discount some of these things before they have become events.

Representative McINTIRE. Well, you can make academic conclusions. My concern, however, with the decision that has to be reached by individuals involved in disposing of a crop and getting that crop into

the hands of consumers at as favorable a price as is possible to get in a prevailing supply and demand situation.

Now, you make reference to the fact that in your opinion a small grower has a good opportunity to get into this marketing mechanism. There has also been reference made to the point that the growers under this arrangement of futures trading do not have a chance to participate face to face.

Well, I can tell you, as one who was born and brought up in this industry, that there are far fewer opportunities for the average grower to get into the marketing structure today than there were 25 or 30 years ago. This is so because we had a market at every railroad siding in the area, but we do not have it today.

Mr. GRAY. Sir, my point is he can become involved in this organized futures market on exactly the same terms as the large buyer or seller. My feeling is that the large grower cannot become involved in a less well organized, geographically less well organized, and a more chaotic market—he cannot become involved on equal terms. The smaller he is, I think the more likely he is to have weak bargaining power in that situation.

Representative McINTIRE. Well, I know that those of us who have had to contend with the dollars and cents phase of potato production are far removed from the academic philosophies of futures trading. And so this is a point—

Mr. GRAY. I tried to base my statement, sir, on evidence, not on an academic philosophy.

Representative McINTIRE. I appreciate that. But the evidence on the other side is quite realistic, too.

Mr. GRAY. Yet I feel that the major piece of evidence I looked at here, sir, was not realistic. As I said, I feel that piece of evidence made bad uses of facts.

Representative McINTIRE. Could you tell us how you computed the financial results of the speculation and the hedge shown in table 4?

Mr. GRAY. Would you permit me to read my statement on that point, sir?

Representative McINTIRE. If you feel the information you have given is complete as to how you made those computations, that's all right. Don't bother to read anything more, because time is so limited.

Mr. GRAY. I think it does explain it, sir.

Representative McINTIRE. But I would just want to say in conclusion, Mr. Chairman, that certainly it seems to many of us who have had the privilege of observing before and after periods of futures trading in potatoes in the Maine industry, it is obvious that the aspect of perishability does not lend itself constructively to futures trading and, in the process, upsets regular marketing procedure.

I think that the history of futures trading in the cases both of onions and Irish potatoes is, in itself, quite supporting evidence that there is no sound basis for a futures contract in either one of these perishable commodities.

Mr. GRAY. I feel, sir, that in both cases you have had a useful futures market. And you have had indications from the people working with committees, people in Maine as well, that they are willing to make whatever adjustments are desired by the trade in the contract.

But I feel that what we have at work here is a useful and effective futures market.

Representative McINTIRE. And your conclusion would be that the growers of onions and the growers of potatoes just do not know how fortunate they are to have this trading vehicle and should not, then, feel that this is a trading mechanism inconsistent with their best interests.

Mr. GRAY. I am not speaking, sir, to the overall fortunes of growers of onions and potatoes. I am speaking and limiting my evidence to the relevance of the futures market to their overall fortunes. And I feel that its net contribution has indeed been positive.

I feel that if the market is closed that the overall fortunes of the Maine potato growers and of potato growers elsewhere will be detrimentally affected.

Representative McINTIRE. Just one final question.

On the basis of this, your firm recommendation would undoubtedly be that every major producing area ought to be working diligently to develop a futures contract for that area?

Mr. GRAY. That would not be my recommendation, sir, because I feel, as I pointed out in the last part of my statement, that the Maine potato contract is already very useful, and can be increasingly used by producers of all-purpose potatoes in the late crop state.

I think New York and Pennsylvania and others do not need another contract.

Representative McINTIRE. Thank you.

Senator JORDAN. Gentlemen, I have another meeting at 2:30 this afternoon, with the combined Agriculture and Foreign Relations Committee.

Mr. DALLING. Mr. Chairman, I am the only unattached person from Maine here not representing anybody. I corresponded with the committee in July, they wired me if I were coming, and I was. I am here at great expense personally. I had to have my statement finished up, typed up and mimeographed here in the city.

Fortunately I belong to a society, and they did it at a reasonable price.

Senator JORDAN. I'll tell you what. We will go as long as we can. I cannot be at two different places at the same time very easily—it is a little hard to do that.

We will keep right on until—we will hear everybody we can. And if we cannot finish up—

Mr. DALLING. I have condensed 45 minutes down to 18, and I can condense that some more.

From what Dr. Gray has covered, I can completely eliminate half of what I have here.

Senator JORDAN. What is your name?

Mr. DALLING. My name is Dalling, sir. I am from Presque Isle.

On this list of people appearing, they have it down that I represent a federation of farmers. That is an error. All my correspondence is in my own name as a public accountant. I was with the federation I worked for at the Association Meeting for Cooperative Accountants, and that got on there by mistake.

Senator JORDAN. Is Mr. Dubord here?

Mr. DUBORD. Yes, sir.

Senator JORDAN. Well, he is next in line. Suppose we take him. Then we will get to you.

Mr. DALLING. I have one thing that is extremely significant, sir.

Senator JORDAN. Dr. Gray, thank you very kindly for your testimony.

Mr. Dubord, if you will come forward, please, sir.

Mr. Dubord, we are glad to have you with us.

Please give your name and who you represent.

**STATEMENT OF RICHARD J. DUBORD, ATTORNEY FOR THE MAINE
ADVISORY COMMITTEE TO THE NEW YORK MERCANTILE EX-
CHANGE, WATERTVILLE, MAINE**

Mr. DUBORD. Mr. Chairman, my name is Richard J. Dubord, of Waterville, Maine.

I am a lawyer representing the Maine Advisory Committee to the New York Mercantile Exchange, speaking in opposition to this bill.

I would like to say at the outset that it grieves me to some extent to be opposing a bill of my good personal friend and political colleague, Senator Muskie. But nevertheless, this is the position that the people I represent take.

Senator MUSKIE. I might say, Mr. Chairman, we are in the same town, we both practice law in this town, as competitors, years ago. And now we are competing again.

Senator JORDAN. You may proceed as you wish, sir.

Mr. DUBORD. I will try to be brief, Mr. Chairman. I realize the demands on your time. I will try to avoid treading on ground that has already been trodden.

As has been mentioned, low prices for any agricultural product always stir a farmer's emotion and anybody else who is connected with the production of the agricultural commodity for his livelihood.

We feel in this instance low potato prices in Maine have again stirred the emotions of the potato farmer and caused many of them to lash out at the New York Mercantile Exchange as the source of the low prices which basically concern them.

As has been touched upon in times past, the Maine potato farmers have blamed the railroads, they have blamed the chainstores, they have blamed the fertilizer companies, and undoubtedly at other times they may blame the potato processing industry. But this time they are blaming the mercantile exchange.

We believe we can show conclusively, and that it has been demonstrated by past investigations and reports of the U.S. Department of Agriculture and the University of Maine Experiment Station, that their position is illogical.

I would like at this point, Mr. Chairman, if I might to offer for introduction into the record two reports on this question which were made prior to this Donnybrook which exists at the moment.

One is by the Maine Agriculture Experiment Station at the University of Maine, 1958, and a Department of Agriculture Report of 1958, "The Economic Importance of Futures Trading in Potatoes."

May we offer those for the record?

Senator JORDAN. They may be included in the record at this point, or at the conclusion of your remarks, whichever you prefer.

Mr. DUBORD. Thank you, sir.

(The documents referred to follow:)

Trading in Potatoes on the New York Mercantile Exchange

Charles H. Merchant

MERCANTILE EXCHANGE											
3/27	Nov. 40		Dec.		Jan. 42		Feb.		MARCH 0	APRIL -181	MAY 7/24
	OLD	NEW	OLD	NEW	OLD	NEW	OLD	NEW			
OPEN INTEREST		184				122			2	2451	4754
OPEN		246				260				405	518
HIGH		246				260				416	529
LOW		245				255				397	501
CLOSE		245				355				405	520
BID		243				255				405	520
ASK		245				260				410	521
NO. SALES		7				9				618	1141
NET PER BARREL		211				231				483	668
		Prev. Close 249				260				410	517
		Cash Traded 1775									

MAINE AGRICULTURAL EXPERIMENT STATION
UNIVERSITY OF MAINE
MAY

ORONO
1958

BULLETIN 572

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To Mrs. Joan Bouchard and Miss Carol LaPlante for tabulating the contract and cash prices of potatoes used. Mrs. Joan Bouchard typed the manuscript.

FOREWORD

One phase of the northeast regional project on marketing potatoes, NEM-10, was established to study factors affecting the quality, price and sales of potatoes. This project was carried out cooperatively by the agricultural experiment stations in the northeast region and by the Agricultural Marketing Service, United States Department of Agriculture. One phase of this regional project deals with futures trading in potatoes. The research covered in this report was developed by the Maine Agricultural Experiment Station and gives particular attention to the operations of the New York Mercantile Exchange and the relationship of future contract prices and cash prices for potatoes. Other phases of work under the regional study completed or underway are (a) Maine Extension Service Pamphlet 53, July 1957, dealing with the New York Mercantile Exchange and some of the influences of the exchange on the potato industry, (b) Maine Agricultural Experiment Station Bulletin 567, November 1958, relating the uses that Maine potato growers make of the New York Mercantile Exchange and (c) Agricultural Marketing Service, United States Department of Agriculture Marketing Research Report 241 concerns the relationship of future trading to the financing of production and marketing of Maine potatoes, procurement and pricing practices.

SUMMARY

Futures trading in potatoes on the New York Mercantile Exchange began in 1941. Trading at first was light and became inactive during World War II. In 1946, trading was resumed but continued to be comparatively light until about 1952, when the number of transactions reached 73,076 for the year. For the three year period, 1954 to 1957, the annual trades averaged 143,293, which is equivalent to the same number of cars of potatoes.

The New York Mercantile Exchange provides three important functions. First, it provides a trading place and facilities for a continuous market every business day of the year. Secondly, potato growers, dealers and processors of potatoes may shift part of their risk of price changes in potatoes by hedging operations on the Exchange and thus permit them to operate on narrower margins. This may also provide consumers with potatoes and potato products at somewhat lower costs. Thirdly, the Exchange provides an opportunity for those who desire to speculate on potatoes under strict rules and regulations.

Originally there were seven months of the year, November to May, in which future contracts were transacted on the New York Mercantile Exchange. Beginning in June, 1957 the number of contract months was reduced to five and contracts for December and February were discontinued. March and May contracts have been more popular than the other contract months.

Contract prices usually advance throughout the marketing season unless there is a large supply of potatoes. For 11 years, 1947 to 1957, the monthly increase in contract prices from November to April has ranged from 7 to 16 cents per hundredweight. The average daily price spread, the difference between the high and low contract prices, for the seven contract months over an 11-year period was only 2.91 cents per hundredweight of potatoes.

The market price of potatoes is determined chiefly by the supply and demand for potatoes. As the demand for potatoes is relatively inelastic, small changes in supply result in large changes in prices. Futures prices on the Exchange respond to changes in the same supply and demand factors. The chief difference between cash and future prices is that cash prices are determined by the actual supply and demand conditions of potatoes on the market or are available to be marketed while contract prices are based on the anticipated supply and demand conditions at some future date. As both cash and contract prices are determined chiefly by the same economic factors, each has an influence on the other.

Prices of the various contracts have a tendency to parallel each other. If the price of one contract month should get out of line with the prices of other contract months, trading in the various contracts tends to bring the prices into adjustment. The month when a future contract matures, the price of the contract shows a somewhat closer relationship with cash prices for that month than a future contract maturing several months later. Cash prices on the New York market differ from future prices to the extent of certain marketing charges for cars of potatoes delivered on contract.

For the last two seasons, 1955-56 and 1956-57, the average weekly price differential between Presque Isle street price and Boston was 66 cents per hundredweight; from Presque Isle to New York 105 cents; and from Presque Isle to Cleveland 160 cents. These price differences amounted to approximately the freight rate and marketing charges from Presque Isle to the respective markets. Whatever influence the New York Mercantile Exchange may have had on the cash potato market in New York was reflected simultaneously in other markets in the northeast.

BULLETIN 572
TRADING IN POTATOES ON THE NEW YORK
MERCANTILE EXCHANGE

By

CHARLES H. MERCHANT¹

INTRODUCTION

This report attempts to bring together information on the operations of the New York Mercantile Exchange and the relationship between prices of future potato contracts and cash prices for potatoes. This study was undertaken in order to better acquaint the public with the operations, uses and probable influence of the Exchange on the potato industry.

THE NEW YORK MERCANTILE EXCHANGE

Futures trading was practiced long before there were organized exchanges. Throughout our history commercial contracts have been drawn involving future delivery of a commodity. Wide variations in these commercial contracts existed and there was no established market available on which to make the transactions. It was only a natural step from privately negotiated commercial contracts to organized trading under strict rules and regulations. The first organized exchanges dealt with grain crops, especially wheat, and then later mercantile exchanges were organized to handle eggs, butter, lard, potatoes and other commodities.

In 1931, potatoes were added to the list of commodities traded on the Chicago Mercantile Exchange. At the outset only the Green Mountain variety was used as the basis for trading. In 1941, potatoes were added to the New York Mercantile Exchange. However, trading was inactive during World War II but was resumed in 1946.

The New York Mercantile Exchange is located at 6 Harrison Street in New York City. A separate trading floor and facilities have been made available for trading in potatoes (fig. 1). As on other exchanges all the trading must be conducted by its members. These members, or brokers, are required to purchase a membership on the Exchange. To be eligible for membership their past business operations must have been creditable and they must be financially able to withstand a substantial loss. Potato growers and dealers, bankers, fertilizer companies, speculators, and in

¹ Head, Dept. of Agricultural Economics, Maine Agricultural Experiment Station.

fact anyone may initiate trades on the Exchange by contacting a broker who executes the order. The unit of trading is one car of Katahdin type potatoes, 450 hundredweight (50,000 pounds for the November, 1958 and later contracts) packaged in 50-pound paper bags.² The broker places all orders on the board and keeps his client informed as to transactions made for him. For these services, he charges a commission of \$20 for "round turns" (purchase order and sale order for one car).

The Exchange opens at 10:00 in the morning of every business day and closes at 1:30 p.m. After the closing hour all trades are cleared and balances are drawn for each day. There are five delivery months in which potatoes are bought and sold.³ They are November, January, March, April and May.

FUNCTIONS OF THE EXCHANGE

There are three primary functions of an organized exchange. One is to provide a trading place and facilities for a continuous market every business day of the year. In this way it provides a market outlet and establishes future contract prices for potatoes.

Trading on the Exchange enables growers and dealers to shift part of the risk of price changes in potatoes and thus permits them to operate on narrower margins. This is not only a benefit to the growers and shippers of potatoes but helps to provide a continuous supply of potatoes at perhaps somewhat lower cost to consumers.

The Exchange also provides a place for speculative transactions for those traders who desire to assume the risk of price changes in potatoes for financial gain. These traders, some buying and others selling future contracts, make for a broader market which more nearly reflects the supply and demand.

Hedging Operations

Any sale or purchase of a future contract may be for hedging or for speculating depending on the position of the trader. A potato grower in the spring of the year may have a sales contract executed for him, usually for November or March, to enable him to finance the planting of his potato crop. The credit may be easier to obtain from banks, other credit agencies, fertilizer companies and suppliers of other materials used in growing the crop, when part of the risk in the price of potatoes is shifted to someone else on a guaranteed basis. After the potato crop is harvested the farmer may sell his potatoes on the cash market and

² Originally the trading was in 100-pound burlap bags.

³ Prior to June 18, 1957, there were seven delivery months, November to May.



FIG. 1. A picture of the trading floor in the back and some of the brokers in the forefront.

buy an offsetting contract prior to maturity of his sales contract or he may deliver the potatoes during the delivery month of his contract.

During the potato marketing season a potato grower or shipper who owns potatoes may hedge part or all of his potatoes by negotiating a sales contract on the Exchange. Again, he may fulfill his contract by the actual delivery of the potatoes on any day in the month in which his contract matures (except November contracts). An alternative would be to sell his potatoes on the cash market prior to maturity of his contract and on the same day buy an offsetting future contract for the month the original contract was made.

A potato processor may hedge by purchasing contracts to provide him with an approximate price for his raw material. The processor has no intention of accepting potatoes purchased on contract. Instead he buys his potato requirements directly to meet his needs and sells offsetting contracts for the contracts that he has purchased. The effectiveness of the hedge depends on the relationship of the cash price of potatoes and the price of future contracts.

Speculative Operations

Speculative transactions may be made by either purchasing or selling contracts where the purpose is for financial gain and not to shift the risk of changes in the cash price of potatoes. A trader may be bullish, purchasing a contract in the hopes that the contract price will advance before the maturity of the contract. He has no intention of accepting a car of potatoes on the contract purchased but will sell an offsetting contract for the particular month the original contract was made. If he has forecast correctly an advance in the price of future contracts, he will have made money. On the other hand if the price declines, he loses.

If the speculator expects prices to decline, he will sell short. That is he will place an order to sell a contract without having any purchase contract commitments or any potatoes on hand at the time. Similar to the speculator who is long on the market, the short seller has no intentions of delivering a car of potatoes at the maturity of the contract. Prior to the maturity of the sales contract which has been negotiated, he will buy an offsetting contract. One who is speculating by selling short anticipates a lower price prior to the time he buys an offsetting contract. If his prediction should be correct he makes money, and if it is wrong he loses money.

INCREASING VOLUME OF BUSINESS ON THE EXCHANGE

The volume of trading on the Exchange was comparatively light until about 1952 when it reached 73,076 transactions for the year. From 1954 to 1957 inclusive, the annual trades have averaged 143,293, which is equivalent to that number of cars of potatoes. Transactions in 1956 reached a record high of 172,761 cars (table 1).

TABLE 1
Potato Transactions on the New York Mercantile Exchange
for All Contracts, 1947-1957

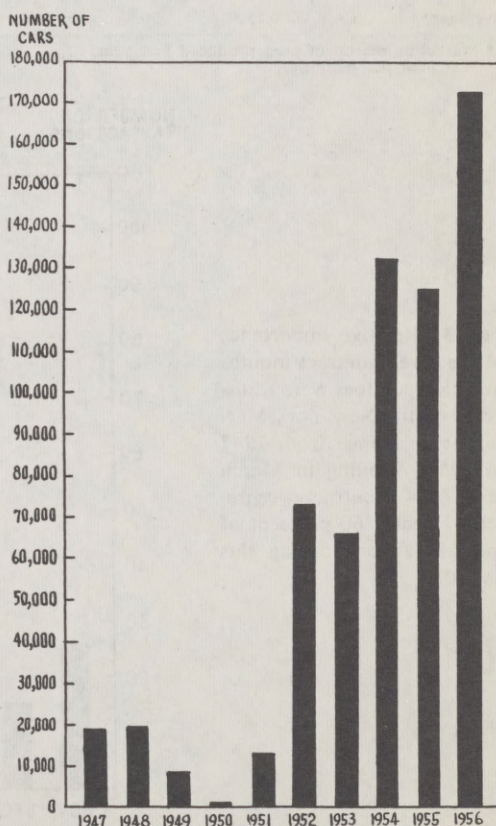
Year	Contract Month							Total
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	
	(number of cars)							
1947	4,561	3,603	5,020	1,972	3,215	959	0	19,330
1948	3,064	2,888	2,563	1,466	2,289	7,072	6	19,348
1949	1,721	943	2,643	1,430	935	1,004	107	8,783
1950	91	37	138	256	385	231	161	1,299
1951	907	2,562	2,787	2,131	2,667	1,626	177	12,857
1952	10,220	6,676	12,937	12,290	22,409	7,954	590	73,076
1953	4,663	2,172	3,748	5,384	21,200	22,673	6,596	66,438
1954	22,047	5,976	10,928	10,897	46,909	18,761	16,979	132,497
1955	8,551	417	1,879	3,469	30,136	29,770	50,399	124,621
1956	29,637	431	2,148	471	50,751	29,288	60,035	172,761
1957*	878	—	878	91	16,915	12,410	41,117	
Average 1947-56	8,546	2,570	4,479	3,977	18,090	11,934	13,505	63,101

* January 1 to June 30.

The number of cars of potatoes traded on the Exchange for the past four years represents an equivalent of about one-third to nearly one-half of the annual United States crop for the corresponding years. However a very small percentage of the contracts is fulfilled by the actual delivery of potatoes. This situation is not unlike that of all other commodities transacted on exchanges.

Producers of and dealers in potatoes desire to supply their customers with actual potatoes in the amounts and qualities needed and may use the exchange for shifting the risk of price changes. The delivery of potatoes by growers and dealers in fulfillment of a sale contract is usually made when the price difference between cash and contract prices is favorable to them and their market commitments would not be materially injured. Many of the trades on the opposite side of a hedge are taken by speculators who help make hedging possible, and these speculators obviously have no intentions of delivering or accepting potatoes.

FIG. 2. The volume of trading in potato contracts on the New York Mercantile Exchange from 1947 to 1956. Transactions reached a high of 172,761 cars in 1956.



MARCH AND MAY POPULAR CONTRACT MONTHS

There were seven months of the year for which future contracts for potatoes were transacted on the New York Mercantile Exchange. Since June, 1957 the number of contract months has been reduced to five by discontinuing contracts for December and February. The contract

TABLE 2

Average Number of Daily Transactions by Contract Months, 1947-1957

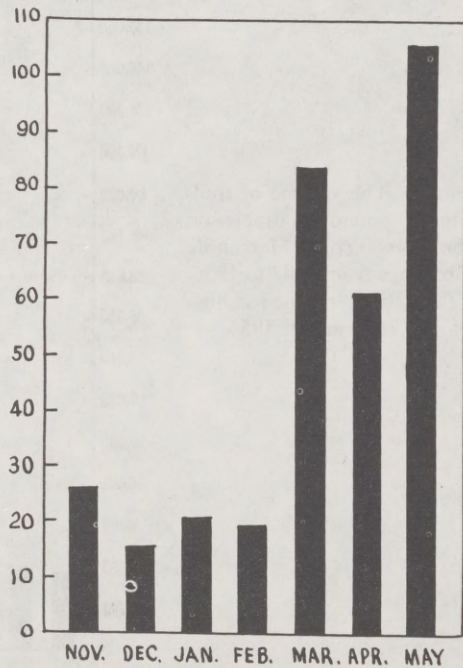
Marketing season*	Contract Month						
	Nov.	Dec.	Jan.	Feb.	March	April	May
1947-48	22.5	24.1	31.3	18.9	24.9	40.0	—
1948-49	18.8	15.2	12.1	6.0	5.0	8.8	3.5
1949-50	9.6	7.2	13.9	9.8	8.6	6.3	6.9
1950-51	3.8	2.1	1.0	5.2	3.8	2.2	—
1951-52	6.6	15.2	13.8	14.3	15.8	17.6	10.0
1952-53	42.5	31.9	47.8	57.3	142.5	114.3	29.8
1953-54	19.6	12.2	18.2	22.2	61.0	50.3	77.1
1954-55	91.1	25.2	45.6	51.2	251.5	168.9	227.1
1955-56	36.5	6.0	9.5	6.2	117.1	136.4	282.7
1956-57	12.1	—	15.1	4.1	206.5	70.2	208.8
Average**	26.3	15.5	20.8	19.5	83.7	61.5	105.7

* Marketing season of crop produced first year.

** Weighted per month.

FIG. 3. Relative importance of the seven contract months in which potatoes were transacted on the New York Mercantile Exchange from 1947 to 1957. Trading in March and May contracts represented nearly 60 per cent of the transactions during this period.

NUMBER OF TRANSACTIONS



months formerly began with November and extended through May of the following year. Of the seven contract months, March and May had the largest number of daily transactions for the 11-year period, 1947 to 1957. The month of April was third in the number of transactions and November was fourth. The number of transactions for the three months of December, January and February averaged two-thirds of the number of transactions for March (table 2).

CONTRACT PRICES USUALLY ADVANCE THROUGHOUT MARKETING SEASON

Even in imperfect competition, supply and demand forces set the spot or market price of potatoes within rather narrow limits. Likewise the estimated future supply and future demand of potatoes represent the major forces that influence contract prices on the New York Mercantile Exchange. Inasmuch as the demand for potatoes is relatively inelastic, the supply of potatoes is the most important factor influencing their market price, and the estimated available supply is the influential factor determining potato contract prices.

It seems natural to most individuals to expect potato prices to advance throughout the marketing season. There are the additional costs such as keeping of fires in storage houses to prevent freezing, cost of fire insurance, shrinkage and deterioration of the potatoes in storage, and interest on money invested in potatoes. Also, the government price support program (1943 to 1950) was set up with price increments throughout the first part of the marketing season. These price increments were established to aid in more orderly marketing and to assure the consuming public an adequate supply of potatoes during the latter part of the season. Some of this influence may have persisted in the thinking of many growers and shippers. However, it should be remembered that the quantity of potatoes on hand, and in the immediate prospect, affect the current potato prices. Large crops of late potatoes usually do not move into consumption rapidly enough to prevent a pile up of potatoes later in the marketing season. When this condition occurs, potato prices instead of advancing throughout the marketing season decline regularly or irregularly month by month. Similar price movements may be expected with contract prices on the New York Mercantile Exchange.

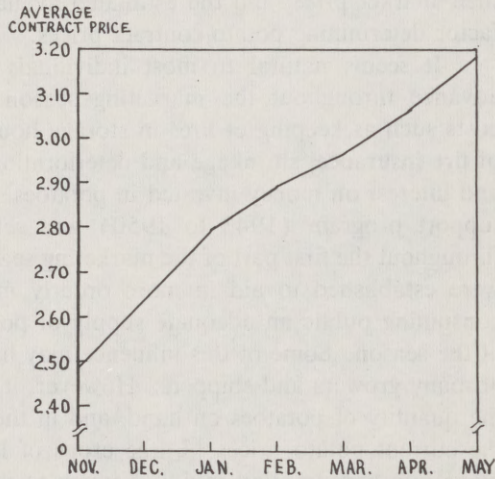
In 10 of the 11 seasons, 1947-48 to 1956-57, potato contract prices on the exchange increased by contract months throughout the season. In 1953-54, potato contract prices declined consistently from November to the end of the season. For 11 years the average increase in contract prices from November to December was 15 cents per hundredweight, December to January 16 cents, January to February 10

cents, February to March 7 cents, from March to April 10 cents and from April to May 12 cents (table 3).

TABLE 3
Average Differences in Closing Prices by Contract Months
Throughout Period of Contract, 1947-1956

Marketing Season	Contract Month						
	Nov.	Dec.	Jan.	Feb.	March	April	May
				(dollars)			
1947-48	2.70	3.04	3.40	3.59	3.71	3.81	—
1948-49	3.09	3.31	3.50	3.61	3.66	3.70	3.91
1949-50	2.53	2.63	2.79	2.84	2.91	2.93	2.74
1950-51	2.00	2.10	2.31	2.38	2.36	2.40	—
1951-52	2.36	2.60	2.87	3.12	3.37	3.94	4.48
1952-53	3.18	3.46	3.56	3.66	3.68	3.78	3.92
1953-54	2.09	2.08	2.06	2.05	2.02	2.00	2.02
1954-55	2.42	2.39	2.68	2.84	2.95	3.19	3.37
1955-56	2.04	2.06	2.17	2.23	2.32	2.32	2.55
1956-57	2.39	—	2.53	2.59	2.58	2.56	2.47
Average	2.48	2.63	2.79	2.89	2.96	3.06	3.18

FIG. 4. Contract prices usually show an advance from November to the following May by contract months. The average increase for the season for the last ten years (1947-48 to 1956-57) has been 70 cents per hundredweight. Figures in the vertical column represent dollars per hundredweight.



CONTINUOUS MARKET WITH NARROW PRICE FLUCTUATIONS

One of the primary purposes of an organized exchange is to provide a trading place and facilities for a continuous market every business day of the year. A large number of transactions involving various interests of the industry and the public are essential for the most successful exchange. On such an exchange one usually finds a very sensitive market with many narrow fluctuations in prices. This situation may be contrasted with the few large fluctuations in prices which too frequently occur on the spot markets. Contract potato prices on the New York

Mercantile Exchange fluctuate by a single cent while fluctuations of five and even ten cents are common on the spot market. Hence, contract prices on an exchange are quick to reflect any expected change especially in the future supply of potatoes.

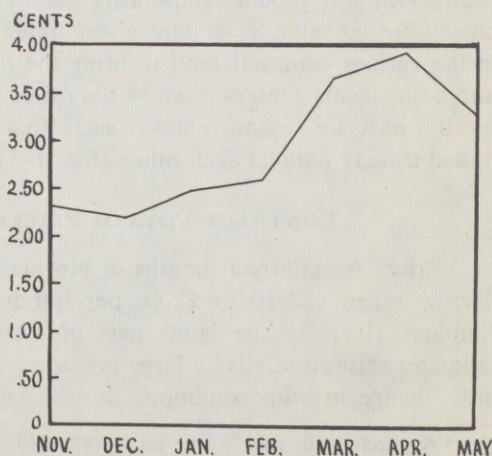
The average daily price spread, the difference between the high and low contract prices reported on the New York Mercantile Exchange for the seven contract months over an 11-year period, 1947-1957, was only 2.91 cents with a range of 2.18 for December contracts to 3.94 cents for April contracts (table 4). The amount of the spread varied somewhat with the level of contract prices but it varied more with rapidly changing commodity prices.

TABLE 4

Average Daily Spread in Potato Contract Prices by Contract Months
Throughout Marketing Season, 1947-1956

Marketing Season	Contract Month						
	Nov.	Dec.	Jan.	Feb.	March	April	May
1947-48	1.71	2.56	3.02	2.22	2.20	2.23	—
1948-49	1.79	1.25	1.20	.63	.67	.99	.62
1949-50	1.18	.85	1.34	1.06	.94	.66	.93
1950-51	.51	.04	—	—	.50	—	—
1951-52	1.64	2.78	2.81	2.92	2.53	3.19	1.34
1952-53	5.59	5.68	3.58	7.29	8.36	7.89	3.05
1953-54	2.09	1.33	2.02	2.13	3.28	3.22	3.32
1954-55	5.02	3.52	4.38	4.52	6.83	7.63	6.35
1955-56	2.74	1.59	1.67	1.86	4.72	5.27	6.12
1956-57	.80	—	2.27	.46	5.83	4.42	4.63
Average	2.31	2.18	2.48	2.57	3.59	3.94	3.30

FIG. 5. The average daily spread in contract prices by all contract months for 11-year period was only 2.91 cents per hundredweight. The range in the daily spread for the period was from 2.18 to 3.94 cents. There were only two years, 1952-53 and 1954-55, that the spread averaged over five cents.



CONTRACT PRICES OF POTATOES ON THE NEW YORK MERCANTILE EXCHANGE

It takes many traders with varied interests to establish a market price which accurately reflects supply and demand conditions. Each transaction requires a buyer and a seller agreeing on a definite price. Those who trade on the New York Mercantile Exchange are scattered throughout the United States and parts of Canada. They represent many occupations and professions, and their trading may be for hedging or for speculative purposes. Some make careful analyses of market reports and conditions before placing an order with a broker. Others act on the advice of persons in various walks of life and a few "play their hunches." However, everyone who places an order has in his own way arrived at an estimate of the future price of potatoes.

Because potatoes are relatively inelastic in demand the supply or the anticipated supply of potatoes is the most important price-determining factor. Hence, most traders in future contracts carefully analyze reports on the supply of potatoes available for markets and on the volume of potatoes that may be anticipated in the future.

As previously stated there were seven contract months in which trading was conducted. On June 18, 1957 the number of contract months was reduced to five. Trading has been and is active in four or five of these contract months each business day of the year. During the period from about October to the end of March trading often is in all the contract months.

Prices of the various contracts have a strong tendency to parallel each other throughout the periods of the contracts. If the price of one contract month should temporarily get out of line with the prices of other contract months at any given time, trading including straddles⁴ in the various contracts tend to bring the prices of all current contracts into adjustment. Observations of the prices of the seven contract months for the past six seasons show clearly that the prices of the contracts traded usually parallel each other (figs. 6-11).

CONTRACT POTATO PRICES IN 1951-52

Prices for contract months of November to March fluctuated in a narrow range (\$2.10 to \$2.40 per hundredweight of potatoes) from January, 1951, to the latter part of August. The government crop estimates showed relatively large potato acreages planted, and there was little change in crop conditions during August and September for the

⁴ A purchase or sale in one contract and the opposite transaction in another contract for another month.

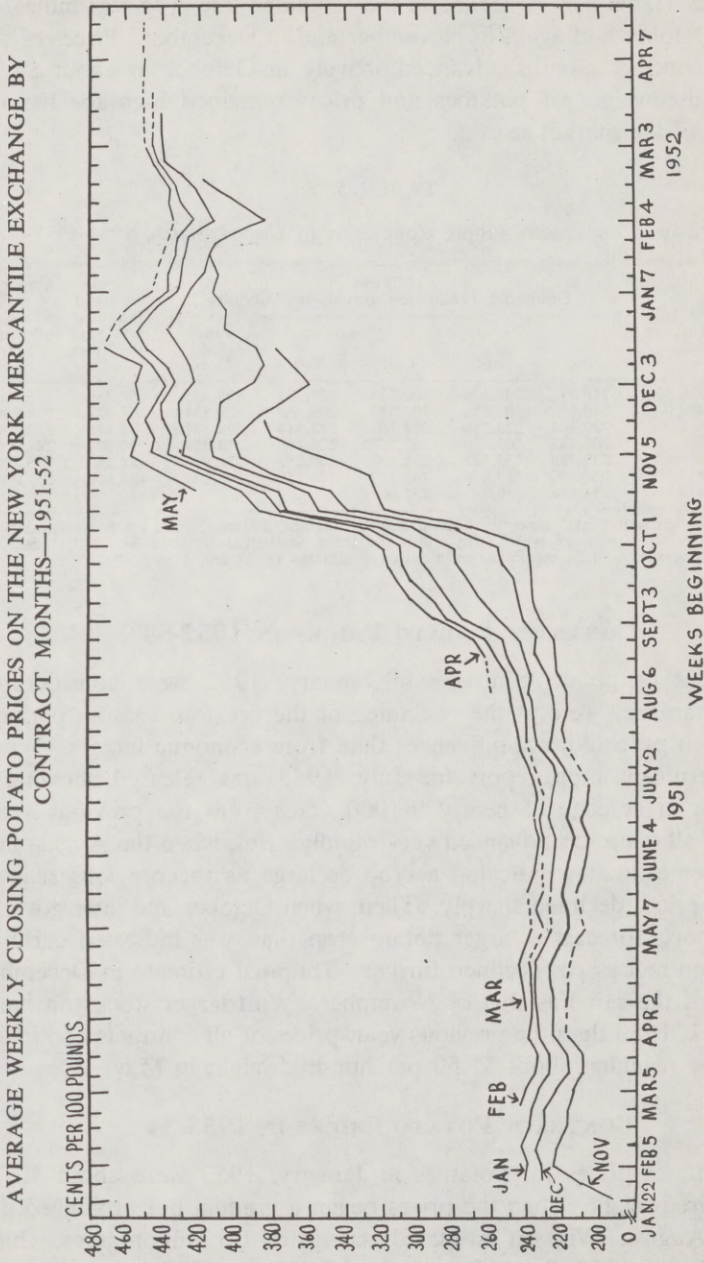


Fig. 6. Prices of potatoes by contract months on the New York Mercantile Exchange for 1951-52. Contract prices advanced sharply in October when the United States potato estimate was less than the estimate made earlier in the season.

late states (table 5). A decline in the estimated late crop was indicated first in October and again in November and in December. Prices of the current contract months advanced sharply in October to about \$4.00 per hundredweight of potatoes and prices remained high for the remainder of the market season.

TABLE 5

Information on Potato Supply Conditions in United States, 1951-1957¹

Crop year	July Acreage	1000 cwt Estimated Production Based on Condition				Final Est. Dec.	Stocks on hand Jan. 1 of next year 1000 cwt.	Acreage of early potatoes following year
		Aug.	Sept.	Oct.	Nov.			
1951	1,526,300	210,712	208,104	202,273	201,391	195,425	58,236	226,400
1952	1,438,000	210,253	202,611	207,337	209,554	209,554	68,022	278,900
1953	1,520,900	229,701	228,556	224,363	222,514	224,227	72,126	220,100
1954	1,396,200	206,749	207,309	207,563	208,166	213,059	70,901	244,000
1955	1,466,900	239,229	235,523	232,400	230,263	228,979	76,265	226,800
1956	1,417,900	230,277	233,676	242,167	244,150	243,238	101,110	252,900
1957	1,417,100	234,974	230,297	231,605				

¹ Taken from current years' reports of Crop Production and Potato Stocks on hand January 1, except Early Crop acreage which was computed from Statistical Bulletin No. 190, U.S.D.A., A.M.S., "Potatoes and Sweet Potatoes, Revised Estimates by States, 1949-55."

CONTRACT POTATO PRICES IN 1952-53

Prices of potato contracts in January, 1952 were considerably higher than they were at the beginning of the previous season, perhaps more from psychological influences than from economic factors. When the government crop report for July, 1953 was released showing a reduction in acreage of nearly 90,000 acres from the previous year, prices of all contracts advanced very rapidly. But, when the August and September estimates indicated a crop as large as the previous season, contract prices declined sharply. Then, when October and later government reports forecast a larger potato crop than was indicated early in season contract prices declined further. The final estimate in December was about the same as that of November. With larger stocks on hand January 1, 1953 than the previous year, prices of all contracts continued to decline reaching about \$1.50 per hundredweight in May.

CONTRACT POTATO PRICES IN 1953-54

Contract prices for potatoes in January, 1953 were about \$2.75 per hundredweight. Then the prices began a gradual but prolonged decline to August. With an estimated acreage of 1.5 million acres, which exceeded the 1952 figure by nearly 90,000 acres and gave a total acreage about equal to that of 1951, contract prices continued to decline. There was a slight recovery in contract prices in September and October

AVERAGE WEEKLY CLOSING POTATO PRICES ON THE NEW YORK MERCANTILE EXCHANGE BY CONTRACT MONTHS—1952-53

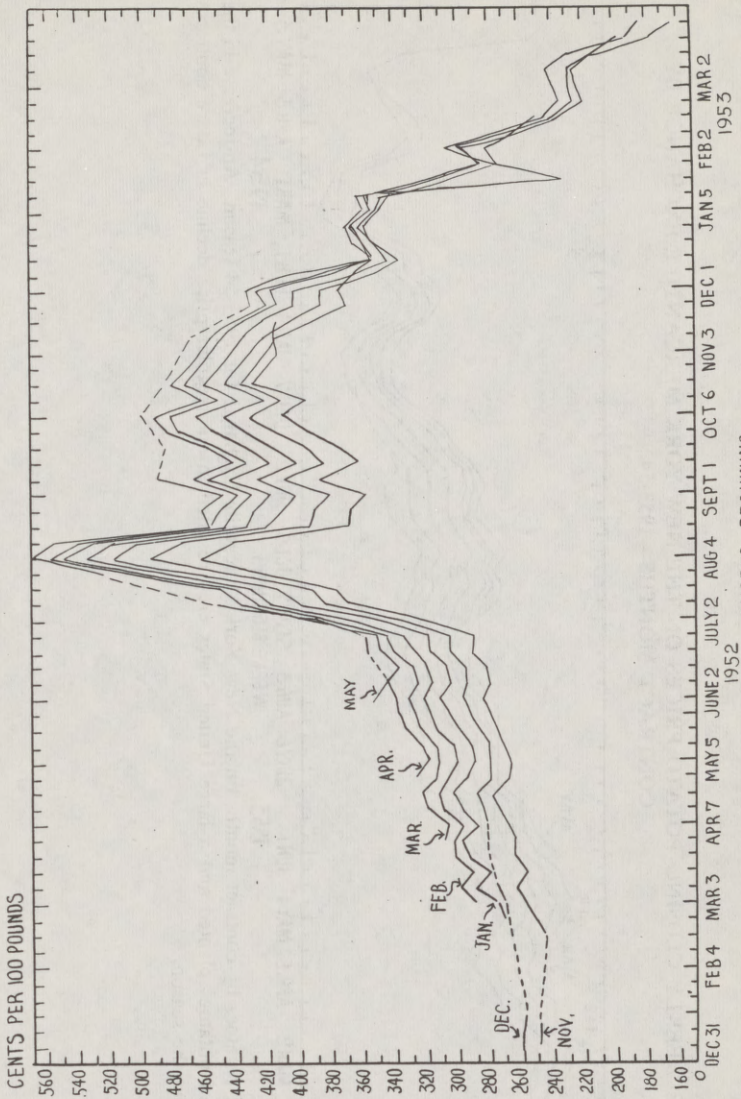


Fig. 7. Prices of potatoes by contract months on the New York Mercantile Exchange for 1952-53. Contract prices for potatoes began the year at relatively high levels following high prices prevailing at close of the previous year. With the July crop report indicating a smaller acreage than in 1951, contract prices advanced rapidly. Later when government estimates showed a larger crop than the previous year, contract prices declined nearly as rapidly.

AVERAGE WEEKLY CLOSING POTATO PRICES ON THE NEW YORK MERCANTILE EXCHANGE BY CONTRACT MONTHS—1953-54

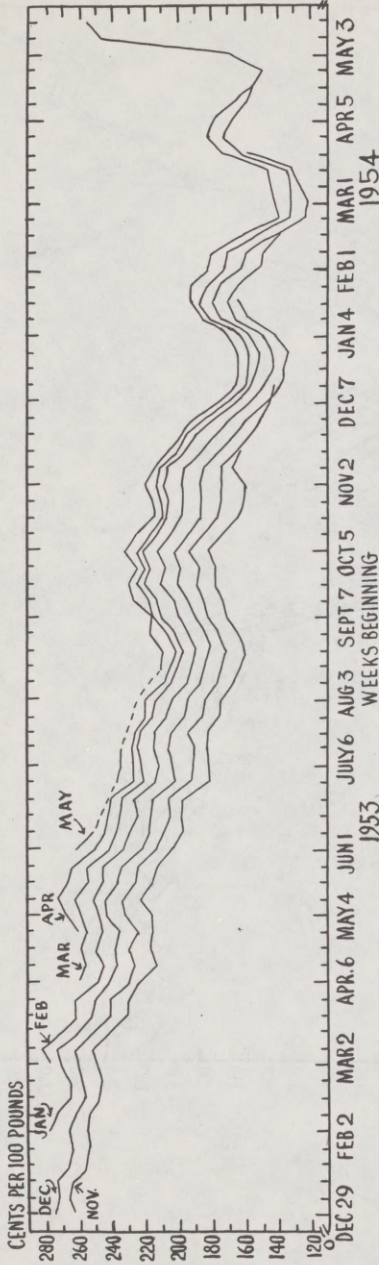


FIG. 8. Prices of potatoes by contract months on the New York Mercantile Exchange for 1953-54 season. An increase in the acreage of potatoes planted and a large United States crop resulted in an irregular price decline in future contracts throughout the season.

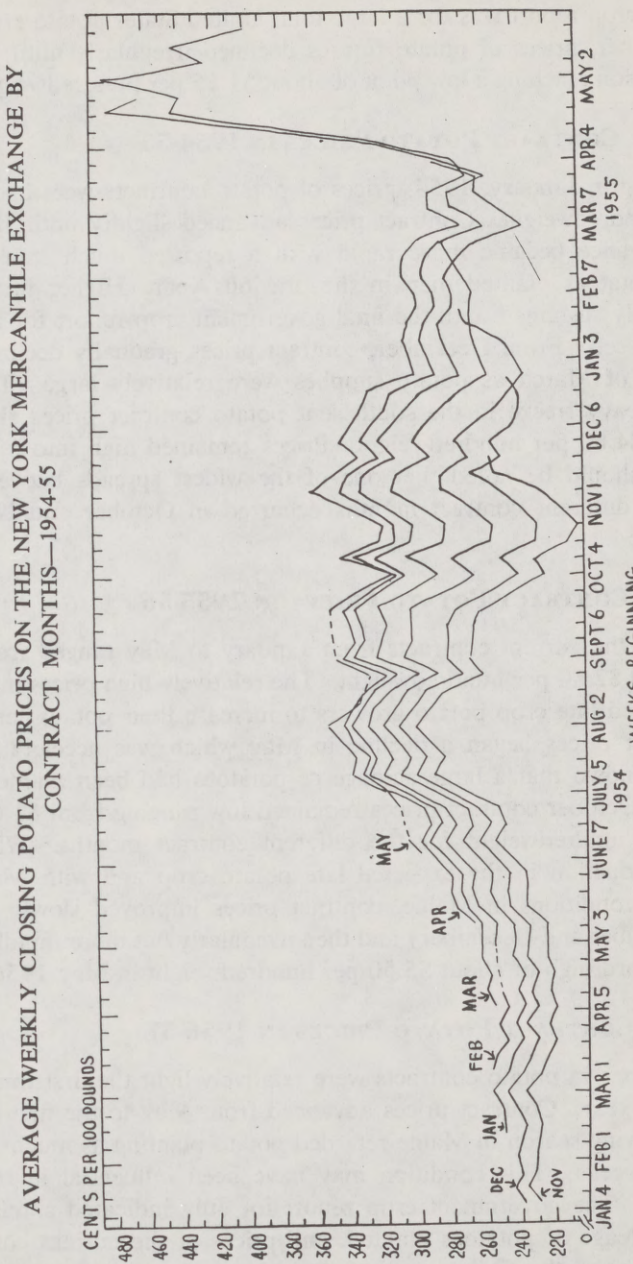


FIG. 9. Prices for potatoes by contract months on the New York Mercantile Exchange for 1954-55. Contract prices in January, 1954 were about \$2.35 per hundredweight. A moderate rise began in May becoming more rapid in July reaching about the \$3.00 per hundredweight level which was maintained until late December. Then contract prices declined somewhat to the last of March when they skyrocketed at the news of a severe freeze in the south.

although the crop report was for a large total United States potato crop. From November, prices of potato futures declined irregularly until the end of the season reaching a low point of about \$1.25 per hundredweight.

