DAVID E. BELL

Louis Dreyfus Commodities

In late 2014, the Louis Dreyfus company was at a crossroads. As seemed to be a constant in the company's 163-year history, changes were underway in the ownership structure, and more significantly, major changes were occurring in the company's primary business: the international buying and selling of agricultural commodities.

In 2009 Robert Louis-Dreyfus, chairman of Louis Dreyfus and great-grandson of the founder, died of leukemia leaving the company in the trust of his widow, Margarita Louis-Dreyfus, for the ultimate benefit of their three sons. The complex ownership structure that Robert left behind had caused some upheaval and raised questions about the appropriate corporate strategy for the future.

Dreyfus, the "D" in the ABCD of grain traders (ADM, Bunge and Cargill being the others) had enjoyed some spectacular returns in the years prior to 2014, and sales had reached \$63 billion, but there were reasons to suppose the future would not be so rosy. China had grown in significance in world markets to the point where in soybeans and cotton more than half of all international grain flows were at their behest. While many Chinese corporations bought and sold in the world markets, these corporations ultimately reported to the government, which coordinated strategy. Chinese policy for some time had been that the country was working to be self-sufficient in food, but lately there were clear signs that they had accepted that long term importation was to be a fact of life. In early 2014 China had purchased majority shares in two large trading firms, Noble and Nidera (see **Table 1** for a list of Ag trading firms). The worldwide shortages of grain that had been a constant for the previous five years seemed to be drawing to a close, making grain traders less attractive as intermediaries, and therefore less profitable. The world's grain surplus, once residing in the USA, was now held in China.

Margarita Louis-Dreyfus, in 2009 suddenly leading the then \$33 billion company, felt no urgency to make major changes, preferring to gradually establish her own vision for the company. By late 2014 she controlled 65% of the company shares and had made a number of managerial changes (**Exhibit 1**). Her most pressing task was to identify a new CEO, the person who would guide the company through the next several years. Her intention was to make an announcement by January 2015. Before making her final selection, she thought again about the history of the company and the challenges – and opportunities – that lay ahead.

Professor David E. Bell prepared this case. It was reviewed and approved before publication by a company designate. Funding for the development of this case was provided by Harvard Business School and not by the company. HBS cases are developed solely as the basis for class discussion. Cases are not intended to serve as endorsements, sources of primary data, or illustrations of effective or ineffective management.

Copyright © 2014 President and Fellows of Harvard College. To order copies or request permission to reproduce materials, call 1-800-545-7685, write Harvard Business School Publishing, Boston, MA 02163, or go to www.hbsp.harvard.edu. This publication may not be digitized, photocopied, or otherwise reproduced, posted, or transmitted, without the permission of Harvard Business School.

Company History

In 1851 Louis Dreyfus was a farmer in Alsace-Lorraine, France. His 18 year-old son Leopold discovered that selling his father's grain across the border in Switzerland was substantially more profitable, so much so that the following year he bought up much of the grain in his village in order to exploit this arbitrage. By the time Leopold was in his sixties (and had changed his last name to Louis-Dreyfus), he had built the largest grain trading firm in the world and "one of the great fortunes of France".

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|---------|--------|---------|---------|---------|---------|---------|---------|---------|---------|
| LDC | 14,758 | 17,173 | 26,250 | 38,802 | 33,427 | 44,667 | 57,669 | 57,140 | 63,514 |
| ADM | 35,834 | 39,093 | 52,919 | 78,325 | 62,208 | 68,577 | 88,155 | 90,559 | 89,804 |
| Bunge | 24,377 | 26,274 | 37,842 | 52,574 | 41,926 | 45,707 | 58,743 | 60,991 | 61,347 |
| Cargill | | 75,470 | 81,681 | 109,664 | 105,138 | 101,308 | 119,469 | 133,859 | 136,654 |
| Noble | 11,691 | 13,765 | 23,497 | 36,090 | 31,183 | 56,696 | 80,732 | 94,045 | 97,878 |
| Olam | 2,292 | 3,041 | 4,299 | 6,119 | 6,436 | 9,118 | 13,511 | 15,175 | 15,946 |
| Wilmar | 3,509 | 7,016 | 16,456 | 29,135 | 23,864 | 30,346 | 44,662 | 44,662 | 44,085 |
| TOTAL | | 181,832 | 242,944 | 350,710 | 304,181 | 356,418 | 462,941 | 496,432 | 509,229 |

| Table 1 | Trading Companies by Ag Revenue (\$M 2005-2013) |
|---------|---|
|---------|---|

Source: Louis Dreyfus Commodities.

The company had offices around the world each led by a French manager loyal to Leopold. Because of the distances involved these managers had considerable independence. And because of the difficulty of converting and repatriating foreign currencies, the country managers used the money to expand, often in unrelated ways.

Having discovered the power of arbitrage, Leopold was also quick to understand the notion of "net exposure" – namely, how did the company's portfolio of holdings and commitments net out? In order to keep track of his company's exposure, Leopold required all of his managers, no matter how distant, to telegraph their positions daily. In the late nineteenth century, Louis Dreyfus became an early user of the futures market, and began its own shipping company.

Despite the company's success, and Leopold's reputation as a watchful manager, the company was very much a family firm. Children of employees were found jobs, and the company was the first to have its own pension fund.

After Leopold's death in 1915, the firm was taken over by two of his sons Louis and Charles (and after Charles, his son Pierre) who were responsible for the firm's direction between the world wars. Though the European operations were seized by the Nazis, the semi-autonomous overseas divisions continued to prosper providing a foundation for a resurrection of the firm after World War II.

