South Dakota's Cropland Share Leasing Market

John Cole
South Dakota State University

Larry Janssen
South Dakota State University, larry.janssen@sdstate.edu

Follow this and additional works at: http://openprairie.sdstate.edu/econ_comm

Part of the Agricultural and Resource Economics Commons, and the Regional Economics Commons

Recommended Citation
http://openprairie.sdstate.edu/econ_comm/434

This Newsletter is brought to you for free and open access by the Department of Economics at Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. It has been accepted for inclusion in Economics Commentator by an authorized administrator of Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. For more information, please contact michael.biondo@sdstate.edu.
Introduction

Farmland leasing is a very important method of resource control in production agriculture and of transferring use rights to agricultural land. In the U.S., farmland leasing has been widely practiced since colonial days, increasing in importance in the 20th century. In 1999, nearly 2.2 million agricultural leases were reported and 44% of the nation’s agricultural land was leased. Producers in South Dakota’s rental market lease almost 40 percent of their agricultural land base. Similarly, in states adjacent to South Dakota, the proportion of land in farms rented varies from 31 to 55 percent. (Agricultural Economics and Land Ownership Survey, (AELOS), U.S. Dept. of Agriculture, 2001).

Leasing provides farm operators the right to operate farmland without obtaining ownership or title. Farmers often use farmland leasing as a primary means of expanding their operation. Common types of leases are cash leases, share leases, or combined cash/share leases. Cash leasing is dominant for pasture, while cash and share leases are common for cropland. Because farmland leasing is widespread, it is important to understand its impact on the organization, distribution, and efficient use of resources and distribution of returns in production agriculture. Yet comparatively little data, especially about share leasing, are available to show the characteristics of farmland rental markets in most states.

The information in this Economics Commentator is based partially on the statewide 1996 SDSU Cropland Arrangement Survey. It was a mail survey of farm operators who provided specific information about their lease(s). Select findings are reported here. A much more detailed discussion is available in a recently released SDSU Experiment Station Bulletin 739, titled “South Dakota Farmland Leasing 2003”. It can be obtained by contacting the authors or it is available as a free download at the following website: http://agbiopubs.sdstate.edu/articles/B739.pdf. In both instances, the reports reflect average statewide or sub-state regional conditions; so specific arrangements appropriate for a particular county or local market may differ. Likewise, the circumstances of a particular lease may require crop share arrangements that vary from what is deemed typical in that area. Nevertheless, the patterns presented here and in B739 provide important benchmark information from which market participants can begin to build equitable share arrangements.

South Dakota Cropland Share Leases

Although an individual share lease is often unique, reflecting the specific negotiation process between the landowner and the tenant, general patterns of input and output shares within a rental market tend to develop across regions over time. They evolve from the market negotiation process and reflect what is fair and acceptable to both parties. These patterns tend to be based on the types of crops grown as well as the soils, climate, and crop productivity of the area. In addition, since South Dakota is a transitional state from east to west and north to south, the patterns vary substantially by sub-state area.

The 2/3 - 1/3 crop share lease was the dominant lease reported in most counties of South Dakota (Figure 1). This output share was reported in more than 80% of crop share leases in the northeast region and in all regions of central and western South Dakota. It was also reported as the output share of 51% of crop share leases in the southeast region and 44% of crop share leases in the east-central region.
The 3/5 - 2/5 crop-share lease was also very important in southeast and east-central regions and was reported for some leases in northeast and western regions. The 1/2 - 1/2 output share was reported in 8.2% of crop share leases, primarily those located in eastern and central regions of South Dakota.

**Figure 1. Most common shares of non-irrigated cropshare leases, South Dakota, 1996.**

The proportion of 1/2 - 1/2 share leases was similar by cropping pattern, with wheat / grain leases reported in the north central and central region, while corn / soybean leases were reported in eastern South Dakota. The 3/5 - 2/5 crop share lease was prominent on tracts where only corn and soybeans were grown.

The 2/3 - 1/3 crop share lease was the overwhelming favorite on leased tracts where wheat or other small grains were raised, with or without corn or soybeans in the rotation. Renters received 3/4 of the crop output in only two percent of crop share leases. These leases were located on small grain and wheat tracts in the central and north central regions.