CONTRACT POTATO PRICES IN 1954-55

Beginning in January, 1954, prices of potato contracts were about \$2.35 per hundredweight. Contract prices advanced slightly until July when the advance became more rapid with a reported much smaller acreage of potatoes planted than in the previous year. Higher prices were irregularly sustained until the final government crop report for the year was released. From December, contract prices gradually declined until the last of March as potato supplies were relatively large. The report of a heavy freeze in the south sent potato contract prices skyrocketing to \$4.60 per hundredweight. Prices remained high into May of 1955. It should be noted that one of the widest spreads between prices of the different contract months occurred in October and November of 1954.

CONTRACT POTATO PRICES IN 1955-56

Prices of the current contracts from January to May ranged from about \$2.40 to \$2.80 per hundredweight. The relatively high prices may have encouraged late crop potato growers to increase their potato acreages. Contract prices began a decline in May which was accelerated when it was known that a large acreage of potatoes had been planted. From July to October contract prices remained low ranging from \$1.60 to \$2.00 per hundredweight for the different contract months. With some slight reduction in the expected late potato crop and with wide spread blight conditions in Maine, contract prices improved slowly at first (in November and December) and then irregularly but more rapidly, reaching a record high of about \$5.50 per hundredweight in May 1956.

CONTRACT POTATO PRICES IN 1956-57

Transactions in potato contracts were relatively light the first three months of the year. Contract prices advanced from May to the first of July. The growing season in Maine retarded potato planting as much as two to three weeks. This condition may have been influential in the price advance. The government crop report for July indicated a relatively large acreage of potatoes planted, and prices of the current contracts declined abruptly. Prices continued in a downward trend to early November as crop reports indicated a large crop of late potatoes in prospect. In spite of one of the largest late crops in recent years, contract prices showed considerable improvement from November to January.

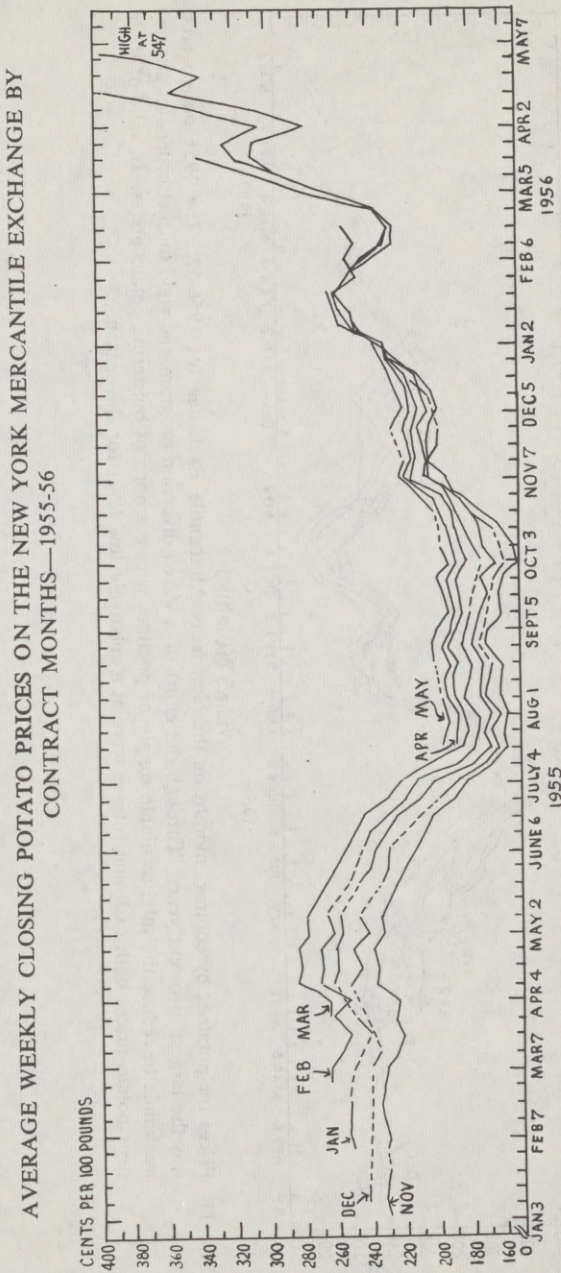


Fig. 10. Prices for potatoes by contract months on the New York Mercantile Exchange for 1955-56. The year 1955 especially illustrates the influences of economic and physical forces on growing a potato crop and the reactions of buyers and sellers of potato contracts. High contract prices in the winter and spring months encouraged a large planting of potatoes. Early crop estimates indicated a large crop reflecting low contract prices. Then almost continuous rain in some of the major potato producing areas induced severe blight conditions which were followed by potato rot. This situation resulted in much higher prices on the exchange.

AVERAGE WEEKLY CLOSING POTATO PRICES ON THE NEW YORK MERCANTILE EXCHANGE BY CONTRACT MONTHS—1956-57

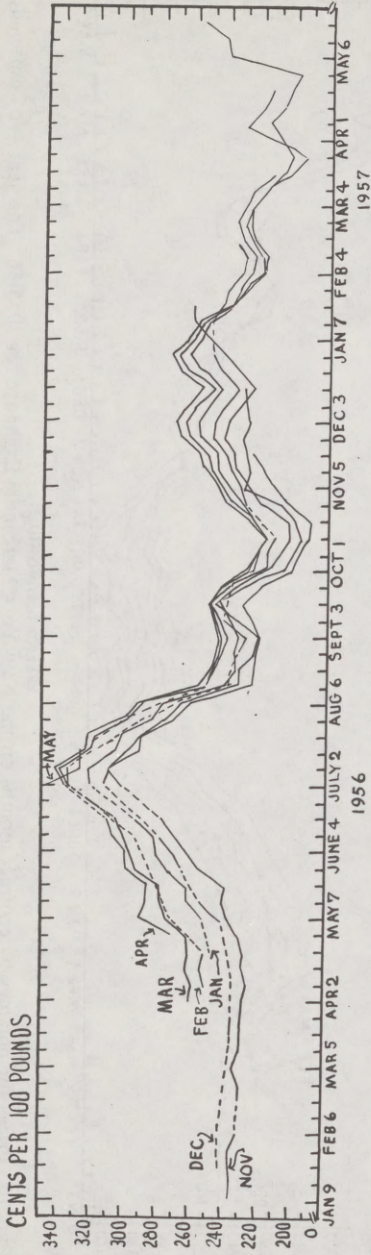


FIG. 11. Prices for potatoes by contract months on the New York Mercantile Exchange for 1956-57. The 1956 potato crop was the largest in recent years. Through the effort of a starch diversion program and rigid market orders an attempt was made to reduce the total available supply of potatoes with the hope of bolstering potato prices. In spite of these steps potato prices both cash and futures were at a relatively low level for the season.

The price advances occurred when the largest starch diversion program in history was undertaken with rigid market orders issued permitting only the best quality of potatoes to be shipped to the markets. Psychologically the influence was registered on the New York Mercantile Exchange but the actual quantity of potatoes removed failed to bolster the contract prices for the entire season. Prices showed an irregular decline from January to May in 1957. Again, it should be stated that the demand for potatoes is relatively inelastic and a comparatively small quantity of potatoes in excess of demand materially reduces the price.

SUMMARY OF SIX YEARS OF CONTRACT POTATO PRICES ON THE NEW YORK MERCANTILE EXCHANGE

The history of contract prices on the New York Mercantile Exchange shows clearly the sensitiveness of the market to changes in the expected supply and demand. The July government crop report on potato acreage planted in the late states is carefully scrutinized by both buyers and sellers of future contracts. During the crop growing season, July to harvest, an appraisal of the expected crop is given consideration. Then, with the release of the final government estimate of the late crop in December, another evaluation of the supply situation is made. Later, the stock on hand report of January 1 and reports of the crop prospects in the south may influence the position of those trading on the Exchange. Thus, most of the buyers and sellers are continuously analyzing all the available information and making reappraisals of the future market outlook.

Although the anticipated future potato supply conditions are the most important consideration of those trading on the Exchange, there are many other factors taken into account. Among these are the economic conditions of the country, transportation, state and federal government programs and export possibilities. Also, there are rumors and reports of rumors which play a part in influencing contract prices. Thus any report, founded or otherwise, may influence buyers and sellers of future contracts.

RELATION OF CASH AND FUTURE CONTRACT PRICES OF POTATOES

What has been the probable influence of futures trading in potatoes on the New York Mercantile Exchange, on the cash price of potatoes in New York and Maine? This question is not peculiar to potatoes as it has been voiced for many other commodities traded on exchanges. When prices of a commodity are relatively low, temptation is often overwhelming to blame someone or some organization. The extension of

credit has been cited at times as responsible for large potato production and resulting low prices. Government estimates of acreage, crop conditions and production have come in for much criticism in the past. It is not surprising that the New York Mercantile Exchange should be blamed for low potato prices. In this part of the report an attempt will be made to analyze the situation.

It has long been recognized that cash prices for potatoes are influenced chiefly by the supply of potatoes available for market. This situation exists as the demand for potatoes is relatively inelastic, and consumers' purchases are nearly the same volume within a wide price range. Likewise, as it has been shown, contract prices on the New York Mercantile Exchange are sensitive to changes in the supply situation. Therefore, both the cash and contract prices of potatoes are influenced by the same supply and demand factors, chiefly supply. The main difference is that the cash price is determined by the actual supply and demand of potatoes on the market or to be marketed, while the contract price is based on the anticipated supply and demand which is expected at some future date. As both cash and contract prices are determined largely by the same supply and demand factors, they necessarily have an influence on each other. If the contract price should be too low or too high in relation to cash prices, there is a tendency on the part of those trading on the Exchange to adjust their trading to the situation. Likewise when the cash price is too low or too high in relation to contract prices, commercial transactions have a tendency to bring the two prices nearer together.

A comparison of cash prices of potatoes on the New York market and at Presque Isle with contract prices on the New York Mercantile Exchange will be presented for each of the last six years. The period of the year chosen for comparison of the cash and contract prices is from December to the following March when Maine potatoes are on the New York market in sufficient quantity to establish a representative price (all future contracts are in Maine potatoes). The contract months used for comparison with cash prices are December, January, February and March. Prices of the current contracts correspond more closely with cash prices than contracts maturing several months later. It should be recognized that cash and contract prices although paralleling each other will have a rather definite price differential. The price differential is the result of certain marketing charges on cars of potatoes delivered in fulfillment of contract. Also, prior to the 1954-55 season the quality of potatoes deliverable on contract⁵ was somewhat lower than commer-

⁵ Unpublished data obtained by the author in cooperation with A.M.S. of U.S.D.A. from inspection records.

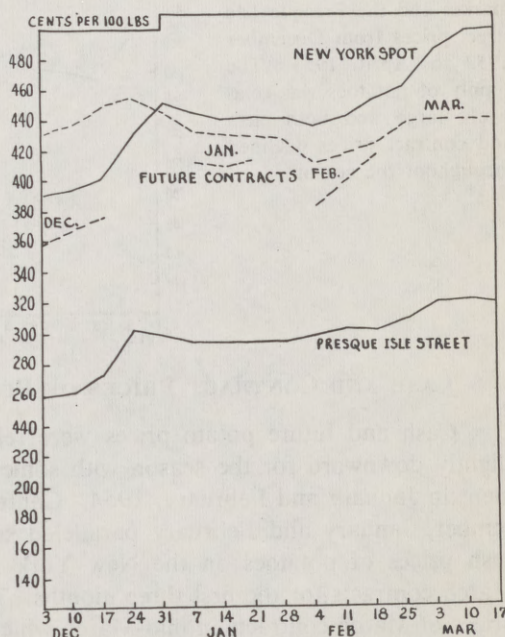
cial cars and the potatoes were in 100-pound bags which were not convenient for the trade.

CASH AND CONTRACT PRICES OF POTATOES IN 1951-52

Prices of potato contracts maturing in a given month and cash prices of potatoes on the New York market for that month usually paralleled each other. Cash prices on the New York market advanced during March, 1952 while prices of the maturing March contracts remained nearly unchanged. The Presque Isle street price also showed little fluctuation during March.

Prices at Presque Isle showed less variation from December to March than either the contract prices or the cash prices on the New York market. As may be expected the prices of March contracts for the season coincided less closely with cash prices than did the prices of contracts maturing in December, January and February for the respective months.

FIG. 12. Comparison of contract prices of potatoes on the New York Mercantile Exchange with the prices of potatoes on the New York market and the Presque Isle street prices from December 1951 to April 1952. The New York cash prices closely paralleled the prices of future contracts maturing in December, January and February for the corresponding months.



CASH AND CONTRACT PRICES OF POTATOES IN 1952-53

Following the relatively high prices of the previous year both cash and future prices were high at the beginning of the 1952-53 season. But with a large crop of late potatoes, cash and contract prices of potatoes

began a rapid and prolonged decline. The rate of decline was approximately the same for both cash and future prices from December to the close of March contracts. Prices of the potato contracts that matured in December, January and February paralleled somewhat more closely the cash prices than did the price of March contracts for the entire period. The Presque Isle street prices followed the price decline of the New York wholesale market with about the usual price differentials.

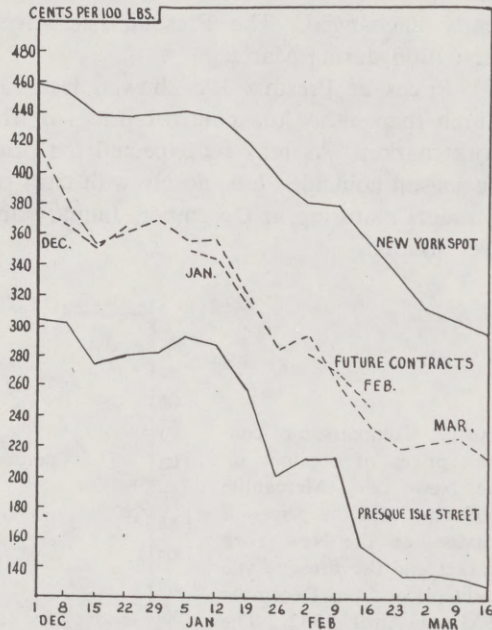


FIG. 13. Comparison of contract prices of potatoes on the New York Mercantile Exchange with the prices of potatoes on the New York market and the Presque Isle street prices from December 1952 to April 1953. The supply of potatoes was relatively large and both cash and contract prices declined throughout the season.

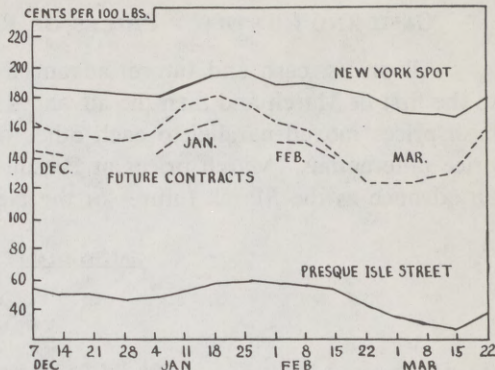
CASH AND CONTRACT PRICES OF POTATOES IN 1953-54

Cash and future potato prices were relatively low and fluctuated slightly downward for the season with some temporary price improvement in January and February, 1954. Contract prices maturing in December, January and February paralleled somewhat more closely the cash prices of potatoes on the New York market than the prices of March contracts for the first three months. There was an upturn in the prices of March contracts in mid-March which was not reflected entirely in cash prices of potatoes.

CASH AND CONTRACT PRICES OF POTATOES IN 1954-55

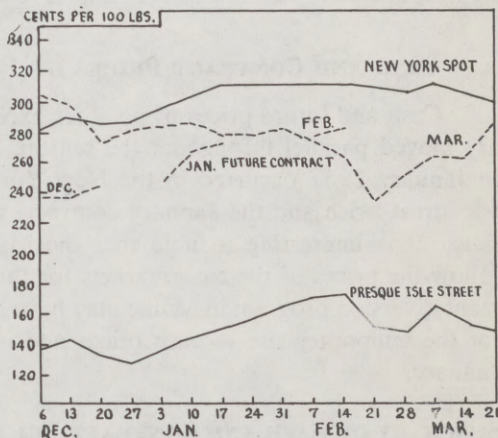
Prices of future contracts maturing in December, January and February paralleled closely the cash prices of potatoes on the New

FIG. 14. Comparison of contract prices of potatoes on the New York Mercantile Exchange with the prices of potatoes on the New York market and the Presque Isle street prices from December 1953 to April 1954. There was a slight gradual downward movement of all prices during the season.



York market for the corresponding months with the usual price differentials. The price of March contracts declined moderately until mid-February at a time when the price of cash potatoes on the New York market was stable and the Presque Isle street prices were showing moderate advances. Both Presque Isle prices and the March contract prices were erratic from mid-February to mid-March. March contracts advanced rapidly at maturity.

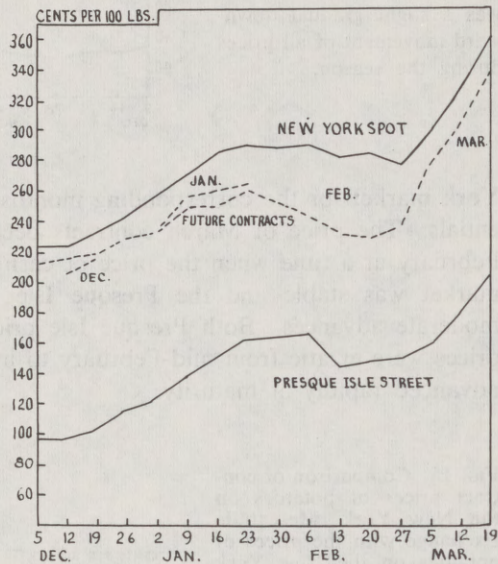
FIG. 15. Comparison of contract prices of potatoes on the New York Mercantile Exchange with the prices of potatoes on the New York market and the Presque Isle street prices from December 1954 to April 1955. Cash prices of potatoes on the New York market advanced in the early part of the season and remained comparatively stable until mid-March. The Presque Isle price advanced from the latter part of December to mid-February and then became erratic. On the other hand the price of March contracts declined until mid-February and then advanced irregularly until the end of the contract period. Prices of contracts maturing in December, January and February followed the general movement of cash prices of potatoes on the New York market.



CASH AND CONTRACT PRICES OF POTATOES IN 1955-56

All prices, cash and future, advanced moderately from December to the first of March and then the advances became rapid. Contract and cash prices moved parallel to each other with approximately the usual price differentials. March prices at Presque Isle did not show as rapid an advance as the March futures or the New York cash price.

FIG. 16. Comparison of contract prices of potatoes on the New York Mercantile Exchange with the prices of potatoes on the New York market and the Presque Isle street prices from December 1955 to April 1956. In general all prices advanced parallel to each other with approximately the usual price differentials.



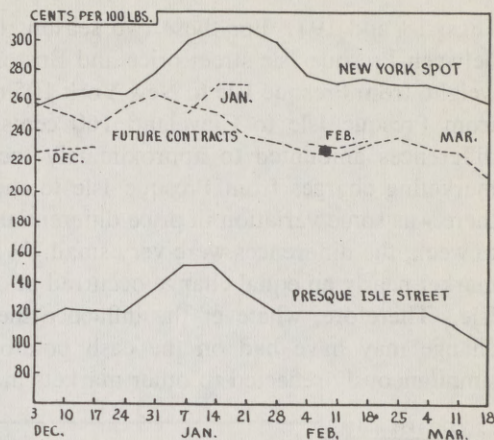
CASH AND CONTRACT PRICES OF POTATOES IN 1956-57

Cash and future prices of potatoes except March contracts in January moved parallel throughout the season. The distinct bulge in prices in January 1957 occurred in the New York cash market, the Presque Isle street price and the January contracts which were maturing at that time. It is interesting to note that the March contract prices did not follow the prices of the cash markets for that period. The large government diversion program in Maine may have been one of the major factors for the temporary rise in cash prices and in the maturing contracts for January.

SUMMARY OF CASH AND CONTRACT PRICES OF POTATOES, 1951-57

The movement of cash and future contract prices of potatoes differ from one season to another chiefly because of the wide variations in the supply or anticipated supply of potatoes. When the crop either appears to be or actually is large, prices of both cash and future contracts

FIG. 17. Comparison of contract prices of potatoes on the New York Mercantile Exchange with the prices of potatoes on the New York market and the Presque Isle street prices from December 1956 to April 1957. The large diversion program in Maine was instrumental in temporarily bolstering cash prices and the maturing January future contracts during the month of January. Buyers and sellers in March contracts apparently discounted the long time effect and contract prices declined rather than advancing in January.



for potatoes decline. Likewise when small crops occur or are in prospect, prices advance. It has been shown over the past six marketing seasons when liberal supplies of Maine potatoes are on the New York market, cash and contract prices generally move parallel to each other. In the month when a future contract matures, the prices of the contracts show a closer relationship with cash prices for that month than a future contract maturing several months later. Cash and contract prices differ to the extent of certain marketing cost differentials. There are definite marketing charges for cars of potatoes delivered on contract. These may include transportation charges, grading and repacking in 50-pound bags prior to delivery, terminal inspection and other charges. Also, prior to the marketing order for potatoes in Maine, the quality of potatoes on contract was lower than in commercial cars and in units not convenient for the trade.

COMPARISON OF SPOT PRICES OF MAINE POTATOES AT DIFFERENT MARKETS

Prices of potatoes on the New York market and the contract prices on the Exchange influence each other with a net effect that supply and demand conditions are more accurately reflected in the prices, and probably much less violent price fluctuations have occurred. One may ask, does this relationship extend beyond the New York market? It should be stated that perfect competition does not exist in any cash market or on the New York Mercantile Exchange.

A comparison was made of cash prices of potatoes for the past six seasons at Cleveland, Boston and Presque Isle with similar prices on the New York market. As the price relationships are practically identical for each of the six seasons, only the last two seasons will be presented

(figs. 18 and 19). For these two seasons the average price differential between Presque Isle street price and Boston was 66 cents per hundred-weight, from Presque Isle to New York 105 cents per hundredweight, and from Presque Isle to Cleveland 160 cents per hundredweight. These differences amounted to approximately the freight rate (table 6) and marketing charges from Presque Isle to the respective markets. While there was some variation in price differential between markets from week to week, the differences were very small. When the price changed in one market nearly an equal change occurred at other markets and at Presque Isle. Therefore, whatever the influence the New York Mercantile Exchange may have had on the cash potato market in New York was simultaneously reflected to other markets in the northeast.

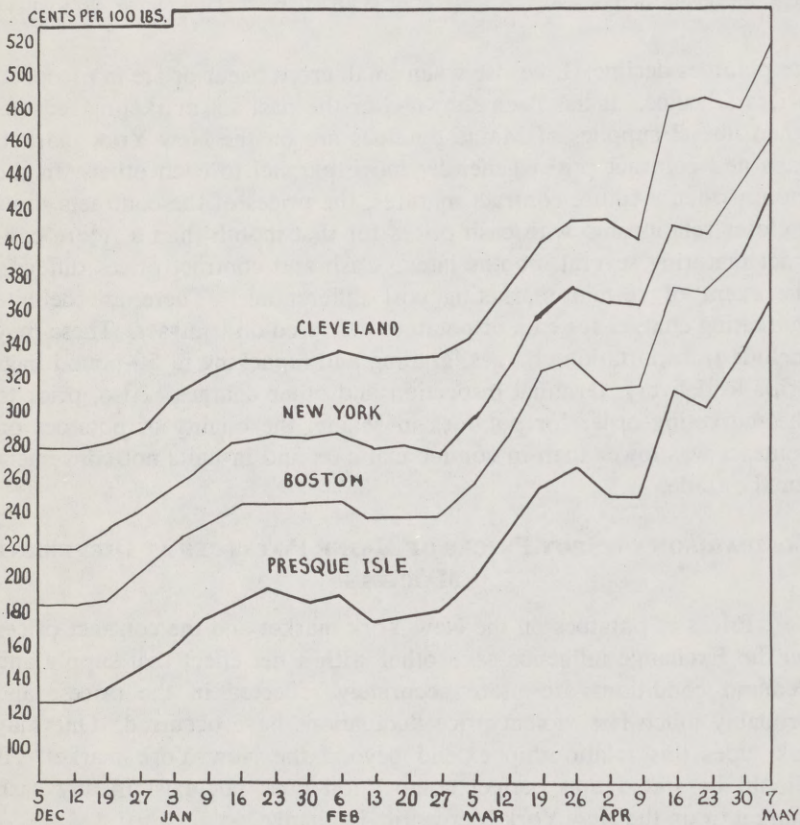


FIG. 18. Wholesale prices of potatoes per hundredweight at Presque Isle, Boston, New York and Cleveland from December 1955 to the following May 1956. Prices in these markets moved parallel to each other with average price differentials of 59 cents from Presque Isle to Boston, 37 cents from Boston to New York and 51 cents from New York to Cleveland.

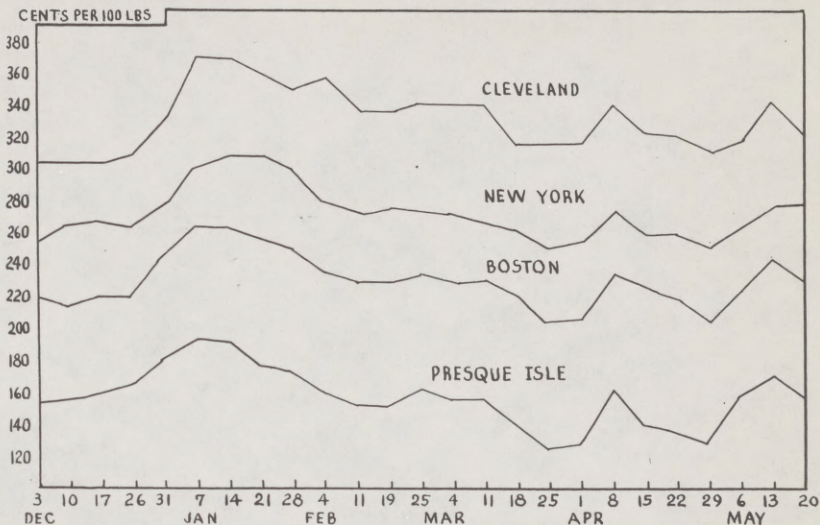


FIG. 19. Wholesale prices of potatoes per hundredweight at Presque Isle, Boston, New York and Cleveland from December 1956 to the following May 1957. Again prices in these markets parallel each other with approximately the same price differentials as the previous year.

TABLE 6

Freight Rates (without heat) on Potatoes from Presque Isle to Specific Markets¹
(Cents Per 100 Pounds)

Year (Sept. to March)	Date Rate Changed	Presque Isle, Maine to		
		Boston, Mass.	Harlem River, New York	Cleveland, Ohio
1951-52	5/2/52	49.82	65.72	112
		54.05	71.30	124
1952-53	9/10/52	50.025	71.30	124
1953-54		50.025	71.30	124
1954-55	12/1/55	50.025	71.30	124
		50	71	124
1955-56	3/7/56	50	71	124
		53	75	130
1956-57	12/28/56 8/26/57	53	75	130
		57	80	137
		60	86	141

¹ Information supplied through the courtesy of L. W. Wentworth of the Bangor and Aroostook Railroad, Bangor, Maine.

NOTE: Fractional rates are caused by ExParte increases applied against total charges instead of rates.

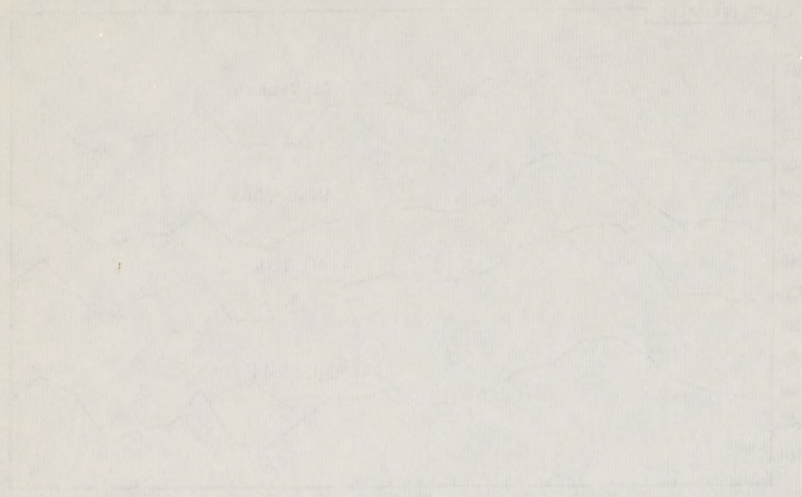


Figure 1: A line graph showing the relationship between variables X and Y over time. The graph displays several peaks and troughs, indicating a cyclical pattern. The data points are connected by lines, and the overall trend shows a fluctuating but generally increasing pattern.

TABLE 1

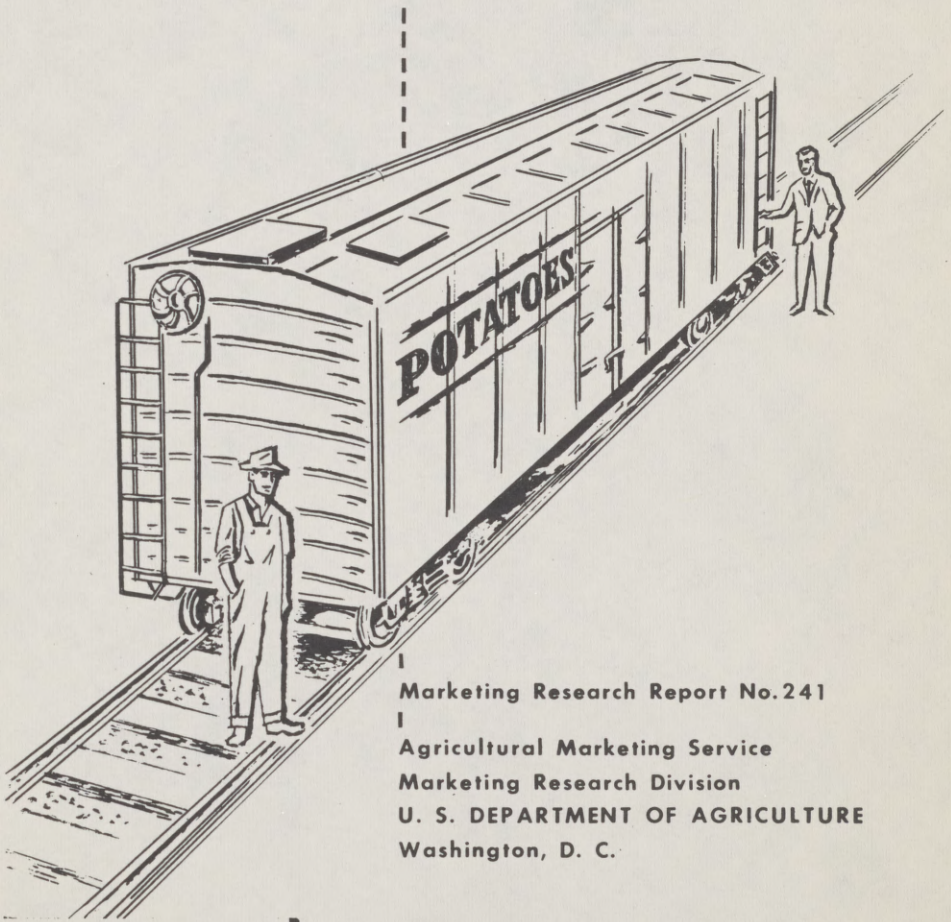
Table 1: Summary of the data presented in the graph. The table lists the values of the variables at various points in time, showing the fluctuations and trends observed in the data.

Time	Variable X	Variable Y
1	10	12
2	15	18
3	20	25
4	15	18
5	10	12
6	15	18
7	20	25
8	15	18
9	10	12
10	15	18

The data in Table 1 shows a clear cyclical pattern. The values of both variables X and Y increase from time 1 to 3, decrease from time 3 to 5, increase from time 5 to 7, and decrease from time 7 to 9. This pattern repeats, with a slight increase in the overall values over time.

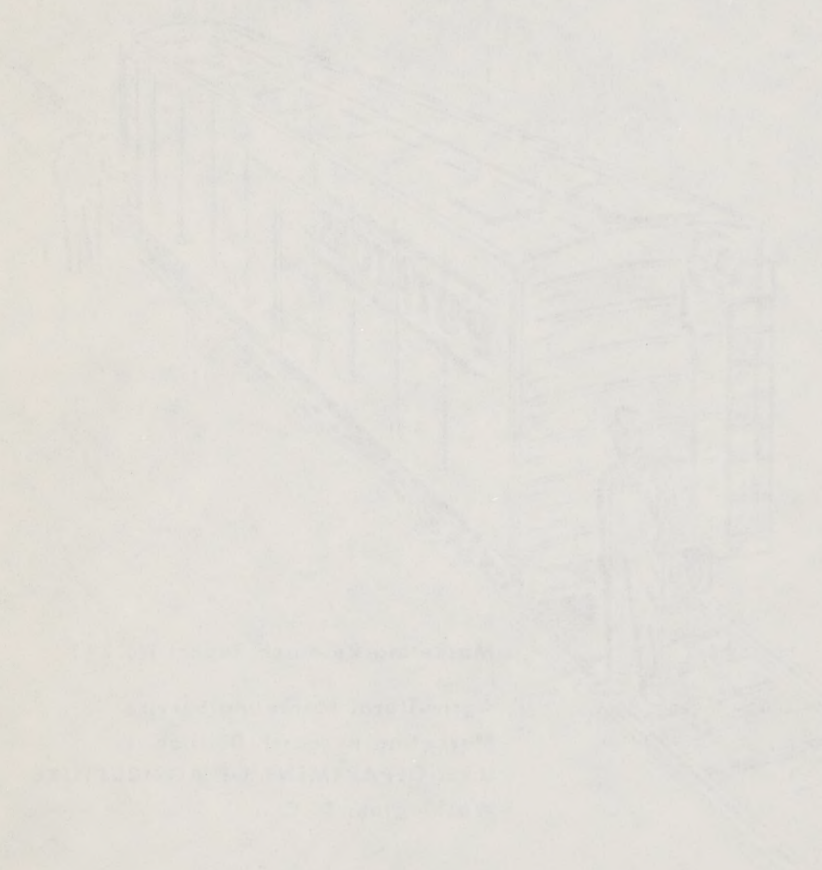
The graph and table illustrate the relationship between variables X and Y over time. The data shows a strong correlation between the two variables, with both exhibiting similar trends and fluctuations. The cyclical nature of the data suggests a periodic relationship between the variables.

the **ECONOMIC IMPORTANCE** of
FUTURES TRADING in **POTATOES**



Marketing Research Report No. 241
Agricultural Marketing Service
Marketing Research Division
U. S. DEPARTMENT OF AGRICULTURE
Washington, D. C.

THE ECONOMIC IMPORTANCE OF FUTURES TRADING IN POTATOES



PREFACE

A study of the economic importance of futures trading to the production and marketing of potatoes was initiated in view of widespread interest throughout the potato industry and because of recommendations of the Department Potato Research and Marketing Advisory Committee.

This study was coordinated with the work on potato futures trading done by the Maine Agricultural Experiment Station as a phase of the Northeastern Regional Potato Marketing project (a study of the factors affecting the quality, price, and sales of potatoes). Since practically all futures trading is done in Maine potatoes, this report deals with potato futures trading in Maine only. In conducting the study, information was obtained directly from packers and shippers, potato brokers, credit agencies, fertilizer and machinery companies, and from secondary sources. Most of the firms and agencies contacted were located in Aroostook County, Maine, the area where the bulk of the Maine potato crop is produced.

Professor Charles H. Merchant, Head, Department of Agricultural Economics, University of Maine, assisted with the arrangements for conducting the field work, and reviewed the manuscript. William N. Garrott, CSS, U. S. Department of Agriculture, formerly of AMS, assisted materially with the collection of the data presented in this report.

Slightly Revised June 1958

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SUMMARY AND CONCLUSIONS

Futures trading in Maine potatoes developed over the years as part of the overall cash market for potatoes. The bases for this trading began to develop about 1871 when cash potato forward contracts between growers and buyers were first used. These contracts enabled growers to obtain short-term capital and to reduce the amount of price and market uncertainty involved in growing and marketing potatoes, and provided the framework for beginning the organized futures trading in potatoes on the New York Mercantile Exchange in 1941.

Futures trading in relation to financing the production and marketing of Maine potatoes: Some Maine potato growers use potato futures contracts to obtain short-term loans from banks with which to purchase such items as fertilizer, seed, and spray material. During the 1954-55 season, 9 of the 21 credit agencies contacted in Aroostook County made loans to growers on the basis of sales of potato futures contracts. Such loans for 7 of these 9 agencies totaled \$811,910 for the 1954-55 season and represented approximately 8 percent of the maximum amount of grower loans outstanding made by these 21 credit agencies during the season. Also, in evaluating the importance of futures trading in grower financing, consideration should be given to the relationship of loans obtained on futures contracts to the total amount that a grower is able to borrow. These secondary effects are important even though they cannot be expressed as quantities.

Fertilizer companies also are sources of credit for Maine growers. Five of the six fertilizer agencies contacted in Aroostook County reported credit sales of fertilizer to Maine growers on the basis of future-cash forward contractual arrangements. During the 1954-55 season, such sales amounted to nearly \$253,000. This amount was hedged with sales of 514 potato futures contracts and involved 78 growers. For the individual fertilizer companies, the total value of fertilizer sold on the basis of futures contracts ranged from \$2,000 to \$100,000.

The use of futures contracts by potato dealers: Forty-two potato dealers in Aroostook County, Maine, were interviewed concerning their use of futures trading during the 1954-55 season. These 42 dealers were selected so as to be representative of all potato dealers. During the 1954-55 season, 37 of these dealers made street purchases and 15 of these 37 offset part of such purchases with sales on the New York Mercantile Exchange. Eleven of these 15 firms sold 2,204 potato futures contracts as hedges against purchases of 7,000 cars of potatoes.

Twenty of the 42 dealers interviewed acquired part of their 1954-55 supply through forward contract purchases from growers. In turn, 14 of these 20 dealers offset forward purchases with sales of an equivalent quantity of potato futures contracts on the New York Mercantile Exchange.

Information obtained from 19 of these 20 dealers showed that they advanced growers over 1 million dollars on forward contract in the form of cash and

materials during the 1954-55 season. Of this amount, 68 percent was in the form of fertilizer and materials and 32 percent in the form of cash. The amount advanced per individual dealer ranged from \$1,200 to over \$400,000.

In addition to making sales of potato futures in the manner described, potato dealers and others may purchase potato futures contracts to offset sales of potatoes or potato products for deferred delivery. These forward sales are made in advance of purchasing the actual potatoes to cover such sales. Generally, this involves a purchase of futures contracts simultaneously with the negotiation of fixed price forward sales of either potatoes or potato products. The use of futures trading in this way is particularly suitable for those firms such as seed dealers and potato processing firms which customarily make forward sales of potatoes or processed potato products.

Futures trading in relation to market information: The New York Mercantile Exchange brings together in a single market much of the available data concerning the demand for and supply of potatoes. Such information is available to both actual and potential traders for use in buying and selling. Also, prices at which transactions are made and bids and offers on the Exchange are made public. The price information is helpful to growers and others in enabling them to determine the market value of potatoes at the time of purchase or sale. The prices established on the New York Mercantile Exchange have, at times, been subject to the influence of manipulation. In such circumstances, the prices established on the Exchange are temporarily distorted away from freely competitive values with possible short-time benefits or losses to growers and others.

The relationship between cash and futures prices: Cash and potato futures prices are largely determined by the same group of supply and demand factors. Available information indicates that changes in cash prices of potatoes at Maine shipping points are generally associated with similar changes in the prices of potato futures contracts on the New York Mercantile Exchange. For example, a comparison of changes in cash and potato futures prices for intervals of 6 trading days, for the period October 1956-May 1957, indicated that about 60 percent of the changes in cash prices were associated with similar changes in potato futures prices. Similar comparisons for intervals of 10 days indicated a 70-percent association.

Futures trading is an integral part of the overall production and marketing of potatoes, and is used by a number of producers, dealers, and others at all levels of trade. The information obtained in this study reveals that futures trading serves the following specific business purposes: (1) Assists producers and others to obtain cash loans and materials needed in production, (2) provides a mechanism for partially offsetting risk associated with price and market uncertainty, (3) brings together a wide variety of supply and demand information for use by potential and actual traders, (4) aids in the dissemination of information on potato prices for use in buying and selling, and (5) provides growers and others with a continuous market and thereby enables them to take advantage of favorable price levels at any time.

THE ECONOMIC IMPORTANCE OF FUTURES TRADING IN POTATOES

By William T. Wesson, agricultural economist
Marketing Research Division
Agricultural Marketing Service

INTRODUCTION

Representatives of the potato industry, particularly those involved in production and marketing, have expressed considerable interest as to the possible effects of futures trading in potatoes on the production and marketing of potatoes. Some individuals in the industry are of the opinion that futures trading operates to the disadvantage of the potato industry, whereas others express the opposite view. Beginning in December 1955, the Special Subcommittee on Futures Trading in Perishable Commodities of the House Committee on Agriculture began holding hearings to study the effect of futures trading on the marketing of perishable commodities, specifically, onions and potatoes.

Because of the interest expressed by various groups, the U. S. Department of Agriculture made a study of futures trading in potatoes and their importance to the production and marketing of potatoes.

In the conduct of the study, primary consideration was given to the nature and extent to which futures trading is involved in financing growers and others in the potato industry. Secondary consideration was given to (1) factors underlying the development of futures trading in potatoes, (2) the relationship of futures trading to procurement and pricing of potatoes, (3) cash and potato futures price relationships, and (4) the terms of potato futures contracts.

Organized futures trading in potatoes began in 1931 on the Chicago Mercantile Exchange. The Chicago futures contracts permitted delivery of potatoes grown in Maine and in Washington and Idaho. Currently, delivery on the Chicago contract is limited to potatoes grown in Idaho. In 1941, potato futures contracts were established on the New York Mercantile Exchange. The New York contract limits delivery to potatoes grown in Maine. Of the two exchanges for futures trading in potatoes, the New York Mercantile Exchange is the one of primary importance. For example, during the 12-year period, 1945-56, 88.7 percent to 99.9 percent of the total annual volume of futures trading in potatoes on the two markets was done on the New York Mercantile Exchange (table 1). In every year except one during this period, sales on the New York Mercantile Exchange accounted for over 95 percent of total sales. For this reason, this report deals primarily with futures trading as it relates to Maine potatoes.

Table 1.--Volume of futures trading in potatoes, New York and Chicago Mercantile Exchanges, 1945-56

Year beginning June	Volume of trading		Total	Percentages of total		
	New York Mercantile Exchange	Chicago Mercantile Exchange		New York Mercantile Exchange	Chicago Mercantile Exchange	Total
	Carlots	Carlots	Carlots	Percent	Percent	Percent
1945	4,794	609	5,403	88.7	11.3	100.0
1946	15,356	187	15,543	98.8	1.2	100.0
1947	28,548	19	28,567	99.9	.1	100.0
1948	9,013	6	9,019	99.9	.1	100.0
1949	7,367	38	7,405	99.5	.5	100.0
1950	2,276	104	2,380	95.6	4.4	100.0
1951	16,254	240	16,494	98.5	1.5	100.0
1952	120,902	1,767	122,669	98.6	1.4	100.0
1953	64,195	1,025	65,220	98.4	1.6	100.0
1954	199,940	580	200,520	99.7	.3	100.0
1955	123,781	181	123,962	99.9	.1	100.0
1956	140,333	121	140,454	99.9	.1	100.0

Commodity Exchange Authority.