In 1965, Pierre's son Gerard (a French-American, who preferred the name William) took over the reins and took steps to rationalize the business after decades of ad hoc expansion. Even so, he ventured into a range of businesses, at one time being a distributor for the apparel company Polo. By the 1990s, the company, though still anchored in Ag, was not doing so well. The boom in grain production was bad for prices and, even worse, the price volatility was low.

But there was one bright spot: in 1998, the French telephone monopoly was broken up, and Louis Dreyfus invested \$10 million to start a new fixed telecom operator to be run by a small group of young managers, including Serge Schoen (**Exhibit 2**), who approached Robert Louis-Dreyfus, one of the fourth generation (born 1946, grandson of Louis, son of Jean) about chairing the telecom business. This was not just a question of finding a family figurehead, as Robert had had an outstanding business career. Following an MBA at HBS, Robert, an avid poker player, had made a small fortune working at a pharmaceutical research firm IMS, a large fortune as CEO of Saatchi and Saatchi the London advertising firm, and a still larger fortune by buying Adidas and converting it from a regional sports apparel company into a world leader. Robert sold Adidas in 1998 and returned to the family firm as leader of the telecom company. Nine years later, that business, by then named Neuf Telecom, was sold for \$10 billion, netting Louis Dreyfus about \$3.5 billion.

In 2005, Robert gradually replaced Gerard as head of Louis Dreyfus, taking half of his senior management team at Neuf Telecom with him.

Robert takes over

To Robert's eyes the business was hopelessly out of date. It was run as an old-time conglomerate with the various businesses (trading, energy, shipping, telecom) competing internally for cash. Family members did not receive dividends but instead were guaranteed lifetime employment with generous compensation. At \$100 million per year, profits were trailing, and Louis Dreyfus had financed assets with short-term maturity debt. To accommodate the far-flung family, the company maintained two headquarters, one in Paris and another in New York. There was no budgeting process, indeed no budget at all.

At the time, Gerard and his three sisters each owned 12.5% of the company, and Robert and his two sisters each owned 16.7%. Robert insisted he would not take responsibility for the company unless he had majority control. Cash from the telecom sale was used to dilute the family's ownership leaving Robert with 50.1%, which he committed to place in a trust for 100 years, more or less giving it away. Robert then made a number of changes. Job tenure would no longer be given to family members, but the company would pay dividends and offer to buy shares from its shareholders (together of the order of \$200 million in recent years).

For nearly 150 years, the country managers had been pillars of the company, but by 2005, they were receiving substantial compensation yet providing very little free cash flow back to the parent. Instead of organizing by country, the company would now be run by product line (trading, energy, shipping, telecom...). The businesses would be run with their own profit/loss reporting, and funded through the marketplace. The new corporate headquarters, adjacent to Geneva airport, had five people. The Ag business, now once again a stand-alone business and renamed Louis Dreyfus Commodities, was to be led by Serge Schoen.

Louis Dreyfus Commodities

Schoen found the crown jewel of the Louis Dreyfus empire to be in poor shape. Leopold's attention to net company exposure had long since been forgotten with different countries acting as fiefdoms with incompatible accounting systems. While ADM, Bunge and Cargill had been forward-integrating into fixed-asset processing businesses, LDC was still primarily a trader. The fees generated from trades were modest: the one bright spot was that the traders were making significant profits on speculative trading (and earning substantial bonuses as a result).

Adrien Tardy, part of the team that left Neuf Telecom for LDC, said that the business seemed to be primarily run to capture arbitrage opportunities, i.e. playing the divergence in prices at different locations, between different future delivery dates, or between a commodity's quality in different places, with limited focus on physical volume growth or on investment in fixed assets: "A sizeable portion of the trading of physicals was buying and selling cargoes that were already at sea. True there was some direct origination of crops from farmers, and some processing at plants around the world, but this was seen as a cost of doing business, acquiring the knowledge necessary to make money on the arbitrages."

The question facing Robert and his team was not just how to fix the business but whether to fix it. They were convinced however that the prospect for grain trading was good. In their view, the demographics were definitely in their favor. The population in Asia was expanding and getting wealthier. Wealthier people tend to eat more meat, and meat is grain intensive: a pound of beef requires 7 lbs. of grain. More importantly, the demand would not be in the same place as the supply which was almost certainly going to be provided from the Americas. And more countries were mandating levels of ethanol/biodiesel usage, which would further constrain grain supplies. Finally there was growing evidence of climate change — at least there seemed to be an increasing number of unusual and major weather events — which would also lead to volatility.

Until he succumbed in July 2009, Robert continued to plan for the long term future of the company, but as his health deteriorated it early fell to Schoen to implement his vision and make a number of changes:

- 1. He increased tenfold the investment rate in fixed assets (silos, value-added processing) to \$1 billion per year. Such investments would not only add margin but also lock up nearby farm production. (See **Exhibit 3** for some financials.)
- 2. He changed the main organizational structure from country-by-country to product-line-by-product-line (soybeans, sugar, metals...). This would simplify exposure management, but equally important, customers tended to group by product line. Many but not all of the country managers became product line managers. There would still be a matrix-like overlay of regional managers so that national issues would not be forgotten.
- Functional activities like finance, legal and HR would be managed centrally though with a physical presence in the regions.
- 4. Traders would no longer receive their bonuses in cash, but as 50% cash and 50% in equity shares that vested over four years. Upon vesting the shares could be sold for a pro-rated share of the book value of LDC. The idea was partly to encourage longer term thinking, like upgrading IT, but also to reduce the chance they would "walk out of the door." The top 100 traders all stayed after the change was made, and for many years few sold their shares in the hope of a larger payment should there be an IPO.

