



## Whatever the Weather

How United Grain Growers tamed Mother Nature in completing the deal of the decade.

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Like a farmer in the Great Depression, Peter Cox battled Mother Nature with little more than skyward eyes and mumbled hopes. Although the CFO of United Grain Growers (UGG) has never tilled an acre, he knows full well that the earnings of the Winnipeg, Manitoba-based grain handler, with \$120 million in annual revenues, hang on the whims of the weather.

UGG buys grains, such as wheat and barley, and ships them for sale worldwide. Every dozen years or so, however, a drought would dry up grain production--and along with it about 20 percent of the company's revenues. "When grain volumes fell, so did our earnings," says Cox.

That didn't sit well with the CFO, who was also unable to hedge UGG's grain-volume risk, because of the diversity of weather patterns in different Canadian provinces. Consequently, Cox turned to his insurance broker, London-based Willis Corroon Corp., to formulate a solution. Together with insurer Swiss Re New Markets, they developed a first-of-its-kind insurance program that absorbs the downside of lower grain volume without taking away the upside of greater volume.

The upside for UGG has been staggering. By calming its earnings volatility, UGG has improved cash flow and increased its leverage opportunities. The insurance has also provided off-balance-sheet capital to invest in higher risk higher return ventures. And the cost of the policy, which blends UGG's grain-volume risk with its myriad property/casualty exposures in a single, integrated portfolio, is comparable to what the company paid for its 20 or so separate insurance policies.

Analysts evidently are bullish on the strategy. UGG's stock price jumped roughly \$2 (Canadian) a share the day after the insurance strategy was announced last November, from about C\$9 to C\$11. Moreover, the strategy can benefit virtually any company--for example, a railroad whose revenues are affected by coal volume; a chemical company burdened by raw feedstock volume; or even (as an upcoming second deal will prove) a securities broker whose revenues are affected by stock exchange trading volume. Such possibilities are leading many in the industry to hail the UGG transaction, which closed on New Year's Eve, as the deal of the decade--and the decade has just begun. "It's a great deal," says an executive at a competing brokerage. "I just wish it were ours."

### **Quantifying Risks**

It took three years to structure the UGG deal. The company went public in 1993, a year before the Toronto Stock Exchange issued the Dey Report, which recommended stricter guidelines for corporate governance--among them a requirement that boards of directors be responsible for identifying corporate risks and ensuring that processes are in place to mitigate those risks.

The Dey Report and other concerns led Cox to identify all the risks challenging UGG's balance sheet--47 in all, from fire to foreign-exchange fluctuations. "We piled about 20 of our people into one room to develop the list," Cox recalls. "We asked each of them to rank what they considered to be our risks in terms of severity." In order of importance, the top six were: (1) the effect of weather on grain volume, (2) environmental risk (the company handles fertilizers and chemicals used in agricultural applications), (3) credit risk, (4) commodity price and basis risk, (5) counterparty exposure (the risk of upstream and downstream suppliers and customers not meeting contractual obligations), and (6) inventory risk.

Willis Corroon was then tapped to quantify the risks to permit comparison. Using in-house computer modeling and half a dozen actuaries and statisticians, the broker developed the value-at-risk metrics, ultimately translating each risk into a common denominator, called a unit of risk. And during the two-year risk-quantification process, Willis broached the notion of an integrated risk program, in which the various risks would be bundled together into a portfolio, much like a basket of foreign currencies. Since different risks often are noncorrelated (the chance of all risks causing loss in the same year is extremely remote), aggregating them in a portfolio would reduce overall risk and, arguably, be more cost-effective.

The prospect of reduced insurance costs caught Cox's attention. "Even though we had an excellent loss history, we were paying three times in premium what our property/casualty insurers were paying out in claims on a consolidated basis," he notes. It wasn't that the insurers were price gouging; it's just that when a company buys insurance on a discrete basis (different policies for different risks from different insurers), each insurer must factor in potential loss costs plus operating expenses and profit. "By aggregating risks in a single policy underwritten by one insurer, these frictional costs are significantly reduced," Cox says.

### **Moral Hazards**

Willis and Swiss Re New Markets searched for a way to add UGG's grain-volume risk--the company's main exposure--to the integrated property/ casualty portfolio. As noted, the company had been unable to hedge its grain-volume risk, because of the diverse weather patterns. That problem prevented the insurers from simply buying a derivative and embedding it in the insurance program. The solution would have to be bona fide insurance, with a specific loss trigger.

But the insurance could not be linked to UGG's actual grain volume, or it would create what insurers call a "moral hazard"--the opportunity for UGG to manipulate its volume to effect an insurance payment. "We needed to develop a volume-based trigger that would mirror UGG's likely experience without it being the actual experience," explains Bob Nusslein, director of Swiss Re New Markets.

