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CURRENT ISSUES IN US GRAIN MARKETING

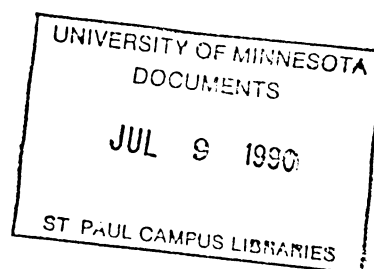
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Structural Characteristics of Grain Marketing Firms in the Cornbelt and Midsouth Regions

Robert Hearne and Michael Reed¹

Accurate information on the structure or characteristics of markets must be available before policies and regulations can be designed to increase a marketing system's efficiency. Such information is especially important for the grain marketing industry because grain is an important component of farm income in many parts of the U.S. This study includes only corn, soybeans and wheat in its definition of "grains." Unfortunately, little is known about the domestic grain marketing system because there are many geographically dispersed firms whose characteristics vary by area of the country.

The purpose of this report is to provide detailed information on the structure of the U.S. grain marketing industry for two regions of the U.S.: the Cornbelt and MidSouth. This investigation focuses on those firms that purchase unprocessed grain, either directly or indirectly, from producers. These firms include elevators, feed manufacturers, and processors. The paper will describe and compare selected characteristics of grain handling firms between these two distinct grain producing regions.

Methodology

Data presented in this paper result from a survey of grain handling firms that was conducted by the Southern Regional Research Committee S176 as part of a project entitled "Grain Marketing Systems." The participating states for the structure analysis are Alabama, Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Ohio, and Tennessee.

The population of grain handling firms within each state was first divided into

categories according to size and function. Original firm categories included country elevators, terminal elevators, river elevators, export elevators, flour mills, soybean processors, corn processors, feed processors, feed mills, feed lots, poultry operations, and other firms. The sampling procedure for each state follows.

The largest country elevators were sampled at a rate of 100% until the sum of the sample's storage capacity equalled at least 25% of the state's total. Not less than 10% of the other firms were sampled. All export elevators, soybean processors and corn processors were sampled. A random sample of 50% of the river elevators were interviewed. Feed manufacturing firms in each state were arranged on the basis of production capacity from largest to smallest. The largest firms were sampled until 10% of the state's production capacity was included -- at least 10% of the other feed manufacturers were sampled. All firm types not mentioned above were sampled at a 10% rate or above.

Participating states were allowed the opportunity to modify sampling procedures within the framework given by the committee. Also, states were given the opportunity to further divide the sample into geographic regions for purposes of creating homogeneous cells.

Results

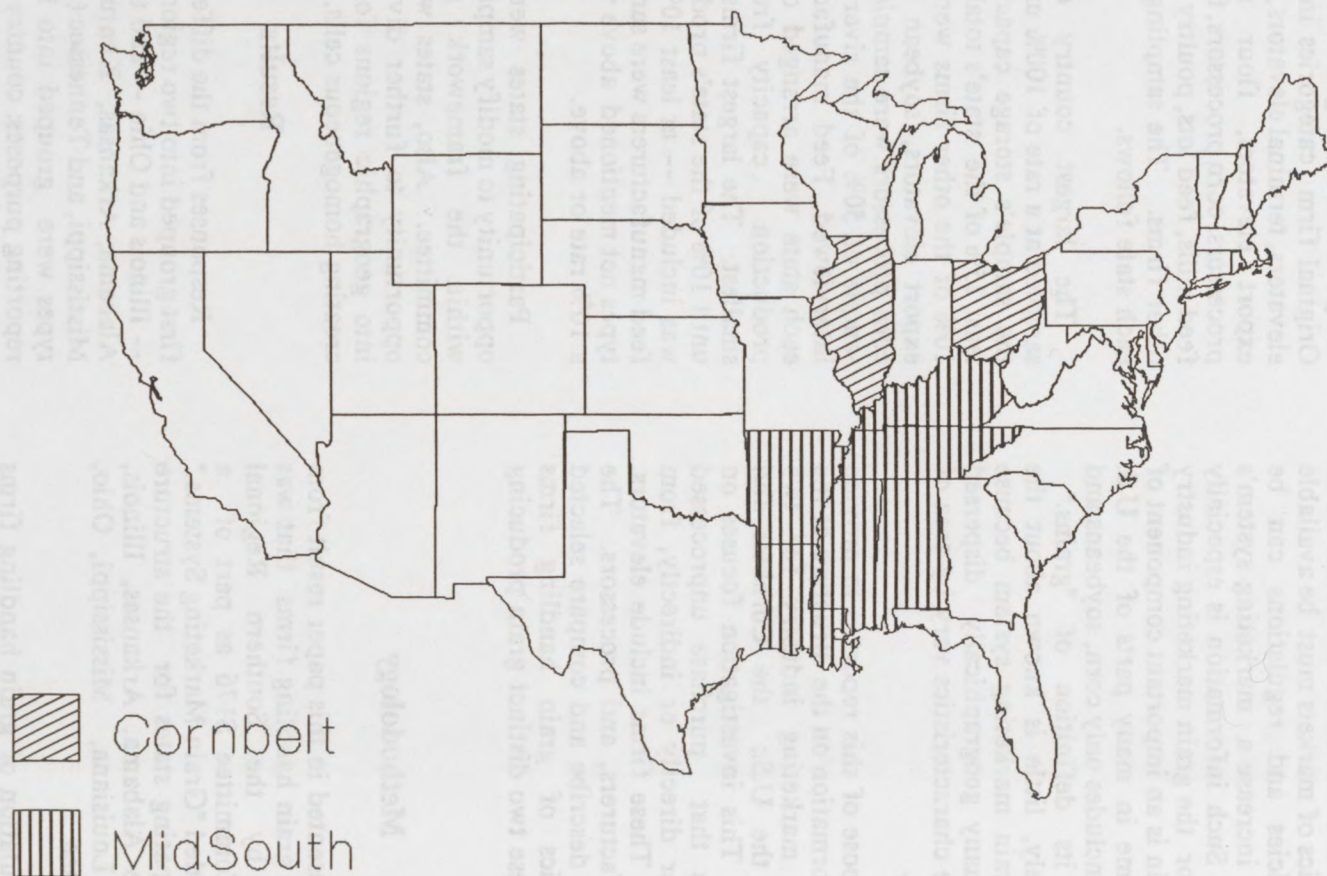
Responses from the different states were first grouped into two regions: the Cornbelt -- Illinois and Ohio -- and the MidSouth -- Alabama, Arkansas, Kentucky, Louisiana, Mississippi, and Tennessee (Figure 1). Firm types were grouped into four classes for reporting purposes: country elevators; river and terminal elevators; feed mills and

¹The authors are former Research Associate and Associate Professor of Agricultural Economics, University of Kentucky.

