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# **1994 Marketings of the Nation's Very Large Producers of Hogs**

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### Summary

Our early 1995 survey of very large producers (those marketing more than 50,000 head in 1994) found that 66 producers marketed a total of 16,054,000 market hogs (MH) which was 16.8% of U.S. commercial slaughter in 1994. These new figures compare to 57 producers surveyed in 1994 that marketed 12,365,000 MH in 1993, or an increase of 3,689,000.

54 of these 66 producers engaged in contract production through growers and marketed 14,390,000 MH. Of these, growers finished 10,406,000 while the contractors finished the others in their own facilities. Growers also farrowed 6,343,000 pigs for these 54 contractors. Producers in the North Carolina and Virginia (NC & VA) region relied most on growers while those in the North Central Region (NCR) relied least, as was true in 1993.

Five of the 9 mega producers (each marketing >500,000 head) and 14 of the 57 super producers (each marketing 50,000 to 499,000 head) were vertically integrated into commercial feed sales and/or pork packing. These 19 vertically integrated (VI) producers marketed 6,128,000 MH or 38% of the group's total. VI producers made more use of growers than did non-VI producers.

The growth in marketings of hogs/pigs for all 66 producers from 1993 to 1994 was 31.4% compared to a 24.6% growth from 1992 to 1993 for the 57 producers in our 1994 survey. The marketing of hogs/pigs grew faster from 1993 to 1994 for VI producers (35%) than for non-VI producers (26%). Likewise, the projected growth to 1995 and 1997 in hogs/pigs of the VI producers was faster than for the non-VI.

Growth in MH marketings 1993-94 was fastest in the North Central Region at 49%, second in NC & VA and slowest in the rest of the nation. During 1993-94 MH marketings by the super producers grew faster (41%) than for the mega producers (25%), as was also true for growth 1992 to 1993. Both super and especially mega producers grew faster in the NCR than in any other region in this survey, whereas growth was fastest on the East Coast in 1992-93.

MH marketings by contractors grew much faster 1993-94 than those by non-contractors, as was also true for 1992 to 1993 in our previous survey. Contractors projected their growth to 1995 and 1997 to be several times as fast as the rates projected by non-contractors.

### Introduction

Last year in University of Missouri Agricultural Economics Report 1994-3, we reported on a survey

of 57 very large (VL) producers using the same size standards as used this year. In addition, we reported on eight "40 K" operations that exceeded 40,000 in marketings but were less than 50,000 head. That list of 65 was the initial base for this 1995 survey. In addition, we contacted various other operations that had appeared in the press or were named by industry sources as possibly large enough for this survey.

The industry is changing rapidly. Of our 57 very large operations last year, three are not in this year's list because one operation's marketings dropped below 50,000 head, two operations (Murphy and Quarter M) merged, and one operation purchased another one. Another three of these 54 changed names between the two surveys. Of the eight 40K operations, four moved into the very large category in 1994. In addition, this year's group includes eight firms new to our listing. Two of these operations started marketing in 1994, two marketed more than 50,000 head in 1993 but were not discovered in our previous survey, and four had grown into the 50,000 category for the first time in 1994. Answers to a two page questionnaire (available from the authors on request) were obtained by telephone, fax or mail. One producer refused to provide any information. It is possible that we have missed a few super producers, but our survey includes all the big names known in the trade. Since the picture is constantly changing, a survey next year would likely include additional producers that were not large enough in 1994.

### Marketings

In 1994, nine "mega producers" (each marketed more than 500,000 hogs/pigs) and 57 "super producers" (each marketed more than 50,000 but less than 500,000 hogs/pigs in 1994) marketed 16,054,000 market (slaughter) hogs. The market hogs sold in 1994 by these 66 VL producers supplied 16.8% of the national commercial slaughter of 95,617,000 head.

Thirty-two (6 of the megas and 26 of the supers) of these 66 operations produced hogs in two or more states. Fourteen operated in three states, 4 in four states and 1 in five states.

The 9 megas concentrated mainly on market hogs and marketed 2.6 million more head than the 57 supers, but they marketed fewer feeder pigs and seedstock than the supers (Table 1). The 7 megas in our previous survey were joined by 2 former super sized producers.

Of the 3,689,000 head increase in MH marketings of VL producers between the surveys for 1994 and for 1993, 2,658,000 was in the mega group and 1,031,000 in the super group. The biggest growth regionally was in the NC & VA area. However, the NCR had the largest percentage growth with an increase of 884,000 in its mega marketings plus an increase of 839,000 in its super group's MH marketings. The mega producers finished nearly 3 times as many MH as the super size producers in the NC & VA region, but less than one-half as many in the NCR (Table 2).

