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## Borrow to plow

A farmer was asked what he got for his crop. "I got to grow it," he replied. So went the dark joke from a long-ago agricultural depression. Now under way is the story about the current difficulties of American farming. Deere & Co. (DE on the New York Stock Exchange) is the focus; bearish is the thesis.

Today's farmer toils under a pair of problems that history would judge to be blessings. No. 1, there is too much food; global stockpiles of grains (excluding rice) are projected to reach 465 million tons at the end of the 2015-16 crop year, the highest in 29 years, according to the International Grain Council. No. 2, there is too much machinery; farmers and dealers have over-borrowed and manufacturers have over-produced. What looks like a taxand commodity-price-induced bubble in tractors, combines, harvesters, etc. is visibly deflating—visibly, so far, except to the stock market.

The Deere story has a little something for everyone. The dollar is up and exports are down (the macro angle), farm incomes and grain prices are down by half from their respective peaks (the micro angle) and the federal tax code has subsidized excessive capital investment in farm machinery (the political economy aspect). Encumbered farmers are starting to squirm under the debt they incurred to buy the heavy equipment for which, at \$3-per-bushel corn, they no longer have such urgent need. The Deere story turns out to be a credit story.

It's a story that bears faint resemblance to the visitation of plagues in the 1980s, when low crop prices were overlaid on high interest rates, punitive

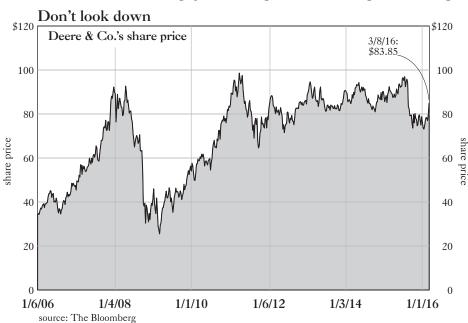
levels of debt and the Carter administration's embargo of grain exports to Soviet Russia. Thirty-six years later, low crop prices and ultra-low interest rates have sown another kind of debt problem. While the aggregate farm balance sheet appears sound enough, the very aggregation masks emergent difficulties.

"The amount of debt is concentrated into a smaller percent of people this time," Jim Farrell, president and CEO of Omaha-based Farmers National Co., tells colleague Evan Lorenz. "The amount of concern is in a smaller percent of people, but they are larger. The impact is going to be bigger when someone goes under. We had an operator who was unable to get financed. He had eight farms that he leased from us. That is more of what we will see. Back in 1982 or 1983, it might have been one or two farms. A big opera-

tor might have had three to four farms with you. Scale is different."

Other things remain the same—the seasons, for instance. Now is the season to secure an operating loan. The applicants who present themselves to Farm Credit Services of America, in Omaha, Neb., say they expect to break even, tops, this year, according to Bill Davis, the company's chief credit officer. Seven years of exceptionally rich incomes stopped cold in 2013, Davis relates: "In the past two years, we've seen workingcapital positions decline and a lot of break-even P&L statements and some losses. On average, our customers are breaking even to losing a little money this year on the crop side."

In such circumstances, equipment purchases take a backseat to husbanding cash and reducing costs. Davis goes



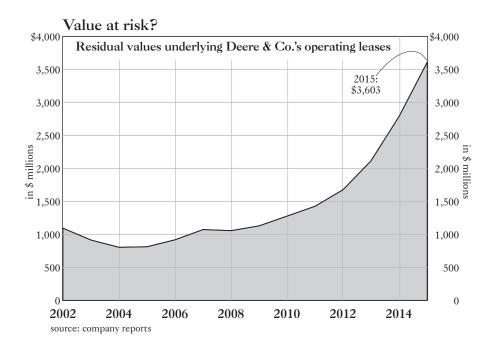
on: "We also have done some restructuring of debt to help them restore working capital in some cases. Our producers are working hard to reduce their operating cost structure. Their operating cost structure went up when grain prices and profits were strong over the past five to seven years. All their inputs—seed, fertilizer—all went up as well as cash rent, which was a large part of their cash expenses, when crop prices went up. Those cost components haven't come back down yet."