Figure 1

Eight State Survey Area

Cornbelt and MidSouth Grain Marketing Regions



manufacturers; and other processors. Table 1 shows the firm types encompassed in each category and the number of firms surveyed in each state (by firm type).

Type of Firm and Business Organizational Structure

Of the 760 firms that were sampled, 52% were in the MidSouth and 47% were in the Cornbelt. Country elevators constituted the largest firm class with 46% of the sample; feed mills and processors, terminal and river elevators, and other processors contained 27%, 17%, and 10% of the sample, respectively. Generally the sampling percentage by firm type was consistent between the Cornbelt and MidSouth, except that a larger proportion of feed mills and poultry operations were sampled in the MidSouth because of their predominance.

The majority of firms were corporate owned in both regions (Figure 2) -- 64% in the Cornbelt and 61% in the MidSouth. Cooperatives were the second most common firm type -- 32% in the Cornbelt and 20% in the MidSouth. Single proprietorships/partnerships were very infrequent in the Cornbelt (only 4% of the firms), but they were as common as cooperatives in the MidSouth (accounting for 20% of the firms).

Single plant firms were also more common in the MidSouth -- mostly with respect to country elevators and feed processors. This is a reflection of the number of single proprietorships/partnerships in the MidSouth. Multiplant firms predominate for river and terminal elevators in both regions (Figure 3).

Firm Storage Capacity and Turnover Rate

Average firm storage capacity is much greater in the Cornbelt than in the MidSouth for all firm classes (Table 2). Only 1983 is presented because responses between January, 1983 and January 1984 were very similar. Cornbelt country elevators averaged 2.5 times more storage capacity than MidSouth elevators. The size distributions explains this difference. In the

Cornbelt 36% of the elevators have storage capacities above 2 million bushels, compared to 9% for MidSouth elevators. Most MidSouth elevators (71%) were small, with less than 500,000 bushels of storage capacity.

Terminal and river elevators averaged 22% more storage capacity in the Cornbelt (2.3 million bushels in the Cornbelt versus 1.9 million bushels in the MidSouth), while other processors in the Cornbelt averaged 29% larger. Feed mills and processors averaged 85% larger in the Cornbelt, mostly because there are fewer mills with less than 500,000 bushel storage capacity in the Cornbelt (83% in the Cornbelt versus 96% in the MidSouth).

Turnover rates were computed by dividing grain purchased by the firm's total storage capacity. This information is presented for both 1982 and 1983 in Table 3. Turnover rates at country elevators were considerably higher in the MidSouth than in the Cornbelt -- 40% of the Cornbelt country elevators have turnover rates below one. Cornbelt country elevators are primarily used for grain storage rather than grain handling. In the MidSouth, country elevators serve a greater assembly and distribution function for feed and other processors.

Conversely, the terminal and river elevators in the Cornbelt have much greater turnover rates, reflecting their pure assembly and distribution function in the grain marketing system. The average turnover rate was 25, compared with 9 in the MidSouth. Terminal and river elevators in the MidSouth have turnover rates much closer to MidSouth country elevators.

The high turnover rates for feed mills and processors reflect their small storage capacity relative to the elevators. These firms hold minimal inventories and attempt to process as much grain through their facilities as possible. Other processors have similar turnover rates between the two regions.

Table 1. Participants in 1982 - 83 Grain Marketing Survey

<u>Class</u>	<u>Cornbelt</u>		<u>MidSouth</u>					
<u>Category</u>	<u>Illinois</u>	<u>Ohio</u>	<u>Alabama</u>	<u>Arkansas</u>	<u>Kentucky</u>	<u>Louisiana</u>	<u>Mississippi</u>	<u>Tennessee</u>
<u>Country Elevator</u>								
Country Elevator	123	77	13	27	14	9	38	51
<u>Terminal & River Elevator</u>								
Terminal Elevator	11	19	1	0	0	0	2	0
River Elevator	37	3	0	9	12	3	9	8
Export Elevator	0	4	1	0	0	8	0	0
<u>Feed Mills & Processor</u>								
Feed Processor	10	8	1	0	1	0	0	3
Feed Mill	0	23	13	50	12	3	16	22
Feed Lot	0	0	1	1	0	0	0	0
Poultry Operation	0	0	6	25	1	2	2	3
<u>Other Processors</u>								
Soybean Processor	11	5	2	4	1	0	3	3
Corn Processor	8	3	0	0	0	0	0	6
Flour Miller	8	11	0	0	4	0	0	9

