

Case Study**Negotiating for a Grain Elevator Purchase: Valuations of Willingness to Buy and Willingness to Sell**Austin Liepold^a, Marin Bozic^b, and Michael A. Boland^b*Ceres Global Ag.^a, University of Minnesota^b*

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Abstract

North America Small Grains Trading Company (NASGTC) is a North American grain trading company investigating grain elevator location prospects to expand their grain origination territory. In 2021, NASGTC purchased grain at a premium from third-party suppliers or country elevators in North America to fill their terminal space at various locations or directly ship to their small grain (defined as oat, hard red spring wheat, rye, durum, and canola) end-user customers with a focus on identity-preservation to help support consumer label claims. Since its founding in 2013, NASGTC has operated terminal elevators efficiently without any origination locations. The NASGTC is in initial diligence to acquire the assets of a Canadian grain elevator to originate additional oats. The objective of this case study is to determine whether it is economically feasible to acquire a grain elevator to own more of the margin in the oat supply chain.

1 Overview

Clare Walsh's job is to quantify risk and analyze opportunities for North America Small Grains Trading Company (NASGTC) and has been tasked to make a recommendation regarding the valuation and possible acquisition of a grain elevator in Canada to originate additional oats. Clare is a 2016 graduate with a Master of Science in agricultural and applied economics from a well-known midwestern U.S. university, and her supervisor is Vice President of Business Development for NASGTC. He has tasked Clare to complete an oat origination, merchandising, and operating analysis assuming NASGTC is able to purchase the elevator and develop an acquisition price for her supervisor and the senior management team to consider. Specifically, Clare must: (1) Create a Microsoft Excel spreadsheet workbook and spreadsheets that are linked and lead to a decision-making tool for analysis of asset valuation; and (2) Apply the concepts of net present value (NPV), understand the components of the calculation and origin of the data for the formulae. These analyses are needed to be used if NASGTC is to make an offer for the grain elevator. Clare's analysis is to identify the value being created in the transaction.

The seller, a well-known multinational grain trading company, has placed the grain elevator with an agent who has informed NASGTC that the seller is eager to sell the elevator. The seller has Canadian export terminal space in Thunder Bay (Ontario) and Vancouver (British Columbia); U.S. export terminal space in Duluth (Minnesota), New Orleans (Louisiana), and Portland (Oregon); and many inland grain elevators in Canada and the United States. However, this particular inland grain terminal is not strategic for the seller since it is centrally located in a primary oat growing region in Manitoba and Saskatchewan, and oats are a small part of their portfolio. However, oats are a strategic crop for NASGTC, which sources oats for North America food buyers in consumer-packaged goods and ingredient users in bakery and food service with key delivery points in New England, the greater Ohio region, southern Great Plains, and southern California. This grain elevator purchases spring wheat and canola but in small quantities, and for purpose of this analysis, Clare is focusing solely on oats.

It is common to hear people joke that oats were the only major commodity to see a declining volume of acreage since 1900 because of the switch from horse transportation, which consumed oats, to

the combustible engine which used gasoline. However, oats for consumer end uses have increased as oats are viewed for their nutritional content. Long-standing breakfast cold cereal brands such as Cheerios owned by General Mills and hot cereal brands such as Quaker and new entrants have created new oat products. In addition, oats were included in many protein bars. Oatmilk (made by Sweden's Oatly and Danone Silk's Oatmilk) or oat beverage (introduced in 2018; discontinued 15 months later by Quaker Oats) are marketed as an alternative for vegans.

This is not the first such economic analysis Clare has done for her employer. She has done more than 70 similar analyses for NASGTC that resulted in six acquisitions to help NASGTC more than double in size with more than 150 employees. Part of her job is to identify potential acquisitions that NASGTC could target that fit NASGTC's business goals. She conducts high-level analyses of potential income including quantity sold (sales) and prices; opportunities for price risk management through price contracts with producers or use of Chicago Board of Trade (CBOT) futures; and quantity risk management such as marketing contracts with producers. Included in these analyses was economic opportunities for price premiums or volume premiums for preserving the crop identity from producers' farms through delivery at the grain elevator and through their logistics pipelines to the end user.

In addition, Clare conducts a high-level estimation of average costs per bushel or ton including procurement price, transportation, labor, and other variable costs of grain handling for NASGTC. In addition, she analyzes the fixed costs if the asset was part of NASGTC's business, as well as high-level acquisition costs. A high-level analysis includes using all public data and any internal knowledge identified by Clare. Her modeling can be used to do more precise analysis once NASGTC has engaged the seller through a confidentiality or Non-Disclosure Agreement (NDA). Clare summarizes a recommendation for the targeted acquisition in a one-page memo that identified the economic returns and costs and its strategic fit with NASGTC. This memo and appending analysis would be used by NASGTC senior leadership team to decide whether to proceed to engage in discussions with the potential seller.

