



**AgEcon** SEARCH  
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search  
<http://ageconsearch.umn.edu>  
[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

# MINNESOTA farm business NOTES



NO. 452

ST. PAUL CAMPUS, UNIVERSITY OF MINNESOTA

MAY 1963

## Vertical Contract Integration: Some Legal Considerations

Dale C. Dahl

During the past 10 years farmers have increasingly bypassed traditional marketing channels to enter into direct contractual arrangements with off-farm firms. All these contracts placed various obligations upon both the farmer and the off-farm party with whom he contracted. But in some cases direct restrictions upon farm production were granted in the form of control rights given to the nonfarm contractor.

This has led to concern over a possible shift in control of farm production from farm to nonfarm business interests. In considering this possibility, let us explore the legal relationships established by this type of contract.

### Vertical Contract Integration

For most commodities farm production is coordinated with productive activities of related agribusiness firms by open market transactions. However, this marketing method is only one of several means by which this can be achieved. Another method that became more popular in recent years is contract farming.

Contract farming refers to the means whereby individual nonfarm businesses draw up formal production-marketing contracts with individual farmers—usually before production begins. Credit contracts with feed dealers and sales agreements with poultry processors are examples.

Vertical contract integration is **one** form of contract farming. The mere extension of credit by a feed dealer, for example, is contract farming but **not** vertical contract integration.

Vertical contract integration differs from other contract arrangements because it involves a shift or centralization of managerial control over the related production stages of the firms involved. By mutual agreement one or both

parties give up a certain degree of management control over some production processes. This change in the balance of managerial control may involve agreement to share management decisions, or it may involve a shift in such control from one firm to another.

Vertical contract integration involves a **direct** grant of control rights made by one or both parties concerning management of their respective production operations. This should not be confused with arrangements where **indirect** control is granted by virtue of product specifications in the contract.

Under sales agreements that specify the product with close precision, firms contracting to produce such a product must follow certain production methods. This is a restraint on management. It can be argued that one firm **indirectly** controls the other by virtue of its product specifications.

Historically, farmers have sometimes directly relinquished some control over farm production for assurances made by off-farm businesses. In most cases these assurances were in the form of credit, a price premium, or the assumption of certain farm production or marketing risks by the nonfarm business firm. The arrangement made was usually expressed by a written contract.

### Legal Relationships Involved

When a farmer contracts with an off-farm business the result is a document that attempts to create the "law" governing their interrelationship. The well constructed contract clearly defines the rights and duties of the parties in an effort to anticipate possible disputes. To the extent that the business relationship does not violate existing law, courts usually carry out the wishes of the parties as expressed in the contract.

But no contract, regardless of construction, can anticipate **all** possible disputes. Even for those points covered,

the contract may be vague and in need of interpretation. Under these conditions, cases involving breach of contract come into courts for settlement. The court does not merely review the written contract but attempts to determine the exact nature of the relationship involved by learning what was said and done by the parties.

When doing this the court usually attempts to classify the relationship as one of several legal types. Although every contractual arrangement is unique, the courts try to apply a general legal status to the parties for certain issues that may arise. More than one legal status may apply to the parties at the same time.

Vertical integration contracts can establish several legal relationships. While other legal relationships are also important in such contracts, the following three will be used to study the extent of control shifted from the farm to nonfarm business: (1) partnership or joint venture, (2) master-servant or agency, and (3) independent contractor.

Depending upon the legal status determined by the court, the off-farm contractor may or may not be held liable for such things as the farmer's debts incurred in relation to the contract. The off-farm firm may also be held accountable for the negligence of the farmer and his employees, depending on whether the negligence can be tied to the contract subject.

Such liabilities are assigned to the off-farm party only if his arrangement with the farmer is other than that of an independent contractor. In most cases it is to the distinct legal advantage of the off-farm contractor to establish an independent contractor relationship with the farmer. So many vertical integration contracts have phrases such as: "It is understood and agreed that the grower is an independent contractor in the performance of this agree-

ment and is not an employee of this company for any purpose whatever."

However, the determination of status by the courts is based upon the actual relationship itself and not on a mere statement of what one or both of the parties hoped the relationship would be.

Whether a court finds that a partnership or joint venture relationship exists depends upon several determinants. These include evidence of profit-and-risk sharing and joint ownership of the factors used in production. In many vertical integration contracts this combination of factors may be present in what the contracting parties had otherwise intended as an independent contractor relationship. The courts may see:

1. Evidence of profit sharing in the price and quality premiums offered to the farmer.
2. Evidence of risk sharing by the contract's reference to what risks must be borne by the farmer.
3. Joint ownership of production resources where seed, feed, or animals are furnished to the farmer.