### Contract Production

It is often assumed that all big operations are engaged in contract production in which all, or part, of their pigs are farrowed by growers and/or are finished for slaughter by growers. We have found previously that usage of growers does increase with size of operation. In 1994, only one of the nine mega operations and 11 of the 57 super size operations did not engage in any contract production. Of the 16,054,000 MH, 14,390,000, or 89.6%, were marketed by contractors. However, many of these 14.4 million MH were produced entirely in the contractors' own facilities as only a few contractors rely entirely on growers for farrowing and finishing. Growers finished 10,406,000 of the MH, or about 10.9% of national slaughter in 1994. Growers participate less in farrowing than in finishing; 6,343,000 pigs were farrowed by growers for these very large producers. The number of pigs farrowed by contractors considerably exceeded their MH marketings for three reasons: death loss, the growth in marketings from year to year requires more pigs than MH in a given year, and 1,560,000 pigs were marketed as seedstock or feeder pigs.

The contractors reported farrowings of 17,990,000 pigs, so the 6,343,000 pigs farrowed by growers were accompanied by nearly twice as many--11,454,000 pigs--farrowed by contractors in their own facilities. Thus, the relative importance of contract production among very large producers may be measured on the high side by the 14,390,000 MH marketed by contractors, or more moderately by the 10,406,000 MH finished by growers, or at a minimal level by the 6,343,000 pigs farrowed by growers. Contract production is very important among very large producers but it is not the only game in town.

A slight majority (51%) of these 16 million survey MH in 1994 were finished in NC & VA while 30% were finished in the North Central Region (NCR) and 19% in the rest of the nation (RON); see table 3. The share for the NCR had

been only 24% in our last year's survey. Virtually all the MH finished by these VL producers in NC & VA were finished by contractors; their growers, in turn, finished 78% of the contractors MH. Contractors in the NCR relied proportionately least on growers for finishing (54%, Table 3) and for farrowing (26%, Table 4).

Mega contractors relied on growers to farrow 39.5% of their pigs while the smaller super contractors got 29.0% of their pigs through their growers. Mega contractors used growers to finish 75.1% of their hogs which was a bit more than the 67.9% figure for the super contractors. These finishing percentages by growers compare to 72% for mega contractors and 61% for supers in 1993.

### Vertical Integration

All very large producers are sometimes called "Integrators." We restrict that term to those hog producers that are also pork packers or sellers of commercial feed. We asked: is this operation controlled (wholly or partially) by a packer or commercial feed manufacturer or feed dealer? Five of the 9 megas and 14 of the 57 super producers were vertically integrated (VI) in 1994. While these 19 "Integrators" constituted 29% of the producers, they marketed 9,926,000 MH or 38% of the group's MH--including 41% of the megas' MH and 34% of the supers' MH (Table 5). These 19 operations included 6 pork packers, 8 commercial feed manufacturers, an additional 2 companies that have both commercial feed manufacturing and pork packing divisions, and 3 feed dealers. Thirteen of the integrators produced hogs in their own facilities; three produced only through growers; and 3 utilized joint ventures. Only one of the 19--a packer--had no contract production through growers.

The 38% share of MH marketings by integrators (Table 5) is up from the 32% estimated in our last survey for 1993 marketings. One reason is that one fast growing mega became an integrator in 1994; another reason is that we discovered that three super operations were owned by packers or feed dealers--information that had not been revealed to us in our previous survey.

More relevant is the small growth in market share of these 19 VI operations from 37.6% of this very large group's 1993 MH to 38.2% of 1994 MH. If we measure the change in VI market share in terms of all hogs/pigs rather than MH, the change is from 36.4% of 1993 HP to 38.0% of 1994 HP. In summary, the market share of VI operations has risen slightly but is still less than two-fifths of marketings among the very large producers.

The VI producers were somewhat more heavily involved in contracting than non-VI operations as they marketed 41% of the contractor MH and 38% of the grower finished MH and farrowed 50% of the grower farrowed pigs (see table 6 for the underlying numbers). Viewed another way, the VI producers were more frequent users of contract production--95% of all MH sold by contractors vs 86% for the non-VI. The VI producers were more consistent users of growers as 67% of their contractor hogs were finished by growers and 54% of their pigs were farrowed by growers compared to similar percentages of 76 and 37 for the non-VI producers (Table 6).