Figure 2

Classification of Firm Types for Grain Marketing Firms in the Eight State Area

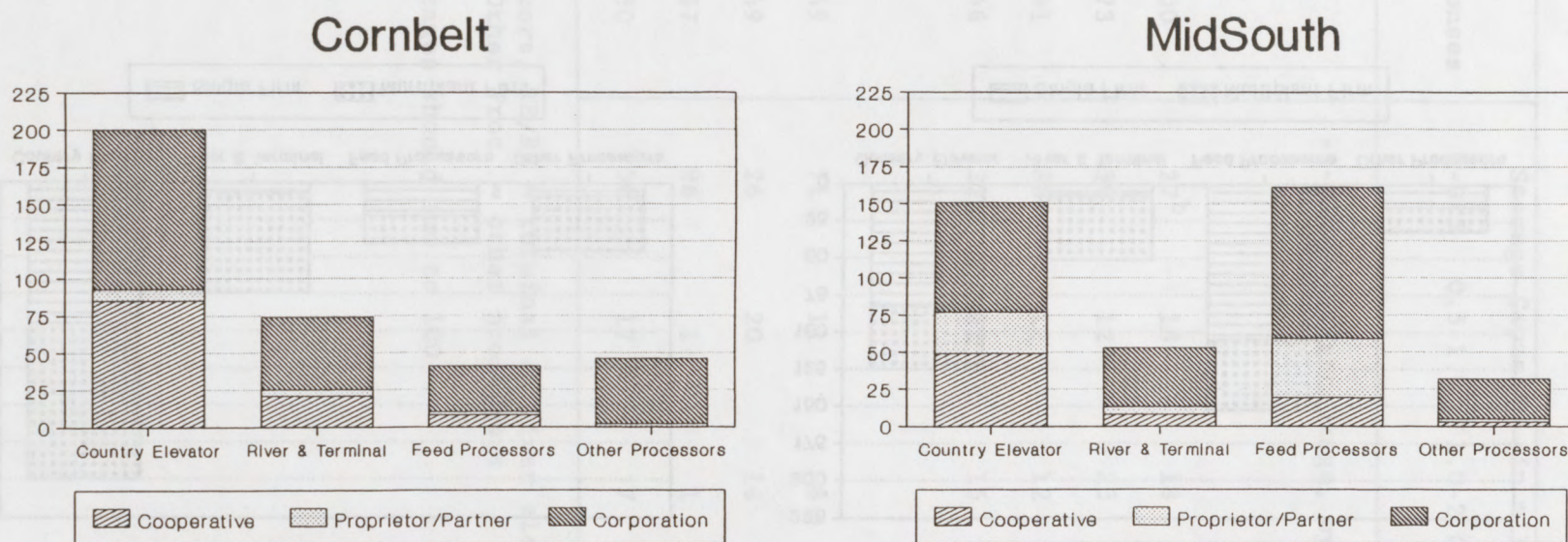


Figure 3

Number of Single and Multiplant Firms in the Eight State Area

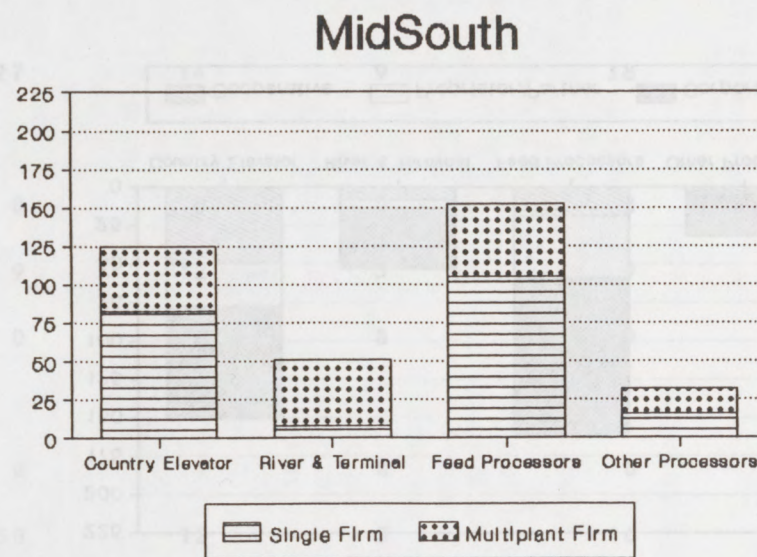
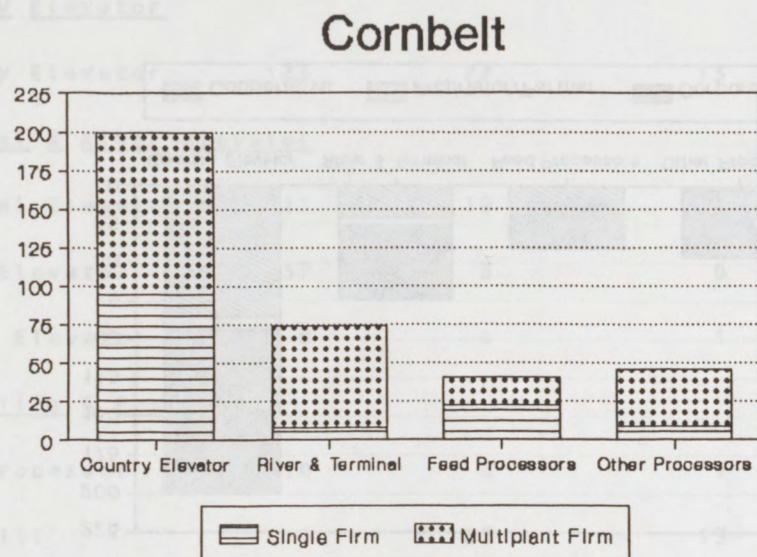


Table 2. Total Storage Capacity of Grain Marketing Facilities by Region.

		Storage Capacity (in million bushels)					
Firm Type	Responses	0-0.5	0.5-1.0	1.0-2.0	2.0-3.0	3.0+	Mean
		----- (Percentage, by group) -----					
<u>Cornbelt</u>							
CE ^a	200	27 ^b	18	18	19	17	1.8
TE/RE	73	34	12	23	8	22	2.3
FM	41	83	12	12	2	0	0.3
Other Proc.	46	22	22	15	15	26	2.3
<u>MidSouth</u>							
CE	149	71	11	8	2	7	0.7
TE/RE	49	26	20	16	16	20	1.9
FM	157	96	1	1	1	1	1.6
Other Proc.	30	50	17	7	3	23	1.8

^aCE = country elevators, TE/RE = terminal or river elevators, FM = feed mills and manufacturers, Other Proc. = other processors.

^bEach row of percentages should sum to 100.

Table 3. Turnover Rates for Grain Marketing Facilities by Region,
1982 and 1983.