DEVELOPMENT OF FUTURES TRADING IN MAINE POTATOES

Since futures trading in Maine potatoes did not develop as an independent type of activity but rather as a part of the overall market for potatoes, this analysis is oriented toward showing how the overall market for potatoes developed with particular emphasis upon futures trading.

The evolution of futures trading in potatoes apparently follows the same pattern of development as other commodities. ^{1/} Organized futures trading is preceded by the buying and selling of deferred delivery contracts or time contracts as they are sometimes called. If the volume of trade in such forward contracts grows large enough to warrant further standardization of contract terms, consideration is given as to the feasibility of trading a more highly standardized version of such contracts on one of the commodity exchanges. Should these steps result in the establishment of a futures contract and the opening of trade under the formalized exchange rules, the contracts are called "futures" and hence futures trading begins. The important part of this development for potatoes took place mainly from about 1900 to 1940, during which the foundation was established for the beginning of potato futures trading on the New York Mercantile Exchange in 1941.

^{1/} For example, development pattern with respect to forward contracting is virtually the same for the grains, cotton, eggs, and potatoes.

Commercialization of Potato Production

Aroostook County, the principal production area in Maine, ^{2/} was part of a diversified noncommercial farming area until 1870 when the pattern of agriculture in the county began to shift in the direction of specialization in potato production. ^{3/}

The change of the Aroostook area from a diversified pattern of farming to the production of potatoes for the market resulted from a combination of factors, each of which facilitated the opening of the previously isolated area to commercial trade channels. More important among these were: (1) the development of a local demand for potatoes for the manufacture of starch, (2) the development of all-weather roads, railroads, and water transport to the point where the Aroostook area was linked by transportation with New England and eastern markets, (3) new and improved communication facilities linking the area with buyers located in distant markets, (4) the introduction of grade standards, although quite crude, enabling potatoes to be bought and sold on the basis of description, and (5) the comparative advantage of the area for potato production.

The foregoing factors provided Aroostook growers with a tremendous market potential for potatoes. However, in order to take advantage of this new market opportunity, additional capital was needed to finance the necessary increase in potato production and marketing facilities and services. The extent and rate at which the market could be developed depended on how much and how quickly capital could be made available.

Shortage of Capital and Forward Contracting

The raising of short-term production capital presented a major problem. The previously commercially isolated Aroostook area of diversified agriculture had not enabled growers to accumulate sufficient capital reserves. The local credit institutions were not adequate to finance the needed increases in the production and marketing of potatoes. Some capital was available from the large capital markets on the East Coast, but at very high interest rates. Confronted with such a scarcity of capital, Aroostook growers turned to starch factories, fertilizer and machinery companies, and potato buyers or dealers as sources from which to obtain production financing. The growers were able to obtain short-term capital from these firms, but in many instances they were required to sell potato forward contracts to the firm providing the financing.

^{2/} According to the 1950 census, approximately 90 percent of Maine's 1949 potato crop was produced in Aroostook County.

^{3/} The material in this section concerning the historical development of the Aroostook County, Maine, area is based, in a large part, on an unpublished study entitled, "The Development of the Potato Marketing System in Aroostook County, Maine," by Clarence J. Miller, Harvard Studies on Marketing Farm Products.

Roughly comparable practices of contract selling have been employed for a number of other processed fruits and vegetables. Under the forward contractual arrangements, Maine growers contracted at or near the time of planting in the spring to sell part of their expected potato production at fixed prices, delivery to be made at or following harvest in the fall. The price to be received by the grower was determined at the time of contract negotiation, with both delivery and payment being deferred. These contracts were referred to by the trade as "cash potato futures" and in some instances simply as "futures." Thus, the use of forward contracts in potatoes apparently came about in part because Aroostook growers considered it the best alternative for obtaining short-term capital and because processors and other buyers found this to be an advantageous means of obtaining potatoes. Through this mechanism growers were able to supplement their own rather limited financial resources and could begin producing potatoes primarily for the market rather than for home consumption. It also seems reasonable to suppose that growers were interested in selling their crop forward because such sales reduced both price and market uncertainty.

The use by growers of potato forward contracts to obtain short-term financing apparently began in 1871 with the establishment of the first starch factory in Aroostook County. ^{4/} Growers and representatives of the starch factory entered potato forward contracts at or near the time of planting under the terms of which the growers agreed to sell to the starch factory a specified part of their potato production at a fixed price, delivery of the potatoes to be made at or following the harvest the following fall. In turn, the starch factory agreed to advance growers a certain amount of capital at the time of entering the contract and, upon delivery of the potatoes, to pay the grower the difference between the contract price and the amount of capital already advanced. The following is cited as evidence of this practice: ^{5/}

"Contracts were used between starch factory and the farmers in the surrounding neighborhood, and these contracts ran for several years. These first commercial acreages of potatoes were rather small per farm, not many being over 10 acres. In many cases the factory owner advanced money to farmers to enable them to plant the necessary acreage."

Potato forward contracts, as a means for providing short-term financing, appear to have been first used extensively around 1900 and later. By 1900 there had developed a substantial demand for Maine potatoes in eastern markets for table stock and seed. Potato production in Maine took a decided upward trend and consequently reflected a similar upturn in the demand for capital (fig. 1). A substantial part of the capital needed to finance the increase in production was provided by fertilizer and machinery companies, potato buyers,

^{4/} Although there is not sufficient evidence to establish this point conclusively, the available information strongly suggests that starch factories financed growers through cash-potato forward contracts.

^{5/} See reference in footnote 3.

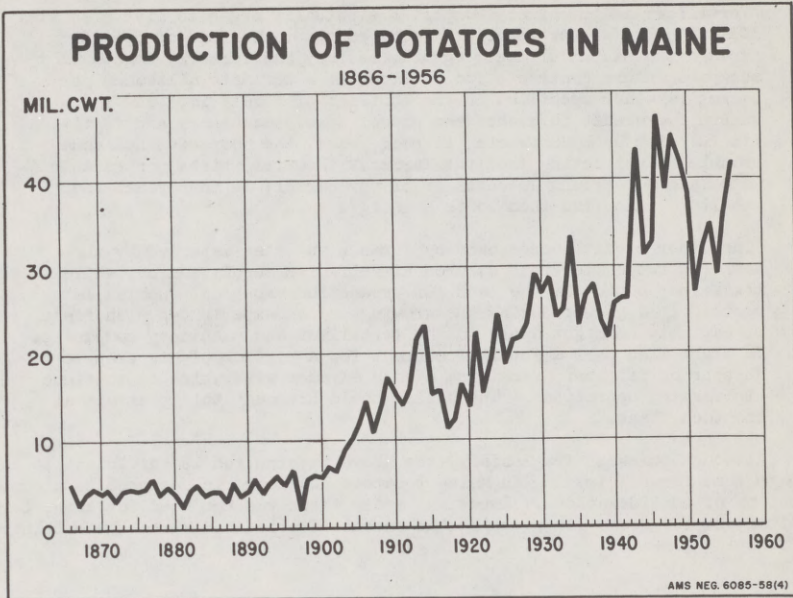


Figure 1

and dealers. This was achieved to some extent through forward contract negotiations with growers. Examples of the nature and importance of such contracts in providing short-term requirements follow. ^{6/}

"In the decade after 1900, the half dozen fertilizer companies operating in Aroostook extended almost all of the fertilizer credit that was given in the county. They sold fertilizer on open book accounts to their agents in the county, and the agent in turn sold an open book account to the farmer. Since many fertilizer sales agents were also potato shippers, it was not difficult to start combining the two operations--advancing fertilizer on time and getting future potato contracts. The agent would contract with the farmer for a certain number of barrels of potatoes at a given price. These would pay for the fertilizer. Although there was some risk involved, the agent did not usually lose so long as ordinary variations in price were involved. The farmer needed the fertilizer badly and the price allowed for potatoes would usually be relatively low. The farmer would assume this cost on the part of his acreage in order to get the necessary supplies for his whole acreage.

^{6/} See reference in footnote 3.

"Fertilizer and machinery companies eventually began to give credit direct to the grower in return for a contract, instead of operating through the medium of their agents, as they had formerly done. They accepted future contracts for potatoes at a definite allowance per barrel (whether specified in the contract or merely implied) in return for credit furnished the grower to buy machinery and fertilizer. With such contracts, in poor years, the companies had some trouble in collecting from the farmers. However, since contracts were made for around 90 cents or \$1 per barrel, in most years the creditor would find them worth holding . . .

"The other credit source used by farmers was that extended by the dealer. The dealer thus assured himself of a supply source, while the farmer could use the cash for production expenses, such as labor costs. If a grower during the growing season experienced a shortage of capital, he might apply to the fertilizer and machinery companies. He might also sell a futures contract for a portion of his crop to a shipper or neighbor, receiving a cash advance with which to continue his farming operations. The holder could discount this contract at the local bank."

Although somewhat fragmentary, the above information is sufficient to indicate that forward trading in Maine potatoes developed in response to a combination of considerations. Important among these was the need for short-term capital and for means for reducing the extent of price and market uncertainty confronting growers.

Forward Contracting As It Relates to Organized Futures Trading

The type of forward contracts which Maine growers began using around 1870 and have continued to use since is illustrative of the type of trading that generally precedes organized futures trading. Dealing in cash potato forward contracts involves the conduct of exchange directly by the parties to the transaction. This is in contrast to organized futures trading such as that conducted through the facilities of the New York Mercantile Exchange. There the Exchange acts as an intermediary between buyer and seller; the terms of the contract are highly standardized, and the entire exchange process is very impersonal insofar as buyer and seller relationships are concerned.

The period between the beginning of trading in cash forward contracts and the time organized futures trading begins varies among commodities. For Maine potatoes, this involved the period from about 1871 to 1941. From 1941 to 1951, the volume of futures trading was relatively small. However, during the 5 years 1952-56 the volume on the New York Mercantile Exchange has averaged almost 130,000 carlots (table 1). Compared with cotton and grains, organized futures trading in potatoes is a recent development. The increased volume of potato futures trading activity in recent years indicates perhaps an increased understanding and familiarity on the part of the potato industry with the operations of the New York Mercantile Exchange.

POTATO FUTURES CONTRACTS AND ORGANIZATIONAL FEATURES OF THE
NEW YORK MERCANTILE EXCHANGE

Delivery Terms of Potato Futures Contracts

Strictly speaking, the terms of potato futures contracts include all of the rules and regulations established by the New York Mercantile Exchange concerning trading in potato futures contracts. ^{7/} However, the analysis here is limited to the delivery terms of potato futures and refers to the 1956-57 season unless otherwise stated.

What is Deliverable

The contract unit is 1 carlot of 900 50-pound bags of Maine-grown potatoes weighing 45,000 pounds net with a tolerance of 50 bags either way at the time of delivery. However, in the case of the November 1958 and subsequent future contract months the contract unit is 1,000 50-pound bags. The potatoes delivered must conform to United States Standards for potatoes as promulgated from time to time by the Secretary of Agriculture.

The basic or standard contract grade is U. S. No. 1, size A, 2-inch minimum of Maine-grown Katahdin-Chippewa type, and/or Kennebec potatoes in straight carloads. ^{8/} In lieu of delivering the basic grade, sellers are permitted to deliver U. S. No. 1, size A, 2-inch minimum Green Mountain potatoes at a 10-percent discount below the previous settlement price of the basic grade. In addition, sellers may deliver U. S. commercial size A of Maine-grown Katahdin, Chippewa-type, Kennebec, or Green Mountain at a discount of 75 cents per 100 pounds. The range of substitution possibilities for sellers is summarized in table 2.

Potatoes delivered on futures contracts must be inspected (unrestricted inspection) by the Federal-State Inspection Service at point of origin in Maine and reinspected at the future contract delivery point by the United States Department of Agriculture. The Department issues a delivery certificate on which is given the date, time of final inspection, grade, car number or lot number, and signature of the official inspector at delivery point. The life of the inspection certificate is 3 full days after the day of inspection.^{9/}

^{7/} Commodity Exchange Authority, "Futures Trading in Potatoes, 1954-55." U. S. Dept. Agr., Nov. 1955.

^{8/} The basic grade, sometimes referred to as the standard contract grade, is the grade from which premiums and discounts are calculated for deliveries of other grades. Thus, the basic contract grade is deliverable at par. Note that the basic grade for the potato futures contracts includes three varieties.

^{9/} The inspection at delivery point must be made within 14 days after date of arrival, except during the month of May when inspection must be made within 10 days after arrival. Provisions are also made whereby the Mercantile Exchange can make inspection in circumstances where it is not possible for the U. S. Dept. Agr. to do so in the manner described.

Table 2.--Potato futures contracts: Grades and varieties deliverable on the New York Mercantile Exchange, and price differentials permitted for delivery substitutions

Grade	:	Variety	:	Discount per cwt.
U. S. No. 1 $\frac{1}{2}$	.....	Katahdin	:	0
U. S. No. 1 $\frac{1}{2}$	.....	Katahdin-Chippewa-type	:	0
U. S. No. 1 $\frac{1}{2}$	.....	Kennebec	:	0
U. S. No. 1 $\frac{1}{2}$	.....	Green Mountain	:	$\frac{3}{10}$
U. S. Commercial-type $\frac{2}{2}$	.....	Katahdin	:	75
U. S. Commercial-type $\frac{2}{2}$	.....	Katahdin-Chippewa-type	:	75
U. S. Commercial-type $\frac{2}{2}$	.....	Kennebec	:	75
U. S. Commercial-type $\frac{2}{2}$	.....	Green Mountain	:	75

$\frac{1}{2}$ Size A, 2-inch minimum.

$\frac{2}{2}$ Size A.

$\frac{3}{10}$ Discount is in terms of percent.

The terms of potato futures contracts are subject to the provisions of the Maine Marketing Agreement and Order. This prescribes the grades, sizes, quality, and varieties of potatoes that may be shipped out of Maine during its marketing season or fractional part of the season. As applied to table stock potatoes, the 1957-58 regulation prohibits the shipment of potatoes out of Maine during the period September 23, 1957-July 12, 1958, both dates inclusive, except (1) potatoes of round white and red skin varieties that meet the requirements of U. S. No. 1 grade or better, $2\frac{1}{2}$ -inch minimum and 4-inch maximum size, and 90 percent "fairly clean"; (2) Long Varieties of U. S. No. 2 grade or better with 5-ounce minimum weight--generally fairly clean to mostly clean or; (3) U. S. No. 1 grade or better size A, 2-inch minimum 4-ounce maximum weight 90 percent fairly clean.

The Maine Marketing Agreement and Order prescribes the grades, sizes, and varieties of potatoes that may be shipped out of Maine. Therefore, it limits the supplies available for delivery on potato futures to those grades, sizes, and varieties that may be shipped out of the State. In this connection the rules of the New York Mercantile Exchange provide for adjustment of the terms of potato futures contracts in case of conflicts between them and Government regulation, such as the Maine Marketing Agreement and Order. The following excerpt from Exchange rule 81-A covers this point: "In connection with the potato futures contract, if any governmental agency issues an order, ruling, directive, or law that conflicts with the requirements of these rules, such orders, ruling, directives or law shall be construed to take precedence and become part of these rules and all open and new contracts shall be subject to such governmental orders."

The kinds of potatoes inspected for delivery on the New York Mercantile potato futures contracts, by variety, grade, and size during the 2 seasons, 1953-54 and 1954-55, are presented in tables 3, 4, and 5.

Table 3.--Carlots of potatoes inspected for delivery on the New York Mercantile Exchange, by grade, 1953-55 seasons

Grade	Season	
	1953-54	1954-55
	<u>Carlots</u>	<u>Carlots</u>
U. S. No. 1, Size A, 2-inch minimum ...:	941	1,141
U. S. No. 1, 2 $\frac{1}{4}$ -inch minimum	5	95
U. S. Commercial, 2-inch minimum	1	---
U. S. No. 1, 2 $\frac{1}{2}$ -inch minimum	1	---
U. S. No. 1, 3 $\frac{1}{2}$ -inch minimum	2	---
1/	36	150
Total	986	1,386

1/ Grade not available.

Table 4.--Carlots of potatoes inspected for delivery on the New York Mercantile Exchange, by variety, 1953-55 seasons 1/

Grade	Season	
	1953-54	1954-55
	<u>Carlots</u>	<u>Carlots</u>
Katahdin	371	1,063
Kennebec	378	232
Chippewa	14	9
Katahdin-Chippewa	108	77
Green Mountain	113	---
Round White	1	2
Teton	---	1
Kennebec-Chippewa-Katahdin	1	2
Total	986	1,386

1/ The fact that potatoes are inspected for delivery does not necessarily mean that they will be delivered. Individuals may order inspection in anticipation of settling all or part of their contracts by delivery but later decide to settle by offset instead. As is the case for other commodities, the number of potato future contracts settled by delivery represents a relatively small proportion of the total volume of trading. For further information on this point, see p. 7 of reference in footnote 7.

Table 5.--Maine Potatoes submitted for inspection, New York Mercantile Exchange, by size, 1953-55 seasons

Size of Potatoes	Season	
	1953-54	1954-55
	<u>Carlots</u>	<u>Carlots</u>
<u>Inches</u>		
2 $\frac{1}{4}$ + 1/	977	1,284
2 $\frac{1}{2}$ + 1/	2	4
2 $\frac{3}{4}$ - 3 $\frac{1}{4}$ 1/	3	---
2 $\frac{3}{4}$ - 3 $\frac{1}{2}$ 1/	1	---
2 $\frac{3}{4}$ - 3 $\frac{1}{4}$ 2/	1	---
3 $\frac{1}{4}$ - 4 $\frac{1}{2}$ 2/	1	---
2 $\frac{3}{4}$ - 3 2/	---	2
2 $\frac{1}{4}$ - 2 $\frac{3}{4}$ 2/	---	1
2 $\frac{1}{4}$ - 3 2/	---	1
Not available	1	94
Total	986	1,386

1/ 60 percent or more were this size.

2/ 55 to 90 percent were of this size.

Sellers of potato futures contracts tend to deliver the grade(s) of potatoes that are, from their standpoint, the most overvalued relative to the "cash market." During the 1953-54 and 1954-55 seasons, U. S. No. 1, size A, 2-inch minimum represented about 95 percent of the total of 986 cars of potatoes inspected for delivery on futures on the New York Mercantile Exchange in the 1953-54 season and about 82 percent of the 1,386 cars inspected for delivery during 1954-55. There were 51,009 carlots of potatoes shipped from Maine during the 1953-54 season and 40,835 carlots during 1954-55.

The factor "size" as applied to potato standards has to do with the size of potatoes in inches and the proportion that different sizes are of the total lot. Data were obtained as to the "potato size" most prevalent for potatoes inspected for delivery on futures (table 5).

When Delivery Is Made

Transactions in potato futures may be conducted in any of the months November through May except December and February. Trading in any of these months may be opened by the Clearing House Committee or the Business Manager. Generally, trading in individual months is opened 11 months in advance of its maturity. For example, in December 1956, individuals could buy or sell potato futures for November 1957. Trading in a maturing contract may be from the first business day of the month up to and including the close of trading on

the sixth day prior to the last business day of the month. ^{10/} A seller who wishes to settle by delivery must issue a delivery notice which, according to the rules of the New York Mercantile Exchange, goes to the buyer with the "oldest" market position. The seller, rather than the buyer, has the right to select the day of delivery within the delivery month. However, in case there are contracts still outstanding after the close of trading, deliveries of potatoes in settlement of such contracts may be made on any business day through the last business day of the month.

Where and How Delivery Is Made

Up to and including the May 1958 contract, delivery on the New York Mercantile Exchange potato futures contract may be made in a "specified delivery district" in New York City. Specifically, delivery shall be in refrigerator cars on track in Harlem River Yards, New York City, and all cars delivered must allow one reconsignment to buyer on day of delivery at the through rate. Delivery also may be made in Exchange-approved public cold storage warehouses in greater New York City except Staten Island (known as the Borough of Richmond). Alternatively, delivery may be made in Exchange-approved public cold storage warehouses in Jersey City, N. J. However, potatoes delivered in approved warehouses must carry storage-in-transit privileges as permitted by the railroads. According to the Commodity Exchange Authority, because of excessive cost, potatoes have not been delivered from cold storage warehouses in recent years. ^{11/}

For the November 1958 contract, delivery shall be at Boston, Mass., only. In the case of Boston delivery, there is an allowance by the seller to the buyer of an amount equal to the difference in freight rate from the point of origin to New York City and from the point of origin to Boston. Also the buyer is allowed one reconsignment on day of delivery at the through rate. It is to be noted that delivery on the January 1959 contract shall be at New York City.

New York Mercantile Exchange Safeguards to the Contract

Buyers and sellers of potato futures contracts may not know, nor do they need to know, the personal identity of one another. Nevertheless, a seller of potato futures is reasonably sure that the buyer will carry out his obligation to pay money in the future (money debt). Likewise, the buyer of futures is sure that the seller will carry out his obligation to deliver potatoes (potato debt).

^{10/} In the case of the November 1958 potato futures contract trading in that contract shall cease at the close of the seventh business day of that month. Also, no delivery notices shall be issued on the November 1958 contract until after trading therein has ceased.

^{11/} See p. 26 of reference in footnote 7.

This is achieved through a combination of arrangements that constitutes what is considered as a trading mechanism for safeguarding performance by the parties to potato futures contracts. The heart of this system is the Clearing House which is part of the New York Mercantile Exchange and operates under the rules of the Exchange. It is set up for the purposes of (1) clearing money accounts (debt and credit) for its members, and (2) guaranteeing performance of all potato futures contract obligations (payment and delivery) cleared by its members. In guaranteeing performance of a member, who must also be a member of the New York Mercantile Exchange, the Clearing House thereby assumes responsibility for performance on all purchases and sales of potato futures contracts. It becomes, in effect, the buyer for all sales of potato futures and the seller to all purchasers of potato futures.

Each clearing member of the New York Mercantile Exchange must maintain margins on his transactions and transactions of his customers, and file reports of their transactions. This amounts to \$150 per contract on a clearing member's net interest with the Clearing House and \$150 per contract on straddles. During periods of unusual market activity, the Clearing House may raise the margin requirement above these amounts.

The New York Mercantile Exchange requires that its members impose minimum margin requirements on their customer--referred to as "customer margins." Under these rules, customers are required to make a cash deposit of \$195 for hedging transactions, and \$240 for speculative transactions. ^{12/} In the case of significant changes in prices, the customer is subject to calls for additional margins should prices move against him. If the customer fails to make the additional margin deposits, the Exchange member (broker) has the right to liquidate the customer's position in futures.

The foregoing brief description covers the main features of the New York Mercantile Exchange that have to do with safeguarding the performance of contract obligations assumed by buyers and sellers of potato futures. Although traders are provided substantial assurance that contract obligations will be fulfilled, it is possible for default, on contract delivery to occur. In such circumstances, the defaulting party is subject to penalty.

Costs of Trading Potato Futures

The costs of trading potato futures contracts on the New York Mercantile Exchange can be considered from the standpoint of the actual dollar cost of making certain types of transactions or settlements or the cost of achieving the same results through private negotiation.

The cost to the individual buyer or seller of potato futures varies, depending on the nature of the services involved. In a simple purchase or sale of futures to be followed later by an opposite transaction, the individual pays the broker or commission house a fee referred to as "commission." The

^{12/} The initial margin requirement applicable to customer transactions as of February 21, 1958 is \$200 for both speculative and hedging transactions.

commission rates for a purchase and sale (round turn) of potato futures are members \$9.00 per contract, and nonmembers \$18.00 per contract. In addition, the Clearing House charges a clearing fee on potatoes of \$1 for each car sold and \$1 for each car purchased. Thus, the cost to a nonmember of the New York Mercantile Exchange for a purchase (sale) of futures and the subsequent offset settlement involving a sale (purchase) of futures is \$20. This amount represents the commission plus clearance fees.

The dollar cost of making or receiving delivery of potatoes on futures contracts is much larger than for settlement by offset. The costs of delivering and receiving potatoes on potato futures contract on the New York Mercantile Exchange (1956-57) follow:

<u>Delivering:</u>	<u>Amount</u>
Commission (nonmember) to sell a futures contract and deliver	\$18.00
Clearing House fee	2.00
Service charge to the carrying broker	7.50
USDA inspection on loading car in Maine	6.50
Reinspection in New York	<u>10.00</u>
Total per contract	\$44.00
 <u>Receiving:</u>	
Commission (nonmember) to buy a futures contract and accept delivery	\$18.00
Clearing House fee	2.00
Service charge to carrying broker	<u>7.50</u>
Total per contract	\$27.50

Based on 45,000 pounds of potatoes per car, the cost of making delivery on potato futures contracts, exclusive of freight, is about 9.8 cents per cwt., whereas the cost of receiving delivery is about 6 cents per cwt.

Through private negotiation, it is possible for individuals to achieve results virtually identical to those realized from organized futures trading on the New York Mercantile Exchange. This can be achieved by employing private contracts with terms identical with those traded on the New York Mercantile Exchange. However, when it comes to the question of the relative efficiency of achieving like results, it seems reasonable to suppose that the advantage is decidedly in favor of organized trading on the Exchange.

In private negotiation, for example, a Maine potato grower who, at the time of planting, wants to contract to sell a carlot of potatoes for delivery the following November faces the following problems: (1) Finding a buyer interested in buying potatoes for November delivery, (2) selecting means for and negotiating the terms, and (3) obtaining information as to the financial integrity of the buyer. Likewise, the potential buyer of the grower's November

contract is confronted with identical problems with respect to his relationship with the grower. The resolving of these problems so as to bring buyer and seller together is time consuming and costly to both parties.

As an alternative, the grower (seller) and buyer can negotiate with each other through the facilities of the New York Mercantile Exchange. This would entail a sale by the grower of November potato futures.

In choosing futures as an alternative, the grower and buyer do not escape the types of cost items mentioned in private negotiations. Costs of the same type are involved whether individuals negotiate privately or through the Exchange. However, in negotiation through the Exchange, the grower and buyer, in effect, contract with the Exchange and its affiliated trade service agencies for service in handling problems that they would have to handle individually in the case of private trading. The matter of locating buyers, for example, is taken care of by the Exchange as it provides a central place for trading. The problem of each party having to investigate the financial integrity of the other is resolved by the elaborate safeguards for contract performance which already have been discussed. The Exchange and trade service associations charge a fee for this service of bringing buyer and seller together.

It seems reasonable to expect that the comparative cost of trading potato futures on the New York Mercantile Exchange is decidedly lower than the cost of achieving the same results through private negotiation since the Exchange is highly specialized in supplying such services.

FUTURES TRADING AS IT RELATES TO THE FINANCING OF PRODUCTION AND MARKETING OF MAINE POTATOES

Futures trading contributes to the short-term financing of the production and marketing of Maine potatoes in that it enables growers, dealers, and others to obtain loan capital in the form of either cash or materials. By hedging part of their expected potato production or inventories of potatoes on hand with sales of an equivalent quantity of potato futures contracts, growers and others can, from the point of view of some credit agencies, raise their credit rating above what it would be in the absence of hedging. Consequently, through hedging they are able to obtain larger loans or make larger purchases of supplies on credit than otherwise with any given amount of their own capital.

General Considerations Involved in Obtaining Loans Through Futures Trading

Growers use potato futures contracts as collateral to obtain short-term loans from banks with which to purchase such items as fertilizer, seed, spray material, and similar items needed in the production and harvesting of potatoes. However, loans are not granted solely on the basis of sales of futures contracts. Generally, the sale of potato futures contracts is simply one of several considerations that banks take into account in deciding the size of loan to make to a

particular grower. From the bank's point of view, a grower who sells potato futures contracts on the New York Mercantile Exchange to offset or hedge part of his expected crop thereby increases his ability to repay his loan above what it would be in the absence of hedging. The hedge in effect raises the grower's credit rating with the bank.

In placing part of its assurance of repayment of loans by growers on sales of potato futures contracts, the bank is necessarily confronted with three types of risks. First, it makes the loan on the assumption that the grower will retain the hedge for a period that is consistent with the bank's interest. For example, if the bank makes the loan today on the basis of so many potato futures contracts sold at a certain price, its assurance of repayment could be materially lessened should the grower liquidate his position--that is, purchase a futures contract to offset the one previously sold as a hedge without the bank's permission or knowledge. In order to protect itself against this sort of risk, it is customary for banks in Maine to require that the sale of futures contracts be done jointly, in the name of the grower and the bank. Banks handle this by instructing the broker not to liquidate the grower's hedge sales of potato futures contracts without its express permission. Banks retain such control over the liquidation of futures contracts sold by growers as hedges against the forthcoming potato crop and against potatoes in storage. ^{13/}

Second, the bank must reckon with the possibility that the grower may have either a complete or partial crop failure. Should that occur, the grower would be left with a firm obligation to deliver potatoes or their financial equivalent on futures contracts but would have no potatoes to deliver. Consequently, the bank's chance of collecting from the grower in these circumstances is materially reduced. In practice, banks take this risk into account by requiring, in most instances, that the grower limit the amount of hedging to one-third of his expected crop. However, the quantity limitation does not apply to potatoes on hand except in those circumstances where the bank is concerned over the "keeping quality" of the potatoes. In that case, limits as to the proportion of stocks hedged may be prescribed; however, these can be expected to be more liberal than those for hedging a growing potato crop.

Third, banks must take into account the fact that buyers and sellers must guarantee their performance on the contract to the extent of making an initial deposit of margin in cash. In February 1958 this deposit was \$200 per futures contract (per carlot) for both hedging and speculative transactions. Margin deposits must be made at the time of selling futures contracts. Subsequently, should the price of futures increase, the grower (seller) is required to put up additional margin--called maintenance margin--and should prices go down, the buyer is required to put up additional margin. In case a buyer or seller

^{13/} For commodities such as grains and cotton, the loaning bank holds the warehouse receipt as collateral for loans and, hence, does not need to control the liquidation of cotton and wheat futures contracts. However, in the case of potatoes there are no warehouse receipts comparable to those for grain and cotton.

fails to deposit the necessary margin money, his contract is subject to immediate liquidation. Thus, in loaning money on the basis of sales of potato futures contracts, the bank is confronted with the possibility that the "hedge" sale will be liquidated because of the grower's inability to provide the cash necessary to cover the margin requirements in the event the price of futures undergoes a substantial rise. To guard against this risk, it is customary for banks in Maine doing this type business to include as part of the negotiation with growers an agreement whereby the bank agrees to supply whatever cash is needed to provide margin requirements. The bank customarily charges the grower interest on the amount required for that purpose. This amounts to a loan to the grower of the cash required for margins. In so doing, the bank is assured that the grower's hedge will not be subject to forced liquidation because of the lack of cash to meet margin requirements.

The level of prices at which the grower is able to sell futures as a hedge is important to both the grower and the lending bank. On the one hand, it is to the grower's interest to sell futures at as high a price as possible so as to assure himself the cost of production plus a margin of profit for his services in producing the potatoes. ^{14/} Likewise, the higher the grower's return, the greater the bank's chances for collecting from the grower. It is to the interest of both the bank and the grower to sell potato futures contracts at prices that will reflect the cost of producing the potatoes and carrying them to the future contract delivery month plus a profitable return to the grower. ^{15/}

In arriving at the selling price of potato futures contracts, growers should take into account that the New York Mercantile Exchange price refers to the per cwt. price for potatoes in New York rather than to Maine shipping point prices. If a grower settles his futures contract by delivery, he will have to pay the cost of preparing and shipping the potatoes to New York. The amount of this cost varies from time to time because of changes in freight rates and other items of cost, and depending upon the nature and extent of services required. The items of cost involved generally include freight, heating service, bags, inspection, labor, papering, paper and twine. Generally, Maine growers sell their potatoes for delivery at the nearest Maine shipping point and settle their futures contract by offset rather than by delivery of potatoes to New York. To translate the Exchange price to prices that growers can receive at Maine shipping point(s), it is necessary to subtract from the Exchange price the various costs involved in preparing and shipping potatoes from Maine to the potato futures contract delivery point. For example, if the price of March futures on the New York Mercantile Exchange is \$2.85 per cwt. and the shipping cost is \$1.20 per cwt., then the grower price at Maine shipping point is \$1.65 per cwt.

^{14/} This is not intended to mean that the prices at a given time are determined by the cost of production. They are determined, of course, by supply and demand forces.

^{15/} This does not mean that the grower will necessarily make delivery of the potatoes on futures contract. Generally, he will, at the time of selling the actual potatoes, liquidate his former sales of futures by offset, that is, by purchasing a future for the same contract month he previously sold.

Growers' Use of Futures to Obtain Financing

Financing by Banks and Other Credit Agencies

Some credit agencies supply growers with cards on which is printed a series of Mercantile prices and a corresponding series of prices representing the Maine shipping point delivery equivalents. With the price card, the growers can immediately translate the prices on the New York Mercantile Exchange at a given time in terms of prices for potatoes delivered at a designated shipping point in Maine. Consequently, the grower knows the price he will receive for the actual potatoes when he hedges at different Exchange prices. An example of a typical price card supplied by Maine credit agencies during the 1955-56 season is shown below.

Price Card

Mercantile price quotation per cwt.	Net return		
	Per barrel expense paid	Per cwt.	Per carload of 272 barrels
<u>Dollars</u>	<u>Dollars</u>	<u>Dollars</u>	<u>Dollars</u>
2.30	1.88	1.14	511.36
2.40	2.05	1.24	556.24
2.50	2.21	1.34	601.12
2.60	2.38	1.44	646.00
2.70	2.54	1.54	690.00
2.80	2.71	1.64	735.76
2.90	2.87	1.74	780.64
3.00	3.04	1.84	825.42
3.10	3.20	1.94	870.00
3.20	3.37	2.04	915.28
3.30	3.53	2.14	960.16
3.40	3.70	2.24	1,005.04

The figures in the first column indicate that a grower who sells a futures contract on the Exchange at \$2.30 per cwt. will net \$1.88 per barrel, \$1.14 per cwt., or \$511.36 per carload, all expenses paid. From the \$2.30 figure, \$1.16 per cwt. is deducted to cover the expenses such as cost of bags, labor, heat, brokerage, transportation, and inspection.

Information was obtained from 21 credit agencies located in Aroostook County concerning the nature and extent to which they made loans to potato growers. These included most of the commercial banks and credit agencies in the county. In interpreting this information it is well to keep in mind that these data relate to the 1954-55 season. Similar data are not available for

other years; consequently, there is no basis for indicating the relative importance of futures trading in financing during the 1954-55 season as compared with other seasons. The extent to which Maine growers and others used potato futures contracts to obtain loans during the 1954-55 season may have been influenced by the relatively low prices and incomes received for the 1953-54 potato crop. These and other factors that indicate the position of the 1954-55 season relative to other crop years are given in table 6.

In order to show the relative importance of futures trading in the total bank financing of growers, data were obtained from each agency as to the maximum amount of loans that were outstanding with growers at any one time during the 1954-55 season and also the proportion of such loans that were made on the basis of futures contracts (table 7).

Of the 21 credit agencies included in table 7, 9 (or almost one-half of them) made loans to growers on the basis of grower sales of potato futures, whereas the remainder did not. Data as to the amount of money loaned growers on futures contracts were obtained from 7 of the 9 credit agencies requiring sales of futures contracts. During the 1954-55 season, these 7 credit agencies loaned growers a combined total of \$811,910 on the basis of sales of potato futures.^{16/} This amount represented approximately 8 percent of the total of \$9,827,253 (table 7) that the 21 credit agencies had outstanding with growers during the 1954-55 season, and is one indication of the importance of futures trading in enabling Maine potato growers to obtain short-term production loans from banks. However, the quantity of money loaned on the basis of futures tends to underestimate the importance of futures trading in this respect. This is because it gives no consideration to the effects that futures sales may have on the total amount that the grower is able to borrow from the bank. Several of the banks contacted indicated that such effects were of primary importance in that their decision to finance some growers for a particular season was, in some instances, contingent on the grower's sale of futures to the extent of covering a certain fraction of the loan. Thus, the fractional coverage by sales of futures may be linked directly to the overall borrowing ability of the grower. There is, of course, no way of quantifying the effects of futures transactions on the ability of growers to borrow; nevertheless, they should not be overlooked.

The amount that credit agencies are willing to loan Maine potato growers on the basis of sales of futures contracts varies directly, as is true for bank lending in general, with the bank's evaluation of the individual grower as a credit risk. Having satisfied itself as to the general credit rating of the grower, it is then customary for banks to tie the size of the loans that they make on the basis of sales of futures contracts to either an acre valuation or a carlot valuation. In both cases, the bank usually establishes a rule of thumb maximum amount that it will loan the grower on either an acre or carlot basis. For example, some banks try to limit the per acre loan before digging

^{16/} This amount was loaned to 135 growers, and represents about 5½ percent of the 2,399 growers receiving loans from the 21 credit agencies contacted.

Table 6.--Maine Potatoes: Production, farm disposition, price and value, 1944-56 crops

Year	Production: 1,000 cwt.	Total used for seed 1/	Disposition Used on farms where grown		Sold 2/ received by: farmers	Season aver- age price per cwt. received by: farmers	Value of produc- tion	Value of sales
			For seed: 1,000 cwt.	For household use: 1,000 cwt.				
1944	31,334	3,010	1,204	1,253	28,449	2.20	62,936	62,936
1945	32,729	3,350	1,340	982	30,011	2.13	69,823	64,024
1946	47,041	3,013	1,295	1,882	43,444	1.80	84,674	78,200
1947	39,060	3,217	1,351	1,367	35,995	2.42	94,395	86,987
1948	45,045	2,708	1,029	2,432	41,237	2.53	114,114	104,467
1949	42,228	2,693	1,346	2,365	38,171	1.65	69,676	62,982
1950	38,016	2,130	1,044	1,749	34,908	1.29	49,041	45,031
1951	27,000	3,046	1,462	1,134	24,150	3.03	81,810	73,174
1952	32,007	3,352	1,743	1,504	28,495	2.17	69,455	61,834
1953	34,839	3,240	1,555	1,324	31,702	0.74	25,781	23,459
1954	29,046	2,919	1,897	2,265	24,661	2.15	62,449	53,021
1955	35,814	2,958	1,538	1,110	32,966	1.77	63,391	58,350
1956	41,748	2,981	1,312	3,423	36,841	1.21	50,515	44,578

1/ Includes seed purchased and seed used on farms where grown.

2/ Consists of potatoes sold for all purposes including food, seed, processing, livestock feed and in 1949 and 1950 purchases by the Government under price support program.

Table 7.--Maximum amount of production loans outstanding with Maine potato growers grouped according to size of loans, 21 credit agencies located in Aroostook County, Maine, 1954-55 season

Size of grower loans outstanding	Credit agencies	Maximum amount of loans outstanding ^{1/}	Growers receiving loans
Dollars	Number	Dollars	Number
Less than 100,000	2	157,990	33
100,000 - 199,999	2	249,000	127
200,000 - 299,999	2	416,000	121
300,000 - 399,999	5	1,668,413	412
400,000 - 499,999	1	470,000	123
500,000 - 599,999	3	1,550,889	299
600,000 - 699,999	2	1,363,721	516
Over 700,000	4	3,951,240	768
Total	21	9,827,253	2,399

^{1/} Maximum amount of production loans outstanding refers to the largest volume of loans outstanding at any one time during the 1954-55 season. It should not be confused with total loans made during the 1954-55 season. The latter figure would generally be much larger.

to \$110 to \$125. Others may express the limit in terms of a maximum amount loaned per bushel or barrel. In relating the size of loan to carlot valuations, the amount loaned per car during the 1954-55 season by the 7 credit agencies which made loans on the basis of sales of potato futures contracts ranged from an average of about \$400 to \$1,500 per car. ^{17/} Information for these 7 agencies as to the amount of loans, number of growers, and the average size of loan per car for the 1954-55 season is summarized in table 8.

Financing by Fertilizer and Machinery Companies

Next to commercial banks, fertilizer and machinery companies are among the important sources of credit for Maine potato growers. Most, if not all, of these agencies sell either fertilizer or machinery to growers on credit. A supplier of fertilizer on credit makes what is, in effect, a loan to the potato enterprise; he helps finance potato production and becomes a part-owner of the process.

Futures trading is an integral part of the system through which several fertilizer companies operating in Aroostook County, Maine, sell fertilizer to Maine growers on credit.

^{17/} The cash required to provide margin deposits for futures contracts is generally included as a part of the loan.

Table 8.--Average size of loans made to potato growers on the basis of sales of potato futures contracts by 7 credit agencies, Aroostook County, Maine, 1954-55 season

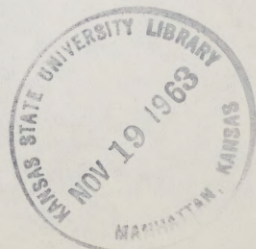
Credit agency classified according to size loan group	Credit agencies	Total amount loaned	Quantity of potatoes	Average amount loaned per carlot	Growers concerned
Dollars	Number	Dollars	Carlots	Dollars	Number
Under 50,000	4	149,430	193	774	20
50,000 - 100,000 ...	3	662,480	845	784	115
Total	7	811,910	1,038	782	135

Typically, a grower who expects to plant, say, 30 acres of potatoes will need approximately 30 tons of fertilizer. This amount, figured at an estimated cost of about \$70 per ton in 1955, comes to \$2,100. ^{18/} Assuming that a grower desires to purchase this amount of fertilizer on credit, he can do so by entering into the following type of arrangement with a fertilizer company. On the basis of prices on the New York Mercantile Exchange, the fertilizer company and grower enter potato forward contracts for a quantity of potatoes equal in value to the fertilizer, or \$2,100. For example, if in May 1955, the March 1956 futures contract was selling at \$2.80 per cwt., the fertilizer company would offer the grower \$2.80 per cwt. for U. S. No. 1 potatoes less the cost of shipping potatoes from a Maine shipping point to New York. If we assume that shipping costs amount to \$1.20 per cwt., then the price to the grower is \$2.80 less \$1.20, or \$1.60 per cwt. At this price, it will require about 3 carlots of 450 cwt. per car to cover the \$2,100.

Simultaneously, with its forward contract with the grower for \$1.60 per cwt., the fertilizer company sells 3 March futures on the Mercantile for \$2.80. Thus, the fertilizer company offsets or hedges its forward potato contract with the grower by selling a corresponding quantity of potato futures contracts. When the delivery month arrives (March, in this example) the fertilizer company furnishes or makes arrangements for the bags and instructs the grower to load the 3 cars with U. S. No. 1 potatoes. Upon sale of the potatoes in regular cash channels, and generally this will have been done before the grower receives instruction to load the cars, the fertilizer company liquidates its sales position in futures by buying three March futures contracts.

In the illustrative example, the fertilizer company is the seller of potato futures contracts on the New York Mercantile Exchange rather than the grower. In other instances, however, the equivalent is achieved through

^{18/} Fertilizer companies generally maintain a certain ratio between the quantity of fertilizer advanced and the quantity of potatoes expected to be received. During the 1954-55 season, this was generally 10 tons of fertilizer to a carlot of potatoes.



arrangements in which the grower, in addition to contracting to sell the dealer potatoes on forward contracts, is also a partner-seller of futures contracts with the fertilizer company. Under the latter arrangement, the grower's cash forward sale of potatoes to the fertilizer company is hedged on the Exchange in the name of both grower and fertilizer company. Likewise, the fertilizer company, rather than the grower, agrees to provide the necessary margin deposits to cover the futures contracts sold.

The types of grower-fertilizer company financing that are based on futures contracts represent some variant of the two methods described. Just as the bank is concerned over the ability of growers to repay money loans, the fertilizer company that sells fertilizer on credit is concerned with the grower's ability to pay off the fertilizer debt. Through the futures-forward contract arrangement described, the fertilizer company is substantially guaranteed payment for the fertilizer and, consequently, can sell a larger quantity of fertilizer than it could in the absence of futures trading arrangements. In this respect, however, it is important to see that the fertilizer company advances the fertilizer to the grower on what is equivalent to an ordinary loan of money. Instead of loaning the grower the money to buy the fertilizer, the company loans the fertilizer directly.

In order to determine the importance of futures trading in financing the credit purchases of fertilizer and machinery by Maine potato growers, information as to the extent of such financing was obtained from 6 fertilizer companies and 8 farm machinery companies.