In almost all cases, all non-irrigated crops raised on the same leased tract were shared in the same proportion. However, in some leases hay output shares were different (usually higher) than other crop output shares.

**Sharing of crop input expenses**

Most crop share lease respondents (80%) reported the tenant and landlord shared expenses for one or more variable inputs, with number and type of input expenses shared varying by region, output share, and cropping pattern. If an input expense was shared it was almost always (98% of reports) shared in the same proportion as output is shared.

Fertilizer expenses were the most commonly shared input expense, followed by herbicide, crop drying, and insecticide expenses (Table 1). Fertilizer expenses were shared by at least 93% of respondents reporting a 3/5 - 2/5 or 1/2 - 1/2 crop share lease and 75% of respondents reporting a 2/3 - 1/3 share lease in South Dakota. Most respondents raising corn and soybeans shared fertilizer expenses with their landlord.

Herbicide expenses were shared in 58.5% of crop share leases, while insecticide expenses were shared in 41.4% of crop share leases. The major difference was due to nearly all respondents reporting herbicide use, but only two-thirds of respondents reported insecticide used on their leased land. Herbicide expenses were shared in most 1/2 - 1/2 and 3/5 - 2/5 crop share leases and in 52% of 2/3 - 1/3 leases. Herbicide expenses were shared in nearly two-thirds of crop share leases in eastern South Dakota and in crop leases where corn and soybean production was reported.

Insecticide expenses were shared in two-thirds of 1/2 - 1/2 crop share leases, three-fifths of 3/5 - 2/5 crop share leases, and about one-third of 2/3 - 1/3 crop share leases. Sharing of insecticide expenses was more likely to be reported by farmer respondents in the east central, northeast and north central regions and by farmers including corn or soybeans in their cropping pattern.

Chemical application expenses were shared in 22% of crop share leases with relatively few differences by region, output share, or cropping pattern. If chemicals (fertilizer, herbicides, or insecticides) were a shared expense and chemical application was hired, the application costs were probably a shared expense.

Crop drying expenses were shared in 46% of crop share leases and were likely to be shared in most regions of eastern and central South Dakota where corn is raised on the leased tract.

Seed costs were shared in two-thirds of 1/2 - 1/2 crop share leases, but were infrequently shared in other leases. Harvesting expenses were shared in nearly one-third of 1/2 - 1/2 crop share leases and almost never shared in any other lease agreement. Hauling expenses were seldom shared.
Table 1. Proportion of respondents reporting shared inputs on crop share leases by region, output share, and cropping pattern; South Dakota, 1996.

<table>
<thead>
<tr>
<th>Region</th>
<th>Seed</th>
<th>Fertilizer</th>
<th>Herbicides</th>
<th>Insecticides</th>
<th>Chem. Appl.</th>
<th>Harvest</th>
<th>Hauling</th>
<th>Drying</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Dakota</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- percent of share leases reporting landlord-tenant share of input -</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Region</td>
<td>13.0</td>
<td>78.1</td>
<td>58.5</td>
<td>41.4</td>
<td>21.9</td>
<td>3.6</td>
<td>2.8</td>
<td>46.0</td>
</tr>
<tr>
<td>Southeast</td>
<td>13.0</td>
<td>89.0</td>
<td>55.0</td>
<td>32.0</td>
<td>31.0</td>
<td>0.0</td>
<td>0.0</td>
<td>30.0</td>
</tr>
<tr>
<td>East Central</td>
<td>22.0</td>
<td>89.0</td>
<td>68.0</td>
<td>51.0</td>
<td>16.0</td>
<td>0.0</td>
<td>2.0</td>
<td>52.0</td>
</tr>
<tr>
<td>Northeast</td>
<td>11.0</td>
<td>87.0</td>
<td>72.0</td>
<td>51.0</td>
<td>17.0</td>
<td>11.0</td>
<td>2.0</td>
<td>60.0</td>
</tr>
<tr>
<td>North Central</td>
<td>17.0</td>
<td>65.0</td>
<td>48.0</td>
<td>43.0</td>
<td>26.0</td>
<td>12.0</td>
<td>12.0</td>
<td>56.0</td>
</tr>
<tr>
<td>Central</td>
<td>0.0</td>
<td>41.0</td>
<td>44.0</td>
<td>28.0</td>
<td>14.0</td>
<td>0.0</td>
<td>7.0</td>
<td>48.0</td>
</tr>
<tr>
<td>South Central</td>
<td>0.0</td>
<td>77.0</td>
<td>50.0</td>
<td>35.0</td>
<td>28.0</td>
<td>0.0</td>
<td>0.0</td>
<td>40.0</td>
</tr>
<tr>
<td>Western</td>
<td>0.0</td>
<td>21.0</td>
<td>25.0</td>
<td>20.0</td>
<td>25.0</td>
<td>0.0</td>
<td>0.0</td>
<td>11.0</td>
</tr>
</tbody>
</table>

