**Massive capital outlay leaves farmers drowning in debt**

**By: Jonathan Mitchell,**

The borrowed combine slowly worked its way across the field. Bradley Ross Knipp’s soybeans were felled by the metallic blades row after row as the sun shone down on the giant green machine.

Farming runs in Knipp’s blood. After World War II, Knipp’s grandfather moved to Missouri and started farming. As time went on, he bought more and more land until he eventually gained enough acreage to support his family. His grandfather passed the farm down to his father, where Knipp now works the land in hopes that he’ll have something to pass on to his future children.

Knipp uses his father’s combine to harvest soybeans on the 1,000 acres he works. It takes a lot of capital to buy and maintain the necessary equipment. As a result, when it comes time to harvest his father’s land, Bradley has to find a way to pay up.

“That's his combine out there, but we work it out,” Knipp said. “Even though right now we’re combining my beans, when we get to his I work for him for free pretty much. “

As operations get larger and larger, it becomes less likely that beginning farmers can compete with these established farms. According to a 2017 study by the United States Department of Agriculture, large-scale family farms—$1 million or more in gross cash farm income—account for about 3 percent of farms but 42 percent of the value of production. The accumulated capital that large farms have means that when new land becomes available it is quickly snatched up before a young farmer with less capital can scrounge up the cash necessary to purchase the land.

“There's a lot of competition between these larger operations that are around there,” Dan Gieseke, Chief Loan Officer for the USDA, said. “When they find out that land is available they will try to rent it and kind of gobble it up before possibly a young farmer could even get a shot at it.”

Knipp and his father, a fairly-established farming duo, work on about 3,500 acres of land. However, the amount of acreage the two work is still small compared to other large operators. Kirtley Lewis, a farmer who’s been working his land for more than 40 years, says that because of the low commodity prices and the large amount of expenses, farmers must expand to survive.

“I probably farm on the small side. I mean, 1,100 acres is kind of a small farm, at least in this area,” Lewis said.  “My wife works full-time. It's just a necessity. I think it takes two to three thousand acres today to support a family.”

Lewis said farmers will continue to get larger.

**“**It will just take more and more acres to survive,” Lewis said. “There will be fewer and fewer farmers and they will all be bigger.”

According to a study done by the Department of Agriculture, farm real estate debt in 2017 is expected to reach a historic high of $242.4 billion nationwide reflecting the rising costs of farming. This can force farmers to borrow more money in order to keep their operations running.

Knipp says it’s not just loans they need, but they also need to find ways to invest their profits. He took his profits from 2010 and 2011 and invested them. In 2012 a drought hit Missouri, and Knipp is still feeling the effects of those investments gone wrong.

“I invested in some more stuff while I had the money and got equipment that we needed,” Knipp said. “It fell on us after that. It was tough, really tough.”

While money management is key for established and beginning farmers alike, a financial barrier that has grown for young farmers today is the cost of getting a college degree. The average annual increase in college tuition from 1980-2014 grew by nearly 260 percent, according to a study done by the Department of Education.

This means that future farmers currently in college, like Dillon Linneman, are now leaving college with a higher amount of student debt. Linneman says they are then still expected to have the capital to buy land, equipment and other necessities. According to the National Center for Education Statistics, the amount of agriculture degrees being earned increased by 41 percent between 2008-2014. For those students that plan on pursuing farming with their degree, this could add student loans to their impending farming debt.

“You have to buy your combines, you have to buy your tractors, you have to buy your fields and all of those things are tough for an existing farmer to do, much less somebody new to the industry that doesn’t have the capital to work with,” Linneman said. “Especially coming out of college, you just got finished and you have your student loans and everything.”

There are lending programs available to beginning farmers. The federal government and USDA have tried coming up with a solution to the capital problem young farmers face. However, Geiseke says, the amount of money the USDA can give out is limited.

The Beginning Farmer Loan Program, a popular loan program run by the Missouri Department of Agriculture, has a maximum loan amount of $524,200 per farmer, per year. That money can only be used for agricultural land, farm buildings, farm equipment and breeding livestock. There are a variety of restrictions on the loan, including a stipulation that says the money cannot be used for operating expenses, to purchase inventory, supplies, or livestock other than breeding livestock.

Knipp used this loan to buy the 60 acres he owns, but he says that it doesn’t cover the expenses that add up over time.

“Your fertilizer, your chemicals, your seed, that all is really, really expensive,” Knipp said.

Young, beginning farmers face a variety of obstacles they must overcome as they enter the industry. For prospective farmers like Linneman, the challenges are just road bumps on the drive to the end destination of sustaining humanity.

“Everybody knows each other in the farming industry and everyone works together to accomplish one goal of feeding the world,” Linneman said.