### Growth Rates

Producers were asked for data on marketings for both 1994 and 1993. MH marketings in 1994 for these 66 VL producers exceeded their marketings in 1993 by 31.4%, a rapid increase that exceeded the 1992 to 1993 growth (found in our previous survey) rate by 6.8 percentage points. Growth rates are doubly susceptible to reporting errors since they reflect the difference in two sets of reported data. For 57 operations we were able to compare two reports of 1993 marketings where the first was made in early 1994 and the second a year later. Ideally, the two reports would be identical, but that occurred in only 13 of the 57 comparisons. In 18 cases, the operations reported in 1995 higher 1993 MH marketings than they had reported a year earlier, while in 26 cases they reported lower 1993 marketings. In total, all 57 operations reported a 1993 marketings total in 1995 that was 598,000 head smaller than the 1993 total reported in 1994. This raises the possibility that the 31.4% rate of growth for 1993-94 was inflated because of producers understating their 1993 marketings in the current 1995 survey. One hypothesis is that there was a deliberate attempt by respondents to inflate their growth. But if there had been a similar attempt to inflate their growth in our 1994 survey, then the 1993 numbers might have been overstated at that time. Thus, there is no obvious reason to assume that the one set of numbers for 1993 is better than the other set. Moreover, there are possibilities for honest errors. The persons providing the data in these 57 operations in 1995 were not entirely the same set of people that provided them in 1994. Some organizations may have changed through the purchase or sale of facilities during 1994, so that there was a basis for changing 1993 marketings to reflect the new organization. There is admittedly the possibility that the 31.4% growth rate is overstated by 2 to 4 percentage points through errors in reporting. We

will use the data as they stand since we have no sound basis for modifying.

Our last survey found that growth of MH marketings from 1992 to 1993 was much faster among non-VI producers than the VI ones. But for 1993 to 1994 the growth in MH marketings was slightly faster among the VI producers (33.3% compared to 30.3%). Both groups had very rapid rates of growth (Table 7). In two of the three regions, the VI had faster growth from 1993 to 1994 in MH marketings (Table 7). The growth in marketings of all hogs/pigs was tilted a bit more in the VI favor for 1993 to 1994 at 35.5% versus 26.5% growth for the non-VI producers (Table 10).

The mega VI operations grew faster than their non-VI counterparts, but the opposite was true for the super operations. The MH growth rates were as follows:

	1993 to 1994			
All	VI	Non-VI	All	92-93
Mega	30.2%	22.0%	25.2%	20.6%
Super	39.1	42.3	41.2	29.8
Total	33.3	30.3	31.4	24.6

Note, first, that the growth rate for the supers exceeded that of the megas in both surveys and, second, that the overall growth rate was higher by 6.8 percentage points for 1993-94 than for 1992-93.

While the super operations marketed 41.8% of the 1994 MH marketed by this group of VL producers, this proportion ranged from 25.4% in NC & VA to 56.3% in the RON to 68.8% in the NCR. The 1993-94 MH growth rates were highest in the NCR. Is that explained by the fact the super producers grew fastest and the NCR has the greatest proportion of super producers? It is not clear how much the high NCR growth rate reflects a size influence and how much a regional one. The fact that the megas had a very high rate of growth in the NCR in 1993-94 suggests a strong regional effect for that particular period (Table 8).

Contractors' marketings of MH grew twice as fast--33% vs 19%--as non-contractors 1993-94 and nearly 3 times as fast--33% vs 12%--in their marketing of hogs/pigs. In our last survey, the contractors grew at a 28% rate for MH compared to 4% for the non-contractors, while the contractors' marketings of hogs/pigs grew at a 26% rate compared to a 14% rate for non-contractors. As we remarked in that survey, "a big appeal of contracting is that it requires less capital to be provided by the contractor and permits faster growth." In this survey, 89% of the contractors listed their savings in capital as a benefit of contracting. Contractors also projected a much more rapid growth (31%) in HP for 1994-95 than

did non-contractors (2%). Likewise, contractors projected their 1997 HP marketings to be 107% larger than 1994, while non-contractors projected only 15% larger.

An examination of growth rates by contractors by regions shows clearly that it was the contractor rate of growth in the NCR that was high (Table 9). In fact, what all of these data are reflecting is a major expansion of contractors and especially the megas in the NCR in 1993-94. It should be realized that this contractor expansion was affected materially by the well known rapid growth of Premium Standard Farms which is technically a contractor although it relies on growers for only a trivial part of its finishing.