		Turnover Rate					
Firm Type	Responses	0-1	1-2	2-4	4-7	7-Higher	Mean
		----- (Percentage, by group) -----					
<u>Cornbelt</u>	<u>1982</u>						
CE ^a	193	40 ^b	39	12	5	4	2
TE/RE	66	6	12	21	17	44	25
FM	38	42	16	16	5	21	66
Other Proc.	42	7	14	33	19	26	8
<u>MidSouth</u>							
CE	129	15	22	29	17	26	6
TE/RE	27	7	11	33	22	26	9
FM	120	12	10	14	18	46	56
Other Proc.	25	16	16	28	8	32	8
<u>Cornbelt</u>	<u>1983</u>						
CE	193	46	36	12	2	4	2
TE/RE	66	14	14	22	7	42	21
FM	38	45	16	13	2	24	127
Other Proc.	42	7	9	36	21	26	9
<u>MidSouth</u>							
CE	129	20	33	22	11	14	4
TE/RE	27	18	15	30	11	26	8
FM	120	13	11	12	18	46	48
Other Proc.	25	20	12	24	12	32	9

^aCE = country elevators, TE/RE = terminal or river elevators, FM = feed mills and manufacturers, Other Proc. = other processors.

^bEach row of percentages should sum to 100.

Total Grain Merchandised

Cornbelt grain handling facilities are generally much larger than their MidSouth counterparts in terms of total grain merchandised (Table 4). Country elevators in the Cornbelt average almost three times the volume of country elevators in the MidSouth, which is consistent with their larger storage capacity. In 1983, 45% of the country elevators in the Cornbelt handled over 2 million bushels while only 6% of the MidSouth country elevators did so. Many MidSouth country elevators are small, with three out of every five handling less than 500,000 bushels in 1983.

Terminal and river elevators averaged over twice as much grain merchandised in the Cornbelt compared to the MidSouth. This increased activity by Cornbelt terminals/river elevators is much more than their larger storage capacity would warrant. In 1983, 93% of the terminal and river elevators in the Cornbelt handled more than 2 million bushels versus 59% in the MidSouth.

The 1983 drought had a much larger impact on the volume of grain merchandised in the MidSouth than the Cornbelt. Average volume merchandised in the MidSouth fell approximately 25% for their elevators while terminal and river elevators in the Cornbelt experienced no change and country elevator volume fell by less than 10%.

Tables 5 through 7 show the merchandised volumes for corn, soybeans and wheat, respectively. The MidSouth is more oriented toward marketing soybeans than corn or wheat. This is evident not only by volume, but also by the number of firms answering the questions, since not answering the question usually implies that the facility doesn't handle that grain. The number of surveyed country elevators handling corn in 1982 for the MidSouth is 65, versus 124 for soybeans and 112 for wheat -- terminal and river elevators in the MidSouth show a similar pattern. Essentially every elevator which handles corn in the Cornbelt also handles soybeans; and most elevators also handle wheat.

The MidSouth is much closer to the Cornbelt in volume of soybeans merchandised and is even ahead of the Cornbelt in wheat volume. However, Cornbelt country elevators and terminal and river elevators averaged 4.7 and 3.7 times more corn volume, respectively, than those elevators in the MidSouth. Again, the MidSouth doesn't have nearly the percentage of elevators handling over 2 million bushels as in the Cornbelt.

Competitors and Market Area

Survey participants were asked to estimate the number of firms competing with them for grain during the harvest and non-harvest seasons. There was generally little difference between harvest and non-harvest competition (Tables 8 through 10). Grain firms in the Cornbelt faced more competition than those in the MidSouth, though most firms in both regions competed with at least five other grain handling facilities. Competition for wheat was slightly less than that for corn and soybeans. Wheat is viewed as a minor crop, thus handled by fewer facilities. Few firms had less than three competitors for grain purchases, but the percentage of firms with less than three competitors was always greater for the MidSouth.

Respondents were also asked to indicate the radius of their market area within which they received at least 90% of their grain from farmers for the harvest and non-harvest seasons. These radii increased slightly from harvest to non-harvest seasons (Tables 11 through 13). The market radius for feed mills and processors expanded greatly in the non-harvest season for the MidSouth, especially for corn. These feed operations must search afar for grain from farmers after harvest because many areas of the MidSouth are corn deficient. The MidSouth is less deficit in soybeans, so the non-harvest market radius isn't as large as corn. MidSouth firms cannot obtain substantial quantities of wheat from farmers, so they buy most of their wheat from other grain facilities.

Market areas in the MidSouth are much greater than in the Cornbelt, reflecting less concentrated grain production in the

Table 4. Total Grain Merchandised by Firm Type and Region, 1982 and 1983.

		Total Grain Merchandised (in million bushels)				
Firm Type	Responses	0-0.5	0.5-1.0	1.0-2.0	2.0 or Higher	Mean
----- (Percentage, by group) -----						
<u>Cornbelt</u>	<u>1982</u>					
CE ^a	194	16 ^b	11	23	49	2.6
TE/RE	71	1	0	4	94	13.1
<u>MidSouth</u>						
CE	127	46	26	20	8	0.9
TE/RE	25	4	4	12	80	6.0
<u>Cornbelt</u>	<u>1983</u>					
CE	199	19	17	19	45	2.5
TE/RE	71	0	1	4	93	13.1
<u>MidSouth</u>						
CE	133	60	23	10	6	0.7
TE/RE	27	11	7	22	59	4.6

^aCE = country elevators, TE/RE = terminal or river elevators.

^bEach row of percentages should sum to 100.

Table 5. Corn Merchandised by Firm Type and Region 1982 and 1983.

		Corn Merchandised (in million bushels)				
Firm Type	Responses	0-0.5	0.5-1.0	1.0-2.0	2.0 or Higher	Mean
		----- (Percentage, by group) -----				
<u>Cornbelt</u>	<u>1982</u>					
CE ^a	192	26 ^b	17	22	35	2.0
TE/RE	71	1	3	4	92	9.4
<u>MidSouth</u>						
CE	65	74	15	9	2	0.4
TE/RE	15	13	13	13	60	2.5
<u>Cornbelt</u>	<u>1983</u>					
CE	196	32	15	24	28	1.8
TE/RE	71	4	4	4	87	7.8
<u>MidSouth</u>						
CE	69	85	9	4	1	0.3
TE/RE	19	47	16	5	31	1.6

^aCE = country elevators, TE/RE = terminal or river elevators.

^bEach row of percentages should sum to 100.

Table 6. Soybeans Merchandised by Firm Type and Region, 1982 and 1983.