The courts could also find an employment relationship existing—the principal-agent or master-servant relationship. An agent represents his principal contractually and can bind his principal by entering into contracts himself. A servant works under the direct order and control of his employer. The employer is responsible for the servant's negligent acts while in the course of employment.

Whether an employment relationship is established by a vertical integration contract depends upon the degree of control exercised by the off-farm firm. If the off-farm firm seeks to direct the day-to-day management decisions of the farmer, an employment relationship may be established.

The legal relationship in which a contractor's liabilities for the farmer's acts are minimized is that of an independent contractor. The independent contractor agrees to do a particular job for a stated price according to certain specifications. His activities and work routine are not under the hirer's control. His major element of control is the contractual requirements governing the specific characteristics of the end product. The off-farm contractor can exercise some granted managerial controls but only to a certain point before the relationship becomes that of master-servant.

There are definite economic reasons why some contractors do not wish to overtly establish the partnership or employment relationship. Uncertainties of agricultural production and demonstrated variation in agricultural prices discourage nonfarm partnership or joint venture ties with agriculture. The intended employment relationship frequently involves a large capital outlay—thus deterring nonfarm interests.

Most vertical integration contracts attempt to create an independent contractor relationship. The amount of control that then can be exercised by an off-farm party is limited by whether the contractor is willing to take the chance of having his contract construed as a different legal relationship than what he intended. This legal deterrent

serves as a positive check against extensive shift in management control from farm to nonfarm business interests.

### Conclusion

The amount of control of agricultural production by nonfarm business interests is limited not only by economic but by legal considerations as well.

This has important implications for the future development of vertical contract integration in American agriculture. While economic factors will largely determine whether vertical integration spreads to other commodity sectors, more intensified control of agricultural production by contract is unlikely for legal reasons.

## FARM MACHINERY — PURCHASE OR LEASE?

Rollin M. Dennistoun

To lease or to buy?—that is the question farm operators must ask as they attempt to:

- Reduce investments in and annual cost of machines such as balers, forage harvesters, and combines that have only limited use during the year.
- Supplement their present machinery during peak work periods.

The leasing of machinery is basically a means of obtaining temporary possession and use, for a specified fee, without using existing capital or raising new capital with which to purchase future services of the machine. The term "leasing" or "for lease," as used here, includes all times or periods of use—from 1 day up to and including 1 year.

Most commercial leasing companies have their own equipment lease agreement forms that can cover the leasing of farm machinery. However, the National Retail Farm Equipment Association, an organization of retail farm implement dealers, prepared a lease agreement form designed specifically for this purpose. Their suggested leasing rates are expressed as a percentage of the retail machine price. For example:

1 day (10 hours)	1 percent of retail price
1 week (6- to 10-hour days)	5 percent of retail price
1 month (4 weeks)	15 percent of retail price
2 months	25 percent of retail price

When deciding whether to purchase or lease a farm machine, farm operators must consider many factors:

1. The comparative cost of ownership versus the cost of leasing.
2. Alternative uses and possible returns that might be obtained from funds released by leasing.
3. Intangibles such as flexibility of operation, risk, timeliness of operation, available labor, pride of ownership, and various lease limitations.

### Comparative Costs

To make comparisons between the cost of leasing and that of ownership, the farm operator must consider the initial capital required for purchase and the annual cost of ownership. Annual cost includes depreciation, interest on investment, insurance, taxes, and housing.

Repair costs are omitted when making this comparison because under both approaches the user, owner under ownership and lessee under leasing, bears these costs. It is also assumed that the machine condition and operation are the same for both approaches, thus repair costs are the same.

Under these conditions the annual fixed cost of ownership averages about 15 percent of the new cost of the machine.

The comparative cost of owning versus leasing a hay baler may be calculated as follows:

**Given:**

A PTO baler—retail price.....	\$2,000
Acres to bale each crop.....	40
Crops per year .....	3
Harvest season—weeks .....	12
Annual fixed cost of ownership—percent .....	15
Salvage value—percent of retail price .....	10
Rental rates—see above	

**Assumptions:**

That with ideal weather conditions and no excessive time lost because of breakdown each crop can be baled in 4 days.

That average conditions will be more common than will ideal conditions in which case 6 days will be required to bale each crop.

That in either case it will be possible to lease a baler for the time required and when needed to bale each crop.