The mindset of the business also changed. Instead of arbitrage being the main strategic priority, with physicals and processing plants as a way to gain knowledge, the merchandising of a growing volume of physical volumes would become the primary business priority complemented by an increasing presence in fixed value chain assets (processing plants, ports...), and once again as much exposure of the company's net position would be hedged away in the futures market (see **Exhibit 4**).

Tardy: "Futures instruments can never be a perfect hedge for the complex physical transactions LDC is involved with, so we implemented risk management tools and systems to assess and monitor

our "residual risk", i.e. the financial exposure which cannot be hedged on futures markets. By company policy, our residual risk is to be contained at such levels as to allow no more than a 5% chance of losing or gaining 2% of the company's equity in one day". (The average fluctuation of equity was more like 0.3%, see **Exhibit 5**).

"If the residual risk gets close to this limit, traders are told to slow down or cease new trades altogether until order is restored. In addition, each trader has his/her own residual risk maximum. If a trader in the corn sector firmly believes that corn prices are about to go up, he/she could, in principle, go long in the futures but this would add greatly to his/her residual risk and therefore is uncommon".

Schoen's changes paid off almost immediately. Return on equity leapt from well below 10% to 40% within a year. Revenues increased from \$11B in 2008 to \$60B in 2012. Profits increased from \$50 million in 2003 to \$1.1 billion in 2012, with shareholder equity rising from \$1 billion to \$5 billion in the same period (see **Table 2**). The grain shortages in the 2009-2012 period helped raise all boats,¹ but LDC's revenues and profits grew more markedly than its competitors because for the first time it was able to reinvest its profits instead of being treated as a cash cow (see **Exhibit 6**).

Claude Ehlinger, CFO and Interim CEO, commented, "For the first time in many decades the shareholders were not attempting to diversify their holdings away from trading: this, and the fact that Robert was himself a trader at heart, helped morale immeasurably". It also helped that the accounting was now clearer, and with employee equity ownership, the management had an incentive to grow the business.

Not every new venture was a success. Schoen: "We thought biofuel would be a bigger deal than it proved to be. We invested a lot of money in sugar in Brazil, eventually spinning off a company called Biosev. We also bought farmland and plantations, not realizing that you can't compete with farmers, many of whom are willing to operate below the cost of capital, treating their land as a free asset."

| Balance Sheet | Dec-05 | Dec-06 | Dec-07 | Dec-08 | Dec-09 | Dec-10 | Dec-11 | Dec-12 | Dec-13 |
|--------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Non current assets | 1,116 | 1,237 | 1,383 | 2,001 | 2,346 | 2,632 | 3,510 | 4,417 | 4,588 |
| Working capital usage | 3,269 | 4,126 | 6,266 | 3,455 | 6,343 | 8,832 | 7,857 | 8,786 | 8,548 |
| Cash and Cash equivalent | 337 | 276 | 397 | 1,535 | 608 | 867 | 980 | 722 | 561 |
| Total | 4,722 | 5,640 | 8,045 | 6,991 | 9,298 | 12,331 | 12,346 | 13,924 | 13,697 |
| Equity | 1,163 | 1,913 | 2,267 | 2,780 | 2,785 | 3,362 | 3,912 | 4,766 | 5,029 |
| Non-current liabilities | 984 | 969 | 1,168 | 1,360 | 1,619 | 2,216 | 2,717 | 3,228 | 4,275 |
| Short-term debt | 2,212 | 1,965 | 4,266 | 2,408 | 4,187 | 5,927 | 4,551 | 5,294 | 4,001 |
| other | 363 | 793 | 345 | 443 | 706 | 826 | 1,166 | 635 | 392 |
| Total | 4,722 | 5,640 | 8,045 | 6,991 | 9,298 | 12,331 | 12,346 | 13,924 | 13,697 |
| Sales | 14,758 | 17,173 | 26,250 | 38,802 | 33,427 | 44,667 | 57,669 | 57,140 | 63,514 |

Table 2 LDC- Simplified Financials - \$ Millions (excludes Biosev)

Source: Company.

By 2013 LDC was shipping 80 million tons of product, a 10% share of all agricultural flows, but the trading market was beginning to cool down. Global production had increased leading to higher inventories. Ethanol consumption had eased, in part due to the boom in shale gas. Prices were down as was volatility. LDC's return on equity was 14% in 2013 compared to an average of 28% over the previous several years (see **Exhibit 7**).

¹ In 2012 the world held collectively only one month's supply of grain, compared to a more normal six months.

In the first half of 2014, Cofco, the Chinese food company and LDC's biggest customer, spent \$2.8 billion for 51% stakes in Dutch grain traders Noble (revenue \$15B) and Nidera (revenue \$17B). Frank Ning, chairman of Cofco commented: "By pushing the international strategy, Cofco will set up a stable grain corridor between the largest global grain-growing origins and the biggest global emerging market, in terms of grain consumption growth in Asia". Commentators noted that the acquisition would allow China to import grain "without going through the ABCD pipeline"².

This was potentially a major threat since nearly 40% of all LDC's business was with Asia, and with China in particular. But Tardy thought it was too soon to tell: "Grain trading is a complex business, it is not trivial to find people who can trade large volumes at low margins with controlled risk." Ehlinger added, "I'm also not sure of the culture mix and how many of their traders will want to work long term for a Chinese state-owned company."