		Soybeans Merchandised (in million bushels)				
Firm Type	Responses	0-0.5	0.5-1.0	1.0-2.0	2.0 or Higher	Mean
----- (Percentage, by group) -----						
<u>Cornbelt</u>	<u>1982</u>					
CE ^a	191	58 ^b	25	13	3	0.6
TE/RE	67	12	12	22	53	3.2
<u>MidSouth</u>						
CE	124	70	23	4	2	0.5
TE/RE	24	17	12	21	50	2.7
<u>Cornbelt</u>	<u>1983</u>					
CE	195	63	26	9	2	0.5
TE/RE	68	12	20	20	47	2.4
<u>MidSouth</u>						
CE	130	79	18	1	1	0.4
TE/RE	27	28	4	24	44	2.3

^aCE = country elevators, TE/RE = terminal or river elevators.

^bEach row of percentages should sum to 100.

Table 7. Wheat Merchandised by Firm Type and Region, 1982 and 1983.

		Wheat Merchandised (in million bushels)				
Firm Type	Responses	0-0.5	0.5-1.0	1.0-2.0	2.0 or Higher	Mean
		----- (Percentage, by group) -----				
<u>Cornbelt</u>	<u>1982</u>					
CE ^a	171	91 ^b	7	1	1	0.2
TE/RE	54	59	18	9	13	0.9
<u>MidSouth</u>						
CE	112	87	9	3	1	0.2
TE/RE	23	30	17	17	35	2.0
<u>Cornbelt</u>	<u>1983</u>					
CE	179	93	5	1	1	0.2
TE/RE	53	60	19	6	15	0.8
<u>MidSouth</u>						
CE	119	92	5	1	2	0.2
TE/RE	24	37	17	25	21	1.5

^aCE = country elevators, TE/RE = terminal or river elevators.

^bEach row of percentages should sum to 100.

Table 8. Number of Firms Competing for Corn, 1983.

Firm Type	Responses	0-2	3-4	5-8	9+	Mean
----- (Percentage, by group) -----						
<u>Cornbelt, Harvest Season</u>						
CE ^a	198	4 ^b	15	40	41	9
TE/RE	72	1	8	29	61	19
FM	30	10	23	20	47	10
<u>MidSouth</u>						
CE	80	20	26	29	25	7
TE/RE	23	9	17	22	52	10
FM	59	32	24	29	15	5
<u>Cornbelt, Non-Harvest</u>						
CE	197	4	14	40	43	9
TE/RE	72	0	8	29	62	19
FM	30	10	23	23	23	9
<u>MidSouth</u>						
CE	76	22	24	28	25	7
TE/RE	23	9	17	22	52	10
FM	52	33	21	31	15	5

^aCE = country elevators, TE/RE = terminal or river elevators, FM = feed mills and manufacturers.

^bEach row of percentages should sum to 100.

Table 9. Number of Firms Competing for Soybeans, 1983.

Firm Type	Responses	0-2	3-4	5-8	9+	Mean
------(Percentage, by group)-----						
<u>Cornbelt, Harvest Season</u>						
CE ^a	197	4 ^b	17	38	42	9
TE/RE	71	3	8	30	59	18
FM	16	6	19	19	56	11
<u>MidSouth</u>						
CE	131	10	29	34	27	7
TE/RE	38	10	29	29	32	8
FM	22	40	18	23	18	4
<u>Cornbelt, Non-Harvest</u>						
CE	196	3	15	39	43	9
TE/RE	70	1	8	30	60	8
FM	16	6	19	12	62	10
<u>MidSouth</u>						
CE	129	21	23	30	26	6
TE/RE	38	15	26	26	32	8
FM	20	45	15	25	15	3

^aCE = country elevators, TE/RE = terminal or river elevators, FM = feed mills and manufacturers.

^bEach row of percentages should sum to 100.

Table 10. Number of Firms Competing for Wheat, 1983.

Firm Type	Responses	0-2	3-4	5-8	9+	Mean
----- (Percentage, by group) -----						
<u>Cornbelt, Harvest Season</u>						
CE ^a	177	13 ^b	16	31	40	8
TE/RE	58	13	9	31	47	14
FM	23	7	13	35	48	11
<u>MidSouth</u>						
CE	119	14	29	30	27	7
TE/RE	39	13	25	26	36	8
FM	20	20	27	32	20	3
<u>Cornbelt, Non-Harvest</u>						
CE	173	12	14	32	42	8
TE/RE	52	15	11	27	46	15
FM	23	8	13	39	39	11
<u>MidSouth</u>						
CE	113	21	21	32	26	6
TE/RE	39	18	23	23	36	8
FM	40	30	22	27	20	5

^aCE = country elevators, TE/RE = terminal or river elevators, FM = feed mills and manufacturers.

^bEach row of percentages should sum to 100.

Table 11. Market Radius for Corn by Firm Type and Region, 1983.

Firm Responses Type		Market Radius (Miles)					
		0-10	11-20	21-30	31-50	51+	Mean
		----- (Percentage, by group) -----					
<u>Cornbelt, Harvest Season</u>							
CE ^a	197	52 ^b	30	13	5	0	14
TE/RE	59	12	14	8	39	27	45
FM	27	33	37	22	4	4	20
<u>MidSouth</u>							
CE	81	18	27	26	21	7	28
TE/RE	20	0	5	15	40	40	77
FM	67	6	21	19	27	27	73
<u>Cornbelt, Non-Harvest</u>							
CE	197	49	32	14	5	0	16
TE/RE	59	7	17	12	37	27	49
FM	27	26	44	22	4	4	20
<u>MidSouth</u>							
CE	76	13	28	25	22	12	33
TE/RE	18	0	5	17	39	39	80
FM	61	2	20	18	24	36	117

^aCE = country elevators, TE/RE = terminal or river elevators, FM = feed mills and manufacturers.

^bEach row of percentages should sum to 100.

Table 12. Market Radius for Soybeans by Firm Type and Region, 1983.