The annual fixed cost of ownership is assumed to be constant for the season or year and is determined as follows:  
 $[\$2,000 \text{ (retail price)} - \$200 \text{ (salvage value)}] \times .15 \text{ (annual fixed cost of ownership)} = \$270 \text{ (annual cost of ownership)}$

The annual cost of leasing the baler under ideal conditions and for the given situation is determined as follows:

$4 \text{ (days to bale each crop)} \times 3 \text{ (crops per year)} = 12 \text{ days}$   
 $\$2,000 \text{ (retail price)} \times .12 \text{ (total rental rate at 1 percent per day)} = \$240 \text{ (cost of leasing)}$

The annual cost of leasing the baler under average conditions is determined as follows:

$6 \text{ days or 1 week to bale each crop; } \$2,000 \text{ (retail price)} \times 15 \text{ percent (total rental rate at 5 percent per week)} = \$300 \text{ (cost of leasing)}$

The example shows that the annual cost of leasing may or may not be greater than the annual fixed cost of ownership. The factor governing this "break-even" point is the length of time the machine is needed. For any given acreage this time factor is determined by weather conditions and the rate of machine performance. The farm operator cannot control the weather, but he can partly control the rate of machine performance.

**Capital—Alternative Uses, Returns**

All farm operators want to maximize earnings. To accomplish this they must continually strive to allocate all avail-

able resources to their most profitable use. In the above example ownership requires \$2,000 from either actual cash or credit sources. But the farm operator can lease the baler for one season for an initial commitment of \$300. When several high cost seasonal use machines are involved, leasing makes a substantial amount of capital available for alternative uses.

Under ownership the initial investment probably provides machines for several years—10 years in the example used. The cost of leasing machines for the same number of years is the sum of the annual leases. Thus any time the annual lease cost exceeds the annual fixed cost of ownership, funds released by leasing must be invested or used in alternative ways. So these funds must earn a sufficient amount to break even at the end of the 10-year period.

Each lease and each machine are different. In order to break even over a period of years, the funds released by leasing must earn 21 to 22 percent if leasing is to cost no more than ownership. Where in a farm business can a farm operator find alternative uses for the released capital that will return 21 to 22 percent yearly?

One such alternative is to purchase more fertilizer and apply it to a high return crop, such as corn. University soil scientists estimated expected crop yields on different soils with improved levels of fertility practices and soil management. Estimates show that improving these practices would have increased the value of crops produced over a 5-year period by about \$95 per acre.<sup>1</sup> The net return was \$68.50 for 5 years or \$13.70 per year. This yearly net return amounts to 258 percent return on funds invested in fertilizer.

Timeliness or method often affects crop yield. A farm operator, because of limited capital, may not have the machines needed to do work at the most opportune time. When this is the case leasing could be a way to obtain machines and increase returns.

For example: fall plowing, in some regions, results in larger yields than does spring plowing. Fall plowed ground resulted in an 11.6 bushel per acre increase in the yield of corn according to 1-year results at the University.<sup>2</sup> On 100 acres of corn this increased yield, with corn at \$1 per bushel, would bring an additional re-

turn of \$1,160. This is equal to a 21- to 22-percent return on about \$5,400. This amount would probably enable a farm operator to obtain the machines to do the work in the fall rather than in the spring.

**Intangibles**

Leasing of farm machines permits or adds more **flexibility** to a farm operation by enabling an operator to adjust more quickly to changing conditions—to try new methods or machines without purchasing expensive units.

**Risk** is an important factor in farming. And leasing shifts risk. The farm operator, the user, substitutes a known rental fee for an uncertain and possible costly loss from obsolescence, machine failure, technological change, etc.

Most farm businesses are short of working capital. Leasing **frees working capital** or, in one sense, becomes a new source of credit.

**Timeliness** is important in many farm operations. Will a machine be available when needed? Delays at critical times could mean greater losses than any savings that might accrue by leasing.

One principal reason for buying or leasing machinery is to reduce work. Is there sufficient **labor available** to properly operate the machine? If not, the hiring of additional labor becomes an added cost to both approaches.

Lease agreements may contain **limiting or unusual terms**. Some agreements make no provision for reducing or suspending the rental fee for time lost because of adverse weather conditions or a prolonged breakdown.

There is a certain **pride in ownership** that many do not feel when machines are leased. This can be important in the care and operation of machines.

The farm operator must weigh and evaluate many factors when deciding whether to purchase or lease a farm machine. A farm operator must consider each situation individually and arrive at a final decision based upon the information available.

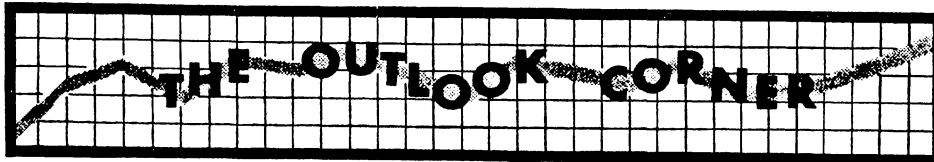
**MINNESOTA****farm business****NOTES**

Prepared by the Department of Agricultural Economics and the Agricultural Extension Service.