With one possible exception, no instances were found where machinery companies sold equipment to growers on credit that involved the future-forward contractual arrangement described above. Most machinery was financed along the more conventional lines, that is, one-third down and chattel mortgage on the machinery for the balance.

In the case of fertilizer, however, 5 of the 6 companies interviewed made credit sales of fertilizer to growers on the basis of the future-cash forward contractual arrangements. The total sales of fertilizer made by the 5 companies on the basis of future contracts during the 1954-55 season amounted to \$252,791. This sales value of fertilizer was hedged with sales of 514 potato futures contracts on the New York Mercantile Exchange and involved a total of 78 Maine potato growers. For the individual fertilizer companies, the total value of fertilizer sold on the basis of futures contracts ranged from \$2,000 to \$100,000.

Futures Trading As It Relates to the Operations of Potato Dealers

The terms "potato dealer" and "packer and shipper" are used interchangeably in this study to refer to a group of firms which constitutes the primary sales link between the grower and the wholesale distributing firms. They are the middlemen merchants, so to speak, who acquire potatoes at the grower level, either by production or purchase or both and sell to wholesale distributors, seed buyers, and processing outlets. In addition to selling potatoes for their

own account, many dealers operate as potato brokers, that is, buy and sell potatoes for others (generally growers) on commission.

Potato dealers in Maine use futures trading in connection with their activities in the production and marketing of potatoes. Among such uses is that of financing potato growers. In view of the importance of futures trading in the potato production and marketing activities of this group of firms, a rather comprehensive inquiry was made of (1) the methods and practices of potato dealers and the way in which futures trading is related to them, and (2) the nature and extent to which dealers use futures trading to finance growers. In the conduct of this inquiry, the information obtained and analysis that follows are based on a sample of 42 dealers located in Aroostook County, Maine. 19/

Methods and Practices

With respect to the total quantity of potatoes handled during a given season, Maine dealers acquired potatoes from the following sources: (1) By production from their own or leased land, (2) by production on a share-contract arrangement (under this arrangement, the dealer usually furnishes the seed, fertilizer, spray material, and receives one-half of the potatoes harvested), (3) by spot purchases from growers--referred to by the trade as "street purchases," and (4) by purchases from growers on forward contracts.

Of the 42 dealers included in the survey, 29 grew part of the potatoes handled either on their own or leased land. During the 1954-55 season, these 29 firms had a combined acreage of 5,482 (table 9).

Fifteen of the 42 dealers acquire potatoes by share-contract with growers and, during the 1954-55 season, had a combined contract acreage of 2,205. Data on the distribution of this acreage among the 15 firms are given in table 10.

The most prevalent of the four methods used by dealers in acquiring potatoes was street purchases from growers. 20/ Thirty-seven of the 42 dealers

19/ This sample of 42 dealers was drawn from a list of about 1,000 firms representing most, if not all, of the dealers operating in Aroostook County, Maine. In drawing the sample, the dealers listed were arrayed according to the volume of potatoes submitted for inspection during the 1954-55 season. This array was, in turn, divided into 5 size groups and samples drawn from each of the 5. The size groups and the number of dealers selected from each size group follows: (1) 5 dealers were selected from the group that submitted 583 to 769 cars of potatoes for inspection during the 1954-55 season, (2) 9 from the 277 to 448 car size group, (3) 9 from the 165 to 276 size group, (4) 8 from the 89 to 158 size group, and (5) 11 from the 27 to 89 size group.

20/ The term "street purchases" refers to potatoes brought in and sold from day to day.

Table 9.--Maine potato dealers classified according to size of planted acreage, 1954-55 season

Planted acreage	Dealers	Total acreage
Acres	Number	Acres
Under 50	2	60
50 - 99	9	641
100 - 149	5	618
150 - 199	2	325
200 - 249	1	240
250 - 299	3	788
300 - 349	1	300
350 - 399	3	1,110
400 and over	3	1,400
Total	29	5,482

Table 10.--Maine potato dealers classified by size of contract acreage, 1954-55 season

Acreage under contract	Dealers	Total acreage
Acres	Number	Acres
Under 50	6	156
50 - 99	2	104
100 - 149	2	200
150 - 199	1	195
200 - 249	2	449
250 and over	2	1,101
Total	15	2,205

contacted used this method to obtain part of their 1954-55 volume. Moreover, futures trading is, for some dealers, an integral part of their street purchase operation. The distribution of street purchases among the 37 dealers is given in table 11.

Some Maine potato dealers offset, that is, hedge their street purchases of potatoes with sales of potato futures contracts on the New York Mercantile Exchange. This use of futures trading for potatoes is comparable to its use in grains and cotton. Futures trading arrangements in potatoes provide individuals with the opportunity to accumulate inventories of potatoes at or

Table 11.--Maine potato dealers classified according to size of "street purchase" of potatoes, 1954-55 season

Purchase	Dealers	Total purchases
Cwt.	No.	Cwt.
Under 50,000	11	212,149
50,000 - 99,999	7	484,274
100,000 - 149,999	3	370,837
150,000 - 199,999	3	539,962
200,000 - 249,999	4	881,718
250,000 - 299,999	3	834,570
300,000 and over	6	3,432,412
Total	37	6,755,922

following harvest and simultaneously offset such purchases with sales of a corresponding quantity of potato futures contracts. During the interval of the futures hedge, the potatoes can be stored. Subsequently, as the potatoes are sold to terminal market receivers and others further along in the distribution channel, an equivalent quantity of potato futures contracts can be purchased so as to cancel those previously sold. In this way, the desired quantitative relationship between actual potatoes on hand and the size of the position in futures can be maintained.

The use of the New York Mercantile Exchange to offset street purchases of potatoes in the manner described is limited, for the most part, to potato dealers located in the Maine area. ^{21/}

"Traders located in Maine held just over half of both the reported long and short hedging commitments, on the basis of average commitments in the period February 28, 1954, through May 15, 1955. Traders in New York held approximately 10 percent of reported long hedges and one-quarter of reported short hedges. Traders in New York held approximately three-quarters of both long and short reported speculative commitments in 1954-55 crop futures on the average.

"In some instances a hedger's interest in potatoes is only partially indicated by a geographic classification based upon his principal place of business. A firm in New York City, for example, in addition to merchandising activities in that city, may have interests in the growing and shipment of potatoes from Maine, and similar interests in other areas. A firm in Maine may also have interest in the merchandising of potatoes in eastern cities, and possibly in the growing of potatoes in other areas."

^{21/} See reference in footnote 7.

To some extent, however, it is used in this manner by terminal market buyers; this is discussed on page 32. In the case of potato dealers, 15 of the 37 which made street purchases during the 1954-55 season offset part of such purchases with sales of potato futures contracts, whereas 22 reported that they did not. Data concerning the quantity of potatoes offset with futures during the 1954-55 season were obtained from 11 of this group of 15 firms. This number sold a combined total of 2,204 potato futures contracts (each futures contract represents a carlot) against street purchases of approximately 7,000 cars of potatoes. Thus, the 11 firms used futures to offset approximately 30 percent of their combined street purchases of potatoes during the 1954-55 season. The number of potato futures contracts sold to offset street purchases for the 11 firms during the 1954-55 season is given below:

Potato dealer	:	Potato futures
	:	contracts sold
<u>Code number</u>	:	<u>Number</u>
1	:	44
2	:	200
3	:	750
4	:	15
5	:	120
6	:	55
7	:	20
8	:	50
9	:	20
10	:	910
11	:	20
12	:	$\frac{1}{/}$
13	:	$\frac{1}{/}$
14	:	$\frac{1}{/}$
15	:	$\frac{1}{/}$
Total		2,204

$\frac{1}{/}$ Data not obtainable.

Finally, potato dealers obtain part of their potato supplies through forward contracts with growers. Under these arrangements, dealers and growers enter contracts, usually around the time of planting, in which the grower agrees to deliver a specified quantity and quality of potatoes to the dealer at harvest or within some period thereafter. The price received by the grower is fixed at the time of negotiating the forward contract but payment by the dealer is deferred until delivery of the potatoes.

During the 1954-55 season, 20 of the 42 dealers contacted acquired part of their supply through forward contract purchases from growers. Data showing the distribution of forward contract purchases among the 20 firms for the 1954-55 season are given in table 12.

Table 12.--Maine potato dealers classified according to size of forward contract purchases, 1954-55 season

Forward contract purchases :	Dealers :	Total forward contract purchases :
Cwt.	No.	Cwt.
Under 10,000	7	40,987
10,000 - 19,999	1	13,200
20,000 - 29,999	3	66,825
30,000 - 39,999	1	33,000
40,000 - 49,999	1	41,250
50,000 and over	7	1,128,900
Total	20	1,324,162

During the 1954-55 season, 14 of the 20 dealers offset their forward contract purchases from growers by selling an equivalent quantity of potato futures contracts on the New York Mercantile Exchange. For example, a dealer may contract with a grower, say, in May for delivery of a carlot of U. S. No. 1 potatoes the following November and simultaneously sell a November potato futures contract on the Mercantile Exchange.

Data as to the quantity of potato futures contracts sold to offset forward contract purchases from growers were obtainable from only 7 of the 14 dealers. During the 1954-55 season, these 7 dealers sold 1,722 potato futures contracts on the New York Mercantile Exchange to offset forward purchases from growers.

Use of Futures Trading by Dealers to Finance Growers

Potato dealers use futures trading to finance growers in ways quite similar to those already described in the case of fertilizer companies (see p. 20). They advance growers cash or materials (fertilizer, spray, seed, etc.) at the time of planting or during the growing season. Such advances are frequently made as part of a cash forward contract in which the grower agrees to deliver the dealer a specified quantity of U. S. No. 1 potatoes of a certain variety at a specified future date. The price is fixed at the time of negotiating the contract and is generally based upon the then prevailing price of potato futures contracts on the New York Mercantile Exchange.

It is standard practice in Maine for the purchaser of potatoes on forward contracts, dealers in this case, to pay the grower approximately \$200 per carlot of potatoes at the time of contract negotiation. Maine growers think of the \$200 advance as a sort of downpayment by the buyer. Strictly speaking, however, the \$200 represents a loan of that amount to the grower during the period of the contract at the end of which the grower repays in potatoes

rather than in cash. The grower makes no direct payment of interest as such to the dealer for use of the \$200 during the period but, nevertheless, pays interest indirectly in that it is necessarily reflected in the price that he receives for the potatoes. The dealer cannot be expected to forego the use of the \$200 without some compensation and, hence, he will take this into consideration in the price he agrees to pay the grower. In advancing the grower \$200 on the forward contract, the dealer thereby becomes a "banker" or lender of funds as well as a buyer of potatoes.

Beyond the standard \$200 requirement, dealers frequently make additional advances to growers either in cash, production materials, or some combination of the two. Just as was noted above for the \$200, all such advances represent the equivalent of a loan of money to the grower during the interval between his receipt of the money or materials and the future delivery date of the potatoes.

With the exception of the \$200 that most buyers pay sellers of cash forward potato contracts, there are apparently no standards as to the amount of cash or material that a dealer will advance growers. Generally, the amounts will vary among different dealers and growers. The greatest degree of standardization is in the advance of fertilizer. In this connection, during the 1954-55 season dealers advanced up to 10 tons of fertilizer against a forward contract purchase of 1 carlot of potatoes. ^{22/} In the case of cash advances, most dealers stated that they generally did not advance more than one-half of the value of the forward contract.

During the 1954-55 season, dealers made advances of fertilizer and materials on forward contracts at a ratio of roughly 2 to 1 as compared with cash. The 19 dealers from whom data were obtainable advanced growers \$1,115,865 in cash and materials on forward contracts during the 1954-55 season. Of this amount, \$759,774, or about 68 percent was in the form of fertilizer and materials and \$356,091, or 32 percent, in the form of cash. The total amounts advanced per dealer ranged from \$1,200 to over \$400,000.

Nine of the 20 dealers stated that they customarily offset their forward contract purchases from growers with sales of an equivalent quantity of potato futures contracts on the New York Mercantile Exchange. Data as to quantity of potato futures contracts sold during the 1954-55 season to offset forward contract purchases of potatoes were obtained from six dealers. This number sold 1,282 potato futures contracts against their 1954-55 forward purchases from growers.

THE USE OF POTATO FUTURES CONTRACTS IN PROCUREMENT AND PRICING OF POTATOES

The discussion so far has been concerned with the way firms use futures trading in the accumulation of potato inventories. Firms also may use potato futures contracts in connection with sales of potatoes or potato products for

^{22/} At the fertilizer price of \$65 to \$70 per ton, this amounts to \$650 to \$700 per carlot.

deferred delivery in advance of having purchased the potatoes to cover such sales. This use of futures trading involves a purchase of futures contracts to offset the forward sales contracts. For instance, some dealers contract to sell a specified quantity and quality of seed potatoes at firm prices several months in advance of buying the seed to cover the forward sale. Against such sales to seed buyers the dealer purchases an equivalent quantity of potato futures contracts for delivery at a time that coincides as closely as possible with the time at which he expects to purchase the seed potatoes to fill the seed buyer's order.

In a forward transaction of this kind, the dealer contracts to deliver to the buyer seed potatoes of a highly specialized type, whereas the potatoes deliverable on the Mercantile contract may fall within a rather wide range of quality. Because of the uncertainty as to the quality of potatoes that he will receive should he take delivery on the Mercantile contract, the dealer will generally settle his futures contract by offset and acquire the seed potatoes to cover his forward sale by private contract.

It may appear odd that the seed dealer buys futures at all in this situation. Why doesn't he match his forward sale of seed with a forward purchase of seed from a grower and not bother with futures? The latter procedure is quite feasible provided the dealer can find seed growers who are willing to sell forward at the same time that seed buyers wish to buy. This sort of situation does not always prevail. Instead, it is not unusual for dealers to be confronted with a large number of seed buying orders at the very time that growers are reluctant to sell. In this sort of situation the dealer, if he is to keep his seed customers, must be prepared to quote prices at which he is willing to deliver seed potatoes, say, 3 or 6 months hence. But how is he to know what sales price to quote when he doesn't know the cost of the seed?

The New York Mercantile Exchange provides the dealer a way out of this dilemma in that the price of potato futures contracts on the Exchange reflects the relative price at which the dealer can purchase seed. This being the case, the dealer can use the Exchange price as a basis for quoting his sales price for seed potatoes. In order to follow through in this manner, the dealer must cover his sales of seed potatoes with a purchase of an equivalent quantity of Exchange contracts. Subsequently, as he acquires the seed potatoes from growers, he liquidates his position in futures by sales of the futures previously purchased against forward sales to seed buyers.

Illustrative of this type use of futures trading is the following statement of a seed dealer: 23/

23/ Statement made by Fred Warman, potato dealer, Presque Isle, Maine. Hearings Before a Special Subcommittee of the Committee on Agriculture, House of Representatives, 84th Congress, 1st Session, Futures Trading, Part 1. December 6 and 7, 1955.

"I find the New York Mercantile a great aid in my business. There're two reasons for this. At times growers in the localities where we work will get a collective urge to buy seed. You gentlemen know if you are going to keep a customer when he calls you for a price, you're going to pretty well have to give him that price; or if he doesn't buy it from you, he'll go to some other locality. There are many other localities that furnish seed--in New Brunswick, Prince Edward Island, Michigan, New York State--so when our customers call us, we feel obliged to quote them a price. Often they accept those prices, and at that time we might find a great reluctance on the part of the Aroostook grower to sell. We can't criticize him for that because he has not yet produced his crop. He doesn't know whether it will pass certification, and he might think the market might well be higher, which could very well be.

"Well, I could very well find myself, along with other seed dealers here, in the position of taking on orders for 50 or a hundred cars of potato seed. Those orders are coming so much faster than we can go out and cover them with the growers; therefore, there's only one place we can go and immediately cover those sales, keeping in mind that the price on the Mercantile is always relative to the price of actual potatoes.

"Another reason why I find it at least--and I'm sure other people do--a great advantage, is that so many of our seed customers will want to buy a specific lot of potatoes, or potatoes with certain specifications. Perhaps they will want some seed that has been through the Florida test. The Florida test doesn't become available until about the 1st of February. Through the summer we might be selling something with, oh, certain specifications as regard to Florida test. There is no way in the world that we can buy those and be sure that we are adequately covered. So we take on these orders at times, not always, and cover them on the Mercantile. As soon as we can buy those actual potatoes to cover this order, we liquidate our hedge."

The purchase of futures to offset forward sales of potatoes in the manner described is thus significant in the procurement of potatoes to cover forward sales commitments. Its importance in this respect has to do with the pricing rather than physical aspects of procurement. Of the 42 dealers contacted, 8 stated that they sometimes purchased Mercantile contracts to cover forward sales commitments of potatoes. During the 1954-55 season, 5 of these firms used the Exchange to cover forward sales of about 215 cars of potatoes.

The points made with respect to dealers using futures to offset forward sales of potatoes apply equally well to forward sales of potato products by processors. For example, processors sometimes are asked the price at which they will sell a specified quantity of french fried potatoes for delivery, say, 3 to 6 months hence. Since potatoes are one of the major items of cost in french fries, information as to the cost of potatoes is important to the processor in quoting sales prices for french fries. Just as in the case of dealers

selling seed forward, the processor has two alternatives for arriving at his purchase price for potatoes and his basis for quoting prices for french fries. He can purchase potatoes at the firm's prices on forward contract with growers. Alternatively, he can buy potato futures on the New York Mercantile Exchange.

The way in which this use of potato futures is tied in with the potato processing business is brought out quite clearly in the following statement of a processor: 24/

"We're seasonal vegetable canners, canning peas, string beans, and corn; and we produce in the potato field quick frozen French fries and such byproducts of freezing as patties and puffs and mashers. We dehydrate potatoes and produce potatoes to flour and meal from the dehydrated potatoes. And we're canners of small potatoes.

". . .The reason that we're interested in the mercantile is that we find it necessary, of course, to give customers a firm price on the various potato products that we manufacture.

"Along in the late summer and early fall, the customers come in with orders for firm amounts at firm prices. And that leaves us in a position of not knowing exactly what our raw material will cost us. We never have gone out to the farmers in the spring with contracts, because we felt that in most cases the contracts were written at a very low level, and when we do contract direct, if we did, we would have the problem of never knowing whether the potatoes which the producer delivered would meet the specifications of our quality control people. It's necessary for us to have high specific gravity and low sugar, and we prefer to be in a position of deciding at the time of delivery with the producer whether or not the potatoes will be acceptable. So that leaves us in a position of either having to use the mercantile as a hedge, or going out and buying from the trade loaded cars. We have in the past bought a good many loaded cars with specified delivery periods. The great difficulty with that is that if you are going to operate a true hedge, you should, of course, liquidate your hedge as fast as you acquire the actual potatoes. And the opportunity for selling loaded cars at the time of buying your potatoes isn't always very good. Actually there may not be much of a market. In the case of the mercantile, of course, you can always liquidate as fast as you acquire your actual raw stock.

"So from our standpoint as a processor who uses up to as many as a thousand cars of potatoes a year, we feel that the mercantile exchange has a very definite place, and every year we use it to a greater or lesser extent. At the moment, we've only acquired something like 50 or 60 percent of our actual requirements for

24/ Statement by Donald W. Reed of H. C. Baxter & Bros., Pittsfield, Maine. Hearing Before a Special Subcommittee of the Committee on Agriculture. See reference in footnote 23.

the year, and we're long in the late months on a part of the quantity which we have acquired, which should assure us of procurement of our raw material at about current prices."

Information as to the extent to which processors purchase futures to offset forward sales of manufactured potato products is not available. Fragmentary information on this point suggests that the practice is rather common. Such use of the mercantile is more typical for processors who make forward sales of potato products in advance of their having purchased the raw material (potatoes) to cover such sales.

In considering the economic implications of the purchase of futures to offset forward sales, whether it be seed potatoes or manufactured products, attention is called to the more specialized enterprise position which results for the dealer or processing firm. A processing firm, for example, negotiates a price for the forward delivery of french fries. Simultaneously, it fixes within narrow limits the primary ingredient cost by purchasing the appropriate quantity of potato futures on the Exchange. In brief, the processor assumes a price spread by his simultaneous purchase of potato futures and a sale of french fries forward. In so doing, the gross return to the firm for processing french fries is closely approximated by the size of the price spread assumed. In other words, the net effect to the processor is that of enabling him to specialize in selling processing service at relatively fixed prices. The price for such services is partially represented by the difference between the price of french fries and the price of potato futures.^{25/} In the absence of futures trading arrangements, or devices that achieve the equivalent, the processor has no way of fixing his return for processing service in advance of his actually providing the service. Consequently, it also is not possible for the processor to specialize to the same degree as is the case in using futures contracts. It is in this sense that the processor can use potato futures contracts to achieve a more precise selection of enterprise position.

Wholesale Receivers

The so-called "wholesale receivers" located in large terminal markets, such as New York and Boston, among other things, buy potatoes for their own account and resell to jobbing and retail outlets. Available information suggests that these firms do not make extensive use of the Mercantile Exchange. Apparently this is because of the rapid turnover of their business and the absence of large accumulations of supplies. The use of futures by such firms is made, for the most part, in those circumstances where they have considerable difficulty in matching buying and selling orders. For example, a terminal market

^{25/} This is because potatoes represent only part of the cost of manufacturing french fries. In order to fix completely the gross margin for processing french fries, the processor would have to contract the purchase at fixed prices of all inputs required simultaneously with his forward sale of french fries.

dealer may, because of competition at the f.o.b. point, find it desirable to make f.o.b. purchases of potatoes even though there is little buying activity in the terminal market where he expects to sell. To guard against such market uncertainty in the terminal market, the dealer may sell futures against f.o.b. purchases. Subsequently, as buying activity improves in the terminal market, the hedges are lifted and the potatoes sold through normal outlets. Likewise, dealers may find it advantageous to sell potatoes forward to terminal market firms at times when they have difficulty buying potatoes in the production area. In these circumstances, they can hedge forward sales with purchase of potato futures. Subsequently, when buying conditions improve in the production area, the purchase of futures can be replaced with purchase of potatoes f.o.b. country points.

CASH-FUTURES POTATO PRICES

In this section, an attempt is made to indicate (1) the significance of futures trading to market information, (2) the relationship of potato futures prices to the structure of market prices, and (3) some of the more basic relationships between cash and futures prices.

Important studies in this area are those of the Commodity Exchange Authority ^{26/} and the University of Maine. ^{27/} The Commodity Exchange Authority study deals with such topics as (1) trends in cash potato prices, (2) futures and cash price variability, (3) futures prices, and (4) the supply and price situation in 1954-55. The University of Maine report gives attention to (1) prices of futures contracts, (2) the effects of futures prices on planted potato acreage, and (3) factors determining cash and potato futures prices.

The Importance of Information on Futures Prices

One of the important functions performed by the New York Mercantile Exchange, along with associated trade organizations, is to bring together in a single market much of the available data concerning the factors affecting the demand for and supply of potatoes. This information is made available to potential traders in the market. Also, the prices at which transactions are being made, and the bids and offers are quickly transmitted from the Exchange to all interested segments of the potato industry as well as to the public in general.

The significance of providing such information on supply, demand, and prices has to do with the competitive character of the potato market. Specifically, one of the requirements of freely competitive markets is that "there must be knowledge on the part of each buyer and seller of the prices at which transactions are being carried on, and of the prices at which other buyers and

^{26/} See reference in footnote 7.

^{27/} The Maine Potato Industry and the New York Mercantile Exchange, Maine Extension Service, Pamphlet 53. July 1957.

sellers are willing to buy or sell. It means also that there must be opportunity to take advantage of that knowledge."^{28/} When so visualized, the New York Mercantile Exchange is a factor that tends to increase the extent of competition in the potato market. The specific reasons are: First, the supply and demand information is made available to a large number of potential and actual buyers and sellers and thereby makes possible a much broader market and increased liquidity. Second, the widespread distribution of price information tends to reduce the difference among buyers and sellers with respect to knowledge of market values. Illustrative of this second point is the amount of knowledge that Maine growers now have with respect to prices. For example, it is a simple matter for them to ascertain the prices and bids and offers made on the Exchange during the day. On the basis of such information, growers and other sellers can determine fairly accurately the market value of their potatoes and, consequently, are better informed in their sales negotiations. The importance of such price information to growers and others is indicated by the following statement of a Maine potato dealer: ^{29/}

"They have seen the tremendous advantages offered by the hedge principle, the only way outside of direct Government support that this industry has ever been able to determine an indication of price for its product before it is definitely committed to its growth. To me that is a tremendous step. Up until the advance of the exchange and the hedging principle being used as it is now, no farmer in this area had any idea what price he would obtain for his product until he was committed, until his investment was made . . .

"It is of utmost importance to him that some determination of price be made before he must commit himself to this extent. These people, these members of the council, also receive the advantage of a public auction type of pricing. There are no secrets in quotations based on the free trading that is possible, and, in fact, is mandatory on the exchange. All quotations of trading are placed on public outcry. The growers in this county, particularly the State in general, have never been better supplied with actual, accurate price information. Nobody can take advantage of a grower when New York Mercantile Exchange quotations are available, and they are available."

The foregoing advantages of price information are realized to the extent that prices are determined by freely competitive market forces. Previous studies indicate that the prices established on the New York Mercantile Exchange at times have been influenced by manipulation. ^{30/} In such circumstances, the prices established are distorted away from freely competitive values with possible short time benefits or losses to growers and others.

^{28/} Boulding, Kenneth E., *Economic Analysis*, Rev. Ed. 809 pp. New York. p. 50. 1948.

^{29/} Statement made by Gordon Robertson, potato dealer, Caribou, Maine. Hearings Before a Special Subcommittee of the Committee on Agriculture, House of Representatives, 84th Congress, 1st Session, *Futures Trading*, Part I. December 6 and 7, 1955.

^{30/} See pp. 90-94 of reference in footnote 7.

Futures Prices and Price Structure

In examining cash-future potato price relationships, it is necessary first to consider the nature of the price structure for Maine potatoes and, in particular, the way in which potato futures prices are tied in with that structure. In this connection, no attempt is made to identify the complete price structure for Maine potatoes except to the extent necessary to establish the point that futures prices are an integral part of the overall structure.

The phrase, "price structure," is used here to refer to the form, place, and time dimensions of potato prices. Any potato price established in the market can be expressed in terms of form, place, and time. The cash price of U. S. No. 1 potatoes at Presque Isle, Maine, on October 1, for example, in terms of structure, provides form (U. S. No. 1 potatoes in raw form), place (Presque Isle), and time (October 1).

Starting with the price of potatoes of a single form, at a single location, and time, it is possible to expand any of these three dimensions of price structure by including additional prices. The "form" dimension may be increased by including prices for potato chips, french fries, flakes, etc. Similarly, the location dimension may be expanded by including prices for potatoes located at several points. Because of the separation of production areas from consumption, the price structures of most commodities are multidimensional in place. Likewise, the fact that consumption is spread over time gives rise to price structures with multitime dimensions.

The prices of potatoes at two geographic locations are parts of the same price structure or market to the extent that arbitrage is effective between them. ^{31/} The effectiveness of arbitrage is evidenced by the degree to which the differences in the prices at the two points approximate rather consistently the cost of transporting potatoes between the two points. Thus, we may regard Presque Isle, Maine, and New York City as parts of the same price structure since potatoes generally move from Presque Isle to New York. Moreover, in normal times the price of potatoes in New York tends to be greater than the Presque Isle price by an amount approximately equal to the freight cost per cwt. for shipping potatoes from Presque Isle to New York. The shipping cost is about 75 cents per cwt. ^{32/} Therefore, when the price in Presque Isle is, say, \$1.60 per cwt., we should expect the price in New York to be \$2.35. However, if the price in New York were only \$2.30 while the price in Presque Isle were \$1.60, it would not pay anyone to buy potatoes in Presque Isle and ship them to New York at these prices. Thus, the movement of potatoes from Presque Isle to New York might be halted temporarily until the supply and demand forces

^{31/} Arbitrage may be defined as the process of changing the value of one's possession by buying an asset or the rights to an asset at one time or place and selling it or them at another time or place.

^{32/} The freight cost is 71 cents per cwt. and heater service is 4 cents making a total of 75 cents per cwt. This freight cost refers to the 1954-55 season.

operating at the two points reestablish the 75-cent shipping parity. Assuming the absence of barriers to movement of potatoes from Presque Isle to New York, the prices at the two points are determined by the same general supply and demand conditions. This is but another way of saying that under such conditions, potato prices at Presque Isle and New York are part of the same price structure or market.

The remarks so far have had reference to the structure of the so-called "cash" potato prices. Potato futures prices also constitute a price structure in the above sense. The prices established in buying and selling potato futures contracts refer specifically to potatoes of a specified quality, a given location, and time. The dimensions of price structure apply to futures prices because of the nature of the contract terms. The terms of the potato futures (1956-57) contract call for delivery of U. S. No. 1, size A, 2-inch minimum of Maine grown Katahdin, Katahdin-Chippewa type, or Kennebec potatoes; the unit of trade is a carlot of 900 bags containing 50 pounds each; the place of delivery is in refrigerated cars on track in Harlem River Yards, New York City; the time of delivery is during any of the calendar months November to June. (For further details of contract provisions and recent modifications, see p. 7.) Thus, by the very nature of the terms of the potato futures contract, it can be seen that the prices established in trading necessarily refer to the price of potatoes located at New York at specified delivery dates. Accordingly, potato futures prices constitute a price structure the same as cash potato prices.

In terms of the concept of price structure developed so far, attention is called to the time dimension of the future price structure. There we find multidelivery dates which are represented by the different calendar months of delivery, such as November futures, March futures, etc. At any given time, it is possible to buy or sell potatoes for seven different delivery dates. ^{33/} Consequently, the time dimension of the potato futures price structure includes potato prices for seven different delivery dates (table 13).

The difference between the prices of any two of the potato futures contracts (see right-hand column of table 13) represents a charge for carrying potatoes between the two delivery dates. ^{34/} For example, on October 4 the carrying charge from November to December was 20 cents per cwt. (\$2.55-2.35), and from November to March it was 90 cents per cwt. (\$3.25-2.35). These price spreads between futures may at times exceed or fall below the actual cost of storing potatoes for the periods involved between futures.

^{33/} Trading in December and February was discontinued in June 1957, leaving only 5 delivery months for potato futures.

^{34/} Just as there are costs of transporting potatoes from one place to another, there are costs of transporting potatoes from one time to another. Charges for the transport of potatoes from Presque Isle to New York have to be paid and, likewise, for the transport of potatoes from, say, October to March. Potatoes are transported from one time to another through storage.

Table 13.--Closing prices of potato futures contracts on the New York Mercantile Exchange, October 1 and 4, 1954, and the price differences between futures on October 4

Year and futures month	Closing prices per cwt.		October 4 price differences
	October 1	October 4	
	Dollars	Dollars	Dollars
<u>1954:</u>			
November	2.24	2.35	---
December	2.42	2.55	Nov.-Dec. -- \$0.20
<u>1955:</u>			
January	2.67	2.84	Dec.-Jan. -- 0.29
February	2.88	3.08	Jan.-Feb. -- 0.24
March	3.07	3.25	Feb.-Mar. -- 0.17
April	3.13	3.33	Mar.-Apr. -- 0.08
May	3.16	3.40	Apr.-May -- 0.07

Up to this point in the discussion of price structure, an attempt has been made to show that both cash potato prices and potato futures prices represent price structures in that they both can be expressed with respect to form, place, and time. At this point, the question is raised as to whether the cash potato price structure and the futures price structure are independent of one another or are they so integrated as to justify considering the two as parts of the same structure. The answer to this question involves the same kind of problem and analysis that was raised earlier with respect to whether cash potato prices at two geographic points represent separate or the same price structures. There it was concluded that they should be considered as parts of the same price structure, provided there was free movement of potatoes between the two locations and that arbitrage was effective between the two points.

The extension of this reasoning to the integration of cash and futures prices means that arbitrage would have to be effective between cash and futures prices and, further, that there would be free movement of stocks (potatoes) to implement the operation of arbitrage. Based on these considerations, it follows that cash and futures prices are integrated and do, in fact, constitute a single price structure or market. This integration is achieved because of the following two general conditions which, for the most part, are satisfied: First, the Exchange facilities, particularly the terms of the contract, permit arbitrage between cash and futures contracts--more popularly known as "hedge selling" and "hedge buying." Second, if there is a need to implement arbitrage with potato supplies, this can be done since all buyers and sellers of potato futures have the right to settle their contracts by delivery of potatoes. In practice, only a small proportion of the total contracts outstanding are settled by delivery.

Most are settled by offset rather than delivery. However, the important point is the fact that sellers and buyers have the right to settle by delivery, the end result of which is to link or integrate cash and futures potato prices into the same price structure or market. To say that cash and futures prices are part of the same price structure is but another way of saying that cash and futures prices are determined by a common set of supply and demand conditions.

Cash and Futures Prices in Relation to
Supply and Demand Factors

Cash and potato futures prices are largely determined by the same group of supply and demand factors--this is shown by comparing the frequency, size, and directional consistency of changes in cash and potato futures prices over time. Available information indicates that large changes in cash prices of potatoes at Presque Isle, Maine, are generally associated with similar changes in the prices of potato futures contracts on the New York Mercantile Exchange. The nature of this cash-futures price relationship for 1956-57 is indicated in figure 2.

Figure 2 shows the prices of the near active potato futures and prices for potatoes at Presque Isle, Maine, just before and during the delivery month, for the period 1956-57. The difference in the level of cash and futures prices reflects a transportation differential between Presque Isle and New York of about 83 cents per cwt. ^{35/} In other words, the Presque Isle price plus 83 cents represents the New York equivalent cash price for potatoes. However, the New York cash potato price derived in this manner, except for short intervals, is slightly higher than the potato futures prices on the New York Mercantile Exchange. A price relationship of this character, that is, futures prices at a slight discount relative to cash prices at the contract delivery point, is not uncommon for some of the other commodities traded on futures contracts. Such price differences arise for a number of reasons, the principal ones of which are: (1) Slight differences in the quality or quantity to which cash and futures prices refer, (2) delivery costs that are involved in settling futures contracts by delivery, and (3) the prices of cash and futures may differ because they refer to delivery of commodities at slightly different delivery dates.

The extent of association between the prices of cash and potato futures contracts, and evidence that the two sets of prices are determined by substantially the same supply and demand conditions, is revealed in a simple correlation of changes in cash and potato futures prices over selected periods of time. Accordingly, a simple correlation was made between changes in cash prices of potatoes (various varieties, mostly Katahdin-type U. S. No. 1's, $2\frac{1}{4}$ -4 inch) at Presque Isle, Maine, and changes in prices of potato futures contracts for the near active month. The price changes employed were for intervals of 6 and 10 trading days and for the 2 periods, October 2, 1956, through May 22, 1957, and October 4, 1954, through May 20, 1955.

^{35/} This consists of freight rate plus 3 percent transportation tax.

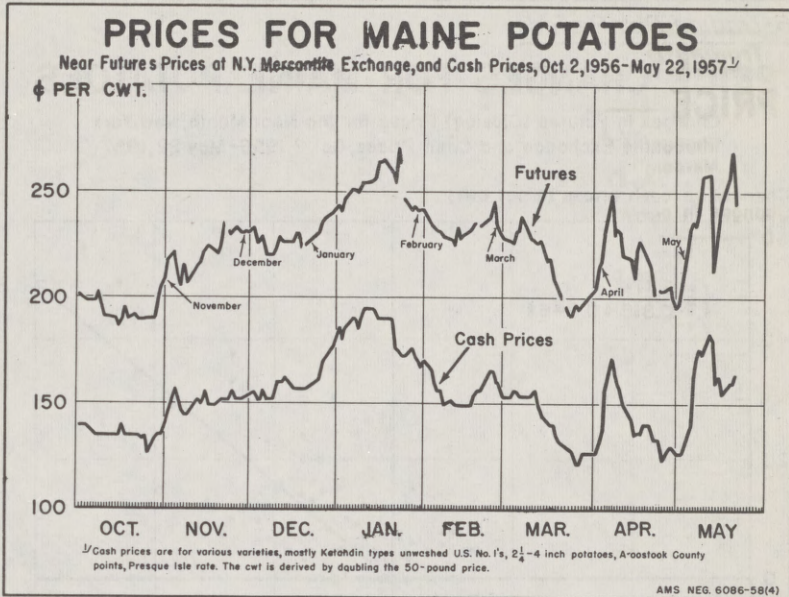


Figure 2

During the period, October 2, 1956 to May 22, 1957, inclusive, changes over 6-trading day periods in cash prices of potatoes at Presque Isle, Maine, when related to similar changes in the price of potato futures for the near active month, resulted in a correlation coefficient of 0.77 (fig. 3). This says, in effect, that about 60 percent of the changes in cash prices are associated with similar changes in futures prices. The equation for the line of regression, $y = -0.815 + 0.846x$, indicates that a change of 1 cent per pound in the price of potato futures is associated, on the average, with 0.846 cents per pound change in the same direction of the cash prices of potatoes at Presque Isle, Maine. ^{36/}

As noted above, a simple correlation was also made of changes in cash prices of potatoes over 10-trading day periods at Presque Isle, Maine, and changes in the price of potato futures on the New York Mercantile Exchange for the near active month. Such analysis for the period, October 2, 1956 through May 22, 1957, resulted in a correlation coefficient of 0.83 (fig. 4). Thus, about 69 percent of the changes in cash potato prices at Presque Isle,

^{36/} Based upon a valid test for significance of the "r" coefficients, it was found that the coefficients obtained differed significantly from zero at the 0.01 probability level.

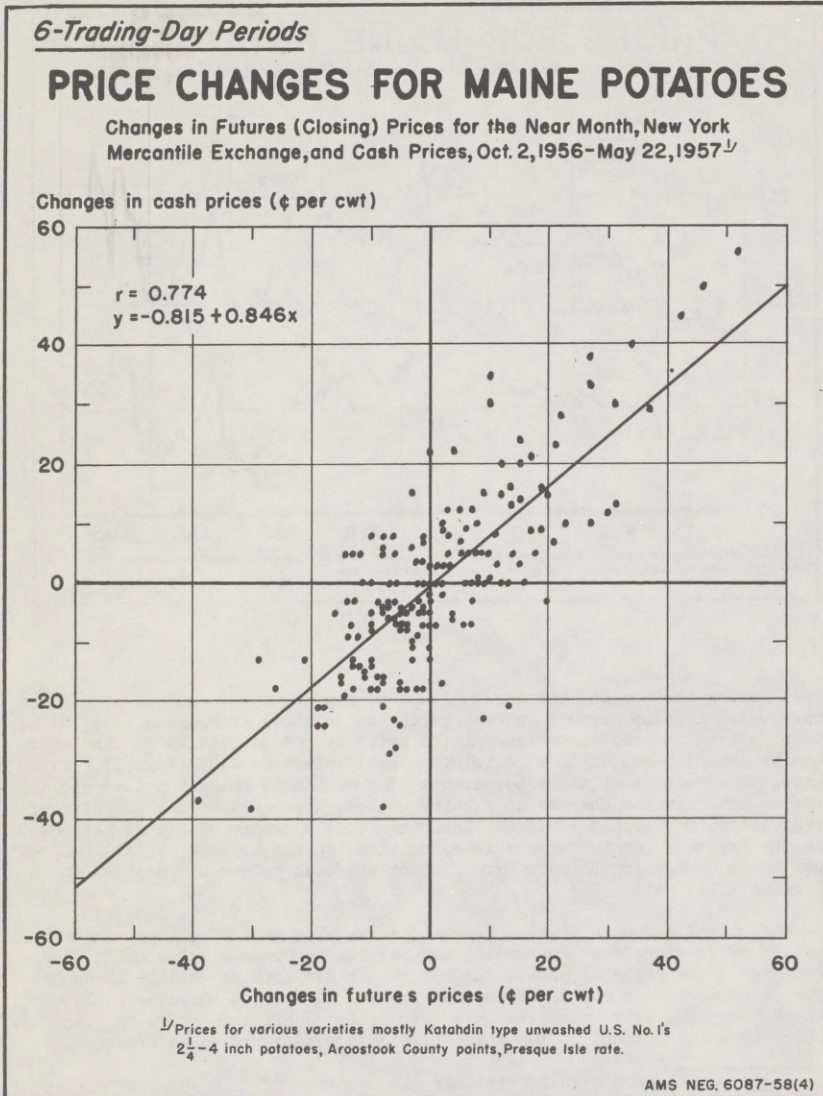


Figure 3

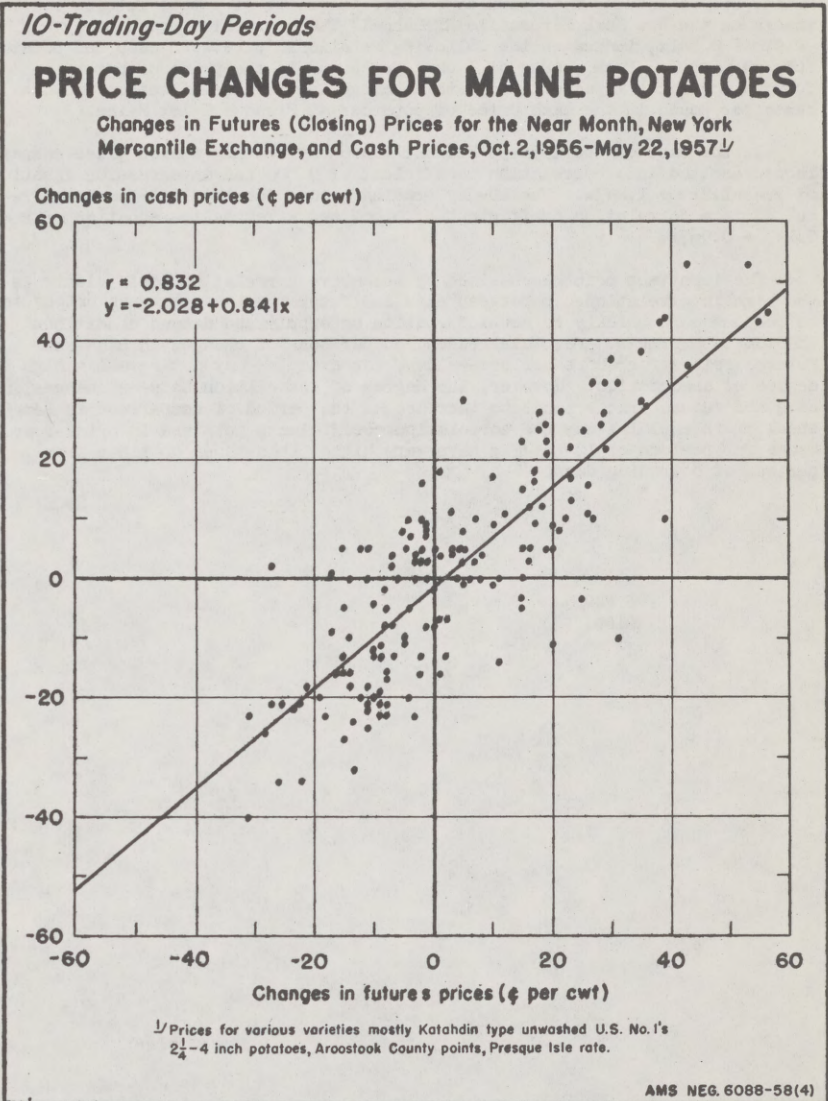


Figure 4

Maine, are associated with similar changes in prices of potato futures contracts on the New York Mercantile Exchange. The regression equation, $y = -2.028 + 0.841x$, indicates the following relationship between cash and potato futures prices: Each change of 1 cent per pound in the price of potato futures contracts is associated with a change in the same direction of 0.841 cents per pound in the cash price of potatoes at Presque Isle, Maine.

In the case of the 1954-55 season, the 6-day trading period price comparisons resulted in a correlation coefficient of 0.806 and a regression equation of $y = -1.229 + 1.243x$. The 10-day trading period for the 1954-55 season resulted in a correlation coefficient of 0.867 and a regression equation of $y = 0.149 + 0.967x$.

The important point emphasized by the above correlation coefficients is the high interrelationship between cash and futures prices. Futures prices tend to respond more quickly to new information on supply and demand conditions than do cash prices. For this reason, comparisons of changes in cash and futures prices for short periods--a day, for example--may not reveal a high degree of association. However, the degree of association between changes in cash and futures prices tends to increase as the period of comparison is lengthened. This explains why the correlation coefficients obtained in price comparisons for periods of 10 trading days were higher than those obtained from periods of 6 trading days.

Mr. DUBORD. We believe that potato futures trading is a sound and useful economic tool which, properly used, can often assure the various components of the potato industry a reasonable income from its capital and labor, year in and year out.

We have so used it, just as have many of the present opponents of the mercantile, who have, from whatever motives, now decided that it is at fault for all the overproduction which lies at the base of the economic ills of potato farming.