Deere & Co. was a credit story from its inception. In the panic year of 1837, the eponymous John Deere, in flight from his creditors in Rutland, Vt., moved his blacksmith shop to Grand Detour, Ill., which is where the company remains to this day. Deere divides its manufacturing operations into agriculture and turf (75% of net equipment sales in the quarter ending Jan. 31) and construction and forestry (the remaining 25%). North American sales predominate both in volume and profitability, margins on big farm equipment being the widest. Though Deere's leaping yellow stag trademark is affixed to backhoe loaders, combines, excavators, articulated dump trucks and lawn mowers the world over, the home market is where the money is.

The one-time blacksmith shop has become a kind of bank—at least, operating income from the Deere captive finance unit, John Deere Capital Corp., has grown to eclipse the earnings from shrinking equipment sales. Of overall operating income in the three months to Jan. 31, ag and turf sales chipped in \$144 million, or 35%; financing activity, \$194 million, or 48%. As recently as fiscal 2013, the respective contributions to operating income were 79% and 15%.

The bank of Deere shows assets of \$39.4 billion and equity of \$4.3 billion. As of Oct. 31, the loan book was tilted 85% to ag and lawn, 15% to construction and forestry. North American assets account for 87% of the whole. Europe (5%), Latin America (5%), Australia (2%) and Asia (1%) fill out the portfolio. By type of loan, the breakdown was as follows: installment loans and finance leases, 59%; operating leases, 13%; wholesale floor-plan, or dealer, lending, 21%; revolving loans, 7%. More on operating leases in a moment.

For the boom that was, the stockholders of Deere & Co. may thank, in part, their elected representatives in Washington. Section 179 of the U.S. tax code allows businesses to deduct the full cost



of new or used equipment, up to a certain threshold, in the year in which it was purchased. After a 2010 doubling, that threshold stands at \$500,000. From Deere's point of view, it was a most propitious boost. Farm income itself was on its way to doubling between 2006 and 2013, and farmers needed a tax shield. Over those same seven fat years, Deere's North American sales jumped to \$21.8 billion from \$13.9 billion.

The lean years are here, though they are not-yet-so very skinny (Deere's 12-month rolling North American sales are still almost \$2 billion higher than fiscal 2006's grand total). One marker of emerging distress is the inventory of used equipment that crowds the dealers' lots. Gary Eklund, a salesman at a Deere dealer in Brimfield, Ill., tells Lorenz that outsize inventories of late-model used equipment have crimped the demand for new merchandise. "It doesn't matter whether it is Case or John Deere, everyone has plenty of inventory on the lot," says Eklund. "It has totally slowed down for the used buyer as well."

Jon Hoffman grows beans and corn and raises cows on a six-section—which is to say, a six-square-mile—farm in South Dakota. Lorenz asked him to describe the replacement demand for large equipment. "There is none," Hoffman replied. "That's what is happening. These guys have bought all the equipment they needed during the good years. They got up to a \$500,000 write-off on their machinery in one

year. In other words, if they bought \$500,000 of machinery, they would write off \$500,000 from their income tax. If they had a tax problem, some of these guys went a little crazy with the iron. They probably created other problems because now this machinery is worth a lot less than it used to be and they are still making payments on the machinery when they don't quite have the income. That's a big factor.

"These guys have replaced their fleets and now times are tough," Hoffman continued. "The guys who are very solid have all the machinery they need, and they don't need to replace them for quite a bit of time. The dealers are really struggling right now. Their sales are way down. Some of them are just dead. This will balance out as the market clears itself."

"The glut of late-model inventory on dealer lots has led to a collapse in used-equipment pricing," Lorenz relates. "According to MachineryPete. com, used-equipment prices dropped by 32% between the first quarter 2013 and the fourth quarter 2015. Most unusually, used-equipment prices actually fell between the third and fourth quarters of 2015. 'The fourth-quarter values had gone up in the previous 12 years and usually up big, because of section 179,' Greg Peterson, the 'Pete' behind Machinery Pete, tells me. 'Farmers at the end of the year with money looking for deductions and trying to get that last minute deduction. Last year was the first time I hadn't seen that since 2002. That's evidence that the current reality is different now. It's just different. That would be a pullback and the story line that is unfolding."