		Market Radius (Miles)					
Firm Type	Responses	0-10	11-20	21-30	31-50	51+	Mean
		----- (Percentage, by group) -----					
<u>Cornbelt, Harvest Season</u>							
CE ^a	196	52 ^b	31	13	4	0	14
TE/RE	58	10	19	12	33	26	45
FM	17	47	35	12	6	0	15
<u>MidSouth</u>							
CE	139	17	32	24	19	8	29
TE/RE	36	0	6	22	39	33	55
FM	27	33	33	11	11	11	26
<u>Cornbelt, Non-Harvest</u>							
CE	196	49	32	13	5	1	15
TE/RE	58	3	26	10	36	24	49
FM	16	37	44	13	6	0	16
<u>MidSouth</u>							
CE	127	15	29	27	19	10	31
TE/RE	34	3	0	18	35	44	64
FM	25	28	36	12	12	12	43

^aCE = country elevators, TE/RE = terminal or river elevators, FM = feed mills and manufacturers.

^bEach row of percentages should sum to 100.

Table 13. Market Radius for Wheat by Firm Type and Region, 1983.

		Market Radius (Miles)					
Firm Type	Responses	0-10	11-20	21-30	31-50	51+	Mean
		----- (Percentage, by group) -----					
<u>Cornbelt, Harvest Season</u>							
CE ^a	170	52 ^b	29	13	5	1	15
TE/RE	47	17	6	17	40	19	43
FM	24	38	46	8	4	4	18
<u>MidSouth</u>							
CE	122	18	31	25	19	6	32
TE/RE	36	0	5	17	42	36	56
FM	51	12	27	16	25	20	43
<u>Cornbelt, Non-Harvest</u>							
CE	166	50	31	13	5	1	17
TE/RE	44	20	14	16	34	16	37
FM	23	30	52	9	4	4	19
<u>MidSouth</u>							
CE	109	16	29	26	18	11	37
TE/RE	34	0	0	18	38	44	67
FM	44	9	32	16	23	20	72

^aCE = country elevators, TE/RE = terminal or river elevators, FM = feed mills and manufacturers.

^bEach row of percentages should sum to 100.

MidSouth. Country elevators in the MidSouth have market areas twice the size of Cornbelt country elevators. MidSouth terminal and river elevators have 71% larger market areas for corn, while approximately 25% larger market areas for soybeans and wheat. Market radii for feed mills and processors vary more by grain, with the MidSouth corn radius much greater than for other grains in absolute terms and relative to the corn market radius in the Cornbelt.

In every case the reason that the market radius in the Cornbelt is low relative to the MidSouth is the percentage of firms with market radii of 10 miles or less. Over 50% of the Cornbelt country elevators have market radii of 10 miles or less, versus less than 20% of the MidSouth country elevators with such a small market area. Market radii for other grain facilities in the Cornbelt are less concentrated than country elevators, but the percentage of firms with radii of 10 miles or less is still much larger than in the MidSouth. Over one-third of the MidSouth terminal and river elevators have market radii of over 50 miles -- a much larger percentage than in the Cornbelt.

Grain Pricing Methods

Managers of these grain marketing facilities were asked to estimate the percentage of their purchases falling into various pricing options. These practices include cash at delivery, forward cash contracts, delayed price, cash for grain stored at the facility, basis contracts and pooled pricing. These percentages represent farmer choices to the extent that all grain firms offer each of these pricing options.

The most common pricing technique in both regions is cash at delivery -- varying from 37% for soybeans to 65% for wheat in the Cornbelt and from 50% for soybeans to 74% for corn in the MidSouth (Figures 4 through 6). This sales technique is particularly dominant in the MidSouth. Cash forward contract is the second most common pricing form for all grains and regions, except for Cornbelt soybeans (where cash sale of stored grain is more common). All other pricing methods in the MidSouth are uncommon, constituting less

than 10% of purchases.

Cash for stored grain and delayed price contracts are more frequently used in the Cornbelt. About 25% of the Cornbelt corn and soybeans are priced for cash out of storage, while 10% of the Cornbelt corn, soybeans and wheat are delayed price. Pooled pricing and basis contracts were uncommon in both regions.

It is difficult to pinpoint the explanation for the much higher percentage of grain priced as cash at delivery in the MidSouth. Possible reasons include: MidSouth farmers are more diversified with less grain to market and, therefore, spend less time on sophisticated marketing methods (though the grain delivered for cash could have been hedged), MidSouth grain handling firms could offer fewer pricing options (i.e., delayed price, basis contracts or pooled price), yield risk could be greater so MidSouth farmers are less willing to commit to forward contracts. The earlier harvest in the MidSouth may make sales at harvest a more attractive alternative for farmers. They can sell before prices are depressed by Cornbelt farmer sales. Further, technical problems with storage (e.g., insects) may be more common in the MidSouth.

Protection Against Price Changes

Elevators employ various means to protect themselves from grain they have purchased. Elevators were asked to estimate how they priced their grain purchases during 1982 and 1983. The pattern between the Cornbelt and MidSouth is quite similar (Figure 7) -- most purchases are hedged using the futures market, with very little grain going unpriced by the elevator. Immediate sale was the second most common technique in both regions.

Summary and Conclusions

MidSouth grain handling facilities are generally smaller than their counterparts in the Cornbelt not only in storage capacity, but also in volume merchandized, especially with respect to the volume of corn

