## Supersized Family Farms Transform U.S. Agriculture

Big growers, with scale and clout, squeeze struggling smaller outfits

## By Jacob Bunge

COLBY, Kan-Lon Frahm may represent the future of farming. Inside a two-story of fice building overshadowed by 80 -foot steel grain bins, he points to a map showing the patchwork of square and circular fields that make up his operation. It covers nearly $10 \%$ of the county's cropland, and when he climbs into his Cessna Skylane to check crops from the air, he can fly 30 miles before reaching the end of his land. At 30,600 acres, his farm is among the country's vastest, and it yields enough corn and wheat each year to fill 4,500 semitrailer trucks.
Big operations like Mr. Frahm's, which he has spent decades building, are prospering despite the deepest farm slump since the 1980 s. Years of low prices for corn, wheat and other commodities brought on by a glut of
grain world-wide are driving smaller American farmers out of business.

Farms with $\$ 1$ million or more in annual sales-only $4 \%$ of the total-now produce two-thirds of the country's agricultural output, the largest portion since-the U.S. Agriculture Department's census began tracking the statistic in the '80s.

The shift means food production is being increasingly handled by larger farms, which can be more financially secure. It also fuels a cycle in which size begets size, further transforming the rural economy. Smaller-scale farmers struggle to expand their operations to become profitable. Work becomes more scarce. Farm-supply retailers and grain companies are pressured, since larger farms use their size to wrangle better deals.

Owners say the big operations-which are Please see FARM page A10

Mr. Frahm, 59 years old, said decisions on his farm are driven by the constant analysis of efficiency and scale-cents per pound or units per acre. big always interested in, how big is too big, how far can this thing go?" he said, clad in bluejeans and a Pioneer seeds ball cap. In more than three decades of running his farm, through droughts and com-modity-market swings, he said he had only one losing year.

## Three decades

Mr. Frahm estimated that farms of his size can produce $\$ 10$ million to $\$ 15$ million worth of grain in a good year. With that amount of production, well-managed farms can reap $\$ 1$ mimon $\$ 3$ mimion in pront, even in times of low crop prices, he said.
A typical smaller farm selling just $\$ 500,000$ worth of grain annually has over the past three years generated a $5 \%$ profit margin, or about $\$ 25,000$, said Mark Wood, a Colby-based agricultural economist for the Kansas Farm Management Association.

Mr. Frahm said his farm provides steady, well-paying jobs and helps fund Collby's hospital and community college. But he has stepped in at the last moment to place the winning bid at land auctions, and he knows that rankles other farmers. Some landown ers see him as more of a corpo rate manager than a growe and have avoided renting their fields to him, looking instead for smaller farmers, he said. run into that resentment-'haven't you got enough by now?'" he said.
Mr. Frahm's family settied and began farming near Collby, which now has a population of 5,419 , in the 1880 s . In 1986, after a heart attack killed his fat ther, Mr. Frahm took over the family's 5,600 acres. The farm was large but not unheard-of in Kansas at that time.
He said he looked for opportunities to expand, persuading relatives to lease him fields and plowing profits from good years into buying land. In 2013 he negotiated his biggest-ever expansion, adding 7,000 acre when an uncle retired, boosting his total land by nearly one-

## Green Acres

More U.S. farms are becoming giant operations. Number of farms, by agricultural sales:

## 聯 $\$ 100,000$ to $\$ 499,999$

 . $\$ 500,000$ or mor

1982'87'92'97 2002'07' 12 THE WALL STREET JOURNAL.
third. This spring, Mr. Frahm rented another 480 acres, and he said he is negotiating this fall to buy more

Rural demographics are moving in Mr. Frahm's favor. The average age of a U.S. farmer is 58 . Younger people are moving away, and over time more fields wind up ies hundreds of miles a ies hundreds of miles away.

In Kansas' Thomas County, where agricultural economists estimate that more than half the land is absentee-owned, Mive tive tenant. Some landords have approached him to rent their fields, knowing he has a good reputation for making payments and maintaining land.

That makes it tough for farmers like Michael Juenemann. He grew up on a family farm near Colby, but his parents 160 acres dont produce enough crops to support the two of them, let alone Mr. Juenemann and his own family. For the past five years Mr. juenemann, 29 , has been rent ing small parcels of land to farm himself, borrowing machinery and rolling out of bed to bale his own hay in the dark. To make ends meet he works for other farmers, and said the hours mean he missed much of his son's first years. Still, he said, "for as long as I can remember, it's been what I wanted to do."
Mr. Juenemann needs more land if he is to farm full time for himself. But buying enough acres requires a down payment he can't afford. This spring, a few fields became available for rent just up the road from his in-laws' farm-but Mr, Juenemann only found out afterM Frahm began farning them.

That's aggravating - oppor tunities like that where I could get some more land, but landowners] will go directly to the big guys," said Mr Juenemann, adding he doesn't blame Mr. Frahm.