The Trading Business

Nigel Mamalis had been with LDC's Ag business for 25 years and was now, after many years as Chief Risk Officer, global platform head (along with Joe Nicosia) with responsibility for half of LDC's platforms (cotton, coffee, rice, metals, finance, dairy, sugar).

He explained the basics of LDC's business: "The barriers to entry in the merchandising business are low. In principle little prevents buyers (such as wheat millers) who need grain from seeking out sellers (such as farmers or coops) who own the physical directly and making a transaction. And indeed that sometimes happens, especially in periods of low price volatility. But there are many logistic complications in actually carrying out the transaction: local shipping and storage, customs clearance, ocean shipping, price risk etc. There can also be a problem if the farmer is selling a crop that is still growing so the yield is uncertain. There are much bigger hurdles standing in the way of buyer/seller direct transactions. Farmers want to sell their crops when prices are high, or at harvest time, at any rate usually at the same time, whereas sellers want to buy when prices are low and more evenly throughout the year. If you buy and sell back to back, there will generally be a negative margin. If you buy or sell without hedging your transactions, there is a significant risk of losing money. So we hedge our positions and use our logistics assets to help optimize and arbitrage the relative price differences.

"Basically our business is buying when people want to sell, and selling when people want to buy. This requires detailed knowledge of hedging techniques as well as of the capacity to raise significant amounts of working capital at certain times of the year. LDC is active in a broader range of commodities than many commodity merchandisers, and this is in order to diversify, not only risk, but also our working capital needs. If all of your trades are in corn, say, then you need a lot of working capital at some points in the year, and none at other times. More significantly the merchandiser will be exposed to margin call financing in one single market whereas with multiple commodity activities this risk is diversified. The more pronounced the differences between prices across continents and across times of the year, the more opportunities we have for arbitrage.

"Volatility is good for our business in another way. Imagine that a buyer sees that the corn he needs is to be found most cheaply in Canada, at \$5.00 per bushel (for illustration). He could simply arrange a direct transaction. But we might offer to sell him the corn for \$4.80 and arrange all the handling. So that's clearly a win for the buyer. But we stipulate that although we will agree to deliver

² http://www.reuters.com/article/2014/04/02/us-noble-group-cofco-idUSBREA3103E20140402.

that much grain of the right quality, it need not be from Canada. We will hedge our sale by buying Canadian wheat. However in the time between the deal and delivery, the cheapest wheat to deliver may change due to changes in local demand and supply or due to changes in freight rates etc. We now have an opportunity to supply from a cheaper source, wherever it might be. We will then sell out the Canadian wheat and purchase from the new cheaper origin thus generating an optimized margin. So we make money on the option value built into the contract, and the greater the day to day volatility in prices, the greater the value of our option. As another example suppose we agree to deliver coffee beans to a roaster with a particular taste profile. There are many different ways to achieve that taste profile and again, we have the option to deliver in the cheapest way to fulfill the contract.

"Like our competitors, LDC owns many processing plants around the world. LDC does not however seek to be the largest processor but rather seeks to selectively own processing assets in particularly strategic locations. Like our competitors we seek to run our plants in the most efficient manner. However processing margins in our industry are volatile. We will generally choose to idle a plant when margins drop below variable cost. We would prefer to idle a plant and purchase product from a competitor at the cheaper price rather than run a plant at a loss. Capacity utilization in this case would not necessarily be an objective. This is deliberate. Again we arbitrage the margins. If we have grain in storage we have three main options, leave it there, sell it, or process it. The option to process is valuable. If you are always running at full capacity you lose the option value."

"Volatility is also a key driver in defaults. In the Ag space all deals are vulnerable to default. Farmers commit to sell at \$4.00 and see the price go to \$5.00 and refuse to deliver. Buyers commit at \$4.00 and see the price go to \$3.00 and default. And this isn't just small time players. Triple A companies have been known to renegotiate contracts, and China has been known to reject soybean deliveries on the basis of ambiguous quality legislation when prices have been unfavorable. We honor our contracts, which is a huge part of our value added. But in a business cycle, you can lose money because of defaults by farmers as the price goes up and again when it comes down because of defaults by buyers. There is an advantage in having the highest market share in a commodity, as we are in cotton (**Exhibit 8**). For one thing, the major players will always call the number one player for a quote on a piece of business. But even more importantly, they'll think twice about defaulting on a contract with the number one. The difference is quite marked".

Ehlinger added: "On top of all that we tend to make more money as commodity prices rise: all across the value chain, the margins widen, not only do the value of our inventories go up but clients tend to be less demanding about price; on the way down the opposite is true".

"So volatility is a key driver of our profitability," continued Mamalis. "In the 1980's, 1990's and early 2000's volatility was low. Since 2004 it has been high. The question is, how will it be in the coming decade? One trend that does seem clear is that more and more buyers are concerned about traceability, which is a challenge in a commodity market where goods are shipped in bulk."

Joe Nicosia had been with the company as a cotton trader for 34 years and was now, along with Mamalis, global platform head for the merchandising group. "Trading has changed quite a lot in recent years. Information is now shared instantaneously. If China needs cotton, everyone knows at the same time. If it rains today in Australia, the world knows when I do. It used to be that if someone needed a particular type of cotton I might be the only one to know that a certain farmer had some. But now everyone can email or text 100,000 farmers at a time."