Figure 4

Grain Pricing Methods for Purchases from Farmers, Corn, 1983

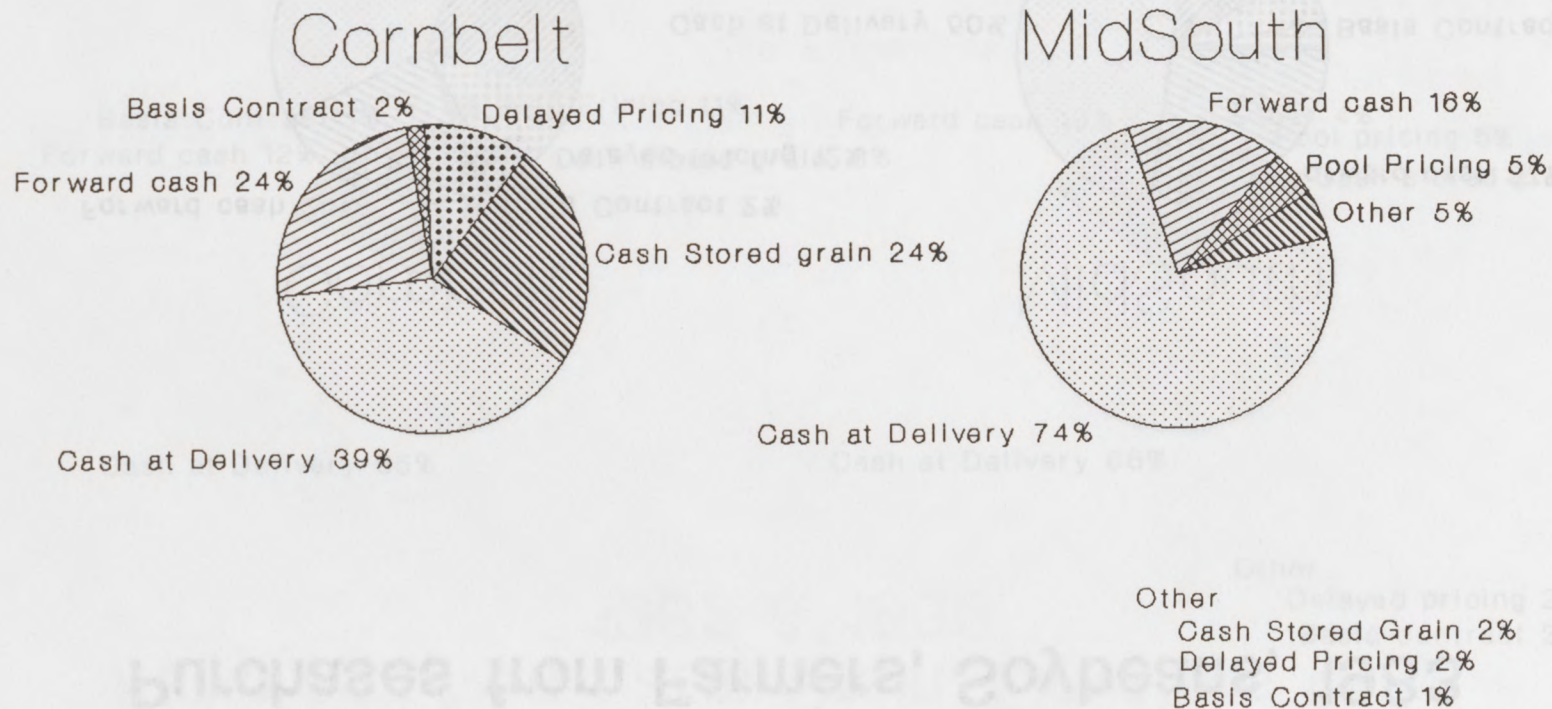


Figure 5

Grain Pricing Methods for Purchases from Farmers, Soybeans, 1983

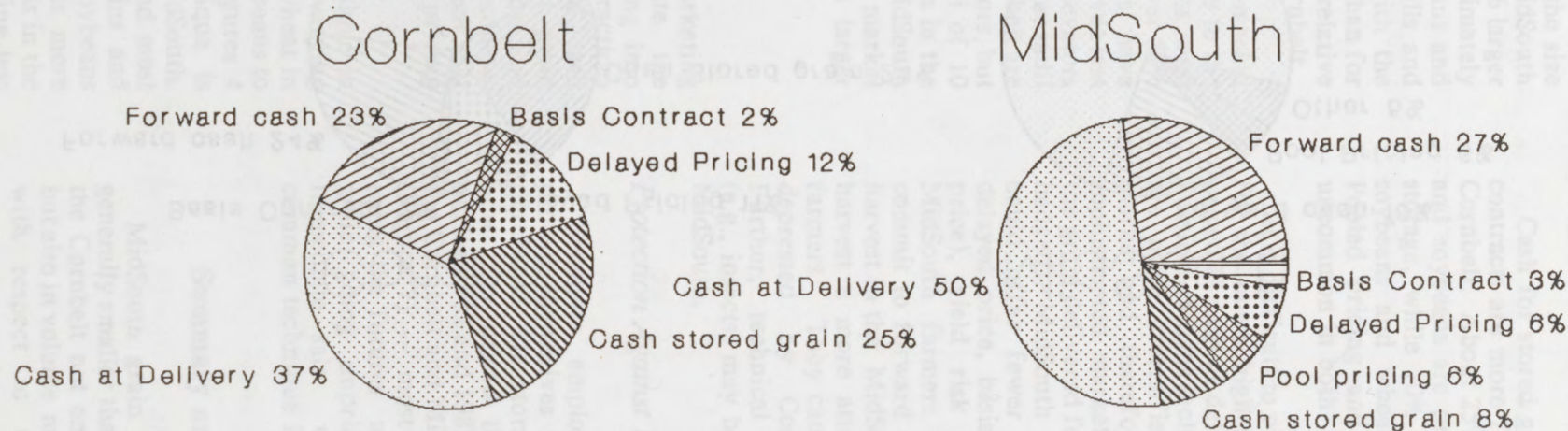


Figure 6

Grain Pricing Methods for Purchases from Farmers, Wheat, 1983

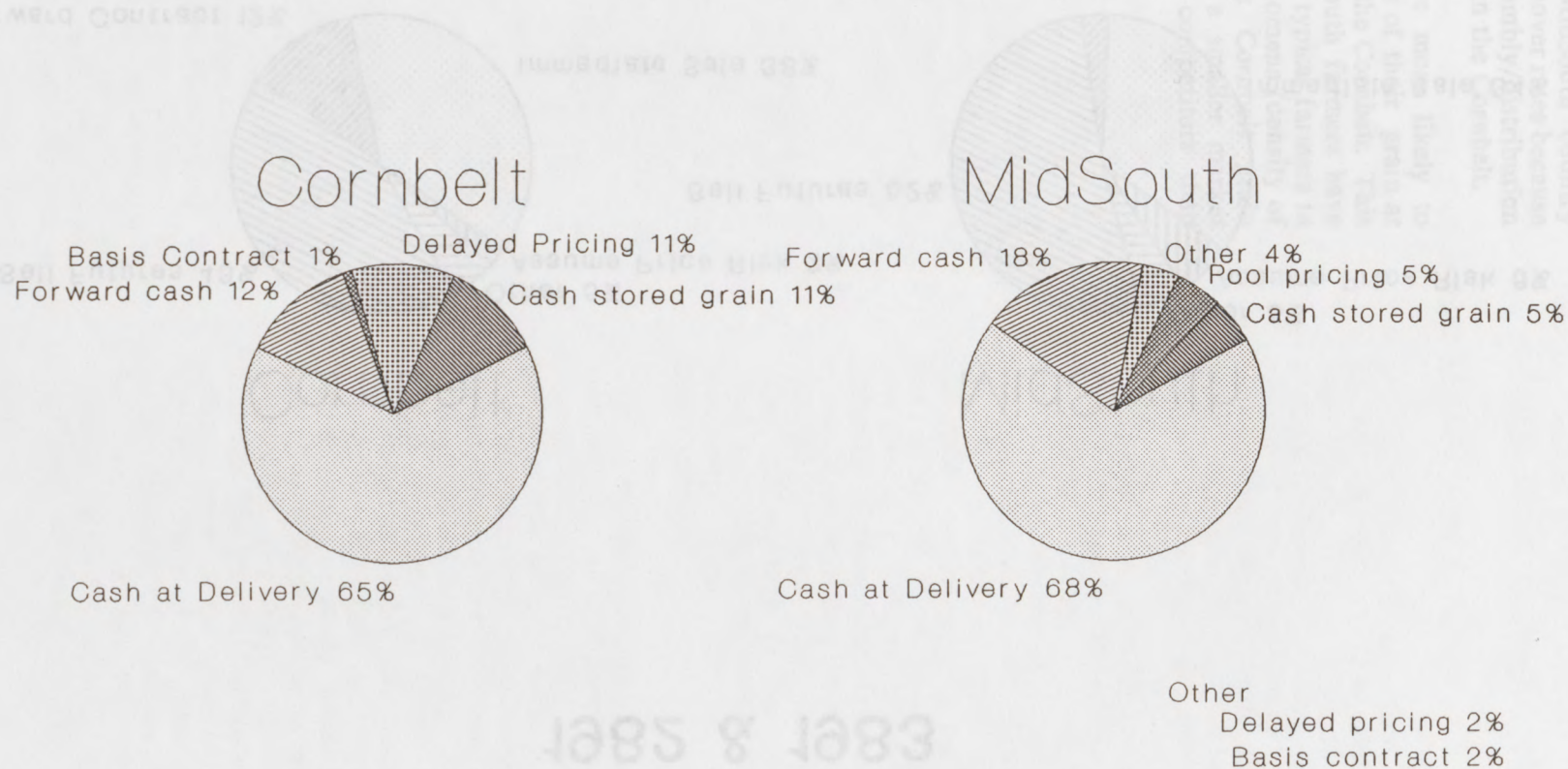
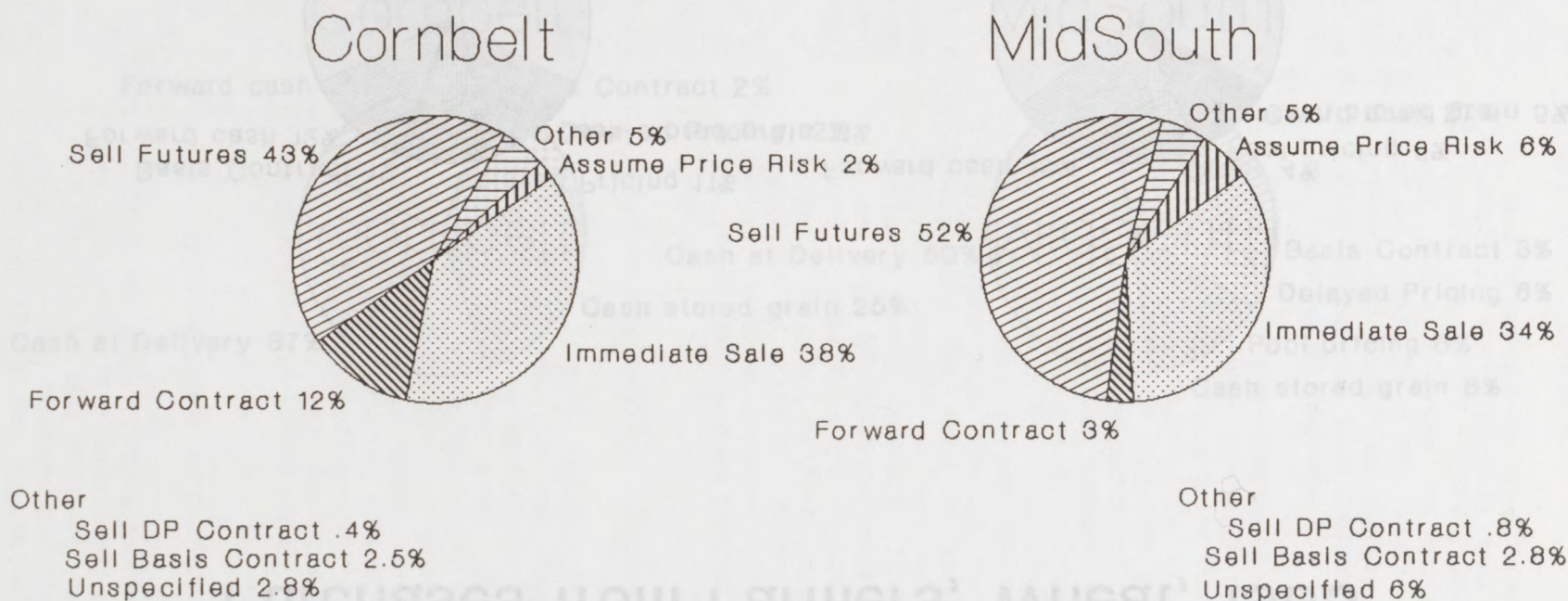


Figure 7 **Protection Against Price Changes for
Farm and Non-Farm Grain, Elevators Only,
1982 & 1983**



merchandized. The MidSouth country elevators have higher turnover rates because they serve a greater assembly/distribution role than most elevators in the Cornbelt.

MidSouth farmers are more likely to price a higher percentage of their grain at delivery than farmers in the Cornbelt. This is likely because MidSouth farmers have less grain to market than typical farmers in the Cornbelt. This phenomena (density of production) also causes Cornbelt grain handling firms to have a smaller market radius and face more competitors than MidSouth firms.