Deere runs—certainly, *has* run—a squeaky clean financing operation. In the quarter ended Jan. 31, accrued annualized loss provisions came in at just eight basis points. "The financial forecast for 2016 contemplates a loss provision of about 19 basis points," Joshua Jepsen, Deere's head of investor relations, said on the company's Feb. 19 earnings call. "Even so, this would put the year's losses below the 10-year average of 26 basis points, and well below the 15-year average of 39 basis points."

Past results are not invariably indicative of future returns. They were not in the famous case of American residential real-estate lending. Between 1990 and 2007, net charge-offs on loans backed by one-to-four family residential properties averaged 14 basis points. By the fourth quarter of 2009, those charge-offs had surged to 247 basis points. Even allowing that Deere's loans to farmers remain money-good, there remains the company's exposure to its dealers, which, as mentioned, constitute 22% of the finance subsidiary's portfolio.

"In order to boost sales," Lorenz relates, "Deere has increasingly offered to finance customers with operating leases. In an operating lease, Deere finances a customer's use of equipment for a period of time—say, three years—and then takes back the equipment at the end of the lease's term. This leaves the risk of falling residual values squarely on Deere's balance sheet. Operating leases funded 15% of net equipment sales in the first quarter of 2016, an increase from 6%, 8%

and 12% of equipment sales in fiscal years 2013, 2014 and 2015, respectively.

"At the end of fiscal 2015, Deere estimated that equipment under operating lease would be worth \$3.6 billion when the leases all expired. If that estimate—no small thing in comparison to the \$4.3 billion in finance-company equity—proves to be too high, Deere would have to take a loss on the eventual sale of its used tractors, combines, corn planters, etc. And let's not forget that, with the downturn in agricultural-equipment sales, Deere's operating profit is largely generated by its financial-services division."

How much can residual value fall if a manufacturer is forced to sell used equipment at a bad time? Hoffman tells Lorenz that he recently went online to bid on a used corn planter. It traded for \$47,000. "Four years ago," says Hoffman, "that same planter would have sold for \$75,000 to \$80,000. . . . There are real bargains out there. Guys who have money can afford them." The flip side of the bargain coin is the risk of falling residual values to Deere's balance sheet.

At \$83.85 per share, Deere trades at 20.5 times the fiscal 2016 estimate, 15.2 times trailing net income and 9.0 times peak earnings, which were registered in 2013. Of the 24 analysts on the case, six say buy, six say sell and a dozen say just stand around, holding. Short interest amounts to 13% of Deere's equity float. Over the past 12 months, insiders have net sold 98,454 shares for \$9.4 million in proceeds. As far as the out-years are concerned, the consensus of analytical opinion holds that (to summarize) everything will be OK.

Barring a snapback in grain prices and agricultural incomes, we think, every-

thing will not be OK. Deere, in the absence of those improvements, will face mounting stress both in credit losses and write-downs in the residual values of the machinery it's leased.

Joe O'Dea and Felix Xu, analysts at Vertical Research Partners, neatly summarize the bearish case, thus:

"U.S. and Canada 100-plus horsepower tractor unit sales peaked in 2013, were down 14% in 2014, another 25% in 2015 and are expected to fall another 15-20% in 2016. Still, given the magnitude of the upcycle, rolling 10-year sales will actually grow in 2016. If we take 2017 down another 10% and run flat at those levels, the rolling 10-year fleet doesn't get to prior trough until 2024. Ethanol, permanent section 179 and favorable farm-bill programs can all contribute to keep volumes above prior trough. Nonetheless, strength of the upcycle means there's no near-term or even medium-term need for demand to improve, and we anticipate a protracted period of softer volumes. Still inflated used-inventory levels despite OEM efforts to underproduce in 2015 adds risk of even more severe declines than anticipated."

Last word goes to the Pete of Machinery Pete: "One thing we are watching is the number of machinery auctions as an X factor. It has been . . . seven to eight years since we've seen this many machinery auctions. The old data used to show that the auction values would get softer from St. Patrick's Day into early fall. The question is whether it will be a glide lower, or are we going to take another jump?"

Watch this space.

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