"Not so long ago a commodity would be handled seven times or so as it moved through the pipeline: farmers, consolidators, shippers, receivers.... and at each of those touch points there was an

opportunity to make a deal, perhaps a warehouse full of grain, or a forward lease of train car capacity. But increasingly Cargill and others have control over a crop throughout its journey through the pipeline. And so we've had to do that too. Whereas at one time you could procure the commodity you needed at any point in the chain, now it is increasingly important to procure it at the source. The little players in the middle are being crowded out because they can't compete globally. China would like to play this game too, but of course they don't have access to the origin, the farmers."

Nicosia reflected on the recent changes within LDC. "When Robert arrived he did many things to modernize the company, things that needed doing, like focusing on long term shareholder value and professionalizing the functions like HR, tax and finance. But the downside is that the people staffing these functional roles aren't traders and aren't really familiar with our day-to-day business and how we make money. Evaluating a trader is really quite simple; there's a scorecard every day."

Options for the Future

There were many questions on Schoen's mind as he thought about LDC's future in the coming decade. Robert's vision in 2005 that the upswing in population and wealth in the emerging world would create opportunities for traders such as LDC had proven correct. But was that vision still true? And even if it was, were the new actions by China and the increasing impact of traceability concerns likely to require changes in how LDC operated?

It was possible that the time might not be right for a major initiative. Many of the senior management had come through an exhilarating but stressful period, and become quite wealthy as a result of the successes they had shared³. Some had already left, and Schoen himself had given up his role as CEO of LDC and was now Chairman of the LDC Supervisory Board. The same was true of the traders – but even those that had stayed had begun to enjoy the fruits of their vested equity. As one executive pointed out, it took seven years to train a trader, so a period of consolidation might be the way to go.

But Schoen was concerned that with all the changes in the world, now was not the time for the company to sit on its laurels. As he saw it, there were two major alternatives: continue to grow horizontally and diversify in the commodities sector or integrate vertically downstream closer to end consumers.

1. Double Down on Commodity Trading

LDC had been the most profitable of the ABCD traders in the last few years, showing that it had some special capabilities. While organic growth was the natural option, might it be better to use some of LDC's recent profits to buy a smaller competitor, or merge with a bigger competitor, to achieve leadership overnight? There would be returns to scale, in part due to normal efficiencies, but in part to keep pace with the growing size of other actors such as buyers, sellers and competitors. Size would also help with the default risk problem. Such an aggressive move would require significant financing. Would an IPO make sense? Could the money come from a sovereign fund; in particular could it come from Asia, a critical region for the future of the company?

³ Though another executive said: "The last few years have been as much fun as you can imagine. Like being in a 150-year-old start up."

LDC had had serious discussions about merging with Olam⁴ in 2011, but these had collapsed. Published news reports saw the two companies' non-overlapping areas of influence to be a positive from a markets point of view but at the same time, less liable to produce cost savings. The attraction to LDC, it was speculated, had to do with access to the deep pockets of Asian investors. The same articles suggested LDC had also put out feelers to both Glencore and Noble. But Margarita concluded that such mergers should not go forward until the transformation Robert had begun was complete. Maybe the time was now right?

2. Increase Value-Added Activities

An alternative was to increase LDC's participation in value-added activities. This could be in the form of further participation in processing and crushing, extending LDC's reach in private label manufacturing, or by entering the world of branded food. LDC had no expertise at all in branding, so this route would require the purchase of a well-run branded company, or again, merging with a larger one. Mamalis thought dairy was an option: "Getting further into dairy is not as far-fetched as you might suppose. Urbanization is changing consumer habits. Demand for dairy products is set to increase significantly in the next 10 years and the only way to ship milk is in processed form, particularly powder. There are futures markets in milk powder but as yet they tend to lack liquidity, but this should change as international trade grows. And in any case we already deal in rice where there is also no futures market."⁵

For quite some time, ABC had been moving in the value-added direction, making their earnings more stable, but lower, as a result. Some observers believed the fixed assets part of their businesses had become so important that trading had become secondary. At the same time Glencore, very much a trader, but in metals and energy, had made a splash by entering the Ag space with its purchase of Viterra, formally the Saskatchewan Wheat Board. Nicosia, in favor of LDC going back to its roots, said: "There are no barriers to entry in the fixed asset business, ultimately you are down to earning just a fair return on capital. The barrier to entry in the trading business is that it takes decades to learn how to balance the huge risks and narrow margins: and to develop outstanding traders whose judgment you can trust".

Another strategic question was the matter of diversification. Some believed that the passion for diversification had led to the company overextending itself into marginal businesses, like fertilizer. Indeed this was at the heart of their strategic dilemma: concentrate on what you do well and accept the risks or diversify and get modest but stable returns. Schoen commented, "The trading and value added businesses are actually countercyclical. The commodity business does well when product is scarce and prices are high and volatile. The processing business does well when product is plentiful and prices are low, so that factories can be kept full". He reflected on his time as CEO: "Robert had a vision for the company: to turn it from being an asset light pure trader to a more balanced, more asset heavy, more industrial company. You can see (**Table 2**) that this has been achieved. The question is, what is the vision that is to replace it?"

⁴ Financial Times http://www.ft.com/intl/cms/s/0/f48f2408-386c-11e0-959c-00144feabdc0.html#axzz3G2rtreQc

⁵ In 2012 LDC bought Imperial Sugar, a branded product company with close to a billion dollars in sales. They paid a total of about \$200 million.