We admit that these opponents are numerous, Dr. Chairman, but we strongly suggest that their emotions have been partly fanned by a continuing and well-organized publicity campaign in Aroostook County and Maine, the heart of the potato production area.

Interestingly enough, we have a parallel proof of how the Maine farmers' emotions can be stirred going on right now.

We have in Maine a potato marketing order, a voluntarily imposed restriction on the quality of potatoes which can be shipped from Maine. It was reaffirmed, having been in force several years, by a vote of the farmers just last August.

Now, there is a very vocal group, similar to the group which is opposing the mercantile, carrying on a campaign in Aroostook County, and they have caused another vote, which will be taken just this week, and they have stirred enough people so that they may very well throw out the marketing order which this group feels is one of the reasons for their difficult position in the market.

But briefly, we feel that this bill would throw out the baby with the wash water in trying to solve these problems.

I won't bore you, Mr. Chairman, with the description of the exchange. I am sure you are familiar with it from your long experience in this field, and in this type of legislation. But like all the other commodity exchanges, and the stock exchanges, it is composed of men of integrity and standing in the trade who have developed rules for the conduct of its business. It is subject to regulation of the Commodities Exchange Act, and the CEA, who constantly supervise it, and of course there are penalties in the law for any attempts at speculation or manipulation which, if any should exist, such as has been charged by some of the opponents of this legislation.

The group which I represent consists of a group of Maine residents—there is one processor, one banker, one broker and a shipper, and seven growers of Maine potatoes who have been growing potatoes for many, many years.

They were chosen from leading figures in the industry to help the exchange in revising the rules if such revision is deemed important or for the welfare of the industry. They are the ones I am representing here today—basically a group of Maine farmers who make use of the exchange.

One of the changes made earlier this year provided—they now have a State of Maine delivery, which means they can be shipped to any point in the United States, whereas formerly delivery was restricted in various contract months to New York City and Charlestown, Mass.

This answers, we feel, one of the arguments made by the opponents in the House hearings that the threat of delivery to New York as formerly could be done could depress prices by creating a glut on the New York market.

With this change in the contract which is traded, this is no longer possible.

Now, I think, Mr. Chairman, that you and your committee should realize, as you probably do without my mentioning it, that contracts for futures trading have been common in this industry for many, many years before you had organized the trading on this exchange, since the early 1950's. And as a business group, not only in potatoes, but in other grains, it was a natural step to go to these exchanges where trading could be organized. But I think we should realize that this has gone on for generations before.

Now, trading on this exchange, as on others, is public, of course. The prices established are immediately known throughout the trade, or to anyone outside the trade who is interested in finding out what the futures price of potatoes is.

The exchange does not set prices. Everybody that sells in the exchange must find a buyer in the exchange who is willing to buy at that price and vice versa.

The board simply reflects the supply and demand or the judgement of those people in the market as to what the supply and demand is.

I might point out—I do not think it has been mentioned today—the demand for potatoes over the years has remained very stable. There has been very little increase in the demand, despite our population growth. So that a small change in supply very rapidly and grossly affects the price, because the demand is, and I think it is generally recognized to be, a very inelastic demand as compared with the demand to many other commodities.

Now, I think I can illustrate to you what used to happen before we had futures trading in Maine by an example of one of the farmers on our committee who describes it to me.

He mentioned this one specific example, and I am sure it could be multiplied many times.

Before the Mercantile Exchange existed, he marketed his potatoes in the usual way, made a forward contract for the potatoes which were growing in the ground to be sold in the fall. Based on the sale, he got financing for his crop. There was only one trouble. When he went to deliver his potatoes, the man that he contracted with to purchase them had gone bankrupt. So he was left with holding a debt in the potatoes, which delivery could not be accepted on because of the financial ability or inability of the buyer.

Now, in this organized exchange, as in other commodity exchanges, the members have to prove financial integrity, of course. The contracts are liquid, they are protected. This risk the farmer formerly had in a futures sale, which always took place, he no longer has that risk.

Then this has been touched upon, but I think should be perhaps emphasized again. Before trading—again, this is information related to me by people growing potatoes in the business—it was not unusual for an experienced buyer to go within a short radius, perhaps 10 miles of Aroostook County, where these potatoes are grown, and to buy from several sources in the same day at prices varying as much as 75 cents a hundredweight. So that you had these fluctuations long before the exchange.

The reason that that could be done was because with only two people to the transaction, without any public knowledge of the price,

the larger buyer, with more access to communication facilities and more knowledge of the price over a greater geographical area, could very easily victimize the farmer. This is no longer possible, because, as has been indicated I think by Congressman McIntire, this board does reflect a price which all the growers are familiar with, and it provides everyone with the same market information.

I would not describe in detail the second usefulness of this exchange, the hedging process, because I am sure, Mr. Chairman, that you are familiar with this. But again, a typical example of one of our farmers and the use that he makes, through the use of hedging—he has been able, year in and year out, through these bad price years that Senator Muskie has referred to, to guarantee himself a reasonable return on his crop, not because he wanted to make an exorbitant profit, but because through the use of prices which have been hit in every year since 1955 on this board, he has been able to guarantee himself a reasonable return of \$100 per acre of net profit. And this same thing could be done by any other of the growers who took the time to understand how this mercantile trading could be an effective tool for his use.

Now, these same hedging transactions provide fertilizer companies with a means of supplying the farmer credit. They have given a great boost to the potato processing industry, which is a rapidly growing one in our State, and we are glad of it, because the processor, through hedging, is able to stabilize his raw material costs so that he in turn can quote prices for his finished product in the future to his buyers, which he has to do to stay in business.

Now, as an example of the use which is made by growers for hedging purposes, even in this year, 1963, there have been over 2,800 carlots of futures sold on this board for fertilizer contracts by 564 growers, which is a very representative, we think, segment of this industry. And this has been true, despite what have been low board prices this year—and we suggest largely as a result of the uncertainty which this legislation has created as to the future of this type of trading.

Calwell, I think, indicated earlier this morning that the greatest use of the market for hedging purposes is by Maine growers. And the speculators who are spreading these risks, on the other hand, come from all over the United States.

Thirdly, the exchange does provide a place for the speculator to make a broader market, and provide someone who is willing to assume the risk that the grower and the processor might want to avoid.

There has been enough, I think, testimony previously on the position of the speculator in the market so that I won't take your time to go into detail on that.

I would like, however, briefly—and I am reaching my conclusion—to attempt to answer some of the arguments that have been made both here this morning and before the House committee on these objections to futures trading in potatoes.

One of the strongest arguments that has been made, of course, is that this trading creates confusion and causes wild price fluctuations. We have only had, as has been pointed out, active trading since the early 1950's in this commodity. The only relatively stable market I think anyone in this room, proponents or opponents, can remember

within memory occurred between 1940 and 1950, when you had more time price ceilings, you had price support and production control. And even then, in one of those years short supply created a black market in potatoes in Maine.

In the 1920's and the 1930's the price fluctuated even more wildly, and since then we have had futures trading.

Briefly, in potatoes as in anything else supply has always violently affected the price. For example, we get news of a freeze in North Carolina or Alabama, prices have fluctuated as much as \$3 per hundredweight in a space of 6 days, because of the diminishing supply which is created by weather conditions in other parts of the country.

We would say to you that this board does not create the facts, but merely reflects what has always been historically and economically true.

Second, the proponents indicate that futures interfere with an orderly market. But we would say to you that exactly the opposite is true. Maine potatoes are in greater demand in the winter, and prices have traditionally been stronger at that point than they are at harvest-time. Trading activities and futures prevents the prices from falling, and actually exert a more stabilizing influence on the prices.

We cannot compete with the earlier crop until January or February because of our distance from the market and a freight differential of some 76 cents which we have. And these futures assist the farmer by giving him general price information as opposed to local geographic price information as to know when to market.

Senator JORDAN. Where would your 76-cent freight rate be to?

Mr. DUBORD. Presque Isle to New York City.

Senator JORDAN. 76 cents a hundred pounds?

Mr. DUBORD. Yes, sir.

Now, one of the strongest points—and we would concede that, the impression has been created—is that practically all of the Maine growers want to eliminate trading on futures. And this assertion has been made today, it has been made before the House committee that because of a poll which was taken of some 2,500 growers back in 1962.

There were only 64 percent of those people who returned the ballot, and 88 percent of those who did favored elimination of futures trading.

We say that there is in evidence that a slight majority, about 56 percent, want elimination.

Now, they are under no compulsion to trade in these futures. And we would suggest they should not be permitted simply by force of numbers to take away the rights of a substantial minority of potato growers and processors and shippers who find this a useful economic tool.

Now, in addition to that, we had the ballot circulated and examined by several nationally recognized public opinion experts, people like the Gallup people, Roper Associates, Harvard Business School of Research—and we can express to you that it was not based on the opinion of these people an unbiased ballot.

No. 1, it was circulated by a committee which identified itself as a committee to eliminate futures trading, which presents bias immediately. It was not worded in unbiased terms. And it required a signature, which of course destroyed the secrecy of the ballot. Obviously someone who might be opposed would under those circum-

stances be perhaps very hesitant to identify himself in opposition to the position stated in the ballot of those who were circulating it, including many leading figures in the potato industry.

So that in any event, we would strongly say to the committee that this poll certainly does not reflect that 90 percent of all the growers in Aroostook County want to do away with this board.

Now, the fourth argument made is that there are too many speculators in the market. I won't dwell upon that. I think Mr. Bagnell, himself, admits that it is a question of who came first, the chicken or the egg—whether the price changes attract speculators or vice versa is difficult to say. But it is interesting to note that we never hear about speculation when prices are going up, and also that back in the stable price-support years there were many in industry who used to complain there were not enough speculators in the market, because prices were too stable and they would like to see a rise.

I think that Dr. Gray has gone in in considerable detail on the comparisons between Maine and Idaho and other areas, so I will skip over that.

The last point is the comparison of the onion market, in which futures were abolished in 1958. I would like to point out that the House committee report—that Government statistics which were quoted in that hearing indicate that during 14 years before there were futures trading in onions, onion prices varied an average of 54 percent. During 9 years when you had effective futures trading in onions, they varied only an average of 22 percent. And in the 4 years since Congress has eliminated trading in onions, prices have varied an average of 50 percent.

As has been indicated already by Mr. Caldwell, there have been very bad years since then for the onion grower pricewise.

We point this out to show that there appears to be, from any statistical analysis that we can make, no correlation between the size of any fluctuations in price of either potatoes or onions during a period of futures trading, or during a period without futures trading.

So that in conclusion, Mr. Chairman, we would feel that these impartial studies which have been made previously, previous to this hearing, simply do not establish that futures trading has the effects claimed by the opponents of futures trading.

We feel that futures are an effective economic tool. The people I represent here are in the same business as the proponents. They would like to see higher prices, just as well as the proponents.

The market price, however, is determined not by futures trading, but by supply and demand in potatoes. And as long as we have competing areas which produce potatoes, then we are going to have price problems, and overproduction is going to cause price problems, and we have had overproduction almost every year.

We feel that banning this trading will only remove a marketing aid which is valued by a large segment of this industry, and that the only way you can cure perhaps the ills that they complain of would be not to repeal this law, but to repeal the law of supply and demand.

Thank you, Mr. Chairman.

(The prepared statement of Mr. Dubord follows:)

Continued low prices for any agricultural product and their economic consequences understandably stir a farmer's emotions, as well as the emotions of processors, banks, suppliers, and anyone else who depends in any way on that product for his livelihood.

Low potato prices in Maine have stirred the emotions of the Maine potato farmers, and have caused many of them to lash out—from the heart rather than the mind—at what they erroneously consider the source of their woes and low prices.

This time, through this bill, the target of frustration in the potato industry is the New York Mercantile Exchange—the mercantile, as it is commonly known in Maine, and more specifically, trading in potato futures on the mercantile. In other times, low potato prices have been just as vehemently blamed on the depression; the fertilizer companies; the chainstores; or the railroads. Next will undoubtedly be the rapidly developing potato processing plants, but right now, the scapegoat is futures trading. We believe we can show conclusively, as has been amply demonstrated by impartial previous studies of the U.S. Department of Agriculture and the University of Maine Experiment Station, that this is illogical. We believe that potato futures trading is a sound and useful economic tool, which, properly used, can often assure the various components of the potato industry a reasonable income from its capital and labor, year in and year out. We have so used it, just as have many of the present opponents of the mercantile, who have, from whatever motives, now decided that it is at fault for all the overproduction which lies at the base of the economic ills of potato farming.

We admit that these opponents are numerous, but we strongly suggest that the emotional flame of their opposition has been hotly fanned by a continuing and well-organized publicity campaign. (Interestingly enough, a parallel proof of how the Maine farmer can be made to react to such a campaign exists right now. The potato marketing order in force in Maine regulates the quality of potatoes which can be shipped. It is a restriction imposed by vote of the growers and it is generally regarded as a fine marketing aid to the industry, especially my many of the proponents here. It was reaffirmed by vote of the farmers only last August. This week, it will be voted on again, purely because of the efforts of a similarly vocal group who are blaming the marketing order as the source of low prices, and who may well have whipped enough people into enough of a frenzy to throw it out, just 2 months after it was voted in.)

Briefly, we believe that such proposed solutions for the problem of low prices, born of emotion and nurtured by propaganda, are like throwing out the baby with the wash water.

What is the New York Mercantile Exchange?

The New York Mercantile Exchange is a commodity exchange dealing primarily in the purchase and sale of futures contracts of Maine potatoes. Like other commodity exchanges which deal in grains, cotton, eggs, etc., and like the stock exchanges, it is a membership organization. The members are businessmen engaged in producing, marketing, or processing potatoes, and brokers. Its affairs are managed by an elected board of governors chosen for their high standing in the trade, who have developed and revise rules for the fair conduct of the exchange's business. The exchange does not buy or sell or set prices, but provides a trading place in which prices are established by open trading. Lastly, the exchange is subject to the Commodities Exchange Act and to the supervision and regulations of the Commodity Exchange Commission consisting of the Secretary of Agriculture, the Secretary of Commerce, and the Attorney General, all of which is designed to protect customers and their funds. Its offices are in New York City.

Who is the Maine Advisory Committee to the Mercantile?

The Maine Advisory Committee to the Mercantile Exchange consists of Maine residents, namely: John Baxter, Jr., processor; Seth Bradstreet and Albert Cyr, growers; J. Fred Donald, banker; Raymond Dow, Thomas Findlen, and Norman Guy, growers; Carlton Lozier, shipper; Jacob Shur, grower; Heber Umphrey, broker; and Bernard Smith, grower.

They were chosen from leading figures in the industry with the purpose of improving the contract which is bought and sold to create an even more effective tool for the producer. For example, one important change was just re-

cently made. The standardized contract traded is for a 50-000-pound carload of U.S. No. 1 grade Katahdin-type potatoes in 50-pound bags. Delivery formerly was to New York City or Charlestown, Mass., depending on the delivery month. This committee effected a change on March 26, 1963, in the contract to provide for State of Maine delivery. This means that delivery can be made from Maine to any point in the United States, which in turn eliminates any possibility of depressing market prices by the threat of creating a glut in New York as has happened, although very infrequently, in the past. Incidentally, this answers the example argument most strongly used by the proponents of eliminating the exchange. It also convincingly illustrates that improved rules are the most effective means of correcting any alleged abuses, operating through existing law and the commercial framework.

Why does the Maine Advisory Committee want the exchange to continue, and how does it help the Maine potato industry?

To those unfamiliar with potato marketing, and even to some in the business, a futures contract seems a mysterious thing indeed. It is basically quite simple, being a contract for the delivery of a commodity, in this case potatoes, at a future date. Such contracts have been common in commerce throughout our history, and as business grew it was a natural step to establish exchanges where standardized contracts were sold under strict rules and regulations. Potatoes began to be traded on the New York Mercantile in 1941, but were inactive until after the war in 1946. It is important to realize futures contracts had been used by generations of Maine potato farmers on an unorganized person-to-person basis prior to trading on the exchange.

There are three basic, primary functions of the exchange. We would like to discuss each in turn.

First, the exchange provides a place and facilities for a continuous market every business day of the year. Trading is public, and the prices established by the trading are immediately known to anyone interested, in or out of the business. (Remember that the exchange does not set prices. Every seller must have a buyer willing to purchase at the price, and vice versa. The exchange records and informs on these transactions. With or without the exchange, trading sets the prices, and the prices basically reflect supply and demand. More accurately, the judgment of the trader as to what supply and demand conditions are sets the prices in any market at any time, since the law of supply and demand is not operated by some electronic brain aloof for human participation. Further, the demand for potatoes has remained relatively stable throughout the years, despite population growths. This inelastic demand means that a small change in supply causes a much wider variation in price than is true in other commodities.)

Without this organized market we would return to the situation existing before mercantile trading. This can best be illustrated by one experience, which could be multiplied many times, of one of the farmers on this committee. In the years preceding mercantile futures potato trading, in the then usual manner, he sold his potatoes, which were growing in the ground, at an advantageous price for delivery after harvest—a futures sale. Based on this sale he borrowed financing for his crop. There was only one hitch. When he wanted to deliver, his buyer was bankrupt, prices went down, and he was left with a worthless piece of paper and a lot of debt. Conversely, if prices had risen and his crop had failed to some extent, he would have been forced to buy potatoes on the open market at a higher price to fulfill his promise to deliver. The organized exchange, with its members required to prove financial and business integrity, and with its contracts liquid and protected, eliminates this farmer's risk.

Without the public price information resulting from the exchange, we would return to another situation formerly existing, which can be verified by either proponents or opponents. Before mercantile trading it was not unusual for an experienced buyer to buy potatoes from several sources in the same day within a 10-mile radius at prices varying as much as 75 cents a hundredweight. With only two parties to a transaction, a difference in bargaining position due to financial resources, market information or other circumstances can seriously victimize the farmer. On the other hand, prices quoted in the openly competitive futures market gives the weak bargainer information by which he can avoid this result. Obviously, a large dealer who wished to profit from his superior bargaining advantage, either buying or selling, is handicapped by the existence of the futures market and would like to see it go.

Second, futures trading permits growers, dealers, and processors to shift part of the risk of price changes and thus to operate on a narrower margin. This prac-

tice is known as "hedging"; is one of the strongest reasons to permit futures trading for the farmers' benefit; and is perhaps best illustrated by the actual and typical example of one of our committee members. This farmer grows 300 acres of potatoes each year. He knows from experience that it costs him about \$400 per acre to grow and handle the potatoes, a total of \$120,000, and that he will need annually about \$50,000 of short-term financing. It takes him 2 acres to load a carlot of 500 hundredweight of potatoes, hence \$800 in expense. If he can sell the car for \$1,000 he has a profit of \$100 an acre. Thus, during the growing season he sells on the futures exchange 50 cars for delivery the following March at \$2 a hundredweight f.o.b. Maine (a price which has been reached on the exchange each year since 1955). As to those 50 cars, he is now "hedged," or protected, against any decline in price occurring at delivery time next March, since he is guaranteed that price. If in late February or March the futures price is down to \$2.25, and the cash market price (which always tends to parallel the futures price) is \$1.50, he liquidates his futures contracts and thereby makes a 50-cent-per-hundred profit. At the same time he markets his potatoes at the cash price of \$1.50, thereby grossing his desired \$2 per hundredweight through the two transactions. Conversely, if prices have risen, he will lose on his futures liquidation, but profit on his market sale and approach the desired result. His basic reason for this hedging procedure is to avoid risks which show little opportunity for profit, and to restrict his vulnerability to boom and bust farming. At the same time, the guaranteed profit in his hedged potatoes provided him with collateral for his crop financing.

These same mechanics of hedging provide the fertilizer company with a means of supplying the farmer credit. They also have given a great boost to the recent and rapidly growing potato processing industry, since futures enable the processor to stabilize his raw material cost and thus quote profitable sales prices in advance for his finished product, which he must do to stay in business.

Continuing analysis and reports by the Department of Agriculture and the Commodity Exchange Authority conclusively establish a substantial use of the futures market by these people for hedging purposes. In 1963, for example, 2,835 carlots of futures were sold for fertilizer contracts by 564 growers in Maine, despite low board prices due to a lack of speculators in the market. The CEA administrator has officially reported that figures obtained through their reporting requirements show the greatest use of the market for hedging to be by Maine industry traders, with speculators coming from all over the country to purchase these risks.

Third, the exchange provides a place for the speculator (buyer or seller) which makes a broader market and brings in someone willing to assume the risk that the grower and processor want to avoid. The opponents of futures trading consider "speculator" a dirty word, and blame him for all kinds of things, but the speculator has always been an integral part of any business community, in or out of any organized market. He was there before the exchanges, and will be there after the exchanges. Without the exchange, however, he is in a position to press all the unfair advantage indicated earlier. There are speculators on both sides of the market, some supporting the price in the hope of a rise, and some not supporting the price in the hope of a drop. Every sale and purchase results in a balancing purchase and sale by someone with a contrary opinion. Moreover, in the exchange, the amount of speculation possible is stringently limited by regulation. This phase of futures trading could, if necessary, be even more strictly regulated by other changes in the rules, which is what the Maine advisory committee is for.

What are the objections to potato futures trading and are they valid?

Those people who wish to abolish potato futures on the mercantile present a series of arguments and conclusions which simply are not supported by the evidence. Briefly, these arguments and their rebuttals are as follows:

(1) *Futures trading creates confusion and causes wild price fluctuations.*—Active futures trading has existed only since 1950. The only relatively stable potato market within memory occurred between 1940 and 1950, when wartime price ceilings, price supports and production controls were in effect—and even then, short supplies in 1 year created a black market. In the 1920's and 1930's prices fluctuated even more wildly than since futures trading. Basically, supply or the lack of it has always violently affected potato prices. A freeze in Alabama has driven prices up \$3 in 6 days. The futures board reflects these age-old economic truths, but does not create them.

(2) *Futures interfere with orderly marketing.*—Exactly the opposite is true. Maine potatoes are in greater demand in the winter and prices generally stronger than at harvest. Trading activity in futures tends to prevent prices from falling as much as they otherwise would, and to stabilize the market throughout the marketing season. Economics and price determine how orderly marketing will be. The Maine farmer cannot generally compete until January or February, because of his distance from the markets, and he is not going to sell or ship at below his production cost. Futures assist him with price information as to when to market.

(3) *Practically all Maine potato growers want to eliminate trading in futures.*—This assertion is based on a poll taken of about 2,500 growers in 1962. Sixty-four percent returned the ballot and 88 percent of those favored elimination. Thus there is evidence that a slight majority, 56 percent, want elimination. They are under no compulsion to trade in futures, and they should not be permitted simply by force of numbers to take away the rights of the minority who find futures an effective farming tool. Moreover, an examination of the ballot by nationally recognized public opinion pollsters reveals that it was not an objective and unbiased ballot. It was circulated by and identified with the committee to eliminate futures, was not worded in unbiased terms, and required a signature, destroying the secrecy of the ballot. There was no explanation of the term "mercantile trading." Clearly an anonymous, secret ballot circulated by a group neither pro nor con among a greater percentage of growers would be a fairer indication of opinion. In any event, this ballot certainly does not reflect that 90 percent of growers are proponents of this bill, as has been represented.

(4) *The volatility of potato prices attracts too many speculators who depress the market.*—This is just the old riddle of the chicken and the egg. However, the truth is that speculators operate on both sides of the market, tending to offset. It is interesting to note that we never hear about speculation as a whipping-boy when prices are going up; and to recall the industry complaints of the stable price-support years that there weren't enough speculators around:

(5) *Other potato producing areas have improved without futures trading compared to Maine.*—This statement is based on alleged statistical comparisons of Maine to Idaho. These comparisons fail to recognize: (a) Substantially better grower prices in Maine than Idaho throughout the period used; (b) A greater relative decline prior to futures trading in Maine; (c) A great difference in consumer preference for the variety of Idaho potato used in comparison, i.e., a Russet versus a Katahdin; (d) A failure to consider an important difference in periods of comparisons, i.e., price supports; and (e) A striking growth in Idaho processing in the periods used for comparison when no such growth occurred in Maine.

(6) *The onion market has been more stable since onion future trading was abolished in 1958.*—Proponents compare onions and potatoes and make many of the same arguments now as were made in a 1958 onion bill. However, Government statistics show that for 14 years before effective onion futures trading, cash onion prices varied 54 percent on the average. During 9 years of futures, they varied an average 22 percent. In the 4 years since elimination they have varied an average 50 percent, and they have been 4 disastrous years for the onion growers.

Conclusion

Many expert and impartial studies have demonstrated that futures trading simply does not have the effects claimed by its opponents. Futures in potatoes are a useful tool to the industry, just as futures in other commodities have been useful for years. We would welcome higher prices. We are in the same business as the proponents of this bill. Futures on the mercantile do not cause the low prices. The market price, now as ever, is determined by all buyers and sellers all over the country. As long as there are competing areas producing potatoes, and as long as potato farmers overproduce, as they have in so many years, our industry will be plagued by low prices. Banning futures trading will only remove a marketing aid valued by a large segment of the industry, but will not cure the ills complained of. Only repealing the law of supply and demand will do that.

Senator JORDAN. Thank you very much, Mr. Dubord.
Senator Muskie?

Senator MUSKIE. Mr. Chairman, in the interest of conserving time for the remaining witness, I want to ask just one question. That is, on top of page 11 of the statement, in analyzing the poll that was taken, you conclude that it indicates only 56 percent of the growers in the county favor elimination of futures trading.

This figure is based on the assumption that those who did not reply at all to the poll are all either opposed to elimination of futures trading or indifferent to it.

Mr. DUBORD. Well, I simply say this, Senator Muskie:

All you can legitimately say you have evidence of is that 56 percent of the growers have indicated they are opposed. There is no way that I know of of knowing how the others feel.

I grant you that it is impossible—we certainly would not suggest to you that all those who did not answer are in favor of it. But with the wording of the ballot, and the manner in which it was circulated, the fact that it was not a secret ballot, we say that it is not fair or proper to jump to the conclusion that 90 percent of the growers are opposed to it. This is a figure that has been thrown around in the local press in Aroostok County, as well as in the previous hearing.

Senator MUSKIE. Most Gallup polls are based on samples of relatively few, maybe a thousand or two thousand—relatively few, to gauge the sentiment of the whole country. And they are used for that purpose. Isn't 56 percent—or isn't—1,400 out of 2,500 is a pretty good sample.

Mr. DUBORD. Except that Dr. Gallup and Mr. Roper have indicated to us that this is really more of a petition to eliminate futures rather than a ballot.

And they pointed out in the type of sampling they do, anonymity of the interviewee is one of the most important things that has to be in the poll in order to get a true reflection of the opinion.

They have pointed out to us you cannot get this type of accurate reflection of opinion with the kind of ballot which was circulated.

Senator MUSKIE. If the ballot had been sanitized, isn't it a fair conclusion that those people who were reluctant to reply to it, because of the fact that their identity was established, might be people who are more inclined to be against futures trading than for it?

Mr. DUBORD. Well, not when you have a committee that in effect are saying to the grower, "We want to do away with this," and every good grower wants to do away with it.

"We are a leading figure in the potato industry. We want you to sign this and let us know you are with us."

Now, this is not—we could go around and drum up perhaps, if we had the time and money, with this other Maine committee, consisting of Maine farmers for the exchange and against this bill—we probably could do the same type of thing.

Senator MUSKIE. I might say with my experience with Aroostook County people they are not at all reluctant to say they disagree to the fellow they are speaking to or writing to. As a matter of fact, I would think if there was only one farmer in Aroostook County who felt strongly on a position contrary to that of all the other growers, that he would state it from the highest housetop in the county.

Senator JORDAN. They sometimes do that at the ballot box.

Senator MUSKIE. Right.

That is all, Mr. Chairman.

Senator JORDAN. Thank you very much, sir. We appreciate your testimony.

Mr. DUBORD. Thank you, Mr. Chairman. I appreciate your kindness.

Senator JORDAN. Mr. Dalling, we will be glad to hear you now.

STATEMENT OF ORVILLE J. L. DALLING, PRESQUE ISLE, MAINE

Mr. DALLING. Many of the people here know who I am, and quite a few do not.

My name is Orville Dalling, from Presque Isle, Maine. I am a public accountant. I am Maine born and have been in Aroostook County since 1944. And I was there previously.

I am not here on behalf of anybody. I am paying my own way, because I am interested in the welfare of Aroostook County.

There are two or three things I don't think have been hit here at all.

Using the acreage is one thing. But production of potatoes in hundredweight is the one that is most commonly used. I have run a chart here from the actual figures—from the crop years 1957-58, through 1962-63.

Now, I have run this for the fall States, and I have run it for the State of Maine.

Back in 1957-58, the fall States was 157 million hundredweight. Maine was only 37.8. And you can see the next year it jumps way up for the fall States, 182—Maine is 37.3. They go down a little.

In 1959-60, the fall States dropped to 167.7. Maine dropped to 34.3.

In 1960-61, the fall States are 175; Maine is 33.7—Maine drops again.

In 1961-62, we have a humdinger of a crop in the fall States—204.6—Maine has 37.

In 1962-63, the fall States, 192.6—Maine has 38.9.

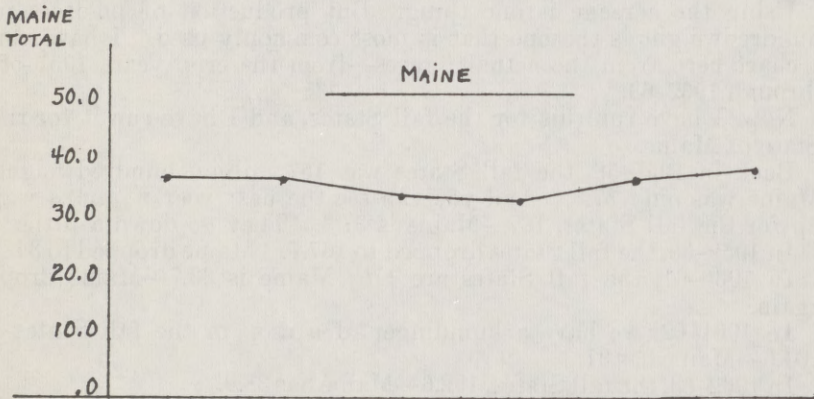
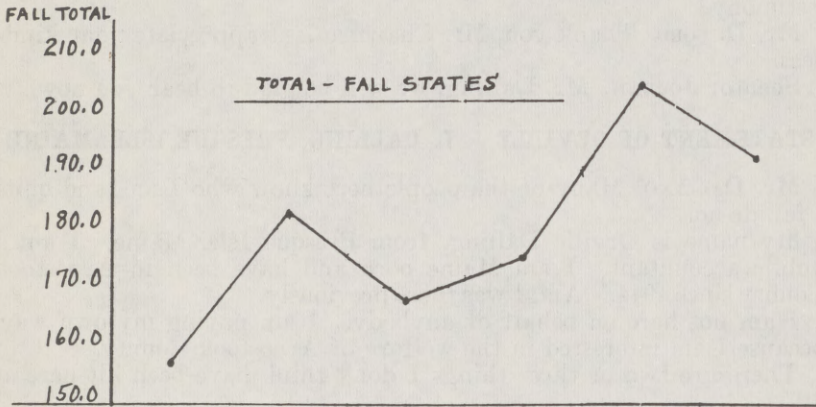
I have drawn a graph. I didn't have time to get this on the graph paper, but I will after lunch and submit it to the committee.

(The graph is as follows:)

FALL STATES - POTATO PRODUCTION IN MILLION CWTs.

DEMONSTRATES OVERPRODUCTION WAS NOT IN MAINE

FISCAL YEARS	1957-58	1958-59	1959-60	1960-61	1961-62	1962-63
FALL TOTAL	157.0	182.9	167.7	175.0	204.6	192.6
MAINE	37.8	37.3	34.3	33.7	37.0	38.9



STATEMENT OF: ORVILLE J. L. DALLING
FRISCO ISLE, MAINE.

Mr. DALLING. Now, that tells the whole story about Maine right there. The national average has gone up.

When I was in the fertilizer office in Mars Hill, in the early 1930's, there were States in this country that still were not heavily in the commercial market. They were urged to diversify into potatoes to offset the trouble in their other crops. Those States today are still heavily in potatoes. And that is part of our trouble. The overall production has gone up, and Maine's has more or less run fairly heavily, comparatively speaking. When you consider the increased

production acreage on account of fungicides, insecticides, and good seed—

Senator JORDAN. By the way, did they ever learn to kill the potato bug yet?

Mr. DALLING. We don't think about that. We think of the funguses, and the aphids.

Senator JORDAN. I've put many a dose of paris green on potatoes.

Mr. DALLING. We don't see those very often. We have too many other troubles instead.

Now, getting back to the potato itself, as far as comparing Idaho potatoes, as put on the market commercially for the homeowner, for the restaurant and the hotel, with Maine, you have got two entirely different products.

Maine potatoes predominantly are the white potato, the Irish type. The Idaho is primarily the Russet. They have the soil, they have the climate, as was mentioned here before. They have practically no rain, and have controlled irrigation, which Maine does not have. They have deeper and a different type of soil.

Back in the 1930's, when I was traveling around the State of Maine in my accounting work, I was at little places like Eustice, Stratton, Farmington. And when they could get Idaho potatoes or Californias, that is what they had to sell, because they had fewer complaints. And I asked two of the men particularly why they didn't have Maine potatoes at that time of the year.

"If I could get these potatoes the year round, I would never buy a Maine potato." That is where our marketing and quality and packaging has to come in.

We don't compete with Idaho for that reason, because we don't have that type of potato. It was tried years ago. And because that meant changing the spacing of the rows and the planting of the seed they discarded that.

My authority on that is P. J. Sullivan, who for a lifetime was general manager of the Aroostook Federation of Farmers.

As far as cooperative marketing, the idea was advanced recently by Mr. Bryant—that what we need is cooperative packing, shipping, and selling. Well, when he was general manager of Maine Potato Growers, and Mr. MacIntyre was assistant general manager, they could not do it then.

Now, they go back 30-odd years. But they have a co-op up there that was originated in 1919, for the cooperative marketing of potatoes. Because the farmers could not get along, they were afraid their neighbor would get a fraction of a cent more, it didn't pan out. It is still in existence—buying supplies for the farmers.

Two years ago, to help the farmers finance their crop, their digging money, they went into the mercantile for them. They helped arrange the hedge. They merely acted as an agent for them—which all fits in with their charter.

Some 205 cars were hedged 2 years ago, 310 last year, and now they have approximately 400. If it hadn't been for this proposed bill, and the uncertainty of the market, there would have been 450 to 500 cars hedged on the mercantile.

They also helped their growers ship potatoes in the foreign export trade last year. A great many of them were packed through the

Caribou Growers, which is a cooperative tied in with Maine potato growers to a certain extent.

Most of the mercantile trades are hedged through Maine potato growers. But Maine potato growers, because they have got two or three men on their directors and some others against it, came out with a vote against trading on the mercantile. The other cooperatives have not. And throughout the country—in the House report, some cooperatives are for, and some are against. And as you go from State to State, you will find the same thing. Some are for and some against.

I notice there is a preponderance of dealers who are against trading on the mercantile. I asked two or three persons—some who were for and some against the bill. I said "Won't you be able to buy for less than \$2?" "Yes." And there is no question about it. Some of them will be bought at \$1.50. Now they have the mercantile. The fellow says: "Gee, I am not going to sell to you for \$1.50 when the mercantile is \$2, \$2.10", and they relate it back to a barrel of potatoes and they just won't do it.

One fellow had trouble getting potatoes for a supermarket in lower New England. He was getting 24½ cents for a pack delivered into the supermarket rear door. The store was selling that pack for 49 cents. The truckdriver himself said so. In order to make the delivery of the extra truckload a week, the shipper got a concession of one-half cent a pack, which is a few cents a barrel. Then all he had was complaints. But the potatoes were selling for 49 cents. And they were delivered into the door for 25 cents.

Now, the farmer should be getting more of that money, and that is what they are trying to do in this "Operation Bootstrap," as they have named it, on this cooperative marketing. I hope it succeeds.

My entire future is tied up in accounting.

Now, as far as the hedging goes, this has been worked out to a great deal of satisfaction by many people. I know one fellow paying for his second farm and living darned well because he used it sensibly. And I know others that have lost money on the mercantile for 6 years in a row, because they have been fighting the market.

As far as these growers who are voting in favor of it, I will give you some of them right here that are dead wrong because they don't know what they are talking about.

I am referring to page 6 of the House report. There is a letter from Caribou, Maine, signed by 20- or 30-odd farmers in that area, farmers and shippers. Now, I see two that are financed through one man. They are against the mercantile. I see a brother here, and I know the other brother elsewhere in favor of trading on the mercantile. They are so mixed up they don't know what it is all about. They have got to have something to blame.

This right here showing the production of potatoes in the country, naturally it is going to depress the price. There are just too many to go around.

We can eliminate a great deal of this right here. But here is one thing.

It struck me very strongly.

The farmer definitely would be at the mercy of the packers and shippers because then they could say "Here is all I will pay."

A fellow would go around and offer 50, 60 cents, someone offer him a cent or two more; he would take it. But he would not have the mercantile to establish the floor price. And that is what it is actually doing.

Now, of course, this has been mentioned over and over.

Herschel Smith, of course, is on the potato council. He testified in favor of the bill. He wanted to eliminate trading on the mercantile. But he states in his testimony in this report he could draw no conclusion regarding the instability of the onion market, because it was so unstable as far as the prices go. And I talked with him over the telephone for half an hour. I told him what I was doing, what I thought I was for and against. And he gave me information very freely, because I was trying to find out, and he appreciated the fact. And I said—I told him who I talked to, that they were shippers, they definitely would try to buy for less than \$2, \$2.50, what would ordinarily be the price, if there was no mercantile, because there was nothing to establish a floor.

And I asked him if he would do the same thing. He said if they were bidding this low a price, I would do the same thing. He couldn't afford to do otherwise. That is the danger.

Now, if this legislation is passed and it turns out not to be the magic word, and the farmer is in a worse position afterward than before, what are they going to do? Go back to the Halls of Congress and try to get new legislation through?

They are doing a lot of bickering that should be done in Aroostook County. The Halls of Congress are too busy a place for it, unless they know what they really want. Because they will be coming back here if you pass it.

The thing is you have got to have buyers, speculators to buy in order for Maine farmers to hedge.

If I go to the grocery store to buy a loaf of bread and they don't have it, they cannot sell it to me. If they have it and I don't go to buy it, they cannot sell it. It is plain everyday economics of buy and sell.

Maybe there are some bad features. That I don't deny. There is always something bad about everything. But originally the implication given the mercantile was that it was a bad boy—just like a gangster was in a hearing here the other day testifying. Actually, it is under Government control, by authorization set up, which is all explained and discussed here, so I can skip that, too.

Now, we have been urged to cut acreage and we have done so. We have put land into the soil bank. So what happens? Other sections plant more. Some of the testimony here in the House report, Colonel Brown on page 148 quoted the indicated acreage for 1963. Maine, 99 percent of 1962, a slight decrease. Idaho, 101, a slight increase. Michigan, 103, a little increase. Wisconsin, 100, even.

Minnesota, 106. I don't have the other figures. I just did not have time to get them.

As far as the perishability, that is fast becoming a quite different thing than it used to be. We have refrigeration, we have waxing processes. And then again, processing plants are using up potatoes.

Surprisingly enough, there is quite a controversy there.

We have had several built in the county—one at Fort Fairfield; one at Easton; and one at Presque Isle.

Now, the management of those plants are divided as to their stand for or against the mercantile. And I will quote the House report.

Page 163 of the House committee report, Jules Salzbank, Potato Services, Inc., of Presque Isle, Maine, have just built 400,000 barrel storage, and I think it is probably ARA money or something like that helping them. They are for the mercantile hedging, because they don't have a farming operation, they have to contract.

F. H. Vahlsing, Sr., on page 44 of the House committee report, said he was against trading. Well, a few years ago he was being blamed for all the troubles in Aroostook County. And that could be easily substantiated.

Now Vahlsing has a plant at Easton. They have their problems. They have a large farming operation—600 or 700 acres, more or less, plus contracting. I don't have detailed information. But they have a man handles that, and they have warehouses and everything.

Now, there is a rumor, which I think your committee may want to verify, that there is disagreement in their own organization about the mercantile.

And I think that it is quite well known, as a matter of fact, in the industry.

Now, as far as our producing potatoes with a view to selling to processing plants, that is something new. We don't know—Congressman McIntire said there was very little information from it. And Senator Muskie, in corresponding with him, felt that a complete review of the facts would be very helpful.

I have tried to cover that very carefully, going down through the House report and other information that I have, my own personal knowledge and information, that has been made available to me, by asking people for that who are in the industry, including those who are for the bill and against trading.

It appears to me that the processing plants in general use and depend to some extent on the mercantile.

Now, some are against it, and some are for it. But obviously, the mercantile at least at the present time is definitely providing a floor, and we have a surplus of potatoes. Not only ordinary, but a little excessive surplus. We have always had them since way back in the 1930's.

When I went to Aroostook in the 1930's, that was my first acquaintance there.

A key point is in this Federal legislation—it would prohibit the trading in futures on any commodity exchanged in the country, in any Irish species of potatoes.

Not just Maine. The bill doesn't say just Maine futures. They don't realize it probably—not intentionally—but they would be foisting that on the entire country. So many States raise various species of Irish potatoes; it would block them out completely.

I am surprised the bill got this far, for that reason.

Now, if the move turns out wrong for the farmer, what alternative does he have? Come back here.

There was some question about farmers going out of business. Well, a person close to farming will know one thing. The other point is times—times change, and we have to keep up.

The small farm used to be an economic unit. You could buy the best tractor for \$1,200, \$1,400, all kinds of equipment to go with it for another \$400 or \$500. And today what have you got—\$3,800. You take a truck you used to buy for \$1,400 or \$1,500, put a body on it for a couple of hundred dollars—now they pay \$2,800, \$3,000, \$3,600. Everything costs more. That same little economic unit just cannot produce enough cash at the present-day prices.

And that is the problem, Senator. That is why a small unit is not economically sound. You just cannot produce enough cash crop.

Now, we are trying to get into the beet industry—that is, sugarbeets. Now, sugar is highly traded on the commodity market. Now, these are trying to be tied together, to take some land from potato production, to take some other land and put that into sugarbeet production, so they will have a balanced income.

They will have their grocery money, and have some money in good years from the potatoes to offset the bad to do various things with.

If we kill the mercantile trading on potatoes, we are going to hurt the future of our sugarbeet industry.

It takes a lot of money to experiment and try this out, because a farmer gets no cash from it. We don't have any refinery.

Now, I was here in Washington last week at the behest of a cooperative manager, because we were acquiring information on the sugarbeet deal, on refineries, costs, how to do it, how to finance it, the amount of money that could be realized, the amount of sugar production that would be necessary to make it economically feasible.

That information has been passed along to the Congressman from our district.

So we, as a county, and as a State, are really trying to do things. The problem is we are going to cut off this side of our face, make this side of our face a little larger—and not realize it.

There is a lot of thought and study that needs to go into this. And that is why I came down here, spent my time, which is money, and the cost besides. I laid over here since Friday noon purposely so as not fly up and back again—that is why I am so interested in this.

My experience in Aroostook started in the thirties. Right in the depression time. And they go up and they go down like any other commodity, because of the weather and all these other things.

So I have given it a lot of thought and study.

The fact that a lot of farmers signed a statement that they are for this bill has got to be discounted, because I have names right here in this letter.

This man sold to this man at a high price, so the buyer went broke—finally went out of business.

I hired his bookkeeper a while this summer, because he was out of work. And the man that has made the big profit one year, turned around and bucked the market the second year, and that is why he is now against trading on the mercantile. I know. I have that information.

It is just fantastic the things that can happen.

So I think that the way this bill is set up, the way it will affect all the other States, I think it is written wrong. I think it was intended to affect Maine only. But the way it is written it affects futures in Irish potatoes in any commodity exchange in any State in the country.

I thank you.

And I hope I have helped you some. My report is quite complete.

(The prepared statement of Mr. Dalling follows:)

Gentlemen, in confirmation of my prior offer to appear before your committee on this proposed bill, I now present my written statement.

I am a free agent, neither hired, nor paid by anyone to appear.

My history: Born in Orono, Maine, 1909. Graduated from Orono Catholic High, and Charleton County Vocational School, business course, Woodstock, New Brunswick, Canada. Father's family were merchants, grandfather's family farmed, and had the first frame house in their section, Belleville, New Brunswick.

Worked in a fertilizer office in Mars Hill 1935-36. Worked in a veneer mill office in central Maine 1937-44. Returned to Aroostook County, settling in Presque Isle 1944, where I now live. Have been in public accounting continuously since moving to Presque Isle. My wife is in a separate business, neither one in potatoes.