Published by the University of Minnesota, Agricultural Extension Service, Institute of Agriculture, St. Paul 1, Minnesota.

<sup>1</sup> W. B. Sundquist and A. C. Caldwell, "Profits from Fertilizer Use," *Farm Business Notes*, No. 415, March 1960.

<sup>2</sup> Crop Summaries 1957, Unpublished Data, Agricultural Experiment Station, Crops and Soils Conference, February 1958.



## Trends in Minnesota Farm Ownership

A. R. Wells and S. A. Engene

What changes occurred in farm ownership in Minnesota over the past 4 decades? And what future changes can be expected? In 1920 every fourth farm was operated by a tenant (rented all land) (see table). By 1935 this increased to one farm in every three. During this same period the number of farms operated by full owners dropped from two in three to one in two.

Three main reasons accounted for these changes:

1. Agricultural prices and incomes were low in the 1920's and early 1930's; many farmers could not accumulate the capital needed to buy a farm.

2. Some farmers could not meet their debt payments. So mortgage holders had to foreclose. Other farmers voluntarily turned back their farms before foreclosure proceedings could be started. Mortgage holders found it difficult to resell their newly acquired farms because of the poor financial condition of farmers. The only alternative was to rent the farms.

3. Limited nonfarm job opportunities during the depression of the early 1930's slowed off-farm migration. This held more people in rural areas as potential tenants.

From 1935 to 1959 the percent of tenants operating farms was nearly cut in half. During this same time the percent of part owners (owned part, rented part of land) increased by one-half. Part ownership was at a level where one-fourth of all farms were part-owner farms. Along with the increase in full owners, by 1959 four out of five farmers owned at least part of their land.

Two main factors were responsible for these changes:

1. Agricultural prices increased steadily during the 1940's. And farm incomes increased at a faster rate than farm expenditures. So farmers accumulated the money needed to buy completely or make a downpayment on a farm. Since

1950 there has been a steady downward pressure on agricultural prices, with the percent of full owners holding relatively constant.

2. Increased mechanization made it desirable for farmers to spread fixed machine costs over more acres. Labor-saving machinery allowed the farmer to handle more acres. Since land values were high and investments in machinery tied up capital, many owners rented the additional land.

Some tenants who wanted to expand had to buy in order to secure additional land. This made part owners out of many full owners or tenants. It helped account for the large percentage increase in part owners during this period.

In 18 southwestern counties more than 30 percent of the farmers rent all of their land. Tenancy falls to 5 percent or less in 22 northeastern counties.

The average income per farm was \$6,000 or less in 31 Minnesota counties in 1959; 8 percent or less of the farms were operated by tenants in all but two of these counties. In 11 counties, where the average income was \$11,000 or more, 32 percent or more of the farmers were tenants.

High incomes permit the tenant to pay his operating and living expenses and still pay a sizable rent. Retired people retain ownership of such farms as a

source of income, or investors buy them. But low incomes leave little margin above operating and living expenses; the rent is too low to encourage retired persons or investors to retain ownership.

Will the proportion of tenants in Minnesota continue to decline? The percent of farm tenancy may have approached its lower limit. Assume that the average farm owner operates his farm for 40 years before retiring. If this farm is a good investment he will want to rent it and live off the income. If he lives for another 10 years, one farm in every five will be operated by a tenant. This is one argument for believing that percent of tenancy may not go much lower.

If the downward pressure on agricultural prices continues, percent of farm ownership could decline—somewhat as it did in the 1920's and early 1930's. This pressure is now coupled with high investments in the farm and machinery, making it difficult to buy.

However, increased use of land purchase contracts and improved sources of production credit help young men with good reputations to buy with lower reserves than in the past.

Percent of farm operators by degree of ownership

Years	Full owners	Part owners	All tenants
	percent		
1920.....	64	11	25
1925.....	60	13	27
1930.....	53	16	31
1935.....	50	16	34
1940.....	53	15	32
1945.....	55	18	27
1950.....	59	20	21
1954.....	59	22	19
1959.....	58	24	18

Source: Census of Agriculture.

Agricultural Extension Service  
Institute of Agriculture  
University of Minnesota  
St. Paul 1, Minnesota

SKULI RUTFORD, Director  
Cooperative Agricultural Extension Work  
Acts of May 8 and June 30, 1914

OFFICIAL BUSINESS  
4-63 2,580

PENALTY FOR PRIVATE  
USE TO AVOID PAY-  
MENT OF POSTAGE, \$300