Margarita Louis-Dreyfus

Of course, the matter was ultimately up to Margarita Louis-Dreyfus. Did she prefer a period of consolidation, preserving the company that Robert had re-energized — leaving bold steps to the next generation? Or would she wish to set the company on a new, more aggressive course?

When Robert had insisted on being the majority shareholder, he had granted the other shareholders the right to sell their shares to the Trust at any time. By November 2014, the Louis Dreyfus Holding Company was about 65% owned by the Trust controlled by Margarita, and 35% owned by other family members. The Holding Company in turn owned 85% of LDC, the other 15% being held by its employees. Were the minority family members to tender their remaining shares, as was their right, this might require some outside funding, and perhaps complicate (or simplify) the strategic questions that lay ahead.

"When Robert took over the company, he did it in part to help fulfill his father's desire that the company, under the family name, thrive for years to come. That is why he set up the 100 year trust before he died," explained Margarita. "I see my role as continuing that mission. It is inevitable that this company will have to change to stay relevant, so I am open to many of the major proposals like an IPO or merger, if that's what it takes. But for the company to survive and flourish it has to be about more than making money. There are many ways to inspire people and have them be loyal to a company, and the promise of money is just one way. I don't think that's sustainable over the long term. Many companies adopt an inspiring mission, like feeding the world, and of course we do play a leading role in that, but any one mission isn't for everyone. I want the next CEO, not only to help guide us strategically through the next few years, but also to help me build a strong culture, one in which everyone feels like a valued partner, and a member of the team."

| Exhibit 1 | Management | Changes | 2012 - 2014 |
|-----------|------------|---------|-------------|
|-----------|------------|---------|-------------|

| Members of the Senior Executive Group as of 2012 | |
|--|--|
| Serge Schoen* | CEO until June 2013, now Executive Chairman of LDC Supervisory Board |
| Erik Anderson* | Retired in 2013 |
| Ciro Echesortu* | Head Trader, CEO from July 2013 to May 2014 |
| Claude Ehlinger | CFO, now also Interim CEO |
| Kenneth Geld* | Head of Biosev, now retired |
| Nigel Mamalis | Chief Risk Officer (now Platform Head) |
| Andrea Maserati | Human Resources and Communication |
| Joe Nicosia | Platform Head |
| Francois-Philippe Pic | Group Head of Regions and Operations |
| Silvia Taurozzi* | Retired in 2014 |

Members of the Senior Executive Group as of 2012

Source: Company.

Exhibit 2 Biographies of CEOs of LDC

2005 - 2013

Serge Schoen is the Executive Chairman of the Louis Dreyfus Commodities Holdings Group, leading the Group's management and chairing the Supervisory Board of Louis Dreyfus Commodities Holdings. Until June 2013, he was CEO of the Louis Dreyfus Commodities Group and member of the Supervisory Board of Louis Dreyfus Commodities Holding. Prior to this appointment in 2005, he was a member of the senior management team of the Louis Dreyfus Group and Chief Financial Officer of Louis Dreyfus Commodities. He was previously Chief Operating Officer of the then-largest alternative fixed telecommunications operator in Europe, Neuf Cegetel (a company founded by Louis Dreyfus). Between 1992 and 1999 he was at the Boston Consulting Group in Paris. He holds a Master of Science degree from Telecom Paris Tech (France) and a Master's degree in Business Administration from the Sloan School of Management at the Massachusetts Institute of Technology (US).

2013 - 2014

Ciro Echesortu is Head of Strategy of Louis Dreyfus Commodities after serving as CEO from June 30, 2013 to June 2, 2014. He joined Louis Dreyfus in 1985 and has had several positions in the company including Head Trader from 2009 to 2012. Prior to joining Louis Dreyfus, he worked at Deloitte Haskins & Sells Argentina and Cresud (IRSA Group). He has a degree in agricultural economics from the University of Guelph, Ontario (Canada).

2014 - Case Date

Claude Ehlinger is Interim Chief Executive Officer and Chief Financial Officer of Louis Dreyfus Commodities, and also serves as Non-Executive Chairman for Biosev. He joined the Group in 2007 after serving three years as Chief Financial Officer at Eutelsat. Prior to this he was Chief Financial Officer of Cap Gemini's Central and Southern European operations, Chief Financial Officer of CCMX and Group Managing Director of Finacor, a large brokerage company in Europe. He began his professional career in 1985 at Thomson Group as personal assistant to the Chief Executive Officer. Claude Ehlinger is a graduate of the French business school, HEC.

Source: Company.

515-065 -13-

Exhibit 3 LDC Financials in \$ billions (excluding Biosev)

| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|------------------------------------|------|------|------|------|------|------|
| Revenues | 39 | 33 | 45 | 58 | 57 | 64 |
| Gross margin | 1.7 | 1.3 | 1.9 | 2.1 | 2.3 | 1.7 |
| Com. & admin expenses | -0.6 | -0.4 | -0.6 | -0.8 | -0.8 | -0.8 |
| Net profit | 0.7 | 0.6 | 1.0 | 0.9 | 1.1 | 0.6 |
| | | | | | | |
| Equity | 2.8 | 2.8 | 3.4 | 3.9 | 4.8 | 5.0 |
| Inventories | 2.5 | 4.1 | 6.5 | 5.6 | 6.0 | 5.5 |
| Non Current Assets | 2.0 | 2.3 | 2.6 | 3.5 | 4.4 | 4.6 |
| LTD | 1.4 | 1.6 | 2.2 | 2.7 | 3.2 | 4.3 |
| Capex | 0.7 | 0.3 | 0.4 | 0.7 | 0.7 | 0.7 |
| Source: Louis Dreyfus Commodities. | | | | | | |



We originate and produce V

of We engage in joint ventures and we commodities, including soy, corn, oranges and lemons. We own contract to source produce from wheat, cotton, rice, sugarcane, palm oil, range plantations, sunflower seeds, extensive and further land. ue... farms

We process and refine ...on every continent. With a robust base of production and processing assets we control the quality and movement of supplies along the value chain. By locating assets strategically we create synergies to maximize distribution flows.