We believe in Aroostook County, and have bet our future on it, and know the goodness, the sadness, and the gladness the earth can bring.

It is time for Aroostook and Maine to stand up and fight for their economic rights. I am in that fight all the way, for this bountiful land, my home.

Not enough is known about our problems by our own people. These snap ideas about what is, or is not needed do harm, and solve nothing.

One farmer is for the mercantile, his neighbor is against it. Same for dealers, and shippers. The dangerous aspect of the bill is that if such trading is stopped by Federal legislation, and proves harmful to Maine—then what are they to do?

We need to study and analyze our problems in agriculture slowly and carefully, so that we can find the right answers and do the right thing, not make matters worse. Too many things in our industry are 20 to 30 years behind the times. All they are doing now is to play into the hands of the other States.

What astonishes me most is the number of different opinions in Maine and the number from other States with differing opinions which they have been expressing. Those from other States can only be interested because they hope to gain at Maine's expense—the halls of Congress is not the place for this bickering.

What are the commodity exchanges?

Where do they get their authority?

Commodity exchanges are public markets on which anyone may trade, buy or sell, hedge, sell long or short, speculate, as your purpose dictates.

The authorization to operate in commodities originates through the Commodity Exchange Authority, an agency of the U.S. Department of Agriculture, under the Commodity Exchange Act.

A list of the various authorized, regulated exchanges, and the commodities generally traded, are shown on page 3, together with other information on the potato delivery rules. The term "Irish potatoes" is used in this bill in the broad sense that it covers the Irish type of varieties, compared with others.

The act and the CEA created under USDA, provide that commodity futures in an organized form may only be conducted on an exchange officially designated by the CEA. The agency regulates and polices the exchanges.

November 1962 publication by the agency entitled "Futures Trading in the Marketing of Maine Potatoes, 1961-62" is a complete report. Pages 7-8, "Location of Reporting Traders in Potato Futures," discusses the areas participating. Page 56 of this booklet tabulates the 1961-62 season's trading.

This shows the majority of the hedging is done by Maine, as it should. On the speculating side although New York outrades Maine, the other trading from one-half to three-fourths the total of Maine and New York trades. However, the concentration of buys is outside of New York and Maine, for example:

September 15, 1961, New York and Maine speculator buys 1,947—elsewhere 2,145.

March 15, 1962, New York and Maine speculator buys 1,336—elsewhere 2,734.

September 15, 1961, New York and Maine speculator sells 1,681—elsewhere 1,255.

March 15, 1962, New York and Maine speculator sells 717—elsewhere 1,264.

September 15, 1961, New York and Maine hedge sells 4,214, total sells 4,514.

March 15, 1962, New York and Maine hedge sells 3,973, total sells 4,845.

Potato futures contracts

The call for delivery is specific months, namely, November, January, March, April, and May. Contract unit is 1,000 50-pound bags (50,000 pounds), of Maine-grown potatoes in straight cars, U.S. No. 1, size A, 2-inch minimum, or to comply with State of Maine grade and size regulations.

Prices are quoted in jumps of 1 cent (not in one-half cent jumps). Daily limits on price changes is 35 cents per hundredweight, above or below the previous day's settling price, but during delivery month this limit is 50 cents.

The Maine group who had the bills introduced to eliminate trading in Maine futures, say speculation lowers Maine's price, both on the merchantile and in the cash market.

These figures show the buys outside of Maine and New York were made when Maine and New York were selling. How can you sell if you don't have a buyer.

Tighter controls have been developed, and are being studied.

One individual may not at any one time hold more than 400 Novembers, 400 Januarys, 250 Marches, 200 Aprils, or 150 Mays. When 25 open contracts are held the holder must report his position on form 603 to the CEA of the U.S. Department of Agriculture.

Both the buyer and seller must put up \$200 margin per car; and for each 10 points in advance the seller must put up \$50 per car, and for each 10 points decline the buyer must put up \$50 per car. This is to insure one can and will deliver, and the other take delivery, or be paid.

The New York Mercantile Exchange now keeps \$110,000 on deposit in Aroostook County Banks (Maine) to insure the growers funds are available to cover.

A farmer or shipper hedge is one where he sells to insure a sale at a minimum stated price with the margin protections. He may buy back the contract and sell potatoes in the cash market.

Commodity exchanges (beginning 1963)

<i>Commodities</i>	<i>Exchanges</i>
Cocoa-----	New York Cocoa Exchange.
Coffee and sugar-----	New York Coffee & Sugar Exchange.
Copper, silver, zinc, rubber, hides-----	Commodity Exchange, Inc.
Cotton-----	New York and New Orleans Cotton Exchanges.
Cottonseed meal and soybean meal-----	Memphis Board of Trade.
Cottonseed oil-----	New York Produce Exchange.
Eggs, porkbellies, frozen; soybean and soybean oil-----	Chicago Mercantile Exchange.
Grains-----	Chicago Board of Trade. Minneapolis Grain Exchange. Kansas City Board of Trade. Winnipeg (Canada) Grain Exchange.
Wool, wool tops, and grease-----	Wool Association of New York Cotton Exchange.
Potatoes—Maine and Long Island-----	New York Mercantile Exchange.

Futures potato contracts—basis of delivery

Three points of delivery—Boston (Charlestown), Mass.; Harlem Riveryards, New York City, N.Y.; or at the f.o.b. point in the State of Maine, at the buyer's option.

Refrigerated cars only may be used—heated in cold weather, cooled in warm weather. All shipments must be inspected and pass the Federal-State inspection tests and grades.

March 26, 1963, Exchange Regulations 51.08-51.11 were made more specific. House report, pages 171-179.

What is wrong with our potato industry can be summed up in one example I discovered this past season, and it is typical. How is the farmer to get a sufficient share of the sale of his product? A shipper was delivering a certain pack into lower New England, truckloads delivered into a supermarket for 24½ cents a pack. He could not supply the demand because he could not get potatoes of quality for the price he could pay. The buyer agreed to pay one-half cent more

a pack only, and did get more potatoes, but he found fault all the time. The delivery truck drivers, told the shipper the buyer was selling the pack for 49 cents in that same store. It is imperative to produce and ship as economically as possible.

The idea advanced recently by Mr. Bryant, executive vice president of the Maine Potato Council is cooperative packing, shipping, and selling. He couldn't do it when he was general manager of Maine Potato Growers, Inc., but we are now hoping the new movement "Operation Bootstrap" may change the situation.

One of the oldest farmers cooperatives in the East, was founded for the very purpose of cooperative marketing in 1919. The potato shipping was dropped by the farmers. It still successfully purchases supplies for them. Its patrons through the cooperative effort hedged over 200 cars of potatoes 2 years ago, over 300 last year, are around 400 this year so far, and would be from 450 to 500 cars if this bill and attendant uncertainty had not unduly depressed mercantile activity. It has become an integral necessary part of the crop financing.

The board of directors of most cooperatives, take stands against the mercantile because many farmers are against it even though the mercantile is an integral part of their financial programs.

After reading about the proposed bill, I made some study of the problem.

One strong conclusion that should be apparent is the uncertainty because the bill greatly curtails mercantile hedging, depresses price, and is seriously hurting the industry.

Therefore, I strongly believe a statement should be made as a matter of policy by you, that this year's (season's) trading will not be interfered with, as otherwise it would seriously hurt everyone.

Based on the following analysis of the published hearings held April 8, 9, and 10, 1963, before the Subcommittee on Domestic Marketing of the Committee on Agriculture, House of Representatives, on H.R. 904, I believe this bill could spell tragedy for our potato industry, instead of helping it. The farmer would be at the mercy of dealers, without a price floor, I mean the dealers both within and without the State. The terrible finality of Federal legislation, is if elimination of potato mercantile does not magically help—then what? Come back to Congress?

For instance: Statements made, and communications in the House publication, with my comments:

Alabama: A potato corporation; a former USDA official, ACPA representing the Rocky Mountain Farmers Association, and a farm corporation. All three for elimination of the mercantile.

Question: What business is it to them? Is there an ulterior motive?

Colorado: Two dealers, for elimination of mercantile—a competitor State with Government irrigation in some sections. Their advantage.

Florida: Four grower-dealers, and a growers' service. Only one dealer is for elimination of the mercantile.

Idaho: One grower-dealer believes in the mercantile.

Illinois: One large organization, a dealer, says we need the mercantile.

Maryland: A fruit and vegetable dealer, says eliminate mercantile.

Massachusetts: Two dealers favor elimination. One dealer for the mercantile. One agent against the mercantile.

Michigan: A family farm group, say need the mercantile for crop sales insurance. Three dealers favor elimination of mercantile. The dealers must expect to buy cheaper.

Minnesota: Three potato dealers favor elimination. Must expect to buy cheaper.

New York State: Sixteen, varying from associations, growers, dealers to foodstore executive, trade publication editor, produce managers, etc. Vahlsing, Sr., a foodstore executive, and an association say eliminate the mercantile. Thirteen say keep it, we need it. Rumor says, big organizations are divided in their thinking as to for or against.

Nebraska: One produce dealer, favoring the mercantile.

New Jersey: One dealer, favoring the mercantile.

Ohio: One dealer, says eliminate mercantile.

Pennsylvania: One dealer and two vegetable co-ops say eliminate the mercantile. A farmer-broker, two dealers, a grower and a co-op executive say we need the mercantile.

Rhode Island: One grower-dealer says we need mercantile.

Virginia: One vegetable dealer says eliminate.

Washington, D.C.: United Fresh Fruit & Vegetable Association in 1958 passed a resolution against the mercantile. In 1963 such a resolution was defeated.

Wisconsin: An onion dealer, says elimination of mercantile in onions was harmful.

Out of six associations, councils, etc, three say eliminate, three say keep the mercantile.

The above analysis indicates a division of thought, and a tendency to favor the possibility elimination, in many areas would mean cheaper prices to dealers, less money for a crop to the farmer.

Many are onion dealers brought in to help the fight to eliminate mercantile on potatoes.

Pages 42-43 of the House committee report show onion statistics and Herschel Smith's statement wherein he says the data shows utterly erratic changes both during and after elimination of the mercantile in onions, and he could draw no conclusion as to trends. Mr. Smith is on the Potato Council of Maine and is for the bill, and buys, sells, farms, ships, and is mercantile broker. Without the floor he could buy cheaper.

Whether potatoes or onions—both are fresh vegetables grown in the ground, subject to all the variations of weather, acreage plant and yield, disease, and consumer demand. It is not like a mathematics table or formula where 2 plus 2 is always 4. Instead, there is a different answer each season, and varying from section to section of the country.

In the 1930's when we had surpluses and low prices, other sections of the country not substantially in the commercial potato market were urged (by USDA) as I understood it to diversify into potatoes. This was to alleviate their local situation only. Now it is affecting our national situation.

We have been urged to cut acreage, put land into the soil bank. We have. So what happens? Other sections plant more. We are working on sugarbeets. We are promoting and getting more processing plants. Both use the mercantile.

Page 148 of the House report, Col. L. Brown, of the Produce News, says: "Maine's indicated acreage for 1963 is 99 percent of 1962; Idaho is 101 percent; Michigan 103 percent; Wisconsin 100 percent; and Minnesota 106 percent."

That is similar to past history.

Congressman Clifford G. McIntire, Perham, Maine, who introduced the House bill, a member of the House Committee on Agriculture, in his opening statement before that committee pointed out the key points of debate on this question, so these are analyzed one by one, as follows:

1. *The perishable nature of potatoes and factor of time, field to storage, to market.*—This is fortunate for the country as a whole. Potatoes have to go to the market, the processing plants, starch factories, and seed to the fields to start the next year's crop. They do not glut storage built especially for the storage of surpluses, as do many other agricultural crops at such great costs each year, year after year.

The mercantile trading in Maine potatoes does not make a surplus.

The surplus is caused by production in States, formerly small producers, and increased acreage yield.

If one buys, sells, makes or takes delivery of potatoes: the quantities, grades, packages, time and place of delivery and prices are stated in the contract, whether a sale of physical potatoes for street, spot, or future delivery, or a futures contract on the mercantile. A monthly delivery on a mercantile trade is closed 10 days before the date of the contract to allow for shipment and delivery.

There is the stated time of delivery directly related to seasons. You choose the time. Refrigeration and sprouting inhibitors are extending keeping time for potatoes.

2. *Speculation and abrupt price change.*—History shows that only the endeavor to make a profit has ever developed a country, and increased the standard of living. Everyone has to adjust to changes—the change of times. That is not easy for everyone. That is our real trouble, which started before the mercantile in potatoes.

So consider these facts (cash market):

In sale of physical potatoes for future delivery, usually the deposit is \$200 per car, no margin given or taken if prices rise or fall, no margin protection against price change or the insolvency of the buyer or seller, except to resort to the Department and courts.

In futures trading on mercantile transactions, there are also stated initial deposits required—refer to section (5) page (5)—7 Maine futures and section (6)—6 on Long Island futures, "New York Mercantile Exchange Guide" or pages 171—179, the House report.

Reference to "The New York Certified Public Accountant" October 1954, page 606, article by Abraham J. Briloff, CPA, whom I met in 1956, deals with the application of accounting and tax concepts to commodity futures trading, and general council memorandum 17322 (C.B. xv-2) which shows a true hedge and the interpretation for internal revenue purposes of taxation. Amendments do not change this fundamental.

The speculators should learn how little they can deduct from loss, and how much they can be taxed on gains. We would have fewer speculators.

The New York Mercantile Exchange was founded in 1872. Commodity futures trading has been a common practice with a history generations old.

Refer to Commodity Research Bureau, Inc., pages 32—34, current, "Understanding the Commodity Futures Markets," for present exchanges and rules, also a glossary of commodity markets terms and detail, page 35.

3. *Effects of price changes ("cash market").*—In the spot market physical potatoes, and delivery of physical potatoes against a mercantile futures contract, both must pass the inspection and requirements of the contracts. That is expected and understood when the contract is made.

When the price goes down, and you deliver potatoes on a contract made previously at a higher price, you then have problems, and no one in the business can truthfully say it does not commonly happen. The buyer may ask for reinspection; claim many things wrong. Those in the business experience it each year.

But if the price has gone up, they are usually good potatoes. Some genuine claims, certainly; but other than that, he is making a profit and happy to do so at the seller's expense. This is a human morality problem. This happens on mercantile trades if delivery is actually made, and prices change much. Once again, this is not caused by the mercantile. The mercantile is being made a whipping boy.

One important fact overlooked is that most who have physical potatoes expect to sell their potatoes, but trade on the mercantile for a hedge, and deliver against a contract if more advantageous. The most blamed, most debated question is the buys and sells that are speculation. Actually, that is what is being blamed as causing all our troubles, which is not commonsense. Farmers, dealers, shippers, and those not in the business do speculate. This happens in other commodities too.

4. *Overproduction, and usage.*—Overproduction is not a new problem. It is caused by several things, such as:

(a) More States producing potatoes for the commercial market than in the 1920's and 1930's which extends the shipping season.

(b) The impact of fungicides and insecticides, modern chemicals, greater yields per acre.

(c) Use of better seed and more careful use of seed. Earlier spraying, better sprays, easier to use.

(d) The tremendous strides made in other fruits and vegetables which in part affect potato consumption.

(e) The advent of frozen foods; frozen potato fries and other forms of prepared potatoes, with resulting less waste and shrink, and less usage of raw potatoes.

(f) New dietary habits.

(g) The trend in vegetables to open or transparent packaging and the light problems with high water content vegetables—potatoes.

(h) The continuing trend in packaging—packing and shipping changes. Cold storage, better facilities and sprouting inhibitors help quality and usage, and keep perishables longer.

(i) Display and handling.

(j) Necessity to sell size and grade—quality.

(k) Needed expansion into potatoes less susceptible to light—russets, etc.

5. *Processing plants.*—Several large processing plants have been completed in our county recently. The management of the plants are divided as to their stand for or against the mercantile.

Page 163 of House committee report: Jules Salzbank, Potato Services, Inc., Presque Isle, is for mercantile hedging.

Page 44 of House committee report: F. H. Vahlsing, Sr.—against mercantile trading.

Potato Services, Inc., does not have own farm operation and use the mercantile.

Vahlsing, Inc., has a plant in Easton, Maine, and farming operations there. Rumor has it others in Vahlsing's organization believe in retaining the mercantile, and use it. The committee may wish to verify this.

6. *Producing potatoes with a view to selling to processing plants.*—I have discussed this with agricultural chemists, farmers, and was told by Congressman Clifford G. McIntire very little information about this is available, even from the West. This is a whole new field that the industry in Maine and the country must work on together.

In correspondence with Senator Edmund S. Muskie with reference to the bill and also processing, I note he stated a complete review of the pros and cons would be helpful. Further, that in expediting applications through Area Redevelopment Administration for funds to build processing plants, consideration has been given to the possible recovery of a portion of the market Maine has lost, particularly in the early months of the year. This would aid more orderly marketing in Maine, and benefit the country.

It appears to me the processing plants, in general, use and depend on the mercantile. Many dealers are against the mercantile because it means competition and provides a floor price which prevents them from buying cheaper.

A key point is that the bill would, by Federal legislation, prohibit the trading in futures on any exchange in any Irish species of potatoes, regardless of where grown. That is a big step, and covers a lot of ground. If the move turns out wrong for the farmer, then they would be faced with asking for new legislation to reinstate trading they are now trying to stop. Other States with other varieties could put their species on the exchange, to Maine's and Long Island's disadvantage.

You have the responsibility of making that decision. I hope this helps you in studying it and making your decision.

Thank you.

Senator JORDAN. Thank you very much. We are glad to have all the information you can get.

Senator, have you any questions?

Senator MUSKIE. I don't know whether it was understood that Mr. Dalling's complete statement would appear in the record.

Senator JORDAN. Yes; it is in the record.

Senator MUSKIE. Thank you very much.

Mr. DALLING. Thank you very much.

Senator JORDAN. Our next witness is Mr. Watts.

Senator, what are your potatoes put into?

Senator MUSKIE. Largely french fries.

Senator JORDAN. Any large producers of chips up there?

Mr. BRYANT. Some chips, yes.

Senator MUSKIE. I think it might be interesting to have this in the record.

What percentage of our crop is now processed?

Mr. BRYANT. Ten percent, I would guess.

Senator MUSKIE. How much of that goes into french fries?

Mr. BRYANT. We have Joe Harrington here. He can probably answer that question better than I could.

Mr. HARRINGTON. I would say roughly 10 to 12 percent is french fries, and then we probably have another 2 or 3 in chips.

Senator JORDAN. Thank you.

I just wanted that for my own information.

Mr. Watts, we will be glad to have you proceed as you wish, sir.

STATEMENT OF LLEWELLYN WATTS, JR., CHAIRMAN, BOARD OF GOVERNORS, NEW YORK MERCANTILE EXCHANGE

Mr. WATTS. Thank you very much, Mr. Chairman.

I am going to abbreviate my statement. I will put it in for the record. I just want to comment on it.

Senator JORDAN. Your entire statement will be included at the conclusion of your remarks.

Mr. WATTS. Thank you.

My name is Llewellyn Watts, Jr. I am chairman of the board of governors of the New York Mercantile Exchange, a nonprofit membership corporation chartered in 1872 by the State of New York. It is a commodity exchange or board of trade and under the regulatory supervision of the Commodity Exchange Authority of the U.S. Department of Agriculture. With the exception of 2 years, I have been in this post since 1950.

For some time the exchange has, with the other commodity exchanges in the Nation, interested itself in the efforts of the agricultural economics departments of the colleges of the country better to teach the use of marketing tools to their students. Our trading floor is visited many times during the school year by field groups of 20 to 30 students from various colleges and their teachers. Recently, on the introduction of legislation prohibiting futures contract trading in potatoes, we have received communications from 79 professors and heads of departments in 40 of the leading colleges and universities from Maine to California. The majority of these statements were unsolicited, for the balance we asked for unbiased opinion.

For the sake of timesaving, I ask that these opinions be included in the record. There are 6 letters and 73 excerpts from letters and statements. In all cases permission, both as to letters and quotations and their contents, has been granted. All statements herein have special reference to potato futures trading, and they are unbiased thoughts of the Nation's leading agricultural economists. I believe the committee will find them most interesting. They are brief and unambiguously in favor of potato futures contract trading.

Senator JORDAN. We will include those.

(The documents referred to follow:)

HONOLULU, HAWAII,
September 10, 1963.

Mr. STEPHEN C. GREENE,
The Jacobson Co., New York, N.Y.

DEAR MR. GREENE: I feel that there is little I can add to the excellent statement of Prof. Roger W. Gray. To my mind, the excerpt from Marketing Research Report No. 241 also reflects a good understanding of futures trading, and I have sent for a copy of this report to read in full.

The economic effect of futures trading can almost be established on logical grounds by asking (and answering) two questions:

(1) Can you conceive of any circumstances in which a farmer or other trader in the actual commodity who is possessed of certain knowledge of the correct price of the commodity would be unable to profit from this knowledge if futures prices were to get out of line?

(2) Would someone intent on influencing unduly the price of a commodity find his task easier if the commodity were actively traded on a futures market than if it were not so traded?

Unfortunately, neither of these questions can be answered simply. If there are adequate credit facilities and other conditions conducive to flexible action, I would say that farmers or traders could not fail to profit, or at least could not

lose, from unwarranted fluctuations in futures prices—if they really knew what the price should be. They do not of course possess this perfect knowledge, and that is what futures trading is all about. Anyone, including farmers and other traders, can speculate and lose money, and this no doubt happens at times and may occasion some of the complaints from this quarter. Ultimate consumers may inherently lack flexibility of action and be disadvantaged by unwarranted price fluctuation.

As regards the second question, it at least seems likely that the possibility of manipulation in the cash market tends to be overlooked. (This leaves aside the more widely recognized proposition that traders in the cash commodity tend to have different levels of knowledge, bargaining power, and trading skill.)

It must be acknowledged that the low margin requirement of futures trading and the general ease of trading does make the price situation more fluid. Furthermore, the effect of participation by the relatively uninformed public cannot be predicted on a priori grounds. In sum, the price performance of a futures market, that is, each specific market, is a question of fact which must be settled by careful analysis. The fact that competition can be enhanced by a well-functioning futures market does, however, create a presumption that commodities which have futures markets are priced more efficiently.

I deplore the proposed legislation prohibiting futures trading in potatoes, just as I do that on onions. It would seem far wiser to direct efforts toward improving the structure of the existing market. I think exchanges and their members should take more notice of the apparent widespread misunderstanding of futures markets, which is manifest even in many of the writings of professional economists who specialize in the study of these and similar institutions. I also think you should sponsor research by competent men of high integrity who are so situated that they would not be compromised by such sponsorship.

I do not expect this statement to be of much use to you in preparing your brief, but I hope to have at least assured you of my moral support in your endeavor, which I feel to be very much in the public interest.

Yours truly,

ARNOLD B. LARSON,

Assistant Agricultural Economist, University of Hawaii, College of Tropical Agriculture.

HANOVER, N.H., September 6, 1963.

Mr. STEPHEN C. GREENE,
*Independent Market Research Association,
Flushing, Long Island, N.Y.*

DEAR MR. GREENE: In reply to your letter of August 16, let me say that in one of my courses I deal with the subject of futures markets, their functions, and their regulation under the Commodity Exchange Act. I have not written for publication in this field, except indirectly. Many years ago (1929) I worked in the agricultural section of the chamber of commerce of the United States in Washington to prepare materials on futures trading to be used in a country-wide referendum sent to all chambers of commerce. My recollection is that the opinion was overwhelmingly favorable to futures markets and futures trading. At that time there was considerable feeling that the futures markets were subject to some abuse and should be regulated more carefully. The 1936 legislature filled that gap, I believe.

Two or three years ago I attended some meetings in New York which were sponsored by several of the commodity exchanges.¹ There were a number of academicians there with me at that time. I recall no strong feelings against the futures market and futures trading as devices to insure risk, at least in part. There may have been some misgivings about the need for closer regulation of the exchanges. And there were some who felt that the price-support legislation might make the need for exchanges less strong than might be the case in free market situations.

At this writing I do not know of anything published or being published here at Dartmouth in the form of special articles. I suspect that Prof. Kenneth Davis, at our Amos Tuck School, has written about commodity markets in his recently published book on marketing. Most marketing books do deal with the subject, briefly at least.

¹ Prof. Thomas Davidson of the University of Connecticut wrote up the summary of these meetings, I believe. He is at the University of Connecticut School of Business.

Let me close by saying I think futures markets and futures trading can play a very useful function, especially in a free market economy, provided that they and it are properly supervised. The public benefits by somewhat lower costs if the lower costs are translated into lower prices—which would be the case if competition is truly present.

Sincerely yours,

WILLIAM A. CARTER,
Professor of Economics, Dartmouth College.

BOSTON, MASS., *September 3, 1963.*

MR. STEPHEN GREENE,
New York, N.Y.

DEAR MR. GREENE: I have been out of the country for several weeks and I was very disappointed to hear of the action taken by the House Agriculture Committee on the proposed legislation to abolish the futures market for Maine potatoes.

All economic evidence from impartial sources that have analyzed the futures activities of this exchange have been unanimous in the conclusion that the futures market has been a beneficial marketing tool for the whole potato industry and its market structure. The commodity exchange authority studies, the analytical work of Holbrook Working and Roger Gray also reached similar conclusions.

It is not only disappointing to have a group of people to blame a marketing tool for their various economic problems; but in the long run, the absence of a futures market will accentuate price fluctuations and narrow the breadth and scope of market operations.

I am enclosing a brief article that I wrote on the feasibility of a futures market for frozen citrus products. The arguments for the development of such a futures market are similar to the retention of a potato futures market.

I do hope that you and your associates will be successful in avoiding the elimination of a marketing tool that is so important to your commodity and many of the other commodities of our agricultural economy.

Sincerely yours,

RAY A. GOLDBERG,
*Assistant Professor of Business Administration,
Harvard University, Graduate School of Business Administration.*

EAST LANSING, MICH., *September 20, 1963.*

STEPHEN C. GREENE,
*New York Mercantile Exchange,
New York, N.Y.*

DEAR STEPHEN: I am now back on my feet after the hospital visit and will comment on some of your materials. I visited with Boger and McBride, but Larry Boger asked that I correspond with you.

Roger Gray has prepared a very interesting statement which merits serious consideration by any legislative committee concerned with the futures markets question. His credentials are above reproach, and I know of no evidence that would prove his statement to be in error. The study of Merchant and the hearings provides a good deal of information and material which is perhaps less well done than some of Gray's work.

The so-called ballot dated May 4, 1962, and circulated by the Maine Potato Council Committee would not qualify under any objective standards as an unbiased survey instrument. The very fact that it is circulated by and identified with a committee entitled "Potato Mercantile Elimination Committee" is sufficient to bias results. The results are further biased by the statement in the first paragraph that "our committee has as its purpose the ending of mercantile trading in potatoes." A further bias is introduced in the second paragraph when the grower is told essentially that all good growers are opposed to trading. These biases are further compounded by a request for a signature which destroys the secrecy of the ballot. The questions posed should appear satisfactory assuming that growers understand the term "mercantile trading." The second question, however, is misleading itself and could be improved by dropping the

first line. However, given the biases in the rest of the sheet, it is impossible to get unbiased results from these questions. To obtain unbiased results, it would be necessary for the survey to be conducted by an agency not identified as being pro or con futures trading. This agency would then have to carefully construct the questions and the accompanying statement so as to obtain honest rather than biased opinions.

I enjoyed our visit at Minneapolis and hope that these comments will be of value to you. Please feel free to raise further questions. I hope that you will send me other information that you may acquire in the course of your study.

Sincerely yours,

LESTER V. MANDERSCHIED,
*Assistant Professor, Michigan State University,
Department of Agricultural Economics.*

[From the Michigan Farm Economics, July 1963]

There are literally many tricks of the trade in complex processes of marketing farm products. This discussion helps answer the question:

ARE FUTURES MARKETS USEFUL TO FARMERS?

(By Lester V. Manderscheid, Department of Agricultural Economics, Michigan State University)

Futures markets exist for a wide variety of farm and even nonfarm commodities. Futures prices on grain and soybeans are widely quoted. Futures markets also exist on soybean meal, soybean oil, eggs, potatoes, frozen turkeys, cotton, cocoa, rubber, zinc, and a number of other commodities.

What is a futures market? What is hedging? How can I use the futures market to make money? These are questions frequently raised regarding the futures market and futures prices.

A futures market enables traders to establish now the price of products they intend to buy or sell in the future. The primary function of the market is to facilitate hedging transactions (described below) although speculators also use the market. In fact, without some speculation a market is not suitable for hedging because someone must be willing to take the risk that the hedger is attempting to avoid. Rapid, low-cost trading is essential for hedging. To achieve this, trading is restricted to approved brokers (who make trades for a farmer or any other person) who trade in standardized contracts. Thus a typical contract for wheat traded on the Chicago Board of Trade provides for delivery of 5,000 bushels of No. 2 Soft Red Winter wheat during a specific month with delivery to be in a public warehouse in a designated area.

A futures price is the price of a standardized contract for delivery in a particular month. Contracts for delivery in different months naturally have different prices because of the cost of storing the commodity.

Futures contracts are similar to other kinds of forward contracts. The futures contract legally requires the seller to deliver the commodity at a certain location at a certain time. Technically, the time and location can be varied within the terms of the contract, but the situation is little different from that of a farmer who sells—forward contracts—his corn for delivery in September to an elevator company with stipulated discounts or premiums for quality. The major difference is that the farmer expects to deliver the actual commodity whereas most sellers of futures contracts do not expect to deliver. They expect to buy a contract; this will cancel the contract to sell. This is possible because futures contracts are standardized. The fact that most contracts are canceled by offsetting transactions does not diminish the legality of the contract.

Hedging

Let us now turn to hedging and possible ways to use the market. Hedging involves use of the futures market to rationalize (justify) a transaction in the cash market. The hedger presumes that cash and futures prices tend to fluctuate together rather than in opposite directions. He uses the futures market as a form of insurance by buying on one market and, at the same time, selling on the other. Suppose, for example, that in September a potato chipper sells an order of chips for November delivery based on the current fresh potato market. Assume that he cannot immediately buy the quality that he wants. If he wants to

hedge, he would buy a future contract (say November) in September (when he contracts the chips). Then when he buys the potatoes he would sell the future.

Example:

<i>September</i>	<i>3 Weeks Later</i>
Sells chips for future delivery based on \$1.80 per hundredweight.	Buys fresh potatoes, \$2.10.
Buys November future, \$2.17 per hundredweight.	Sells November future, \$2.45.

In this example the chipper makes 28 cents per hundredweight on the future but loses 30 cents on the cash transaction for a net loss of 2 cents. Thus, hedging reduced his loss from 30 cents to 2 cents. On the other hand, if potato prices had fallen he would lose a possible gain by hedging.

Farmer's Use of the Market

In what ways can a farmer use the futures market? He can use the market to establish a price. For example, if the November futures price of soybeans is very favorable, the farmer might ask his broker to sell a future contract to establish a price before planting the soybeans. If the price goes down, the farmer will still get the price established by the future contract; but if soybean prices go up, he will lose a possible gain.

He might prefer to contract with the local elevator to buy his soybeans. This would save the farmer the bother and expense of operating directly on the futures market. The elevator operator would often hedge these forward purchases by selling futures contracts. The elevator operator is hedging because he is making offsetting transactions, selling a future contract and purchasing a cash commodity.

Another use of the market would be to enable a farmer to establish the price for his crop and still obtain payment for storing the commodity. Suppose that a farmer has harvested his wheat and expects the cash price for wheat to decline. He already has the wheat in storage and has no alternative use for the space. He can sell a future contract to establish the price for his wheat. Since the price for, say, a May future is likely to be above current cash prices at harvest (even allowing for some loss in storage, insurance, etc.) he will get a return on the storage space. This operation is similar to that of an elevator operator using the futures market to justify filling his bins with grain.

A related problem is encountered by the grower who expects prices to increase but who has no storage space for the crop. He is forced to sell the crop at harvest unless he can find commercial storage. He may decide to speculate on this price increase by buying a future and selling his crop. Then, if he is right, he will make an amount similar to the profit he could expect on the cash commodity. On the other hand, if wrong, his loss would be similar to the loss he would have experienced on the cash commodity.

A farmer could also use the market to establish feed prices by buying instead of selling futures. For example, he can buy soybean meal and/or corn futures to establish the feed costs for a cattle feeding operation. By doing so, he will not be able to take advantage of a subsequent decline in feed prices, but he will avoid paying higher prices if corn and/or meal prices advance.

Functions of futures market

What does the futures market offer the farmer or agribusinessman? The main functions of a futures market are to provide an opportunity for hedging transactions and to record the trade's judgment on prices not only for today but also for the future. Both of these are made possible by the speculators who make money by knowing the commodity and the market. They use their knowledge to buy when price drops below what supply and demand warrant and to sell when price appears too high. The constant influx of new information is evaluated by the traders and is quickly reflected in the price—often before others in the trade are aware of the information.

Cash—Futures price relationships

Why do cash and futures prices tend to fluctuate together? Cash and futures prices tend to change in the same direction because they refer to the same commodity but at different points in time. Just as we expect corn prices in Huron County to move in the same direction as corn prices in Washtenaw County, we also expect prices for different delivery times to fluctuate together. If they do

not, some traders will buy on the cash market and sell for future delivery (if the future price moves too high) or sell all of their stocks and hold none for sale on the cash market in the future month (if the futures price is too low). Therefore, the prices of cash and futures tend to fluctuate together, not necessarily in every small price wiggle, but in the large and significant price movements. It is precisely this tendency for prices to be jointly determined that enables a hedger to use the futures market to offset his speculation in the cash market.

The major exception to this tendency to fluctuate together is the seasonal pattern of the cash-future price relationship. We expect the cash price to be below the future price by the cost of storing the commodity until the future contract expires. This cost of storing is not the rental rate for public warehouses but is the amount that owners of storage space require in order to furnish the space. The pattern of wheat prices in the 1962-63 crop year is illustrated in figure 1. Monthly average prices on a May 1963 future at the Chicago Board of Trade are compared with prices paid to elevators on No. 2 Soft Red wheat in southeast Michigan. The 1962-63 crop year was unusual in that cash prices declined during this period. Those storing unhedged wheat from July to the following May would have lost 4 cents per bushel plus their storage costs. Those storing wheat hedged in the May 1963 futures realized about 9 cents to cover storage costs.

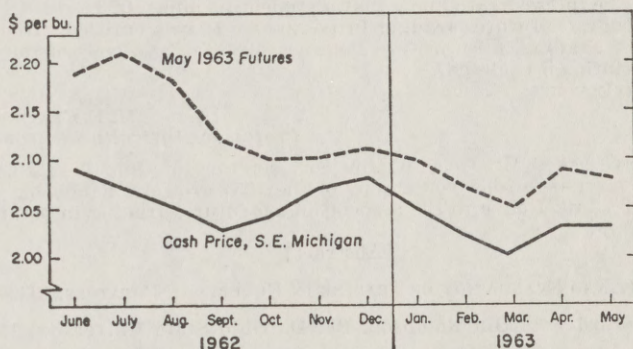


FIGURE 1.—Wheat Prices—Cash and Futures, 1962-63.

Note in figure 1 that the cash and futures prices tended to fluctuate together and that the difference between the two prices became less as the season progressed. The two prices would be the same in May 1963 if location and quality differences and certain technical factors were taken into account.

Summary

A futures market provides low cost facilities for hedging transactions that transfer certain types of price risks from the hedger to a speculator. A farmer can use the futures market to establish the price of products he plans to buy or sell in the future. He also benefits from the fact that he can make forward contracts with agribusiness firms who hedge on the futures market in order to reduce their risk and lower their marketing margin.

THE OHIO STATE UNIVERSITY,
COLLEGE OF AGRICULTURE & HOME ECONOMICS,
Columbus, Ohio, August 30, 1963.

STEVEN C. GREENE,
Independent Market Research Association,
Flushing, Long Island, N.Y.

DEAR MR. GREENE: I am writing relative to your August 16 letter asking for comments on the commodity exchange. It seems to me that it would be a mistake to forbid trading in future contracts on potatoes. There are at least two major reasons for this. In the first place the merchantile exchange provides a place where qualified buyers and sellers can meet and have available all the information that can be brought together concerning potato market. This

would seem desirable as a means of allowing the marketing system to establish potato prices based on supply and demand conditions. In the second place I think that hedging has been and will continue to be practiced if future contract continues. It seems to me that the provision of means of securing price insurance through hedging is a desirable goal. With or without futures market, price risk will continue to be a fact. Due to the nature of the potato market future commitments of some sort will continue to be necessary. It is not possible to process and market a crop without guaranteeing adequate future supplies through some means. The only question is the degree to which this price risk can be passed on to someone else through the use of a futures market. Presumably, this voluntary means of sharing of risk would lead to a more orderly marketing system and would have the effect of reducing marketing margins.

It seems to me that the abolishing of the future trading contract would be detrimental to the industry and that it would be more detrimental to Maine than to Ohio and other parts of industry. Certainly there is evidence that Maine growers use the contract more frequently and directly than do those of Ohio.

This suspicion of existing market agencies and the tendency to try to legislate them out of existence is no doubt due to the failure of the agencies concerned to present their case as is possible. I believe that this tendency has broadened them by futures contract in potatoes. It is evidenced in other areas by the desire to legislate the solution to farm prices and problems.

You might be interested to know that a student of mine Dr. Howard F. Robinson did a study on futures trading in potatoes. It was entitled "History and Evaluation of Trading in Futures in Potatoes, 1930-56." A copy of the abstract of this dissertation is enclosed.

Sincerely yours,

M. E. CRAVENS,
Professor, Agricultural Economics.

P.S.—I have asked Mr. Gene Wittmeyer, secretary of Ohio Vegetable Potato Market Association to send you a copy of the 1957 grower's handbook. In this you will find a talk I gave to the association on futures trading in potatoes.

[Abstract]

HISTORY AND EVALUATION OF TRADING IN FUTURES IN POTATOES, 1930-56

(By Howard Franklin Robinson, Ph. D., Ohio State University, 1957)

The buying and selling of futures contracts in potatoes has taken place on organized commodity exchanges since 1931. Very little activity took place during the first 10 years on the Chicago Mercantile Exchange. Erratic price movements and a relatively small volume of trading were characteristic of this period. Its chief effect during this decade was to introduce the idea to the members of the trade and overcome suspicion inherited from futures trading in other commodities.

In 1941, potatoes were added to the board of the New York Mercantile Exchange. Since 1945, over 95 percent of the trading has taken place on this market. The most rapid growth was during the 1951-55 period. The average volume of trading increased from a prewar total of 1,446 carlots to a postwar total of 32,000 carlots and a 1951-56 average of 105,000 carlots. Open contracts increased from a prewar monthly average of 64 carlots to a postwar average of 1,440 carlots and a 1951-56 average of 3,456 carlots.

Futures trading is not confined to nonperishable commodities which have long storage periods, as had been commonly thought. The potato futures market compares favorably with those of wheat, cotton, oats, and corn in the volume of trading and the number of transactions consummated.

The principal economic function of the futures market is to provide a medium through which producers, dealers, and processors of the commodities traded on the exchanges can insure themselves against the effect of price fluctuations. Regulatory activities on commodity exchanges by the Commodity Exchange Authority are aimed at maintaining the proper competitive conditions necessary in obtaining this goal.

Criticisms of futures trading as a market institution have evolved largely from the misuse of the market by traders and from a misconception of the role of the speculator. The speculator assumes risks that would otherwise have to be absorbed by the producers and distributors and finally by consumers of farm products. Therefore, the speculator or risk-taker performs a function in our economic system.

An analysis of the relationship between the relative movement of the Ohio cash and the March (NYME) potato futures shows that the potato futures market can be used successfully for hedging by the Ohio potato grower. Further analysis revealed that the Ohio farmer could have profitably hedged his potato crop during the 1951-56 seasons.

The Ohio farmer apparently enjoys a price floor of about \$1.75 per hundred-weight as a result of his locational advantages in relation to his competitors. It follows that it would not be wise for him to pursue a practice of indiscriminate hedging. It was possible to successfully predict profitable years to hedge for the 1951-56 seasons.

In conclusion, the study shows that, if the Ohio potato grower uses the futures market for hedging rather than for speculation, it is possible for him to maximize his returns and thereby contribute to a more efficient allocation of resources in our economy.

SEPTEMBER 25, 1963.

DEAR MR. GREENE: I am taking this opportunity to write in support of the continuation of the potato futures market.

I am amazed, as I read the report of the hearings of the House of Representatives Subcommittee on Domestic Marketings of the Committee on Agriculture held in April of this year, at the abysmal lack of understanding on the part of some individuals of the functioning and use of the futures market. I wonder as I read some of the statements whether they were made in ignorance or with the deliberate intent of misleading.

The idea put forward that the presence of a well-recognized and widely used market, such as is found for potatoes, will be the cause of potato price fluctuation, is amusing. It should be obvious to those who honestly look at the situation that such is not possible. Quite the contrary. If farmers and traders have ready access to such a market, unwarranted fluctuation is eliminated. A trader on the futures market, whether he be a farmer or otherwise, who feels that the price of the commodity is too high or too low, can shift his position too readily to let the price get out of line. The awareness of all such traders as to the probabilities of the supply and demand situation is enough to keep any individual or group of individuals from getting away from the price that the actual conditions dictate. Informed buyers and sellers with access to a widely used market where they have the opportunity of expressing themselves in buying and selling create price stability.

Much has been made of the price fluctuations for onions. I wonder if those who have tried to make this point, who have the integrity, tried honestly to bring the price statistics for that crop up to date? If they do, I wonder how they will explain the price gyrations that have occurred in the last few years. To be sure, the violent gyrations have had little to do with the elimination of the futures market, but by the same token the variation in the days when there was a future market for onions was not due to the existence of the market.

The elimination of futures trade in potatoes will not only reduce the stability of potato prices, it will further eliminate the possibility of reducing price risk for the potato processors, dealers and growers (and others) who are primarily processors, dealers and growers, and who wish to make their profits from the business with which they are familiar. These people will lose the opportunity to hedge against price change. Those who are rendering services will, in protecting themselves against the possibility of losses in business due to price changes, have little alternative except to change rates high enough to cover such a possibility.

Deliberately or through ignorance several of those heard last April presented an entirely erroneous picture of the use of a futures market in hedging. Dr. L. B. Darrah has presented a discussion of how the hedging function of a futures market is used. A copy of his presentation is enclosed. Perhaps as time goes on something similar can be used to educate those who are critical through ignorance of the futures market as a tool in hedging.

I sincerely hope that cool, sensible heads prevail in the matter of the potato futures market. It would be a shame if the price stabilizing influence and the benefits of being able to hedge were lost to the potato industry. Especially it would be sad if these were lost because a few self-seeking individuals were to achieve their ends. It would be at the most of the many.

Sincerely yours,

C. D. KEARL,

*Professor, Agricultural Economics, New York State College of Agriculture,
Cornell University.*

Dr. Charles H. Merchant, former professor and head of the Department of Agricultural Business at Utah Agricultural College and the University of Maine. Member of several national and international professional organizations, selected as one of 20 U.S. agricultural economists for international conference following World War II and for many years listed in *Who's Who in America*:

"There is some question in my mind whether any logical answer to these criticisms would be acceptable to the group of dealers on the elimination committee. I answered these questions in seven lectures before growers and shippers back in 1955 when there was opposition to the exchange. I like to take the credit for helping to quiet the movement which was underway at that time.

"What has been the probable influence of futures trading in potatoes on the New York Mercantile Exchange, on the cash price of potatoes in New York and Maine? This question is not peculiar to potatoes as it has been voiced for many other commodities traded on exchanges. When prices of a commodity are relatively low, temptation is often overwhelming to blame someone or some organization. The extension of credit has been cited at times for large potato production and resulting low prices. Government estimates of acreage, crop conditions, and production have come in for much criticism in the past. It is not surprising that the New York Mercantile Exchange should be blamed for low prices of potatoes.

"It has long been recognized that cash prices for potatoes are influenced chiefly by the supply of potatoes available for the market. This situation exists as the demand for potatoes is relatively inelastic, and consumers' purchases are nearly the same volume within a wide price range. Likewise, as it has been shown, contract prices on the New York Mercantile Exchange are sensitive to changes in the supply situation. Therefore, both the cash and contract prices of potatoes are influenced by the same supply and demand factors, chiefly supply. The main difference is that the cash price is determined by the actual supply and demand of potatoes on the market or to be marketed, while the contract price is based on the anticipated supply and demand which is expected at some future date. As both cash and futures prices are determined largely by the same supply and demand factors, they necessarily have an influence on each other. If the contract price should be too low or too high in relation to the cash prices, there is a tendency on the part of these trading on the exchange to adjust their trading to the situation. Likewise, when the cash price is too high or too low in relation to contract prices, commercial transactions have a tendency to bring the two prices nearer together.