To do that, a decision was made to tie the policy to a grain- volume index compiled by the Canadian Grains Commission, which tabulates all grain-shipment volume. The trigger works like this: If grain volume reported by the Grains Commission at a designated time is less than long-term grain averages, UGG can file a claim subject to its deductible. The actual dollar amount of the claim is based on the difference between long-term averages and the actual volume as measured by the commission. UGG and its insurance partners, however, have not divulged the aggregate insurance limits, deductible, or price of the policy.

The irony is that UGG has purchased a policy that is not linked to the weather at all, although Willis and Swiss Re analyzed reams of weather-related data to determine overall risk. "We

realized the issue for UGG was not the weather, but the volume shortages," Nusslein says. "That was the key that opened the door."

### **A New Debt- Equity Mix**

The risk for UGG, as with any company buying an integrated risk program, is that a major loss in one area will eat up the coverage limits. Cox responds that UGG "has more than adequate limits to cover all contingencies." And UGG risk manager Mike McAndless notes that Swiss Re provides an automatic renewal of the coverage limits if they are blown away, at a prenegotiated additional premium.

Still, UGG chose not to incorporate such financial risks as interest rates and commodity prices into the portfolio. "We explored that strategy, but rejected it," says McAndless. "It just made more sense, in terms of the frequency and severity of the [financial and commodity] risks, to continue hedging them in the financial markets, instead of transferring them. Commodity risks are a core competency of the company. That's the reason we get up in the morning, and a reason why shareholders invest in us."

But by creating a floor to offset decreased revenues, UGG tamed its main risk--unpredictable earnings. And that has led to additional benefits, such as the ability to take on more debt. "A company is more comfortable assuming additional leverage when it is able to decrease volatility in its operations," Nusslein explains. Cox concurs: "The insurance program allows us to increase leverage, which was gradually increasing anyway because of the need for higher capital expenditures."

Cox calculates that additional leverage capacity at a modest 2.5 percent. "At the end of our fiscal year, July 31, 1999, our leverage ratio was 50 percent," he says. "The minute we did this deal, we were able to raise that debt level to 52.5 percent without incurring additional risk to the company, because the capital we previously set aside to cover volume-based losses was replaced by insurance."

On the investment side, the company gains a similar benefit. "No longer must we set aside a couple million dollars every year or so to absorb a potential \$20 million hit to earnings every 10 years," says UGG treasurer George Prosk. "That cash flow stays in the company" for additional

capital expenses, potential acquisitions, and so on. Last year, the company spent \$73 million on capital improvements. This year it expects to spend another \$60 million.

### **Repeat Performance**

While it would seem the strategy is rarefied, Willis broker John A. Bugalla, the managing director who shepherded the UGG deal, says volume-based insurance triggers have wide applications. "If you insure a reduction in raw chemical feedstock volume for a chemical manufacturer, you protect it against this potential earnings downside," Bugalla contends. "Same thing with railroads shipping minerals and commodities. Any company whose revenues depend on a specific volume of something can benefit."

Borden Foods Corp. is intrigued. "The strategy has tremendous appeal," says Michael DeRosa, risk manager at the privately held Columbus, Ohio-based company. "We're very dependent here on two commodities--wheat and tomatoes. [Borden manufactures the Prince line of pasta and several tomato sauces.] If volumes drop, we pay higher prices to obtain what we need to meet our production demands. However, we can't just charge an extra buck for a jar of tomato sauce each time crops suffer."

DeRosa says he is interested in talking with his broker about a strategy similar to UGG's. "If we can find the right indicator to tie the volumes to, much like UGG did [with the Canadian Wheat Board], we'd be very interested," he says.

Nusslein says a second UGG-type deal is in the offing. "We're working with a securities broker that receives roughly 70 percent of its revenue from trading commissions," he says. "If trading volume in the stock market is down, its commissions are less, and consequently revenues suffer. We're putting together a program integrating the firm's property/casualty exposures with a trading-volume trigger. It's a carbon copy of the UGG transaction, except for the fact that these are two vastly dissimilar industries."

The integrated risk strategy is not without criticism, however. Indeed, in the protracted soft insurance market, several companies that had purchased pure property/casualty baskets, including Mobil Corp. and Huntsman Corp., have now done an about-face. Ditto for Honeywell Inc., which bought an integrated insurance program that also contained coverage for foreign-

exchange translation risk. Each company later learned it would have saved money had it bought insurance the old-fashioned way--from different insurers competing for the business. They're now back in the traditional market.

Another potential drawback is the time it takes to assemble the data required for an integrated approach, although UGG's principals say the effort was well worth it, given the financial outcome. The usual array of insurance complaints also should be mentioned, including the conditional nature of coverage and insurers' slow claims-paying process.

Companies undertaking the trek also must put aside executive-turf issues, since the integrated approach requires a multidisciplinary effort. Yet, these were mere bumps in the road for UGG. "We were collaborative from day one on this thing," McAndless says. Cox agrees: "The walls are down here. This kind of collaborative effort creates a much more effective team to take on anything."