The increased farrowings between 1993 and 1994 of these 66 very large producers were largely in their own facilities with about 3/4 million head in growers' facilities. We don't have total farrowings for 1993, so our estimates are crude. Based on the change in total hogs/pigs in those two years and the change 1993-94 in grower farrowings on which we do have data, we estimate that 75 to 80% of the increased farrowings were in producers' own facilities rather than farrowed through contract production.

In contrast, most of the increase in the finishing of contractors' MH was by growers. For the two groups of very large contractors, their marketings of MH rose 3,395,000 head while the numbers reported as grower finished rose 3,069,000, representing 90% of the increase. These numbers should be regarded as approximate, since producer supplied data on grower versus own facility hogs may contain some errors. However, it is very clear that this fast expansion of hog production by very large producers was based upon rapidly increasing finishing by growers and rapidly increased farrowing by producers in their own facilities. The greatly higher requirements of capital, labor and management for farrowing as compared to finishing are probably the main reasons for these divergent trends.

### Projected Growth

Producers were asked to project their total marketings of hogs/pigs to 1995 and 1997. The average growth of 28% projected for this year (1995) was a bit slower than the 29.8% rate for hogs/pigs achieved from 1993 to 1994. The growth rate projected for 1995 by both the super and mega VI producers exceeded the rate for the non-VI (Table 10). The growth rate projected to 1997 was much higher for both the VI supers and megas than for the non-VI producers (Table 10).

Growth in MH marketings in 1994 was fastest

in the NCR at a surprising 49%, second in NC & VA at 29% and slowest in the RON at 15%. (Note that region was assigned on the basis of where MH were finished.) Projected growth for 1995 again had the fastest rate for the NCR, but the rate for the RON exceeded the rate for NC & VA (Table 11). Projection by region was not asked of respondents, so projected growth for 1994-95 is assumed proportional for each operation to its current distribution of finishing among regions. Such an assumption will likely introduce some error, but it should not be excessive for projecting to 1995.

For 57 operations that were included in both our 1994 and 1995 surveys and also provided the requested data, we were able to compare their actual change in 1993-94 marketings of hogs/pigs with the change projected in early 1994. The actual change was larger than the projected change for 24 of the operations while it was smaller for 30 operations and in 3 cases zero change was both projected and later confirmed. The largest over achievement of goal was 261,000 head more, while the extreme under achievement was 240,000 head less than projected. On average, the operations undershot their projections by 17,900 head; expressed another way, the group's actual increase was 77% of its projected increase. The low hog prices ending the year, to the extent that they were correctly anticipated, may have contributed to this undershooting.

For 52 operations, we were able to compare their projected 1996 marketings made in early 1994 with their projected 1997 marketings made in early 1995. Normally, the 1997 projections would be expected to be larger, or surely as large as, than the 1996 projections of hogs/pigs. Only 30 operations made larger 1997 than 1996 projections, while 22 made lower projections. In the former group were four operations that each made a 1997 projection in early 1995 that was more than a million head larger than its 1996 projection made a year earlier. In the latter group, were six operations that each cut their projection for 1997 marketings by more than 200,000 head below their 1996 projections made in early 1994. In net, these 52 operations projected 1997 marketings of hogs/pigs at 4,788,000 head more than their 1996 operations. Quite clearly, the poor hog prices of the previous few months had not stopped expansion plans on average. However, the fact that 22 firms cut their 1997 projections below projections made a year earlier for 1996 indicates that something occurred during 1994 to moderate their goals. Even the super and mega operations are not immune from low prices and anticipated low prices.

**TABLE 1**

Marketings of VL Producers, 1994, by Size of Producers

Marketings in 000 Head								
Size	MH		Feeder Pigs		Seedstock		Hogs/Pigs	
	N	SUM	N	SUM	N	SUM	N	SUM
Mega	9	9,346	3	458	0	0	9	9,805
Super	57	6,708	24	741	23	361	57	7,810
Total	66	16,054	27	1,199	23	361	66	17,615

**TABLE 2**

MH Marketings of 66 VL Producers, 1994, by Region and Size of Producers

Marketings in 000 Head Regions				
Size	NC & VA	NCR	RON	USA
Mega	6,155	1,498	1,693	9,346
Super	2,090	3,305	1,312	6,708
Total	8,246	4,803	3,005	16,054