Output Share: Tenant-Landlord

<table>
<thead>
<tr>
<th>Share</th>
<th>Seed</th>
<th>Fertilizer</th>
<th>Herbicides</th>
<th>Insecticides</th>
<th>Chem. Appl.</th>
<th>Harvest</th>
<th>Hauling</th>
<th>Drying</th>
</tr>
</thead>
<tbody>
<tr>
<td>50-50</td>
<td>66.0</td>
<td>93.0</td>
<td>85.0</td>
<td>67.0</td>
<td>22.0</td>
<td>34.0</td>
<td>11.0</td>
<td>67.0</td>
</tr>
<tr>
<td>60-40</td>
<td>14.0</td>
<td>95.0</td>
<td>78.0</td>
<td>59.0</td>
<td>27.0</td>
<td>0.0</td>
<td>0.0</td>
<td>50.0</td>
</tr>
<tr>
<td>67-33</td>
<td>7.0</td>
<td>75.0</td>
<td>52.0</td>
<td>35.0</td>
<td>20.0</td>
<td>1.0</td>
<td>2.0</td>
<td>44.0</td>
</tr>
</tbody>
</table>

Seed, fertilizer, herbicide, chemical application, and harvesting were reported as crop expenses in almost all share leases. However, insecticide expense is reported in only 74% of share leases and crop drying expense is reported in 67% of share leases.

Crop input expenses were more frequently shared on leased tracts where corn and/or soybeans were grown and the tenant's share was 1/2 or 3/5 of the crop output. By contrast, crop share leases for wheat and small grains (usually 2/3 - 1/3 tenant-landlord share) had a lower incidence of shared costs. For these leases, fertilizer expense was more frequently shared than were other input expenses.

Stability, change and flexibility in crop share leases

Crop share leases have built-in changes in net returns to landlords and tenants as yields, prices, and input costs change over time. This is a major reason that relatively few share lease respondents (4%) reported a change in the output share or a change in the number and type of specific inputs that were cost-shared by the renter and landlord. Further, the average crop share lease in South Dakota was oral (81%) and has been in effect an average of 13.7 years. Tenants also reported relatively frequent contacts between renter and landlord contributing to flexibility in their crop share leases. The most substantial change reported was a change in landownership in 10% of the crop share leases in the preceding five years.

Conclusions and Implications

Leasing agricultural land is an important source of capital in production agriculture and is an important tool used by farmers to operate, manage, and control farmland to enhance, maintain or expand income-generating capacity.

Share leases and cash leases are the two principal types of cropland leases. However, the cash lease and share lease each have specific advantages that the other one lacks, so neither type
of lease is likely to replace the other for leasing cropland in most of South Dakota.

Regional differences in crop output shares and in the array of inputs shared reflect geographic differences in cropping patterns, yield risk, cultural practices, and the general preference of both landowners and tenants. Only significant alterations of farming practices and crops grown will lead to changes in output shares, in sharing of specific costs, or other modifications in a share lease agreement.

Overall, farmland leasing remains an effective means of production control for farm operators and ownership control for landlords. General satisfaction with share lease provisions and relatively low incidence of changes in lease provisions suggest slow and deliberate adaptation by rental market participants and institutions to changes in economic or agricultural conditions.

References


ECONOMICS COMMENTATOR

Economics Department
South Dakota State University Phone: 605-688-4141
Box 504 Scobey Hall Fax: 605-688-6386
Brookings, SD 57007-0895 E-Mail: Penny_Stover@sdstate.edu
325 copies of this newsletter were produced at a cost of less than $100