Clare and the other two employees including her supervisor comprise the NASGTC Business Development team. They think of themselves as a grease gun because their task is to determine and develop fact-based analyses with as much precision as possible and to accept responsibility for the outcome through high standards for individual quality of work. The NASGTC's founder considers this to be an example of Savant Leadership, a term often used within NASGTC.

The NASGTC has two business segments in grain and product merchandising and supply chain logistics. Grain and product merchandising includes originating small grains from Canada's Prairie Provinces (Alberta, Manitoba, and Saskatchewan) and the U.S. northern Great Plains (Montana, North Dakota, and South Dakota). The buyers demand high quality with regard to known origin, consistent moisture percentage, and other factors with a fairly well-known pattern of demand. Supply chain logistics include transloading products other than the small grains being merchandised to NASGTC's buyers, including hydrocarbons, fertilizer, chemicals, and other industrial products. In addition, this business segment extends NASGTC's expertise in transportation and logistics (such as barge, rail, truck, and ocean-going vessels) to other grains outside of its core small grains including dry beans, such as chickpeas and lentils. In both segments, the overall goal is to reduce quantifiable risk as much as possible.

One goal for NASGTC is to become the number one oat supplier in North America with key expertise in low average costs of origination and logistics, identity preservation, delivery on futures contracts with CBOT, oat milling for certain strategic accounts, and feed demand. This potential acquisition would help further that goal, and because there are only five grain elevators in the heart of oat growing territory, it is not common to see an elevator come up for sale.

2 The Deal-Making Process for Negotiations

Clare follows a well-known deal-making process for negotiations doing this type of economic analysis. Her graduate degree allowed her to take graduate courses in her university's College of Business. Clare's

course in negotiating used a seven-step process that was widely taught in similar courses and used by consulting firms. Her supervisor told Clare in the interview process that NASGTC approached deal making as an art to craft deals with potential sellers who were not actively selling assets. As a new firm, NASGTC was approaching potential sellers who included well-established firms. Thus, NASGTC chose to focus on value-creation instead of negotiation through haggling. The seven-step deal-making process for negotiations that Clare was taught included:

- 1) Prioritizing the strategic over the opportunistic,
- 2) Prioritizing value creation right from the start,
- 3) Creating a broad and detailed value creation plan,
- 4) Focusing on people and intangibles such as culture and fit,
- 5) Investing in integration and execution after the deal and making sure those costs are accounted for initially,
- 6) Understanding your potential biases that could lead to value destruction because you do not understand the seller's motivations, and
- 7) Having clarity regarding success.

The NASGTC uses all seven steps. The focus of Clare's job is to perform analyses to support all seven steps, but specifically she does the analysis in step 2 on value creation. Clare knew that doing the analyses for potential targeted assets that fit strategically into NASGTC's business segments allowed NASGTC to approach potential buyers who might not have been engaged in a review of their asset portfolio for potential divestitures but who might listen to a proposal from NASGTC. The use of a precise, fact-based approach with a clear focus on identifiable risk and value creation is a key element of NASGTC's Savant Leadership approach. In this particular case, NASGTC had approached the multinational company two years ago but were told that the grain elevator was not for sale. The firm's agent had reached out to them recently to indicate the firm had changed its mind.

3 Identifying Value Creation

Clare is to lay out the data needed by the integration and execution team to get implementation done right away to identify value creation. She is responsible for the second set in the deal-making process for negotiations. The NASGTC business model is built around strategic assets such as a focus on logistics and transportation and the ability to segregate and preserve the identity of crops for customers with well-known demands. Clare knows that identification of risk and quantifying that risk is critical for ensuring the value created beyond the first year.

In this case, the seller has already decided to explore a sale of the asset by hiring an agent to identify potential buyers including NASGTC. The reality is that there are only a handful of potential buyers, and the seller knows that. The NASGTC is engaged with the seller through an NDA, and Clare is beginning the full diligence process. Once she completes and sends her analysis to her supervisor, a decision is made on whether to proceed with an offer subject to board of director approval. If an offer is made and accepted, further diligence is required prior to the offer being finalized. This additional diligence includes tasks such as identifying soil, water, and possible pollution sources; the locations' employees; contractual issues such as land title and leases; and similar factors. If this analysis is satisfactory, then pre-close procedures are finalized, and the close and integration is done with NASGTC. Clare understands the desire by NASGTC to be a leader in oat origination and that her analysis could likely lead to an acquisition.

The NASGTC has already executed an NDA and initial exploratory conversations have begun. As is the case in other deals, the seller has agreed to not engage in conversations with other potential buyers. Clare has comprised a list of questions through interviews with the seller to learn about how the company

makes money, such as information and data about components of margin, assets, strategic relationships, and other data to help her do a more in-depth analysis of revenues and costs. In addition, she has received information on the grain elevator's competitive position in the industry based on historical data on quantities procured and sold to individual buyers. Clare must further analyze the strategic fit and alignment of the potential acquisition about NASGTC's future goals in the oat supply chain. Finally, she must consider whether there are further opportunities not being used by the seller to add value to the acquisition. Such opportunities might include written supply agreements with existing NASGTC customers or export buyers.