We store and transport

our our worldwide distribution network. We own warehouses and silos Our products are transported by rail, road, air and sea, with our own fleet of vessels shipping goods both for Louis Dreyfus Commodities and for third network creates allow us to control costs, mitigate risk and optimize synergies in the value chain. The efficiencies in several key locations. across ...supplies parties.



We research and merchandize

....developing outstanding market intelligence. This knowledge is shared across all platforms and regions so we can respond efficiently to customer demand.



We customise and distribute

...our products to a broad customer base. From multinationals to local manufacturers, we supply every type of company with items such as: - Packaged frozen orange

juice - Dairy products distributed under the Jolait, Milait,

under the Jolait, Milait, Sunny Farms and Montex brands

 Sugar distributed under the Imperial Sugar, Dixie Crystals and Holly brands



Segment overview: product portfolio

| ę | | OILSEEDS | Primary processing and merchandising of soybeans, soybean meal and oil, seeds (rapeseed, sunflower, cottonseed), seed meal and oil, palm oil, biodiesel, glycerin |
|---------|------------|-------------|---|
| SMAO: | | GRAINS | Merchandising of wheat, corn, sorghum, barley, rye, oats and ethanol |
| атаја | | JUICE | Processing and merchandising of orange, grapefruit, lime, lemon and apple juice and citrus by-products |
| сныи | 1 | FEED | Operating mill and merchandising feed |
| ∃UJA\ | | FERTILIZERS | Merchandising of nitrogen, phosphates & potash fertilizers & crop protection products |
| N I | | FREIGHT | Freight solutions for LDC's platforms and for third parties |
| | | | |
| | <i>i</i>] | COTTON | Merchandising of upland saw ginned cotton, pima and extra long staple |
| | 7 | SUGAR | Merchandising of raw and white sugars and ethanol, refining of raw sugar |
| ЯО∃ТА | | RICE | Merchandising of paddy, brown and milled rice |
| AG PL | R | FINANCE | Financial market and risk mitigation for LDC's platforms |
| npisidn | ý | COFFEE | Merchandising and milling of Arabica and Robusta qualities |
| ноя | - | METALS | Merchandising of copper, zinc, lead concentrates, copper cathodes and cobalt |
| | And a | DAIRY | Merchandising of regular whole, full cream, instant whole, fat-filled and skim milk powders |
| | 1 | OTHERS | Includes LDC's minority shareholding in Calyx Agro and LDC's activity in providing market intelligence to LDIG Commodities Alpha Fund, a hedge fund investing in a diversified range of commodities |
| | | | |

Exhibit 4c Activities by Value Chain

| Retail/ Distribution | NS | NS | NS | > | > | × | > | × | NS | > | × |
|-------------------------|----------|--------|------------|-------------|------|--------|-------|--------|-------------|-------|--------------------------------|
| Secondary Processing | > | > | > | > | > | × | > | × | × | × | Smelting tolling agreements |
| Marketing | > | > | > | > | × | > | > | > | > | > | > |
| Logistics/ storage | > | > | > | > | > | > | > | > | > | > | > |
| Primary | > | > | > | > | × | NS | × | > | × | × | × |
| | > | > | > | > | > | > | > | > | > | > | > |
| Crop production | × | × | > | × | × | NS | × | NS | × | × | × |
| | OILSEEDS | GRAINS | JUICE | FERTILIZERS | FEED | COTTON | SUGAR | COFFEE | RICE | DAIRY | METALS |
| | Lms | ottel | a nis I | edD a | nleV | ່ຼ | notte | sig g | n Juizik | yanc | Merc |

Louis Dreyfus Commodities owns key strategic assets in the value chain to support and develop its merchant activity

Source: Louis Dreyfus Commodities.

515-065 -16-

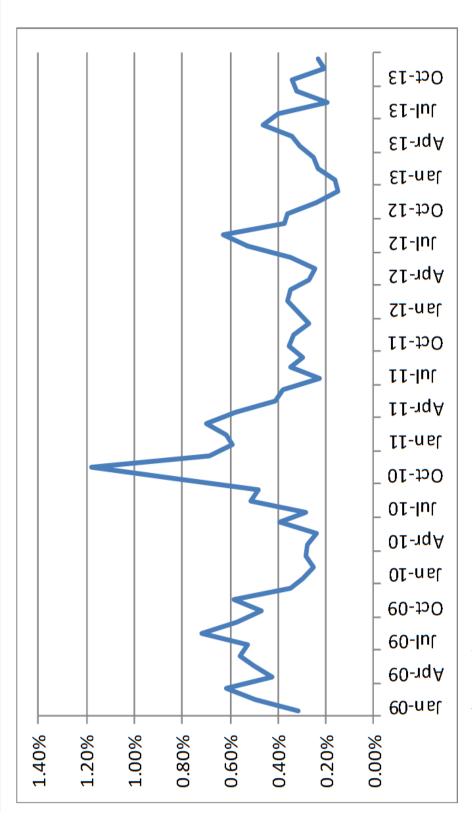
Exhibit 4d Main internationally traded agri commodities