Note: Location reports where MH were finished

**TABLE 3**

1994 MH Marketings by VL Producers by Contractor Status and Region

Marketings in 000 head						
Region	Total MH	% of Group	Contr. MH	Contr. Tot. MH	% Grower Fin.	% of Contr. MH
NC & VA	8,246	51.4	8,241	99.9	6,424	78.0
NCR	4,803	29.9	3,947	82.2	2,139	54.2
RON	3,005	18.7	2,202	73.3	1,843	83.7
	16,054	100.0	14,390	89.6	10,406	72.3

**TABLE 4**

Pigs Farrowed by VL Producers by Contractor Status and Region Where Hogs Were Finished

Farrowings in 000 head					
Region	Total Pigs Far.	Contr. Far.	Contr. % of Total	Grower Far.	Grower % Contr. Far
NC & VA	9,483	9,470	96.8	3,550	37.5
NCR	6,308	5,421	85.9	1,417	26.1
RON	4,046	3,099	76.6	1,376	44.4
All	19,937	17,990	90.7	6,343	35.3

**TABLE 5**

MH Marketings of VL Producers, 1994, by Size and VI

Marketings in 000 Head			
Size	VI	Not VI	VI as % of Total
Mega	3,849	5,497	41.2%
Super	2,279	4,429	34.0
Total	6,128	9,926	38.2



**TABLE 6**

Marketings and Farrowings of VL Producers by VI and Contractor Status

Thousand Head							
Column	(1)	2)	3	(4)	(5)	(6)	(7)
VI?	Total MH	Cont. MH	(2)/(1)	Grower Fin. MH	(4)/(2)	Grower Far Pigs	(6)/(2)
Yes	6,128	5,838	95%	3,931	67%	3,153	54%
No	9,926	8,552	86%	6,475	76%	3,190	37%
Total	16,054	14,390		10,406		6,343	

**TABLE 7**

Growth 1993 to 1994 In MH Marketings of 66 VL Producers by Region and Vertical Integration

Thousand Head						
	VI Producers			Non-VI Producers		
Region	93 MH	94 MH	% Chg.	93 MH	94 MH	% Chg.
NC & VA	1,617	2,243	38.7	4,774	6,003	25.7
NCR	1,096	1,772	61.8	2,119	3,031	43.0
RON	1,883	2,113	12.2	727	892	22.8
Total	4,596	6,128	33.3	7,620	9,926	30.3

**TABLE 8**

Growth Rates of VL Producers, Actual 1993-94 MH, by Size and Region

Size		
Region	Mega	Super
NC & VA	24.6%	43.9%
NCR	52.8	47.9
RON	9.4	23.4
Nation	25.2	41.2

**TABLE 9**

Growth Rates in MH Marketings by VL Producers 1993-94 by Contractor Status and Region

Growth Rates in MH Marketings, 1993-94		
Region	Contractor	Non-Contractor
NC & VA	29.0%	*
NCR	60.2	13.9
RON	12.2	23.8
Nation	33.1	18.6

\* Too few numbers for a rate to be meaningful.

**TABLE 10**

Growth Rates, Actual and Projected, for V. L. Producers

Growth Rates of Hogs/Pigs Marketings				
Size	VI?	1993-94	1994-95	1994-97
Mega	No	19.9%	25.9%	65%
	Yes	33.1	34.2	112
	All	25.3	29.2	84
Super	No	34.1	20.5	82
	Yes	39.9	36.5	175
	All	35.8	25.9	114
Total	No	26.5	23.4	73
	Yes	35.5	35.2	137
	All	29.8*	27.8	97

\*Note that this growth rate for hogs/pigs was slightly smaller than the growth rate for MH of 31.4%. Note also that the projected rates are for 60 producers as 6 did not project marketings, while the actual rates are for 65 producers—one new producer did not market in 1993.

**TABLE 11****Growth Rates, 1993-94 MH and Projected 1994-95 and 1994-97 Hogs/Pigs by VI and Region**

Region	VI?	Growth	Projected Growth HP	
		1993-94	1994-95	1994-97
NC & VA	No	25.7%	27.2%	77%
	Yes	38.7	39.5	117
	All	29.0	30.1	89
NCR	No	43.0	19.6	81
	Yes	61.8	42.2	190
	All	49.4	27.8	121
RON	No	22.8	14.9	28
	Yes	12.2	25.7	101
	All	15.1	22.3	78
USA	All	31.4	27.8	97

Note: These projected rates are for 60 respondents while actual rates are for 65 producers.