4 Possible Deal Breakers

Clare must identify any possible "deal breakers," which may include environmental issues with the site, such as soil contamination from underground diesel or refined fuel tanks, as well as fertilizer or chemical spills, given many grain elevators have diversified into supplying farm inputs, storing them on the same site. Similarly, road issues may be a deal breaker as many grain elevators were built on the principal road artery in a small town, and the road was parallel to the rail line. As small towns increased in size and roads were redone to handle larger vehicles including semitrucks, curb access and other problems could emerge such that producers might have difficulty delivering grain. This would be a potential deal breaker.

Some grain elevators are located on land owned by the railroad, and the site is leased back to the elevator in a long-term agreement whereas some grain elevators own the land. Lease provisions sometimes automatically result in a renegotiation of the lease upon change of ownership, which might make the deal uneconomical. Another deal breaker might be labor contracts since NASGTC does not want to take on defined benefit retirement programs that might exist with a unionized work force. The NASGTC has a defined contribution retirement program.

The ability to expand grain handling and storage and segregate grain at the site is critical. Lack of such abilities is also a potential deal breaker since NASGTC believes any acquisition must include opportunities for volume growth and include the ability to preserve the identity of crops, which means the need for flexible storage bins to segregate by small grain type or variety. Such deal breakers could be offset by changes to the original offer, but Clare is to identify the economic value of such value adjustments. To the best of her knowledge, Clare has verified all the data from the buyer. In this case, most of the information is in her high-level analysis, and the in-depth diligence has verified this information. No big deal breakers have been identified so far. Her next step is to approach her supervisor to understand the NASGTC team responsible to plan for post-close integration, operation, and growth. Their data is incorporated into further analysis.

5 Information to Close the Deal

Prior to the close, the senior leadership team approves the material being used to close the deal. This material includes the (1) set of Microsoft PowerPoint slides containing a summary of the acquisition, (2) any diligence reports such as a Phase 1 Environmental Site Assessment Report (Phase 1 ESA) of the site, and (3) the initial integration plan (\$500,000 estimated cost plus a \$1.7 million upgrade in the first year and \$2 million upgrade in the second year for rail upgrades and dryer replacement), and full economic model that is provided in a Microsoft Excel spreadsheet workbook with multiple worksheets and cells protected for full understanding of critical assumptions. A Phase 1 ESA is an analysis of any soil or groundwater issues that might impact the environment and human health and a necessary part of a real estate transaction.

The economic model includes an analysis of the impact to the projected income sheet, balance sheet, and cash flow projections and lender report. All NASGTC employees use the same formatting in all their spreadsheets to create a common translation. For example, all currency is expressed in Canadian dollars, and all physical units are expressed in metric tons. Inputs that are considered assumptions and

could be varied in that cell such as weighted average cost of capital (WACC), marginal tax rates, insurance costs, and various other costs are identified in blue bolded Calibri font. Outputs that are outputs from a summation formula of revenues, costs, or other data in Excel were identified in black bolded Calibri font. Finally, Excel cells that are fixed formulas to help make decisions were highlighted in yellow. A matrix of various price assumptions based on past and forecasted future prices and quantities are used to better understand how sensitive the analyses are to changes in the prices and quantities.

These are submitted to the NASGTC board of directors who must approve any capital expenditure, such as for the proposed acquisition of the grain elevator. The board of directors includes the NASGTC founders who have invested in the company through investment of their equity capital and own the company. The board must approve the acquisition and may request additional diligence. Finally, prior to the close of the deal, a closing package is prepared using legal counsel and finance experts such as accountants or auditors who lay out the flow of funds. The closing package outlays the components of the deal in detail and defines all key words in the agreement to translate the legal and financial information for all readers. A communication plan for stakeholders such as employees, neighbors, and others in the community is prepared. The final onboarding and integration plan is laid out including decision authority, and an initial operating and risk management plan is finalized.

6 Preparing the Final Report

Clare is to prepare her final Microsoft Excel workbook and PowerPoint slides that will be reviewed by the senior leadership team. Her oat origination, merchandising, and operating analysis has been completed in a PowerPoint slide deck, which have been taken directly from her spreadsheet workbook with different spreadsheet menus for her analysis of origination, operations, merchandising, and grain elevator valuation. Appendices contain slides with information on input assumptions, the commercial team report summary on origination, and operations team report summary on integration and annual ownership costs. Although Clare has prepared many reports over the past five years, there is a little extra pressure on this potential acquisition because of its strategic fit for NASGTC.

Clare has worked from home during the Covid-19 pandemic, and this report to her supervisor will be done via Zoom. She makes herself another cup of coffee and sits at her kitchen table to practice her valuation conclusions once more before the meeting. In particular, the maximum valuation that NASGTC would be willing to pay for the grain elevator acquisition must be presented along with her analysis of the minimum valuation that the seller would be expected to sell the grain elevator for. The difference or overlap between both valuations provide input for the leadership team to develop a negotiation strategy. She needs to get these analyses done. It is time to finish her report.

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