| 7 | | Others | | | Walnuts | Pistachios | Almonds | | Cashews | Peanuts | | Biofuels Edible nuts | No involvement by LDC Denotes segment where the Group is involved | raded |
|--------------------|-----------|----------|----------|--------|---------|------------|---------|---------------|---------|---------|--|----------------------|---|--|
| 7 | | | | | | | | Ethanol | | | | Biofuels E | e the Gro | nally t |
| 10 | | Ginder | b | Spices | | | | | Onion | | | Spices & Dehyd | egment wher | nternatio |
| 12 | | Lentils | | | | | Beans | Beans | | | | | | |
| 103 | 11 | | Dairy | | | Reef | Chicken | Chicken | | | | | | |
| 101 | Citrus | 00000 | 0000 | Coffee | | | | Sugar | | | | | | |
| 95 | Others | Rubber | Timber | | Cotton | | | Fertilizers | | | | | | |
| 258 | Sunflower | Rapeseed | | | Palm | | | Soy | | | | | | |
| Millet Oats 365 | Sorghum | Barley | Dice | 222 | | | Corn | Corn Wheat | | | | | | LDC is involved in 86% of the total main agri-commodities which are internationally traded |

Source: Louis Dreyfus Commodities.

515-065 -17-



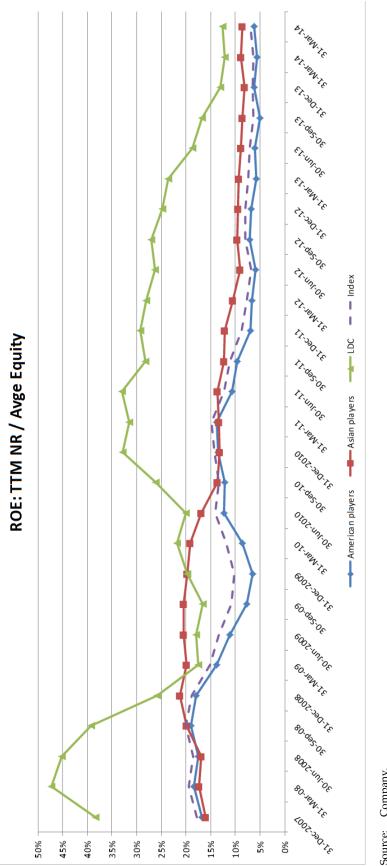


515-065 -19-

Exhibit 6 Average return on equity, trailing twelve months

ROE – Quarterly evolution

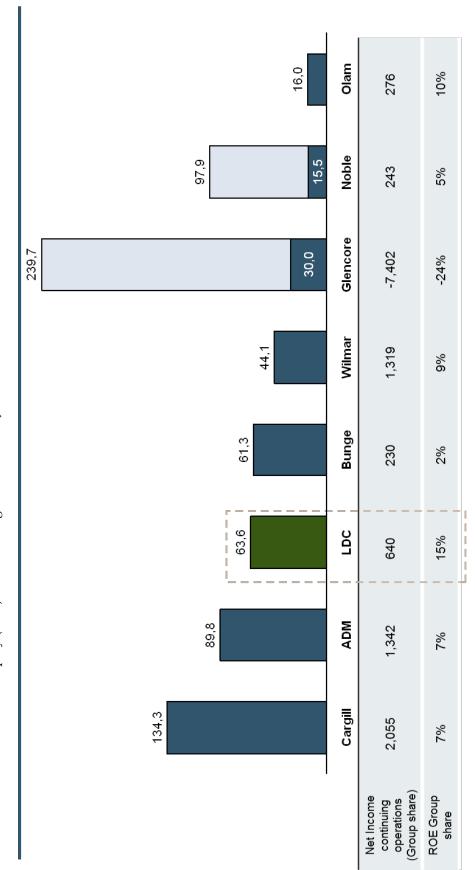
TTM NR / Avge Equity [2007-2014, %]



Company. Source: American players: ADM, Bunge, Cargill. Asian players: Olam, Noble, Wilmar Note:

515-065 -20-

Exhibit 7 Sales and Return on Equity (ROE) benchmarking - Calendarized Jan. to Dec. 2013



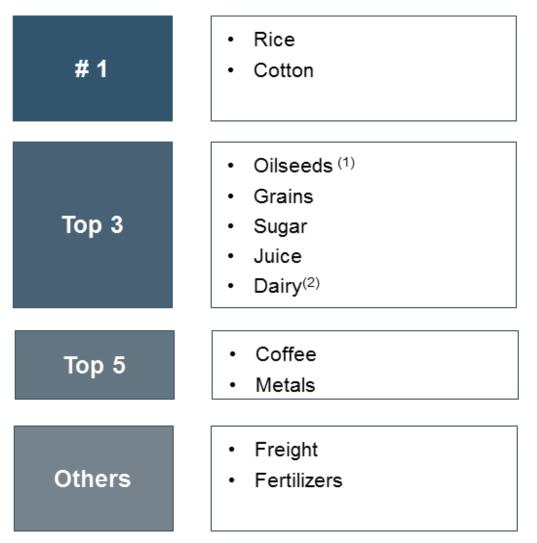


Exhibit 8 Competitive position of LDC commodities and freight platforms by market position in 2013

- (1) CPO & feed milling included in oilseeds platform
- (2) Based on addressable markets excluding Chinese domestic market