Many large farmers pay cash on leases, versus the crop-shar ing deals that smaller farmers have often used and which add risk for the landowner Some large farmers provide more data on how the property is cared for Mr. Frahm offers a mobile app that shows his landowners how much moiswe their fiefds are geting.
Three-quarters of America's farmed cropland is controlled by $12 \%$ of farms, USDA data show. The number of million-dollar-plus revenue farms more than doubled between 1992 and 2015, while the ranks of smaller farms, with revenue between $\$ 350,000$ and $\$ 999,999$, fell by $5 \%$, as farmers get older and have a hard time making profits. USDA researchers, in a December report, said consolidation is likely to con tinue.
An average farm household in the Colby area needs income of at least $\$ 50,000$ annually to get by, said Mr. Wood, the agricultural economist, which has become harder to generate from a smaller farm. "The big guys can cover their costs and have money left over to grow, Mr. Wood said. Smaller farms he said, "are going to struggle. Bill Miller, 65, who farms about 10,000 acres around Colby, has absorbed othe farms from neighbors who re tired or moved on. He said the younger generation will have hard time growing big enough to compete with large, en trenched farms. "If you don"t


Jacob Rickli heads back to work after a dinner break during the com harvest on one of Lon Frahm's fields in Colby, Kan., this month.

## Shift to Greater Size

The largest U.S. farms are growing in number and size, and commanding more of the country's food production, while smaller farms shrink.

Number of farms by size of farm
500 to 999 acres 1 1,000 to 1,999 acres $\quad 2,000$ acres or more
250 thousand
 Harvested cropland
have family in it, you're probably not going to get into it, because of the expense" of ac quiring land, he said.
The local school district has lost more than one-fourth of its students over the past 20 years, he said. "The pyoung people are moving away, be cause the farmers need less help"Mr. Miller said The big machinery, and technology used or lage farms-such as remote sensors for irrigation systens-mean fewer workers are needed.
At Colby's Farm Credit of Western Kansas, chief credit officer Mark Winger said the bank over the past decade has reduced the number of loan of ficers that deal with farmers As large farms absorb smaller ones, he said, that leaves fewer farmers to finance, and mor concentration of risk.

## Supplier pressure

Some area farm-supply re-
tailers, which sell seed and tailers, which sell seed and chemicals, have trimmed head count. Local grain companies, such as Winona Feed and Grain and Rexford Grain, which buy grain from farmers and sell it on to exporters, livestock oper ations and ethanol plants, have been absorbed by larger re gional players, including Fron tier Ag Inc. Large farmers often seek to buy chemicals and ma terials from suppliers with direct links to manufacturers and increasingly handle grain storage and sales themselves. Farmer-owned cooperative which handle grain and supby size of farm
$50 \%$


1974788287929702071

Percentage of acres harvested, Midpoint farm size* 1,200.acres
900


Percentage of market of agricultural products sold by farms with revenue of $\$ 1$ million or more $\$ 1$ m

$\begin{array}{lllllllllll}1982 & 87 & 92 & 97 & 02 & 07 & 12 & 1987 & 92 & 97 & \prime 02\end{array}{ }^{\prime} 07 \quad 12$
plies and share profits among sell based on grain prices.
Cooperatives are becoming "just a place to drink coffee," Mr. Frahm said. "They can't change quickly enough to keep up with competition that can turn on a dime."
Mr. Frahm, who holds three degrees in business and agri cultural economics, said his operation thrives byipushing efficiency at every turn.
His nine-person team totes ablet computers that control sprinkler systems miles away switching them off when sensors report adequate moisture. When his tractors are rolling, automated systems monitor the number and type of seeds being sown in each row, to maximize planting on fertile ground.
'T'm always
interested in, how big is too big, how far can this thing go?'

The equipment beams the data to remote servers, where Mr. Frahm and his team ana yze it to determine how ma chinery can be run more effi ciently, or where they can spray fewer chemicals. This year Mr. Frahm has been testing automated insect traps that deliver updates on the number and type of bugs killed to help time pesticide spraying.
Mr. Frahm acknowledges big to adjust. near Colby and no grew up eight regional faw manage farm cooperative company CHS Inc., has watched area farms consolidate. the decades ago, around the time Mr. Kahle started wromg at tor 120 far wasn tirn up at 20 farmers hosted by alaning semina searchers These searchers. These days, he lo ures 20 farmers might show up, even though they still rep resent the same number of acres. As a resul, he said his fifth of its stashed about one 10 years.
"The larger [the big farms] get, the more difficult they are to do business with on a retail
the community. But he sees his operation as an economic en gine for Colby. His employees hold year-round, salaried posi tions with health care and four weeks of vacation. His longest tenured employee started working for Mr. Frahm's father on the farm 43 years ago. He brings them on cruises as bonuses and outfits them with matching white Ford pick ups for work. He said he gives each one $\$ 1,000$ each year to donate to charity. "These jobs offer a higher quality of life than if you were out trying to farm] on your own," he said. The farmer's Colby office is outfitted with flat-screen TVs and a grand piano where he ometimes plinks out jazz stan dards. Before Mr. Frahm bought the building, it housed the bank that lent him money. He owns a sprawling house on the town's edge, and vacation houses in Denver and Arizona and a cabin on a nearby lake. Wheeling his own white Ford truck around Colby, where rows of corn march up to the edge of the town's main ther oughfare, Mr. Frahm notes the farm's sponsorship of the annual county fair, and support for the historical society and public radio station.
Mr. Frahm said he has no heirs, and after he dies he plans to have a foundation own his property, with the goal of maintaining jobs and funding his community charities.
"There's a reason behind continuing to accumulate," Mr. Frahm said, "My main concern is that everything carries on."