Prices of potatoes on the New York market and the contract prices on the exchange influence each other with a net effect that supply and demand conditions are more accurately reflected in the prices, and probably much less violent price fluctuations have occurred. One may ask, Does this relationship extend beyond the New York market?

"A comparison was made of cash prices of potatoes for the past six seasons at Cleveland, Boston, and Presque Isle with similar prices on the New York market.¹ The price relationships are practically identical for each of the six seasons. * * * For these seasons the average price differential between Presque Isle street price and Boston was 66 cents per hundredweight, from Presque Isle to New York 105 cents per hundredweight, and from Presque Isle to Cleveland 160 cents per hundredweight. These differences amounted to approximately the freight rate and marketing charges from Presque Isle to the respective markets. While there was some variation in price differential between markets from week to week, the differences were very small. When the price changed in one market, nearly an equal change occurred at other markets and at Presque Isle. Therefore, whatever the influence the New York Mercantile Exchange may have had on the cash potato market in New York was simultaneously reflected to other markets in the Northeast."

Dr. Wolfgang M. Schultz, assistant professor, Department of Economics, Division of Agriculture, South Dakota State College:

"I consider futures markets of commodities indispensably stabilizing and market regulating institutions of our economy. However, just like the Nation's securities market, they are apt to lapse into abuse unless vigorous self-control

¹ "Trading in Potatoes on the New York Mercantile Exchange," Bulletin 572, University of Maine.

and/or public regulations are enforced. The higher the ethical standards set and maintained by professional traders the better futures markets will be able to fulfill their function."

James D. Bromley, consumer education specialist, assistant extension professor, USDA, and Farm Bureau, University of Rhode Island:

"In general, commodity exchanges are good. Risk is one of the costs of marketing and traders on the exchanges bear this cost. This means, or should mean, that the price of the commodity will be lower than if the risk cost was part of the selling price.

"On the whole, I believe, even with a commodity such as potatoes, the effects of the exchange is good. The beneficial effects of hedging outweigh the possible harmful effects of occasional market rigging."

Dr. Earl H. Brown, food marketing specialist, Department of Agricultural Economics, Cornell University:

"* * * all I can say about the potato futures is that I think that they have performed a very useful function in the past and definitely should be continued."

Dr. Smith Greig, extension specialist in agricultural economics, Cooperative Extension Service, USDA, Michigan State University:

"THE PERFECT MARKET"

"The perfect market does not exist but neither does absolute zero temperature (-460°F.) nor a perfect vacuum. And while the concepts of absolute zero temperature and the perfect vacuum are useful to the physicist, so is the perfect marketing concept useful in looking at the long-range procurement of potatoes for chipping. With the use of the perfect market concept one can analyze how the marketing system deviates from a supposedly perfect situation. I would like to briefly explain the characteristics of the perfect market in theory, and then apply the characteristics of the perfect market to the Maine potatoes futures market and to the procurement of potatoes for chipping.

"THE CHARACTERISTICS OF A PERFECT MARKET"

- "1. There must be a large number of buyers and sellers.
 - "2. No one buyer or seller is large enough to affect the price.
 - "3. All buyers and sellers must have equal knowledge of supply, demand, and prices.
 - "4. All buyers and sellers are doing business at one time, in one place, and a uniform price prevails.
 - "5. Price differentials in time, place, and form are equal to cost.
- "As you all know, by the use of the Maine potato futures market one can buy potatoes for future delivery. This futures market has many characteristics of the perfect market.

"THE MAINE POTATO FUTURES MARKET"

"Characteristic 1. On the futures market there may be several thousand individual traders buying or selling potatoes in any one day. The first 3 days last week 7,902 cars of May delivery futures were traded (February 27-March 1, 1961).

"2. There is a legal limit on the number of cars any one firm or individual can buy or sell in any one month. This prevents any individual or firm from possible affecting price.

"3. All individuals can never have equal knowledge, but reams of Government statistics and analysis by the brokerage houses operating on the market are available free of cost to any trader on the futures market.

"4. In a sense all traders are doing business at one place: the market in New York City. All can be doing business nearly at one time, and at any one time or in a very short time the market equilibrium is reached and a uniform price does prevail.

"5. Differences in time approximate storage costs (if futures prices are above cash prices plus storage costs, growers will sell futures). Differences in place of delivery are approximately equal to differences in transportation costs. Differences in form deliverable on the potato futures market are small, but in the grain or cotton futures market a wide range of grades are deliverable at pre-determined price differentials for differences in grades.

² Excerpt from speech given at the Annual Production and Quality Control School of the Potato Chip International, Kellogg Center, East Lansing, Mich., Mar. 6, 1961, "Long Range Planning for Procurement of Potatoes for Chipping."

" * * Potato chippers should actively encourage any method which will more nearly perfect the perfect market for chipping as in the long run this will reduce procurement costs and tend to stabilize prices."

Dr. John C. Lingle, associate olericulturist, University of California :

"I believe in the case of potatoes this practice (of futures trading) would certainly have a stabilizing influence on the price and could even be extended to other commodities such as lettuce and tomato products."

Dr. Joseph M. Johnson, agricultural economist, Virginia Polytechnic Institute :

"The main advantage of futures trading as a means of avoiding risk is that the risk taking, or part of it, is transferred out of the marketing channels whereas with contract sales or purchases of the actual commodity the risk taking stays entirely within the marketing channels. I have seen no studies that have demonstrated clearly whether the actual cost of the risk taking can be done more cheaply one way or the other, although I feel it can probably be handled more cheaply in the commodity exchanges because of the large base over which the speculators can spread their risks."

"I have been somewhat surprised at the attitude of the Maine potato industry regarding potato futures trading."

Dr. Leonard W. Schruben, professor of agricultural economics, Kansas State University :

"Over the years I have often expressed the desirability of permitting market forces to determine whether or not futures in a given commodity should be traded. I do not believe that Government should forbid the trading of futures in any commodity."

"There are many reasons why I believe as I do with regard to this part of our commodity marketing system. One is that any market innovation which improves efficiency in which a commodity is marketed, will develop. If they make the old system of marketing no longer capable of competing, I believe that the old system will be discarded. We should not have laws which maintain any system of marketing. We should not have laws which give specific privileges to the futures commodity markets."

Dr. H. W. Herbison, marketing economist, College of Agriculture, North Dakota State University ; also speaking for A. H. Schulz, director, agricultural experiment station, North Dakota State University, Dr. Fred R. Taylor, chairman, department of agricultural economics, North Dakota State University, and Dr. Al Donahoo, educational director :

"Use of the potato futures market by our Red River Valley firms would be very limited, and somewhat spasmodic, in our opinion up to the present time. However, with potato processors and firms increasingly involved with contractual distribution of processed potato products, opportunity to hedge part of the risk through a futures market may take on more practical consideration in the future than has been the case heretofore."

"Imperfect as risk hedging may yet be for some commodities, scrapping the mechanisms or institutions we now have access to in hedging would seem to be a step backward in the opinion of many marketing men we've discussed the subject with. We're aware, of course, that futures trading in certain commodities (e.g. potatoes) comes under fire at times and that there is not complete agreement as to their usefulness. Without them however, I would expect (1) more difficulties in making economic forward contracts, (2) higher risks, (3) necessity for still greater marketing margins to partially cover increased risk, and (4) less efficiency in the marketing system generally, operating against both supplier and the eventual commodity-products user or consumer."

Dr. Harry G. Sitrler, agricultural economist, USDA Farm Production Economics Division, Colorado State University :

"I think there is considerable merit in hedging in the prices of all crops and I believe that as more and more farmers become acquainted with the opportunities and advantages in hedging on the futures market that more of them will use this manner of assuring themselves a better price for their commodities. I think this is especially true in the case of commodities of potatoes where the storage and handling are large enough that any extra handling is an appreciable expense."

Dr. J. H. Weber, agricultural economist, University of Idaho :

"I personally, am very much in favor of a commodity exchange for potatoes. A futures market is a way of shifting risk to those who want to take it. It usually brings more money into a commodity industry because it provides a means whereby people who only have money, and no other interest in a commodity, can help to finance this industry."

"Particularly as processing becomes more of a factor, a futures market could be helpful. It should tend to stabilize a market; it allows specialization beyond what we already have, by allowing the risk factor to be a special function; it provides better market information to more people."

Dr. R. L. Simmons, North Carolina State College of Agriculture, University of North Carolina:

"I concur in the conclusion of Market Research Report No. 241 (the Economic Importance of Futures Trading in Potatoes) and have nothing to add."

Dr. T. A. Hieronymus, professor agricultural marketing, University of Illinois:

"I am answering your letter for a number of other people also including, Dr. L. B. Howard, dean of College of Agriculture, University of Illinois, Dr. K. E. Gardner, associate dean of College of Agriculture, University of Illinois."

"I assume that you are participating in an effort to avoid legislation prohibiting futures trading in potatoes. In this I wish you success. The Congress is firmly on record supporting futures trading generally. The onion legislation was justified as an exception because of their perishability. It is my understanding that something of the same approach is being made in the potato matter. I do not think that this is valid. All things are more or less perishable. Those commodities that are relatively perishable have a more severe pricing problem than those that store easier. But this severe pricing problem exists whether there is future trading or not. The question is whether it is made more or less severe by futures trading. I think such evidence that we have indicates that it is made less severe."

"If you will read the hearings record on the onions bill I think you will reach the conclusion that there was no real substance to the charges against onion futures trading but that the constant repetition of objections impressed Congress. Senator Douglas of Illinois commented on the Senate floor that Congress was only counting noses."

I think that the most influential group who objected were farmers who had been using onion futures to speculate in contrast to hedging and who had lost money."

Dr. L. M. Parker, professor of agricultural economics, Arizona State University:

"If potato hedging would help stabilize the price of potatoes, I think it should be encouraged."

Prof. Rollo Ehrich, agricultural economist, University of Wyoming:

"I agree with Holbrook Working and Roger Gray, that elimination of onion futures was a mistake and potato futures legislation will be one, too. We try to tell growers that futures trading reduces risk and narrows price fluctuation, but it seems to go in one ear and out the other."

Dr. Harold Pederson, agricultural marketing specialist, University of Minnesota:

"Futures trading is of great economic importance to the industry. Compare it with the building industry. You couldn't build buildings without contracts."

Dr. Philip Raup, agricultural economist, University of Minnesota:

"Oh great—exactly what this country needs—more wonderful legislation. They can't be serious."

"Rural attitudinal changes are needed if we are to expand our improvements in agricultural methodology and financial resources."

Lyle Ross, director of Agricultural Extension Service, USDA University of Minnesota:

"Such legislation is pure foolishness. Futures contracts are a very important part of the potato industry. Even if they do away with trading, they can't stop futures transactions from being made. They'll only stop the guaranteed contract and the public price announcements for all to see."

Wm. R. Reilly, Department of Agricultural Economics, Purdue University:

"One of these days they're (Congress) going to ruin us with too much legislation. Potato futures trading is a necessary and useful function. To eliminate it would be one more step toward socialism, which is just around the corner."

Prof. Harold Guither, University of Illinois, managing editor, Doane Agricultural Digest:

"Potato futures trading serves a useful function to the industry."

Gordon W. Erlandson, agricultural marketing, University of Minnesota:

"Eliminating potato futures would be a terrible thing to do. Growers would then have to assume the entire risk of crop production."

Dr. Daniel W. Sturt, director administrative operations, Agricultural Extension Service, USDA Michigan State University, former economist U.S. State Department, London:

"I don't see how they can eliminate potato futures trading. It's such an important part of the U.S. potato industry."

Dr. Francis J. Smith, Jr., agricultural marketing specialist, University of Minnesota:

"I think those people in Maine are looking for a devil. The basic trouble with the potato industry is overproduction. Futures trading is definitely an asset to that industry."

John Hanes, agricultural economist, ERS, USDA:

"Futures trading in potatoes are good for the industry. It helps distribute the volume during the season."

Dr. H. B. Arthur, professor of agriculture and business, Graduate School of Business Administration, Harvard University:

"An organized futures market is unquestionably a part of the market structure for the commodities traded there. Its most important service is to provide an effective time dimension to the market. * * * It enables traders to split off most other elements of their transaction by carefully defined contract terms, leaving only the relationship of price and time as the major consideration, which can then be transferred to other risk takers.

"The virtual isolation of the time-price factors make it possible to regard the futures market as a device for opening up an otherwise difficult and restrictive market dimension. The futures market is not just a separate market with its own structure and its own functions; it is a part of the broader market structure which embraces the entire trading in a commodity. It not only broadens the market by providing another trading place; it makes it possible for market participants—dealers and processors, for instance—to transfer to others the time-price risks and concentrate on other factors, such as geographic, quality, transportation, customer service and the like, with comparative freedom from time pressures and risks. It is a market extender."

Dr. Gene A. Futrell, extension economist marketing and outlook, USDA, Ohio State University:

"Briefly, I believe futures markets are a useful and valuable mechanism in the market. * * * In other words, futures markets that are actively used by the trade for hedging purposes have a useful purpose recognizing the necessity for speculator participation."

Dr. R. H. Bauman, extension economist, USDA, Purdue University:

"I am aware that some of the policymakers in the USDA look with disfavor on hedging crops through futures markets. I personally do not share their view and think futures trading performs a real function in our marketing system provided the commodity exchanges are properly regulated and administered.

"I feel that the Michigan Farm Economics article and the one by Dr. Charles Merchant of the University of Maine states my position rather clearly."

John A. Schoenemann, extension specialist, vegetable crops, USDA, University of Wisconsin:

"Here in Wisconsin growers of onions were concerned about futures trading in that commodity up to the time that this was discontinued. The principal reason for concern was some evidence of market manipulation during the mid-1950's. However, many growers expected that this would solve their onion marketing problems.

"Time has shown that this has not been the case. I would like to call your attention to an article by Roger Gray in the May 1963 issue of the *Journal of Farm Economics*. This article entitled, "Onion Futures Revisited," demonstrates that the seasonal price pattern has not been too different after futures trading was discontinued. In fact, there was some indication shown that futures trading may have had a desirable effect rather than a detrimental effect on seasonal price pattern for onions. Onion growers in Wisconsin are quite divided in opinion as to the usefulness of hedging. It appears that it can be a useful tool for growers, if it is properly understood and properly used."

Dr. G. A. Carpenter, extension economist, USDA, University of California: also speaking for Dr. M. L. Peterson, dean of University of Agriculture, University of California.

"With respect to the first item (opinion of educators as to the merits of hedging crops such as potatoes), I give herewith a few comments. Anyone engaged in the business of producing, merchandising, or processing farm commodities

is often confronted with the problem of risk incident to adverse price changes. Protection against losses due to price fluctuations may be achieved through the practice of hedging conducted in the futures market.

"In a nutshell, the theory of hedging is that all purchases or sales of a commodity are offset by sales or purchases of an equivalent quantity of futures contracts in the same commodity. Hedging of a cash transaction in the futures market is made possible by the fact that cash prices and futures tend to move up and down together reflecting the fact that futures contracts call for delivery of the actual commodity during the delivery month. It follows, therefore, that by taking an exactly opposite position in the futures market to that in the cash market, a loss in one market would tend to be offset by a profit in the other. This is the basic assumption underlying hedging transactions. Hedging thus limits the possibility of a loss or gain from price changes.

"Hedging may be very useful to farmers as well as to other types of businessmen. The magnitude of operations, however, varies greatly between farms.

"Whether a given price risk should be hedged in the futures market, of course, is a problem for the individual producer or handler. Through hedging, the price risks incident to ownership for the commodity may be lessened or eliminated entirely. The net results of hedging may be simplified marketing, reduced cost of distribution, lower price of products to the ultimate consumer, and higher returns to the producer. The success of hedging operations, of course, depends greatly on the ability of the person doing the hedging and his basic background information concerning markets in general. Successful hedging calls for keen appraisal and clear judgment as to the future of the markets in which the hedges should be made and also at what prices they should be taken off. Although it is rarely 100 percent effective in preventing losses, nevertheless it is valuable in minimizing risks inherent in the price fluctuations of commodities."

Dr. E. F. Baumer, professor of agricultural economics, Ohio State University :

"My own reaction to futures trading is favorable and it may be that certain other commodities should be traded. So long as we have the tremendous pricing risks we have today it would seem desirable to offset these risks, if this is possible.

"The well-functioning commodity exchange can perform such a role."

Dr. Newton M. Penny, head, department of agricultural economics, University of Georgia :

"I have always believed that futures trading on commodity exchanges to be a very important aspect of marketing—specifically important in shifting hazards and uncertainties in business operations from the operator to the speculator. Although speculators and so-called middlemen have been villainized by politicians who demonstrate repeatedly that they know nothing about business, I am convinced that the futures exchanges perform a vital service in our American way of free business enterprise. Government programs for agricultural products dealing with allotments and price pegging have shifted, to some degree, the risk burdens from speculators to the Government and, subsequently to the taxpayer.

"Actually, as I see it, the speculators, in the sum total over time, must come out even except perhaps being paid for the service rendered, which I judge would be a relatively small net percentage on business; but the shift to the Government has been and undoubtedly will continue to be a net loss to the Government. In the end, I suspect nobody gains by such programs."

Dr. B. J. Kilbride, head, finance department, University of Notre Dame :

"My personal opinion is that hedging crops is an absolute necessity for the farmer and manufacturer who cannot afford to, or does not want to carry the risk of violent swings in prices of the commodity due to factors beyond his control. It seems obvious to me that retail prices of finished goods, embodying hedged commodities, would have to be higher if the same commodities were not hedged."

Dr. Stewart Johnson, professor of agricultural economics, University of Connecticut :

"My opinions on the subject are similar to those of Roger Gray and Holbrook Working—that futures trading serves a useful purpose."

Dr. Harold C. Grinnell, professor, College of Agriculture, University of New Hampshire :

"I am in general agreement with the purpose set forth in the final paragraph of the "summary and conclusions" ("Economic Importance of Futures Trading in

Potatoes"). It is my belief that futures trading serves to register price in terms of supply and demand."

Drs. Allen B. Paul and William T. Wesson, agricultural economists, USDA.

"To show how the development of new manufactured items affects the raw materials market, consider the expanding potato processing industry. Only in an economy of advancing incomes would one expect potatoes to be consumed in such expensive forms. In order to sell manufactured potato products forward at fixed prices in advance of having obtained the potatoes required, some manufacturers commit their assets to a supply of potatoes by purchasing potato futures. Their additional buying and selling tends to improve the competitive character of the potato market.³

* * * Trading in some commodities has grown to relatively large volumes, as soybeans, soybean oil and meal, eggs, and potatoes. The shifting composition is by and large a response to the set of forces arising out of the structural organization and the needs of individual commodity sectors."

Dr. M. E. Cravens, agricultural economist, Ohio State University:

"Neither the existence nor the absence of an organized market eliminates the risk of price change. Risk due to price change is inherent in ownership and is not created by market organization. Any farmer who stores potatoes assumes a risk of price change whether he wishes it or not. An effective market should reduce price risk somewhat.

"The New York Mercantile Exchange is in essence a place where buyers and sellers can get together and trade in futures contracts under rules made by them and the Government. It provides in one place a great deal of information regarding supply and demand and a place where the forces of supply and demand can focus on price. Potato growers and handlers may also shift some of the risk of owning potatoes to speculators through trading in contracts on this market or, if they wish, they may add to the risk of owning potatoes by speculating on contracts."

Dr. Truman F. Graf, agricultural economist, University of Wisconsin:

"It was also ascertained that in periods of large cash price increases or declines, hedges serve to reduce the magnitude of the gains or losses * * *. Thus hedges are more effective when it is more imperative for them to be so—that is, in periods of large cash price changes, while ineffective hedges occur more frequently when the danger of losses is less.

"Conclusion: This study indicates that the need for protection is very pressing."

Dr. Max Meyers, Agricultural Experiment Station, South Dakota State College of Agriculture:

"I consider futures trading to be useful to farmers."

Alvin B. Wooten, leader, resident instruction, the Agricultural and Mechanical College of Texas:

"The commodity markets offer an excellent opportunity for many of our producers to partially eliminate the risk of price fluctuation. However, it has been my experience that most of our producers are not sufficiently informed about the futures markets to utilize it effectively * * * most of them need to know much more than they now know about how to use them."

Dr. David J. Burns, research specialist in marketing, Rutgers University:

"I feel that futures trading, as presently conducted, should be continued because of its many merits."

Dr. Ellsworth W. Bell, economist, Amherst College, speaking for Dean Spielman and Dr. Blackmore, Amherst College.

"In these times of great technological development in our agricultural and food industries, we are blessed with a great abundance of food in this country. This has made it necessary for us to concentrate on problems of distribution. The firms in the food business who are in this great field of distribution and processing are serving as links between the producer of the raw material, the farmer, and the ultimate consumer.

"The principal users of futures markets may be classified into two categories; first, those who desire to minimize their risks which are the hedgers and the others who make it their business to assume risks in hopes of gains. The

³ For some insight into the operations of potato chip manufacturers see the testimony of Donald W. Reed, "Futures Trading, Hearings Before the Special Subcommittee on Agriculture, House of Representatives, Dec. 6, 1955," pp. 54-56.

hedgers are likely to be individuals in any phase of the food and agricultural business and the speculators, any individual who participates in the specialty of assuming risks for other businessmen.

"This institution has contributed to the narrow margins and operational efficiencies in food businesses that bring our agricultural products to the point of sale where ultimate consumers use them. It is well documented that consumers in this country buy their food at the lowest relative prices than any other civilization in the world and the institution of our futures market and the opportunities that it has given to distributors and processors has to a large measure contributed to this increased and high level of purchasing power that the citizens of the United States can realize in their purchases of food."

Dr. Carl E. Shafer, Texas A. & M. University :

"A quick perusal of some recent journal articles (J. F. E. by Working and Gray, February 1960 and May 1963), suggests that the onion case was misjudged by Congress on the basis, partially, of conflicting expert evidence regarding the unstabilizing effect of speculation on the onion futures."

Dr. E. L. Williams, assistant forest economist, University of Idaho :

"I believe the merits of hedging outweigh its unfavorable aspects. I only wish we could successfully establish such a marketing process for forest products."

Dr. D. W. Parvin, head, Department of Agricultural Economics, Mississippi State University :

"In my opinion, futures trading contributes to the orderly production and marketing of a number of agricultural products."

Dr. Edward Marcus, professor of economics, Brooklyn College :

"I can say only that I have always been in favor of futures markets."

Stephen C. Marks, extension agricultural economist, Cooperative Extension Service, USDA, Oregon State University :

"Hedging is indeed a useful tool to those engaged in producing and storing commodities traded on the exchange. I would observe though, relatively few people have the knowledge necessary to use this tool effectively. This is one of the chief reasons why hedging is not generally engaged in by producers."

T. Everett Nichols, Jr., marketing specialist, Agricultural Extension Service, North Carolina State College :

"The idea of hedging crops merits consideration just as hedging grain, oil, or any other commodity. My experience in attempting to educate farmers and firm managers in the use of futures market has not been very fruitful, primarily because of their lack of knowledge and appreciation of the system. Certainly, as educators we need to do more work in this area."

Dr. H. D. Taylor, agricultural economist, Louisiana State University :

"I do believe that such commodity exchanges serve useful functions."

Dr. Robert C. Angus, professor, Department of Agricultural Economics, University of Arizona :

"I agree with Manderscheid's position. It should be pointed out however, that with commodities like cotton the Government's program stifled the futures market and makes the costs of risk transfer high."

O. E. Allen, extension economist, marketing, USDA, University of Missouri :

"I have not always been connected with the university. Part of my years were spent in industry and we used the futures market to protect our contracts with growers * * *. It was a most satisfactory way to protect ourselves against market gyrations."

Dr. John Ferris, extension specialist in agricultural economics, USDA, Michigan State University :

"The futures markets are commonly used by handlers and processors as a means of (1) reducing their risks and/or (2) speculating. The futures market allow those who can ill afford to speculate to transfer risks to professional speculators (and a few nonprofessional speculators also). They may be used to assure profits on storage operations."

"Farmers, as other individuals, can use the futures market to reduce risks (hedging) or to speculate."

Dr. George K. Dike, assistant professor in agricultural economics, Michigan State University :

"In my classroom and extension contacts with managers of agricultural marketing firms I list hedging as a tool for management to consider in reducing risk and for uncovering potential profits. The risk reduction comes about from the classic hedged position where price fluctuations in cash and futures markets compensate each other. The potential for profits comes about through the narrowing of cash under futures differences over time."

Roman Borkovec, farm consultant, the Burlington National Bank, formerly with the University of Wisconsin:

"The article that appeared in the Michigan Farm Economics Journal (Manderschied) was most interesting. I can see where there would be a place for hedging certain crops on a commodity exchange."

Dr. Daniel A. Swope, associate professor, USDA, University of Maryland, replying for Dean G. M. Cairns, University of Maryland; Dr. Poffenberger, University of Maryland; Dr. J. M. Curtis, University of Maryland; Dr. H. D. Smith, University of Maryland; and R. J. Beiter, University of Maryland:

"I believe that many people possibly have a misconception about hedging, mistakenly thinking that it offers almost complete protection against price changes. Dr. Geoffrey Shepherd has given some indication of the extent of protection in his textbook 'Marketing Farm Products.' Also, I believe that work such as that proposed by Dr. McDonald is warranted, since many farmers, shippers, and marketing agencies who might benefit by hedging are either unacquainted with the process or consider it to intricate or impractical to serve their needs."

Ross Milner, extension specialist, USDA, Ohio State University:

"Please consider my answer and an answer by Dr. M. E. Cravens to be a reply not only by me and Dr. Cravens but also a reply by Dr. Krauss (Ohio Agricultural Experiment Station), and Drs. Bohning and Sutton (college of agriculture), and from Director Roy M. Kottman."

Mr. WATTS. I think that a great deal of the ground has been covered about the techniques and so forth.

I would like at this time to have the letter that Secretary of Agriculture Freeman wrote to Mr. Cooley, chairman of the House Agriculture Committee, on date of July 21, 1961, when he took a positive stand against the bill. I will not read it. It is rather long.

It is in my statement.

In other words, the exchange performs a valuable function and its trading is properly administered.

It has been testified that there is too much speculation and that the market is manipulated. As to the speculative allegation, Report No. 8-63 of the CEA showing positions held on August 31, 1963, and all contracts to be 5,538 cars. Hedging short positions were approximately three-fourths of the total and one-sixth by spreaders or straddle operators. The balance was probably speculation. On the long side were the one-sixth straddles and approximately one-half hedging. The balance was probably speculation. I submit that this is far from a speculative market. I offer this report for the record.

Senator JORDAN. That will be included in the record.

(The report referred to follows:)

COMMITMENTS OF TRADERS IN COMMODITY FUTURES AS OF AUGUST 31, 1963:
COTTON—WOOL—COTTONSEED OIL—POTATOES

This report gives a breakdown of month-end open contracts of large and small traders in the commodities and markets indicated below.

Open contracts of large traders show the aggregate positions reported as speculative (including straddling) and hedging, as classified by them in their reports to the Commodity Exchange Authority. A large trader is one who holds a position in any one future of a commodity on any one contract market equaling or exceeding the quantities specified below as "reporting level." Large traders are subject to the reporting requirements of the CEA.

Open contracts of small traders include both speculative and hedging positions. Small traders are not required to file reports on their futures transactions. Their positions are derived by subtracting large traders' commitments from total open contracts.

Commodity	Market	Reporting level
Cotton.....	New York Cotton Exchange.....	5,000 bales.
Wool.....	Wool Associates of the New York Cotton Exchange.	150,000 pounds (25 contracts).
Cottonseed oil.....	New York Produce Exchange.....	1,500,000 pounds (25 contracts).
Potatoes (Maine)....	New York Mercantile Exchange.....	25 carlots.

*Cotton futures, wool futures, cottonseed oil futures, and potato futures—
Commitments of traders, Aug. 31, 1963*

Classification	Aug. 31, 1963		Net change from July 31, 1963	
	Long	Short	Long	Short

COTTON, NEW YORK COTTON EXCHANGE

[In bales]

Large traders:				
Speculative:				
Long or short only.....	11,100.0	0	0	-6,000.0
Long and short (straddling).....	0	0	0	0
Total.....	11,100.0	0	0	-6,000.0
Hedging.....	23,700.0	0	-300.0	0
Total reported by large traders.....	34,800.0	0	-300.0	-6,000.0
Small traders:				
Speculative and hedging.....	131,000.0	165,800.0	-7,000.0	-1,300.0
Total open contracts.....	165,800.0	165,800.0	-7,300.0	-7,300.0
Percent held by—				
Large traders.....	21.0	0	+ .7	-3.5
Small traders.....	79.0	100.0	- .7	+3.5

WOOL, WOOL ASSOCIATES OF THE NEW YORK COTTON EXCHANGE

[In contracts of 6,000 pounds]

Large traders:				
Speculative:				
Long or short only.....	705.0	31.0	+51.0	+31.0
Long and short (straddling).....	9.0	9.0	-25.0	-25.0
Total.....	714.0	40.0	+26.0	+6.0
Hedging.....	805.0	2,098.0	-78.0	-74.0
Total reported by large traders.....	1,519.0	2,138.0	-52.0	-68.0
Small traders:				
Speculative and hedging.....	1,556.0	937.0	-7.0	+9.0
Total open contracts.....	3,075.0	3,075.0	-59.0	-59.0
Percent held by—				
Large traders.....	49.4	69.5	- .7	- .9
Small traders.....	50.6	30.5	+ .7	+ .9

*Cotton futures, wool futures, cottonseed oil futures, and potato futures—
Commitments of traders, Aug. 31, 1963—Continued*

Classification	Aug. 31, 1963		Net change from July 31, 1963	
	Long	Short	Long	Short
COTTONSEED OIL, NEW YORK PRODUCE EXCHANGE				
[In tank cars of 60,000 pounds]				
Large traders:				
Speculative:				
Long or short only.....	1,223.0	649.0	+99.0	+218.0
Long and short (straddling).....	632.0	632.0	+415.0	+415.0
Total.....	1,855.0	1,281.0	+514.0	+633.0
Hedging.....	5,366.0	5,983.0	+982.0	+901.0
Total reported by large traders.....	7,221.0	7,264.0	+1,496.0	+1,534.0
Small traders:				
Speculative and hedging.....	775.0	732.0	-96.0	-134.0
Total open contracts.....	7,996.0	7,996.0	+1,400.0	+1,400.0
Percent held by—				
Large traders.....	90.3	90.8	+3.5	+3.9
Small traders.....	9.7	9.2	-3.5	-3.9

POTATOES (MAINE), NEW YORK MERCANTILE EXCHANGE

[In carlots]

Large traders:				
Speculative:				
Long or short only.....	742.0	140.0	+215.0	+61.0
Long and short (straddling).....	927.0	927.0	+416.0	+416.0
Total.....	1,669.0	1,067.0	+631.0	+477.0
Hedging.....	669.0	2,929.0	+265.0	+299.0
Total reported by large traders.....	2,338.0	3,996.0	+896.0	+776.0
Small traders:				
Speculative and hedging.....	3,200.0	1,542.0	+67.0	+187.0
Total open contracts.....	5,538.0	5,538.0	+963.0	+963.0
Percent held by—				
Large traders.....	42.2	72.2	+10.7	+1.8
Small traders.....	57.8	27.8	-10.7	-1.8

Mr. WATTS. I submit that this, as I said, is far from a speculative market. The charge of manipulation is irresponsible, it labels the exchange management and suggests that the CEA is derelict in its duties and that the USDA does not administer the law.

CEA and USDA reports and publications already placed in the record here prove conclusively that the futures contract market lends stability to cash prices.

There are no comparable wild price gyrations in futures prices. This year 1963, since January, the widest price range from low to high has been 31 cents per 100 pounds. It is a steady, orderly market, truly reflecting the serious opinions of the potato industry. The efficiency and discipline of the operation and the fairness of our contracts led Mr. Roger Kaufman, the CEA Administrator, in a speech to representatives of the 10 major commodity exchanges to say that of all futures traded in the United States the potato contract was the nearest approach to a perfect hedge.

We come to the question of perishability.

I think that has been shipped to death around here.

Senator JORDAN. Mr. Watts, may I ask you a question at this point? What is the widest variation price that you can have in any 1 day?

Mr. WATTS. Thirty-five points.

Senator JORDAN. Is a point a cent?

Mr. WATTS. A point is a cent—a cent per hundred pounds. Thirty-five cents a hundred pounds is the limit fluctuation in 1 day.

Senator JORDAN. On cotton it is one-hundredths of a cent in a point.

Mr. WATTS. We have speculative limits. People may not speculate more than a certain number of cars. And, of course, if you have 25 contracts, you must report it to the Commodity Exchange Authority, you must report it individually, and the exchange is very careful to watch the limitations on contracts.

Senator JORDAN. Thank you, sir.

Mr. WATTS. I won't go into the perishability of it. But I think that I must take issue with Congressman McIntire—that the perishable—or a perishable or a cutoff commodity which hasn't the cushion of being carried over really needs and should have a futures market more than a storable commodity, for the simple reason, as Dr. Gray pointed out, it gives continuation to the price, it gives an indication of what is going to happen in the future, and it prevents people from panic selling.

The panic selling that we hear of has never resulted in any terrific drop in prices. We have had 50-cent drops in prices from the last 2 days of trading. But that really had no effect particularly on the spot market or the cash market for potatoes. And it was really the result of people staying too long in the market, which we try to discourage, and which we very often succeed, and probably will succeed better in the future.

Now, there is a widespread critical need for potato futures and this is evidenced by the request from other producing areas, for us to open trading for delivery in those areas. We are contemplating, because of this, a nationwide contract, where the potatoes may be delivered from anywhere in the country.

Presently our contract calls for delivery in Maine, as you have heard. And there is no glut in any consumptive market—there is no glut. There is never any panic in that regard.

And we have not had a chance yet to find out just how it is going to work because it begins this March—March, April, and May contracts are to be delivered at point of origin, with freight allowance to New York.

Senator JORDAN. And your market only deals in Maine potatoes?

Mr. WATTS. Right now, yes. Well, we have a Long Island contract, but the Long Island dealers and growers decided they would use the Maine contract, which Maine evidently objects to.

I don't know why, but they do.

On the question of trading, we submit that if a contract is not favorable or even needed, there is certainly no compulsion to use it, and most assuredly I don't think there is any justice in prohibiting it.

Let me point out Mr. Justice Oliver Wendell Holmes, in an opinion of futures trading, observed that—

People will endeavor to forecast the future and to make agreements according to their prophecy. Speculation of this kind by competent men is the self-adjustment of society to the probable. Its value is well known as a means of avoiding or mitigating catastrophe, equalizing prices, and providing for periods of want.

It is imperative to point out the disadvantage under which the moderate size family farm would have to operate without the exchange futures contract market. His shipper, whether independent or a cooperative, would have uncertainty of future value and necessarily operate with caution and on a restricted basis. It is possible that returns would make survival difficult, if at all possible, in an era of fewer and more powerful buyers. The added armament of the futures market gives him more muscle. And it is my conviction and seems to be the experience of other and different economic systems that if a nation is to be fed, the independent farmer must do it.

They can talk all they want about corporate farming—I think that the trend will be back toward family sized farms.

Finally, if I may indulge in strong personal conviction it seems preposterous that so much time, effort, and money is being expended to get this or that unit of national farm organizations to pass resolutions to destroy the one stabilizing mechanism in the industry. One year we are praised by Mr. Mercker of the National Potato Council and the next condemned. There is implicit somewhere either abdicated duties or misdirected effort. The fixed idea of inflexible or limited demand for one of the most important food products of our Western World is ridiculous. American business negates this glum philosophy absolutely. What is needed is proper public relations with consumers through food editors and commentators and institutional, or industry, advertising. Destroying this futures contract market will make a complete mess of things and not win one customer.

I earnestly and respectfully pray that S. 332 be not enacted.

Thank you very much.

(The prepared statement of Mr. Watts follows:)

Gentlemen, thank you for the privilege of appearing before this committee. I am opposed to enactment of the bill S. 332.

My name is Lewellyn Watts, Jr. I am chairman of the board of governors of the New York Mercantile Exchange, a nonprofit membership corporation chartered in 1872 by the State of New York. It is a commodity exchange or board of trade and under the regulatory supervision of the Commodity Exchange Authority of the U.S. Department of Agriculture. With the exception of 2 years, I have been in this post since 1905.

For some time the exchange has, with the other commodity exchanges in the Nation, interested itself in the efforts of the agricultural economics departments of the colleges of the country better to teach the use of marketing tools to their students. Our trading floor is visited many times during the school year by field groups of 20 to 30 students from various colleges and their teachers. Recently, on the introduction of legislation prohibiting futures contract trading in potatoes, we have received communications from 79 professors and heads of departments in 40 of the leading colleges and universities from Maine to California. The majority of these statements were unsolicited, for the balance we asked for unbiased opinion.

For the sake of timesaving, I ask that these opinions be included in the record. There are 6 letters and 73 excerpts from letters and statements. In all cases permission, both as to letter and quotations and their contents, has been granted. All statements herein have special reference to potato futures trading, and they are unbiased thoughts of the Nation's leading agricultural economists. I believe the committee will find them most interesting. They are brief and unanimously in favor of potato futures contract trading.

In the interest of saving time and since others have testified at length, let me say that there has never been a complaint by the Commodity Exchange Authority against us.

On the date of July 21, 1961, the Secretary of Agriculture wrote to Representative Harold Cooley, chairman of the House Committee on Agriculture as follows:

"DEAR CONGRESSMAN COOLEY: This is with reference to your request for a report on bill H.R. 260.

"This bill proposes to prohibit trading in Irish potato futures on boards of trade in the United States. It does not remove Irish potatoes from the commodities covered by the Commodity Exchange Act, and, therefore, the effect is to prevent all trading in Irish potato figures in the United States.

"The Department recommends that the bill not be enacted.

"Nearly all trading in Irish potatoes is conducted on the New York Mercantile Exchange and such trading is almost exclusively in futures calling for delivery of potatoes produced in Maine. It is our opinion that this commodity is suitable for futures trading as now conducted on the New York Mercantile Exchange. Since substantial quantities of Maine potatoes are shipped to market as late as June of each year, it is apparent that fall potatoes are storable throughout the marketing season. The maturity date of the May, or final, future traded in the crop year on the New York Mercantile Exchange is well within this period in which the commodity can be carried in storage.

"The potato futures market fulfills a useful and needed economic function in potato marketing. The facilities of the exchange are being used by growers, shippers, receivers, merchants, and processors to a substantial extent as a means of hedging price risks. The proportion of futures trading in potatoes reported as being for hedging purposes compares favorably with that of other commodities. Potatoes have a record of wide price variability. The use of the hedging medium provided by the futures market, by reducing price risks, permits farmers and the trade to carry potatoes, permits shippers and processors to enter into contracts with producers, and facilitates extension of credit to farmers during the production and marketing season. The potato futures market also fulfills a vital economic function by furnishing a pricing basis open and known to all. The focusing of supply-and-demand forces in one place, and the wide dissemination of the prices competitively determined there, is of benefit to all persons concerned with the marketing of potatoes.

"Even though there is a wide variation in the prices of Maine potatoes from season to season and within a particular marketing season, price fluctuations do not appear to be increased by futures trading. The average prices received by farmers for Maine potatoes generally fluctuate no more than the prices of potatoes produced in other States which are not traded on futures markets. The prohibition of futures trading could not be expected to eliminate these wide price movements, which are inherent in the marketing of a commodity having, as do potatoes, an inelastic demand and substantial variations in the size of the crop from year to year.

"The New York Mercantile Exchange, after consultation with Maine producers and other marketing interests, has changed its rules and adopted regulations during the past few years which are designed to improve delivery and trading practices. Beneficial rule changes include: (1) Provision that delivery be deferred in a delivery month until trading has ceased in that future, which avoids the price-depressing effects of heavy initial deliveries, and the pressure or re-deliveries while trading is still going on; (2) provision for delivery on the November and January futures on track at Charlestown, Mass., an economically desirable arrangement; and (3) provision for penalty for delivery in warehouses in Greater New York, which lessens possible price-depressing effects of delivery of storage potatoes.

"The Bureau of the Budget advises that there is no objection to the presentation of this report from the standpoint of the administration's program.

"Sincerely yours,

"ORVILLE L. FREEMAN, *Secretary.*"

In other words, the exchange performs a valuable function and its trading is properly administered.

It has been testified that there is too much speculation and that the market is manipulated. As to the speculative allegation, Report No. 8-63 of the CEA showing positions held on August 31, 1963, on all contracts to be 5,538 cars. Hedging short positions were approximately three-fourths of the total and one-sixth by spreaders or straddle operators. The balance was probably speculation. On the long side were the one-sixth straddles and approximately one-half hedging. The balance was probably speculation. I submit that this is far from a specu-

lative market. I offer this report for the record. The charge of manipulation is irresponsible, it libels the exchange management and suggests that the CEA is derelict in its duties and that the USDA does not administer the law.

CEA and USDA reports and publications, already placed in the record here, prove conclusively that the futures contract market lends stability to cash prices.

There are no comparable wild price gyrations in futures prices. This year 1963, since January, the widest price range from low to high has been 31 cents per 100 pounds. It is a steady, orderly market, truly reflecting the serious opinions of the potato industry. The efficiency and discipline of the operation and the fairness of our contracts led Mr. Roger Kaufman, then CEA Administrator, in a speech to representatives of the 10 major commodity exchanges to say that of all futures traded in the United States, the potato contract was the nearest approach to a perfect hedge.

We come to the question of perishability. Potatoes harvested in September with the present storage facilities, make the official USDA grade for delivery in May and can still make it in July and August. This is a real tough perishable. We know that potatoes cannot be carried over like grain, and for that reason we are convinced that potatoes need futures contract trading insurance more than do grains. That there is a widespread critical need for potato futures is evidenced by the request from other producing areas, for us to open trading for delivery in those areas. We are contemplating, because of this, a nationwide contract. On the question of trading, we submit that if a contract is not favorable or even needed, there is certainly no compulsion to use it and most assuredly no justice in prohibiting it.

Let me point out Mr. Justice Oliver Wendell Holmes, in an opinion of futures trading, observed that—

"People will endeavor to forecast the future and to make agreements according to their prophecy. Speculation of this kind by competent men is the self-adjustment of society to the probable. Its value is well known as a means of avoiding or mitigating catastrophe, equalizing prices, and providing for periods of want."

It is imperative to point out the disadvantage under which the moderate size family farm would have to operate without the exchange futures contract market. His shipper, whether independent or a cooperative, would have uncertainty of future value and necessarily operate with caution and on a restricted basis. It is possible that returns would make survival difficult if at all possible in an era of fewer and more powerful buyers. The added armament of the futures market gives him more muscle. And it is my conviction and seems to be the experience of other and different economic systems that if a nation is to be fed, the independent farmer must do it.

Finally, if I may indulge in strong personal conviction it seems preposterous that so much time, effort, and money is being expended to get this or that unit of national farm organizations to pass resolutions to destroy the one stabilizing mechanism in the industry. One year we are praised by Mr. Mercker of the National Potato Council and the next condemned. There is implicit somewhere either abdicated duties or misdirected effort. The fixed idea of inflexible or limited demand for one of the most important food products of our Western World is ridiculous. American business negates this glum philosophy absolutely. What is needed is proper public relations with consumers through food editors and commentators and institutional, or industry, advertising. Destroying this futures contract market will make a complete mess of things and not win one consumer.

I earnestly and respectfully pray that S. 332 not be enacted.

Senator JORDAN. Thank you, Mr. Watts.

Senator, do you have any questions?

Senator MUSKIE. Mr. Chairman, I would like to suggest that since Mr. Watts in his prepared testimony included a letter of Mr. Freeman, the Secretary, dated July 21, 1961, on H.R. 2260, which is comparable to S. 332, that we include in the record at this time a letter that Mr. Freeman wrote as Governor of Minnesota in support of the bill eliminating trading in onion futures.

That letter appears on pages 73 and 74 of the Senate hearings in 1957. I think it ought to be included in the record at this point.

I guess all it proves is that politicians are as inconsistent as anybody else.

But it ought to be included in the record.

Senator JORDAN. It will be included at this point in the record.

(The letter referred to follows:)

STATE OF MINNESOTA,
EXECUTIVE OFFICE,
St. Paul, April 4, 1957.

HON. HUBERT H. HUMPHREY,
Senator from Minnesota,
Senate Office Building, Washington, D.C.

DEAR HUBERT: State Representative Edmond F. Conn of Freeborn County and Commissioner of Agriculture Byron G. Allen have discussed with me the contents of S. 788, as introduced by Senator Neuberger for himself and Senator Morse, which has been referred to your Committee on Agriculture and Forestry. I have also learned that three similar measures have been introduced in the House of Representatives.

From my study of the legislation, I find it is intended to amend the Commodity Exchange Act so as to prohibit trading in onion futures on commodity exchanges.

My inquiries among commercial onion growers of Minnesota reveal that this proposed amendment meets with almost universal approval. The Minnesota citizens who last year grew some 3,600 acres of this crop, which had a market value of about \$1,200,000, state that they must be rid of the burden of futures trading, if the industry is to continue at its present level. They further point out the fact that the practice of futures trading to a large measure has established, and will continue to set, the cash market price for this commodity, which nationally is too small in volume and too perishable in nature to be suited to this marketing method.

For a number of years a small group of brokers trading in onions have been able to manipulate the market at will. Their operations have consistently been on the bearish side, since it seems it is easiest to turn a profit in that direction. As a result, this practice has continually depressed cash onion markets.

I have had cited to me a very good recent example of this method of operation. During February of 1957, due to supply-and-demand conditions, the market moved to a high of \$2.20 per 50-pound bag. Immediately thereafter, when the bears assumed control, they decided to take the profits and in a matter of weeks drove the market down to a low of 85 cents. This low was uncalled for, as evidenced by the fact that the futures market just prior to its close in March went back to \$1.60 and even at that price some commitments remained open because of the shortage.

I am aware that those opposed to this legislation have available large amounts of money for the fight to continue this practice, which has been carried on for the past 15 years and, according to the growers and their spokesmen, has during the past 4 years become increasingly disastrous to growers and shippers in Minnesota and elsewhere. I know, however, that in the interest of the onion producers you can be called upon to exert again your every effort in committee and with your colleagues in the Senate to bring this legislation to a vote before that body.

Sincerely yours,

ORVILLE L. FREEMAN, *Governor.*

Senator MUSKIE. I was interested, Mr. Watts, that on page 6 you quote with approval from Mr. Justice Holmes, when he describes this sort of operation as speculation. But when the supporters of this bill complain about speculation in the futures market in potatoes, you describe them as being irresponsible.

Mr. WATTS. Being what?

Senator MUSKIE. Irresponsible—on the bottom of page 4 of your statement.

You start off the paragraph:

It has been testified there is too much speculation and the market is manipulated. * * * The charge of manipulation is irresponsible, it libels the exchange management and suggests that the CEA is derelict in its duties and that the USDA does not administer the law.

Now, I am not aware that the supporters of this legislation have that kind of attitude towards the exchange at all.

Mr. WATTS. Manipulation, you mean?

Senator MUSKIE. They complain that speculation, which is the essence of the market, as you testified, and which Justice Holmes attests, is harmful to the fresh vegetable markets.

Now, this is a matter of judgment on their part with which you disagree. But in order to be excused from the charge of irresponsibility and libeling, do they need to agree with you on that point? Isn't it possible for them to honestly disagree with you as to the effect of the speculative elements in the market on the price of fresh vegetables?

Mr. WATTS. Well, I think any charge of manipulation against an exchange, against the operations on an exchange, is libelous—because exchanges have to operate under the Commodity Exchange Act.

Senator MUSKIE. I am saying you set up a strawman.

Who has accused you of criminal manipulation here?

Mr. WATTS. It has been so often said. If you look at the letters in the testimony in the House hearings, you will find that we are accused of everything.

Senator MUSKIE. Well, maybe so. I will read it again.

But I am not aware—the bill I sponsored here is the product of discussion with a lot of very responsible people who are not accusing and have not accused in my presence the exchange of criminal manipulation.

Mr. WATTS. This is a general statement, because this is what we have been up against for several years.

Senator MUSKIE. I know. But the statement is made with reference to testimony on a bill which I introduced, which is why I focus my attention on it.

There is the feeling on the part of honest, responsible people in the industry—and there are honest and responsible people on the other side of the issue in the industry—that the speculative element in futures trading on the exchange is harmful.

Now, it seems to me they can entertain that judgment, and be convinced of it, without by so doing being suspect of accusing the exchange of manipulation, or of dereliction of its duties, or failure to administer the law properly.

I have not heard in any of the arguments on this issue any criticism directed toward you or your colleagues or the agency charged with the responsibility for administering the law. I have not heard a single word of criticism toward any one of you at any time over a period of 10 years. The criticism is directed at the trading in futures on the market.

And that criticism is based upon honest judgment. Just as your position is based on honest judgment, I am sure.

Mr. WATTS. Indeed it is.

Senator MUSKIE. So I don't know why it is necessary for you to set up this strawman you do in this paragraph on page 4.

Mr. WATTS. Well, the strawman is pretty live insofar as the letters to the Committee on Agriculture in the House. And, naturally, when this statement was prepared, I heard none of the testimony that went on this morning.

Senator MUSKIE. You mean there are letters in the House testimony accusing the exchange management—

Mr. WATTS. Talking about gamblers, and so forth.

Well, you cannot have gamblers and manipulators on an exchange and run an exchange.

Senator MUSKIE. I am sure there are gamblers in the potato industry.

Mr. WATTS. They may be gamblers, but they do not manipulate on the exchange. We will catch them if they do.

Senator MUSKIE. You mean no one with gambling instincts ever trades on the exchange?

Mr. WATTS. Everyone that lives gambles.

Senator MUSKIE. And nobody with gambling instincts is ever motivated by that instinct on the exchange?

Mr. WATTS. He trades on the exchange, but he does not manipulate. He may try to manipulate.

Senator MUSKIE. Are we really saying something different, Mr. Watts?

Mr. WATTS. I think we are.

Senator MUSKIE. You are interpreting this criticism of trading in potato futures on the markets as a criticism directed against you, those who are associated with you in the management of the exchange. And I will say to you honestly that this is the first time, out of your mouth, that I have heard that this was the objective of the criticism.

Mr. WATTS. Well, I may be overly sensitive now, Governor. But we have heard so much criticism, we have read so much criticism, we have read it in the House testimony, in letters, the telegrams, I cannot pinpoint it for you now.

But if you will read the whole thing—and it is amazingly complete there—you will find out that it makes you pretty sensitive.

Senator MUSKIE. I think you ought to distinguish—

Mr. WATTS. Because I am responsible, in my position as chairman of the board of the New York Mercantile Exchange—I am responsible to the Commodity Exchange Authority—they would hold the exchange and me irresponsible if we permitted manipulation—or if we did not discover it.

Senator MUSKIE. All I can suggest to you, Mr. Watts, is that your interpretation of manipulation, in the light of your own understanding of the inhibitions which are imposed upon people who deal in the futures market, is likely to be far more precise and far more closely related to the legal limitations which are imposed upon trading and speculation than is the understanding of the small potato grower up in the county who only knows that he feels that this kind of trading is harmful to him, and he uses the best words he can find to describe that injury as he understands it.

Now, I think to accuse that fellow, who is just trying to react to a situation, he finds harmful to his living, of directing this accusation at you, as part of the management of the exchange, I think it is a little far fetched.

Mr. WATTS. I apologize to him if I misunderstood his language, but his language was plain.

Senator MUSKIE. I have no other questions, Mr. Chairman.

Senator JORDAN. Thank you, Mr. Watts.

Is Mr. Ehrlich here?

Mr. EHRLICH. Yes, sir.

Senator JORDAN. Mr. Ehrlich, I don't believe—with your permission—there is a Mr. Zambito here, from Elba, N.Y., who is from out of town. You are here from Washington, are you not?

Mr. EHRLICH. Yes, sir.

Senator JORDAN. I will personally give you a hearing tomorrow at 11 o'clock, to hear your testimony, and present any testimony, but we are going to have to close this very shortly.

Mr. EHRLICH. Senator, please, I would be not over 5 minutes.

Senator JORDAN. How long is Mr. Zambito going to have?

Mr. ZAMBITO. About 5 minutes.

Senator JORDAN. Let's get on it, then.

Both of you come up.

Mr. Zambito, we are glad to have you. We are sorry to rush. But somebody else sets the time schedule around here.

STATEMENT OF ANTHONY ZAMBITO, ELBA, N.Y.

Mr. ZAMBITO. My name is Anthony Zambito. I am a partner with my four brothers in a muck-land potato and onion growing and shipping operation at Elba, N.Y.

Congress should abolish trading on stock exchanges because declining stock prices cause national recessions. Abolish stock trading and eliminate recessions. What a simple solution to one of President Kennedy's most pressing problems. With a similar lack of logic, abolishing potato futures trading is advocated as a means of eliminating potato producers' problems. Unfortunately, the answer is not that simple. Just as stock prices merely reflect existing factors in the Nation's economy, potato futures prices reflect, and do not cause, conditions in the potato industry.

Dynamic technological advances in production practices coupled with decreasing per capita consumption have created a chronic over-supply situation in the potato industry. Concentrated chainstore buying power has weakened the farmer's bargaining position. New potato varieties, labor saving mechanical harvesters, and a phenomenal expansion of the processed potato industry have further complicated the competitive positions of several old established potato producing areas.

In today's rapidly changing potato industry the futures market serves as a valuable and effective marketing tool. However, as with other tools, correct use is essential for optimum results. Pesticides and fungicides provide protection against insects and diseases. Price, the potato producers greatest hazard, may be protected by proper use of the futures market. A realistic appraisal reveals the constructive role of this marketing medium. However, the natural tendency to blame someone else, has led to loud protests against futures trading, by a small segment of the potato industry. This group charges that prices are manipulated at the expense of producers. Sympathies are aroused and emotions stirred by this recklessly hurled accusation. The records show that actual attempts at manipulation are few in number. Banks are not abolished because of occasional embezzlements and automobiles are not banned because of the frequency of speeding

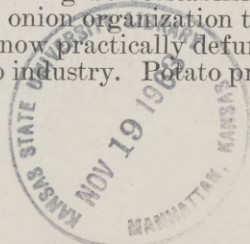
violations. Instead police forces are maintained to discourage law-breakers. The Commodity Exchange Authority is a highly effective police force in discouraging manipulators, and the CEA has been effective, also, in catching and punishing those not easily discouraged.

It is argued that the potato futures market is responsible for low potato prices. Yet, during the past several seasons, in our area alone, thousands of dozens of heads of lettuce have been plowed under because of the lack of buyers and there is no lettuce futures market. Thousands of tons of carrots have been left unharvested because prices were too low and there is no carrot futures market. Cabbage, sweet corn, snap beans, tomatoes, and many other vegetables have been left in the fields to rot because of depressed prices and there are no futures market for these commodities.

During the past season of heavy potato production and low potato prices, only the futures market provided producers with an opportunity for a respectable profit. Throughout most of the marketing period potato prices remained below the cost of production. In February cold weather threatened the Florida potato crop. Cash potato prices remained low but prices on the futures market jumped 50 to 60 cents. The cold weather did not materialize and futures prices dropped back to the level of the cash market. But, potato producers had been provided with an opportunity to hedge their crop on the futures market at profitable prices.

Four years ago Congress abolished onion futures trading. At that time onion growers from many areas joined the crusade of a strong national onion organization to improve the onion industry by getting rid of futures trading. The history of the onion industry during the past 4 years vividly illustrates and conclusively proves that futures trading was helpful, not detrimental, to the onion industry. Prices during the last year of futures trading were among the highest ever received by onion farmers. Prices during the first 2 years without a futures market were among the lowest ever received. The futures market kept all onion farmers constantly aware of factors affecting prices. Today, small growers are at a distinct disadvantage in this respect. The futures market provided all growers with an opportunity to sell at the same price. Today, large growers with established outlets have a definite advantage. With a futures market growers always had an alternative buyer for their onions. Today, more than ever, they are at the mercy of powerful and oftentimes unscrupulous chainstore buyers, who utilize their monopolistic positions to depress prices. We are both growers and dealers in onions. As growers our position has been seriously impaired by elimination of futures trading. As dealers, we never had it so good. Growers no longer are fully informed. And in their weakened bargaining position growers have resorted to the price-demoralizing practice of consigning to dealers. As a result, during the past 4 years, onion growers have been going out of business at an alarming rate. And I am sure that if the opportunity were provided, many of the growers who appeared in opposition would gladly return and ask that onion futures trading be reestablished. And, incidentally, the once powerful national onion organization that championed elimination of futures trading is now practically defunct.

Rapid changes are taking place in the potato industry. Potato proc-



essing has become a dominant factor. Export trade is playing an increasingly important role in the industry. The futures market is a valuable tool for both the processor and the exporter.

An analysis of the current situation indicates that only a small segment of the potato industry favors elimination of futures trading. This is a segment that has failed to keep pace with changing conditions. Without a futures market the competitive position of this group would become even worse.

Nearly 200 years ago the early American settlers fought a war to free themselves of the shackles of oppressive government controls. A new nation was born and under a competitive free enterprise system it prospered and grew into the greatest Nation the world has ever known. Under the market price system this Nation's agriculture became the envy of the world. But 30 years ago the Nation's economy suffered a severe depression. Government offered agriculture a helping hand in the form of a few temporary emergency farm programs. Since that time the number of farm plans has multiplied rapidly and Government controls over agriculture have become more rigid. Our market price farm economy is veering more and more in the direction of a Government-planned farm economy. The helping Government hand of the 1930's has turned into a ruling Government fist in the 1960's. Costly failures and loss of farmers' freedoms are the only result of 30 years of Government attempts to solve farm problems. Last May in the wheat referendum, farmers emphatically rejected attempts to impose additional Government regulations on American agriculture.

Today, a few potato farmers caught in the cost-price squeeze characteristic of many segments of our economy, seek elimination of a legitimate market which many in the industry find extremely useful. Step-by-step Government regulations, against which the colonists fought, destroy individual liberties for which they died.

I am sure that the members of this committee will study carefully the full implications of the bill to eliminate futures trading of potatoes. May I respectfully urge rejection of this bill which would sacrifice the rights of many for the whims of a few.

I would just like to comment on a few other statements that were made.

Dr. Gray answered a lot of the charges. But some statements are made, and they are pertinent facts pointed out, but the conclusions, I think, are kind of erroneous.

One of these is the statement that the ratio of price received for Maine potatoes compared to Idaho's has declined from 88 to 69 percent. I think this is a very pertinent point. And I think that we can draw some pretty good conclusions from that, but not the one that was drawn that the futures market is responsible.

When the housewife walks in the supermarket and is faced with a choice between a bag of Maine potatoes and a bag of Idaho potatoes, I don't think she stops and figures that since there is a futures market on the Maine potatoes she better buy the Idaho potatoes. I think it is a quality factor, and I think this is probably most of the reason why the Maine industry is in the shape that it is in, that they apparently are not providing exactly what the consumer wants.

And then I would like to comment on Congressman McIntire's reference to the 10-cent onion price, and the heavy deliveries of potatoes.

These things were a fact, and he uses this as an argument against futures trading.

I think the reason onions went to 10 cents a bag is because that is all onions were worth. The exchange was merely reflecting a condition, a sad condition of the onion industry at that time, an oversupply situation.

But the futures market did not cause the 10-cent price. Many onions were dumped by farmers, and they have been since that time.

But the point that he failed to bring out is that the farmer who grew those onions did not sell them for 10 cents a bag. He sold them on the exchange because this was the best price he could get, and it was the speculator who bought them at probably a dollar, or \$1.25 a bag who suffered the loss on them.

So the exchange gave the producer an opportunity to sell onions which actually were worthless.

So that I don't think that this is necessarily a good argument against futures trading. As a producer, I think it is a good argument for futures trading.

Senator JORDAN. Thank you very much.

Senator?

Senator MUSKIE. No questions.

Senator JORDAN. Thank you very much. We appreciate your coming down, and your testimony.

Mr. Ehrlich?

We are very glad to have you here. Sorry time is running a little fleeting.

Mr. EHRLICH. I really will be short, with less than two pages, Senator.

Senator JORDAN. You may handle it any way you like.

STATEMENT OF MELVILLE EHRLICH, COUNSEL FOR THE POTATO CHIP INSTITUTE INTERNATIONAL

Mr. EHRLICH. My name is Melville Ehrlich. I am appearing as counsel for the Potato Chip Institute International to express our opposition to S. 332.

The Potato Chip Institute International is a trade association with headquarters in Cleveland, Ohio. Its membership is composed of manufacturers of potato chips and some of its associate members are potatogrowers. Its members include approximately 90 to 95 percent of the volume of potato chips produced in this country.

It is our understanding that S. 332 is sponsored, promoted, and supported by a comparatively small group of potatogrowers who desire to impose their own viewpoint on the potatogrowers of the Nation, disregarding the legitimate need for trading in potato futures and disregarding benefits obtained by many potatogrowers from futures trading.

Trading in potato futures serves a legitimate purpose and carries with it substantial benefits to many potatogrowers. Some potatogrowers enter into preplanting contracts with processors for the sale of all or a portion of their crops after harvest, at a price basis established in the preplanting contract. On the basis of such contracts, growers are able to obtain financing for seed, fertilizer, and other costs

of growing and harvesting their crops. Similarly, growers who do not have preplanting contracts are enabled, by contracts for future sales in the futures market, to arrange financing for their crops.

If S. 332 should be enacted, and future sales prevented or prohibited, many growers who now depend on this method of obtaining financing will find it more difficult, if not impossible, to arrange for the financing of their crops. Any benefits which might possibly be obtained by growers sponsoring this bill would be offset by detriments and hardships suffered by other growers.

On the other side, futures trading provides a legitimate function and fills a real need of many processors. Processors must frequently sell their products in advance. They must be able to afford their customers a continuity of supply at a price. A processor cannot commit himself in advance to a supply and a price when he does not know whether the raw material will be available to him or the price he will have to pay. Processors buy potatoes on the futures market primarily to assure themselves of a continuity of supply and to stabilize their costs, or at least to be able to predict their costs for the season with some degree of stability. Also, processors need not make as substantial investments for storage facilities, which go into the costs and therefore into the sales price of the products, when they are able to buy on the futures market for later delivery. Without the ability to buy on the futures market, many processors who now buy in that manner would be obliged to contract for, buy, and store a whole year's supply in order to insure continuity of their raw materials and in order to make at least reasonably accurate estimates of their product costs.

Even if a processor or other purchaser buys from a grower directly, for future delivery, such as purchases under preplanting contracts, the mere existence of a futures market and price serves as a guide to both sellers and buyers.

Therefore, since trading in potato futures serves a legitimate purpose and fills a need for both buyers and sellers, we hereby register our opposition to any attempt to prohibit or limit such trading.

Thank you, gentlemen.

Senator JORDAN. Thank you very much.

May I ask—what percentage of the potato crop your industry uses. I know it is a very large user of potatoes.

Mr. EHRLICH. Yes, I think it is the largest process use.

My recollection is—and maybe Joe Harrington can help me on this—my recollection is that the potato chip industry uses approximately 28 million hundredweight.

Mr. HARRINGTON. Last year it was a little over 24. It is roughly 10 percent of the entire crop.

Senator JORDAN. Is it the largest particular single user of potatoes?

Mr. HARRINGTON. Right.

Mr. EHRLICH. Single processing use, yes.

Senator JORDAN. I had heard that. I thought you were a very large consumer of potatoes.

Mr. EHRLICH. That is correct. It is the largest processing outlet.

Senator JORDAN. Senator, do you have any questions?

Senator MUSKIE. I must say that the third paragraph of Mr. Ehrlich's statement strikes me as interesting.

He says:

It is our understanding that S. 332 is sponsored, motivated and supported by a comparatively small group of potato growers who desire to impose their own viewpoint on the potato growers of the Nation.

In the first place, we are talking entirely about the Maine potatoes—not potatoes grown by any other potato growers in the country. And we are talking about 92 percent of a sample representing 56 percent of all Maine potato growers, who support this.

So this is an interesting description of the interest which those people have in this problem.

You get the impression from the statement that you have a relative handful of people up here in Maine who are for this, and the overwhelming total are against it—where the almost reverse is true.

It is language that actually reverses the actual facts.

Senator JORDAN. Wouldn't that contention be true if you took all the Irish potatoes in the United States?

Senator MUSKIE. We are talking about Maine potatoes.

Senator JORDAN. But this bill doesn't specify Maine potatoes in its entirety.

Senator MUSKIE. I know, but the fact is we have had no testimony here from any other growing area in the country opposing it on the basis that they want it for themselves in their own crop.

Mr. DALLING. The House reported 22 letters.

Senator MUSKIE. Against this bill. But not a single witness on the House side, or this side representing the growers of any other area have come in and said we are against this bill because we want to put our potatoes on the exchange. Not a single one.

So you are saying to me that the Maine people ought to have a smaller voice in what ought to happen to their crop of potatoes than growers in other areas of the country.

Mr. EHRLICH. Well, Senator, I don't like to find myself in disagreement with a fellow New Englander.

Senator MUSKIE. I am in disagreement with a lot of fellow New Englanders.

Mr. EHRLICH. I must say, first, paragraph 3 was correct when we drew this statement, that that was our understanding. And secondly, that I have not really heard anything here this morning to indicate that, in that it seems to me from the testimony of previous witnesses that they made the same point—that it is a small group who wants to prohibit it.

But there is nothing in the bill which limits this to Maine.

As far as I am concerned, this bill applies to the Nation.

Senator MUSKIE. Are you saying that your potato growing areas would like to put their potatoes on the exchange?

Mr. EHRLICH. I have no knowledge of that. But I say if they do, this prohibits it.

Senator MUSKIE. I know. But if you had no knowledge, how can you say, as you do, that a comparatively small group of potato growers desire to impose their own viewpoint on the potato growers of the Nation?

Mr. EHRLICH. I say that, meaning this, Senator: And I think, first, there was a question this morning raised by previous witnesses, facts of which I do not have knowledge, of the percentage of Maine potato growers that want it.

Secondly, if those are the ones that sponsor it, they are still, in my opinion, a very small percentage of the potato growers of the Nation.

The potato growers of the Nation are bound by this bill as well as the potato growers of Maine.

Senator MUSKIE. You are not impressed by the fact that the National Potato Council, which represents potato growers over the country, support this bill? You are not impressed by the fact that in the only sample which we have of grower sentiment, and that is the Maine sample, 1,400 out of 2,500 growers support the bill, and that 1,400 is 90 percent of those who responded to the questionnaire?

You think that this kind of fact as to sentiment in the industry is less accurate and precise than this generality which is contained in your statement?

What are the facts that you have at your disposal to support the implication of what you said, that the vast majority of potato growers over the country want this futures trading in Maine potatoes?

Mr. EHRLICH. Well, let me put it this way: I would not want to state my opinion in the words that you used for me. I would still say yes, that is our understanding; it is our understanding that a group in Maine wants it, and it is our understanding, however, that even if it were 100 percent of the potato growers in Maine, they would still be a minority nationally. And there is nothing that I can see that confines this bill or the proposed legislation to Maine.

It applies to every potato grower in the United States. It deprives every potato grower of the United States ever using the privilege of trading on the futures market. And, therefore, it seems to me that our statement is essentially correct, because even despite the question that has been raised about the Maine survey, and its inaccuracy, as I heard testified to this morning—if your construction of the Maine vote is correct, or if it were even more favorable to this bill than your construction, and if all the potato growers in Maine opposed this bill. I still think they would be a minority of the potato growers affected by the bill.

Senator MUSKIE. You are taking the position, then, that if 100 percent of Maine growers were opposed to futures trading in Maine potatoes, and 100 percent of all other potato growers in the country were in favor of futures trading in Maine potatoes, that the latter view ought to prevail?

Mr. EHRLICH. No, sir; I am taking the position that if 100 percent of the Maine growers are opposed to trading in futures of Maine potatoes, and 100 percent of the remaining growers in the country are in favor of futures trading of potatoes—

Senator MUSKIE. I am talking about Maine potatoes.

Mr. EHRLICH. I am trying to address myself to 332, and I cannot find Maine potatoes in it.

Senator MUSKIE. I asked you a question. I wanted your answer, to determine your attitude—forgetting S. 332.

I repeat my question—because there are no other potatoes being traded on futures market, and there is no evidence, either on the House side or this side, that any other potato growing area wants its potatoes on the futures market. We are dealing with the facts as they are. Then I ask my question:

Do you believe that if 100 percent of the Maine growers are opposed to trading in Maine potatoes on the futures market, and all the rest of the country wants it, for Maine potatoes, that the point of view of the rest of the country ought to prevail?

Mr. EHRLICH. No, I don't say the point of view of the rest of the country ought to prevail. But I do say if 100 percent of the Maine potato growers do not want futures trading, and they are the only ones affected, if they don't want it, they don't have to use it.

If they don't have to use it, it will die.

It doesn't have to be killed by legislation for those who want to use it, and use it legitimately, even of the Maine growers. If there are 10 growers in Maine who want to use it, and it is legitimate, and serves a proper purpose for them, the others don't have to use it. But the few who want to use it should not be deprived by legislation of the right to use it.

Senator MUSKIE. In other words, if there are only 10 people in Maine who want to speculate, or who want to trade in Maine potato futures on the Maine market, and everybody else in Maine is against it, those 10, whether their power economically to do so is greater or less, ought to be allowed to prevail on this issue?

Mr. EHRLICH. No, sir; I don't say they ought to be allowed to prevail.

I say they should be permitted to trade as they want to trade. And if the others don't like to trade that way they don't have to use it.

Senator MUSKIE. You cannot influence a situation of this kind by a negative attitude. I mean the 10 have a positive way to act. The other 2,500, if they are all against the futures trading, and feel that it hurts their industry, cannot do anything in a negative way to stop it.

The 10 can, by taking positive action, stimulate and keep this market going.

But the 2,500, if they are all against it, and if this is permitted by law, are helpless to do anything about it. If they refuse to participate in it they could not stop it, could they?

Mr. EHRLICH. Well, Senator—

Senator MUSKIE. How do you perform a negative?

Mr. EHRLICH. I cannot find myself wholly in agreement, because if we go on the assumed facts that you suggested, that 10 growers in the State of Maine want to use this, and 2,500 do not—

Senator MUSKIE. You suggested it.

Mr. EHRLICH. All right.

But the question you put to me now is on the basis of 10 wanting to use it, 2,500 do not—

Senator MUSKIE. You said that. You said if there were no more than 10.

So I am posing your situation.

Mr. EHRLICH. Right.

And then I say I don't think there are any 10 growers in the State of Maine who have sufficient production if the other 2,500 will not use this method, that the 10 are powerful enough to affect the price of the 2,500 by any trading that the 10 might do.

Senator MUSKIE. But the principle—I only want to establish your attitude for the record. Your attitude is that if there were 10 in that position, that they ought to be allowed to continue their activity.

Mr. EHRLICH. Senator, I think this is a hypothetical question, because it doesn't seem to me to be nearly the situation based on fact—even on the Maine survey.

The Maine survey seemed to show, from what I heard here this morning, a very distinct division of opinion on the subject—nothing like 10 to 2,500.

Now, it is a question of whether the minority is to be prohibited—even if they are a minority—be prohibited by legislation from an undertaking which is otherwise legitimate and serves a need, both to growers and processors.

Senator MUSKIE. Take the ballot results.

On the ballot results 1,443 returned their ballots and said they were against futures trading; 117 returned their ballots and said they were for it.

Now, as I recall, what you have just said, those facts suggest to you a relatively even division of opinion in Maine.

Mr. EHRLICH. No, I am sorry.

Senator MUSKIE. This is part of the facts in the record.

What did you say? What would you now say?

Mr. EHRLICH. I would say that the survey which has been referred to obviously shows a substantial majority in favor of the legislation.

Senator MUSKIE. And every grower had an opportunity to express his view.

Mr. EHRLICH. I say I have heard the accuracy of the survey questioned this morning.

Senator MUSKIE. But these are the figures.

Do you have contrary figures?

Mr. EHRLICH. I have no independent knowledge of it.

Senator MUSKIE. But you make a statement in the third paragraph of your statement which suggests you have a precise understanding of how many people for or against it. You said it is supported by a comparatively small group of potato growers who desire to impose their viewpoint on the potato growers of the Nation.

Mr. EHRLICH. Yes; I think in the Nation as against Maine.

Senator MUSKIE. You have no poll of the growers of the Nation, have you?

Mr. EHRLICH. No.

Senator MUSKIE. So your statement is more precise and accurate than these figures?

Mr. EHRLICH. I am not comparing my statement to any other figures.

Senator MUSKIE. You criticize these figures, because you say you heard testimony this morning to the effect that they were not accurate. And you have no figures at all. And you offer this as a more accurate statement.

Mr. EHRLICH. No, sir, I don't offer that as a more accurate statement. I offer that as our understanding.

And it is our understanding—that even if it should be the figures in that poll or some other figure, that the Main growers still would be a minority in the Nation, which is what I said.

Senator MUSKIE. Upon what is your understanding based? The National Potato Council is for the bill. We have this poll in Maine, accurate or inaccurate—and you have no independent judgment on that point.

Mr. EHRLICH. No, sir.

Senator MUSKIE. You have the National Potato Council, and this poll in Maine.

And yet you say you have an understanding to the contrary.

What is it based on?

Mr. EHRLICH. Well, it was our understanding based on who was sponsoring the bill, and the fact that it was a small group in Maine that was sponsoring it. That was our understanding.

This is what is reported to us. And this is what I have set forth as an understanding.

I did not attempt to make a survey or set it forth as a statement of fact.

Senator MUSKIE. Would you now say that the understanding is accurate or inaccurate?

Mr. EHRLICH. I would still say that they way I have stated the understanding, referring to growers of the Nation, that the growers who are sponsoring the bill are still a minority of the Nation's growers.

Senator MUSKIE. All right, we will take that statement as it is.

Senator JORDAN. I would think that would be entirely accurate in this case.

Senator MUSKIE. Yes, I think that is an accurate statement.

Mr. EHRLICH. I think so, too, sir.

Senator JORDAN. I want to ask you one question, sir.

What is the position of your institute—why did you take this position—because you are a large consumer of potato chips, your industry?

Mr. EHRLICH. Yes.

Senator JORDAN. You feel that you are able to carry on your business better with the forecast of a market?

Mr. EHRLICH. Yes, sir.

Senator JORDAN. You can sell your commodity on a better basis knowing what you have to pay for it?

Mr. EHRLICH. To protect supply, yes, sir; and price. I might elaborate on that slightly.

When you move over into other potato processing, such as flakes, granules, instant mashed, things of that sort, where processors frequently commit for a year in advance to a national brand to whom they sell, and they have to supply them for a year, it is even more important for them to have a knowledge of what their price is going to be throughout the year.

And futures trading, as well as preplanning contracts, are the things that give them the raw material cost that they can project for a year, and, therefore, contract with a customer for a year—even more so than in the case of potato chips.

Senator JORDAN. Thank you, sir.

We appreciate your testimony.

I want to say to all of those who testified today that the record will be kept open for several days, because I promised it to somebody here, for any additional information that they want to file for the record.

You can bring it in to the committee here, and it will be included in the record, before the record is printed.

Do you have anything further, Senator?

Senator MUSKIE. I would like to again express my appreciation to the chairman, particularly for sitting through these long hours, for your patience and interest in hearing these witnesses out. This is a controversial issue. There are both sides which ought to be heard, and I think this was the chairman's desire. For that, I compliment him on that.

Senator JORDAN. You are entirely welcome. I was glad to do it.

The hearing is adjourned.

(Whereupon, at 2:30 p.m., the subcommittee recessed, subject to the call of the Chair.)

(Additional statements filed for the record are as follows:)

STATEMENT FILED BY THE AMERICAN FARM BUREAU FEDERATION

We appreciate the opportunity to present the views of the Farm Bureau with regard to futures trading in potatoes. Farm Bureau recognizes the fact that futures trading serves an important function in the marketing of some agricultural commodities. If we thought our recommendation for action on potatoes would seriously jeopardize the continued use of futures trading on other crops where it serves well the interests of farmers, we would not support legislation to eliminate futures trading on potatoes.

Futures trading in perishable agricultural commodities, particularly onions and potatoes, has been a matter of concern to Farm Bureau members for several years. Previously we supported legislation to prohibit onion futures trading, and today we support S. 332 to prohibit potato futures trading. We do not think it serves the interests of potato—or the cause of futures trading generally—to perpetuate an unworkable program of futures trading in a perishable commodity, especially when it involves only one of the producing areas.

In 1955 the Farm Bureau first discussed some of the problems that had arisen in connection with onion and potato futures trading. We recommended at that time that steps be taken to eliminate onion and potato futures trading from the various commodity exchanges. In 1957 legislation was enacted to prohibit onion futures trading.

The current Farm Bureau policy on potato futures trading is as follows: "We continue to favor legislation to eliminate potato futures trading from the various commodity exchanges."

We have cited this background in order to have it understood that the Farm Bureau has been interested in this matter for a number of years and has given it serious consideration.

In our previous statements to the Congress, we have recommended the elimination of onion and potato futures trading for two basic reasons:

(1) Onions and potatoes by their very nature are perishable commodities. They cannot be stored for an unlimited length of time, and only limited processing is involved. This situation is quite different from that existing for wheat, corn, and other storable commodities, where the futures market performs a valuable role since hedging provides price risk insurance. Futures trading in these storable commodities serves an important function because of the considerable amount of processing that occurs in marketing. This is quite different from onions and potatoes which, having only limited processing, move from producer to consumer in virtually the same form. Because of their perishability and lack of processing, we do not believe that onions and potatoes lend themselves to sound futures trading.

(2) The volume of both onions and potatoes that is involved in futures trading is relatively small, thus providing the opportunity for sharp price fluctuation and facilitating price manipulations.

We feel that these two reasons still are valid and that S. 332 should be enacted into law. However, in addition to these, we would like to cite other reasons for eliminating potato futures trading.

(1) While contracts are offered in at least three other potato areas, futures trading in potatoes is confined solely to Maine potatoes. This means that the trading activity is confined to the product of one potato area, which produces about 14 percent of the total crop. Furthermore, within Maine not all the potatoes are eligible for trading. This is a very narrow basis for trading. While futures contracts involving potatoes from other areas have been offered, they have never been traded.

(2) The fact that trading is confined to such a small volume increases the opportunity for rumors and other questionable market information to have an effect on the futures and cash markets.

(3) The lack of processing, and the consequent lack of need for hedging to cover the risk of price changes during the time required for processing, means that the potato futures market is highly speculative in character. While there has been a considerable increase in the use of potatoes for food processing in recent years, this is less true in Maine than in other areas of the country.

(4) Potato futures price movements which cannot be justified by supply-and-demand factors and which are the result of speculation have a serious effect on the orderly marketing of potatoes. From the potato producer's point of view, the type of future price movement which delays cash purchases, or creates instability in the cash market, contributes nothing to orderly marketing.

Farm Bureau believes in the market price system. We believe that futures trading plays a valuable role in agricultural marketing of many commodities. Our support of S. 332, to eliminate potato futures trading, does not in any way change this belief. We do, however, feel that futures trading in potatoes does not help the potato marketing system, but is in fact a detriment. We, therefore, support S. 332 and urge its prompt enactment.

NEW BRUNSWICK, N.J., *September 30, 1963.*

MR. COTYS M. MOUSER,
*Clerk of Senate Committee on Agriculture and Forestry,
Senate Office Building, Washington, D.C.*

DEAR MR. MOUSER: The majority of the members of the New Jersey State Potato Association are in favor of S. 332 which would prohibit the speculation on potatoes through the merchantile exchange. We believe that this speculation by persons with no other interest in the potato industry tends to reduce the prices received by potato growers for their potatoes.

Over 75 percent of our members are in favor of Senate bill 829 which would establish acreage allotments for potatoes and thus bring production nearer to needs. This would in a large measure prevent the overproduction of potatoes with its consequent disastrous effects on farmer income and requests for Government supports.

This bill would also prevent the unwarranted large increases in potato acreage on newly developed lands in the West.

We also favor Senate bill 1506 which would amend the Agricultural Act so that marketing agreement committees could regulate the size and quality of potatoes sold to canners and freezers.

Sincerely yours,

JOHN C. CAMPBELL,
Secretary, New Jersey State Potato Association.

BRIDGEWATER, MAINE, *September 21, 1963.*

SENATOR B. EVERETT JORDAN,
Washington, D.C.

DEAR SENATOR: Understand you will have hearings on Senator Muskie's potato futures bill on September 30.

This is a bad bill as it offers nothing to replace the present open market system of potato futures.

We are opposed to the bill and want to be so recorded.

It is unfortunate that you have scheduled this bill for hearing in the middle of our potato harvest season when so many who would like to attend cannot.

Sincerely,

JOHN J. EDMUNDS.

STATEMENT FILED BY JOE HOUSKA, JR., MAGIC VALLEY POTATO GROWING & MARKETING ASSOCIATION, HAZELTON, IDAHO

Mr. Chairman, and members of Senate Agricultural Subcommittee, my name is Joe Houska, Jr., from Hazelton, Idaho. I have lived on a potato farm since I was 10 years old and I have raised potatoes since 1936. I have been, and am a member of many potato organizations. I am a past president of the Idaho

Potato Producers Association and am presently a director and vice president of the Potato Growing & Marketing Association, and chairman of the Idaho-Eastern Oregon Potato Control Committee and vice president of the National Potato Council. I am also presently a member of Secretary Freeman's National Potato Advisory Committee and I have participated in the consideration of the proposals and of the discussion which has resulted in the legislation which you as chairman, and several other members of both parties and in both Houses of the Congress have introduced.

I am testifying for passage of this bill in behalf of the Magic Valley Potato Growing & Marketing Association, which has a membership of 410 potato growers, with an average of approximately 18,400 acres.

This bill would prohibit futures trading in potatoes. The heavy speculative activity which takes place on the New York Mercantile Exchange results in erratic, unwarranted price gyrations throughout all producing areas.

A similar situation existed in the onion market until 1958 when the growers were successful in getting enactment of the Onion Futures Act, eliminating futures trading in onions. The onion growers here in Idaho feel this has been very beneficial in stabilizing onion prices in this area. Potato growers feel strongly that they should have the same relief.

Since potatoes by their nature as a perishable product and their inelastic demand are subject to wide variation in price depending upon the supply, I feel that this trading in futures merely adds to the problem.

In behalf of the Magic Valley Potato Growing & Marketing Association, I solicit your influence and efforts in securing passage of S. 332, and thank you for the opportunity of presenting this testimony.

DEERFIELD, MASS., September 30, 1963.

HON. B. EVERETT JORDAN,

Chairman, Subcommittee on Agricultural Research and General Legislation:

The Massachusetts Potato Growers Association wishes to go on record in favor of legislation prohibiting trading on potatoes on the futures exchanges.

MYRON A. MAIEWSKI,

President, Massachusetts Potato Growers Association.

STATEMENT FILED BY SMITH C. MCINTIRE, PERHAM, MAINE

My name is Smith C. McIntire. I live on and operate a farm at Perham, Maine, having 640 acres of which 225 acres are tillable. I grow 120 acres of table and seed potatoes and 40 acres of peas for processing. I was born on this farm, part of which was purchased from the State by my grandfather when Aroostook County was settled. Following college, a year of graduate work and 15 years with the Maine Extension Service in farm management, marketing, and land-use work, I returned in 1947 to take over the home farm.

I am definitely opposed to futures trading in potatoes and am in support of Senate bill S. 332. Through the Maine Farm Bureau and the Maine Potato Council I have in the past 10 years actively participated in four polls of grower opinion relative to futures trading. In each poll growers' opinion has been about 90 percent opposed to this speculative paper trading in potatoes.

Regardless of the many special press campaigns and the task forces circulated by the New York Mercantile Exchange and its brokers, grower opinion has been consistently opposed.

It is useless to contend that over the long time futures trading either does or does not influence the average price of potatoes. With this activity so deeply rooted one cannot know what would have happened had the industry's price structure been based upon real potatoes moving to consumers, rather than upon hourly bets as to what the price would be at some future time.

Any improved potato-marketing program has as its basis three major objectives: 1. Continuity of supply. 2. Consistent quality and attractive pack. 3. Reduced short-time price movements.

While there are many shady areas in relation to futures trading in potatoes, all can agree that it has an adverse effect upon attempts to improve our marketing of this product.

First, futures trading has come to dominate the attention of brokers and traders. The volume of trades and the fast price swings offer more opportunity for a fast buck than does the merchandising of real potatoes. The result is that pricing and purchasing start and stop with, and is dominated by the "Board." The real users of potatoes who must buy in advance are dominated by this type of paper trading.

Secondly, the futures market in no way recognizes quality except that it establishes a grade minimum. There is no way in which a producer, willing to deal in better quality produce, can get any price consideration. In fact, it is recognized that deliveries made on the "board" are neither of the quality or in the size pack that the trade generally wants. Thus to the extent that deliveries are made they are a depressing factor upon the trade acceptance of potatoes.

Thirdly, the most evident detrimental influence of futures trading is its extreme exaggeration of short-time price swings, particularly at the producer level. Regardless of why these quick swings occur and of who may at the moment be in the money or broke, it tends to nullify all attempts to initiate price stability based upon the supply and demand of the real food product—potatoes. These short-time paper profits and losses in turn transmit the same fluctuation into related producer fields. Interest in holding or moving the crop, increases in acres planted, credit, the purchase of equipment, etc., are the result of on-the-spot decisions made by many people. Futures trading by exaggerating short-time price swings has a serious disrupting influence upon the immediate and future welfare of potato producers.

I regret that I cannot attend this hearing as a representative of the growers, the Maine Potato Council and the Maine Farm Bureau, as I have at two previous House of Representative hearings and on many other occasions. I am in the middle of a potato harvest season, which I cannot neglect by being away because this involves my life's investment. I can think of nothing that offers more promise of helping the troubled potato industry to improve its marketing structure than the termination of futures trading in potatoes.

CANASTOTA, N.Y., *September 24, 1963.*

SENATE COMMITTEE ON AGRICULTURE AND FORESTRY,
Washington, D.C.

DEAR SIR: I have been advised that a hearing would be held September 30 on S. 332, which would prohibit futures trading in potatoes. Hearings before the Subcommittee on Agricultural Research and General Legislation, B. Everett Jordan of North Carolina, chairman. This being the middle of our harvest season, the writer cannot personally appear. Would you please enter this letter in testimony in favor of the bill.

Reason for favoring the bill in brief: While New York State potatoes are not in themselves traded on the exchange, the actions on the board have a definite impact on our market since our prices from about November on, follow Maine prices, which are definitely influenced by board speculation.

The futures exchange provides a place where people can sell short on us which has a depressing effect. It provides a place where people who know nothing of potatoes can speculate on our living. The exchange does not actually market or consume a single potato.

If it were not for the fat brokerage profits and speculative possibilities, the exchange would not exist. It isn't a charitable institution operating for the benefit of the industry. I have yet to find the man in our trade who sees any good to our New York State potato industry from futures trading.

This is the 35th crop of potatoes I have harvested. I am a past president and director of Empire State Potato Club.

I will appreciate your good efforts to relieve our industry of the blight from futures trading.

Yours very truly,

DAVID R. C. SMITH,
Smith-Coulter & Co., Inc.

BOISE, IDAHO, *September 30, 1963.*

HON. B. EVERETT JORDAN,
*Senate Subcommittee on Agricultural Research,
 U.S. Senate, Washington, D.C.*

In regard to the hearing held today on S. 332, speculation of potatoes on the futures exchanges, Idaho wishes to go on record as favoring the passage of this bill.

ROBERT E. SMYLLIE,
Governor of Idaho.

SEPTEMBER 27, 1963.

SENATE COMMITTEE ON AGRICULTURE AND FORESTRY,
Washington, D.C.

DEAR SIR: I, as a potato grower in Pennsylvania, very strongly support bill S. 332 which would eliminate futures trading of potatoes. I am in support of this bill because I feel the trading of potatoes futures too often reflects false market conditions at the potato growers expense.

Sincerely,

REID E. WISSLER,
Ephrata, Pa.

TULELAKE, CALIF., *September 25, 1963.*

MEMORANDUM

To: Mr. Cotys M. Mouser, clerk, Senate Committee on Agriculture and Forestry.
 Subject: Hearing on S. 332, regarding the speculation of potatoes on the futures exchanges.

The Tulelake Growers Association has adopted a position of support to S. 332, which would prohibit the speculation of potatoes on futures exchanges.

It is the feeling of the membership of this association, the trading of potato futures has an adverse effect on the freedom of the market to establish its own price levels on a basis of supply and demand. We feel that this adverse effect is greater than any benefit that potato growers may derive from hedging operation on futures exchanges.

Sincerely,

JOHN S. WYNN,
Manager, Tulelake Growers Association.



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