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Enterprise Risk Management at Top Agro Inc.

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Abstract

Top Agro (TA - *not its real name*) is a small crop protection start-up operating in the European Union. In a relatively short period of time TA has been able to secure a reasonable profit margin and build a solid niche in the Italian crop protection market. The driving force in their success is the professional expertise of the two owners, their knowledge of the domestic market, and the highly flexible business model they've developed. Chemicals are sourced either in the Far East via a Hong Kong based commercial partner or purchased directly from other European domestic suppliers. TA is responsible for the formulation and packaging of the finished product, which is then distributed in the domestic Italian market. Although TA is now profitable, further sales growth is unlikely. One of the owners is convinced that significant benefits may be obtained by identifying and controlling the key risks that TA is exposed to, in particular by reducing the price risk in their international supply chain.

This case has been classroom tested at the senior undergraduate and MBA level with good results. It works well as opening case for an eMBA course on managing price risk, as it provides an opportunity to map the risk "opportunity set" via the ERM challenging students to reason and set intervention priorities by focusing on currency exchange rates and risk management as the most immediate and promising action.

Keywords: supply chain; enterprise risk management; currency risk management; crop protection.

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IFAMA Agribusiness Case 14.1B

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Introduction

After working countless hours preparing for a crucial business trip to Hong Kong, George was exhausted and needed a break. The dreary November afternoon in Milan deterred him from taking his normal brisk walk through a nearby park. He settled into his chair and scrolled the financial news headlines on his laptop. George, the president of Top Agro, used this opportunity to relax and stay abreast of current global events. He felt he needed to do this in order to advance his company's long-term sustainability.

A story on a major news feed soon captured his attention. *"Globalization Concerns of a Successful Start-up"* was about a high tech company which had managed to grow exponentially thanks to excellent technical know-how and profound knowledge of the domestic market. Despite early growth, the piece explained, the company was now held back by difficulties in gaining access to convenient and reasonably priced international financial services, something that was essential to reducing costs and supporting its future expansion.

*Join the crowd…*thought George. After all, the story seemed similar to his own company's story and to a large extent the reason for his forthcoming business trip to Asia.

* * * *

George's company, Top Agro (TA), is a successful crop protection firm that he started with a colleague in 2000. They left a large and somewhat lethargic corporation to venture into business for themselves. Top Agro is a highly specialized company based in Milan, in the region of Lombardy, serving the entire Italian market. The company began breaking even by 2003, and six years later, enjoyed a profit margin George considered "reasonable" for a sector increasingly dominated by large multinationals. Top Agro weathered the 2008-2009 global crisis reasonably well; sales of some product lines shrunk by about 5%, and the age of receivables had increased noticeably, but "hard" losses remained below 1% of total sales.

George had reason to be proud of Top Argo's achievements. On the eve of its 10th birthday, the company had managed to grow the product line and expand into the micronutrient fertilizer market while developing, rationalizing and consolidating its network of international supply chain partners. TA's main focus was the Italian market, where the company built a profitable niche for its own brand of specialty crop chemicals. They were also sold as "no name" and "private label" products. TA had been quite successful in exploiting its production and administrative flexibility with relatively low fixed costs and had specialized in the production of higher margin products with a relatively limited market potential, too small to attract the interest of large multinationals.

The first 10 years had been a growth story. Now, as market shares stagnated in many segments, George realized it's been a struggle to maintain volumes and margins under increasing pressure. The two principals struggled to reinvent their push strategy and refine the efficiency of existing operations in order to increase profitability. They knew their company had grown thanks to their ability to merge entrepreneurialism with scientific knowledge and during the ``early years. They exploited their flexible, low fixed costs company structure and used their entrepreneurial

serendipity to solve most problems, as they arose. It was clear that TA had already captured the lower hanging fruits available in the domestic market and volume growth was almost impossible. But, additional profits could be had by promoting a more efficient management of their supply chain and significant gains could be achieved through implementing better risk and cost controls throughout their supply chain.

Their chartered accountant had been asking for a sober, comprehensive assessment of all risks, something TA had never done during the forgiving and fast growth years. Perhaps, George felt, we should listen to her more carefully.

Concerns were not difficult to spot, from the tightening regulatory scenario which required increasingly expensive registration and certification protocols, to the crowding out of several independent suppliers of chemical inputs, to the worsening demographics of Top Agro's independent retail sales force, which was shrinking at an increasing pace as salespeople reached retirement age.

A lot needed to be done to streamline TA`s international supply chain. During their first 10 years, Top Agro concentrated on the growth of domestic sales, happy to simplify and standardize their international supply chain which was now handled via a trusted Hong Kong partner who was responsible for sourcing chemicals primarily in China and arranging for their shipment to Milan. One of the reasons TA did not pay too much attention to their supply chain was because their Hong Kong partner had been extending extremely long terms on TA's USD payables. This was a flexible and convenient arrangement for Top Agro, resulting from several years of close collaboration and mutual trust.[1]

The international financial crisis of 2008-09, and the violent increase in exchange rate volatility convinced George it was necessary to invest time and effort into improving the efficiency of TA's supply chain, and develop convenient and cost effective access to modern and competitively priced financial services. The steep appreciation of the US dollar during the second part of 2008 and the first quarter of 2009 could have had disastrous consequences for Top Agro, as the company had neither a formal exchange rate forecasting nor hedging policies in place. Quite simply TA had been basing its budget decisions on limited qualitative information provided by senior staff at local branches of regional banks. The 20% drop of the Euro relative to the US dollar during the middle of 2008 had caught Top Agro completely without any protection. This change alone could have cut TA's EBITDA in half. With a virtual gun to their head, the two partners decided to postpone all US dollar payments, gambling on their partner's patience and wait for a stronger Euro. They were fully aware of the limited sustainability of this approach.

By the end of 2009 the Euro had regained some strength and was back to a comfortable $1.40-1.50 range which allowed the company to lock a comfortable average margin for the crop year. Top Agro had been fortunate, once more, but George now understood that a "do nothing" approach was indeed a highly speculative strategy which exposed the company to almost unbearable risks.

[1] The Hong Kong partner had recently purchased a 32% equity interest in Top Agro.

TA's accountant also considered the possible expansion into foreign markets. This was been tabled due to its complexity and high capital requirements. The two partners felt they could not transfer any competitive advantage from their core competencies. Additionally, the European crop protection market was much more concentrated than the Italian one, with much higher barriers to entry.

George was convinced that improving efficiency of TA's supply chain and reducing its costs was probably the first strategic priority at this time.

The Business: Top Agro's Global Supply Chain

Top Argo's global supply chain was reasonably simple and designed to provide the company low cost inputs from the Far East. Most chemicals were purchased in China, in USD, and shipped to the corporate warehouse in Northern Italy.

Until recently TA's Hong Kong partner satisfied over 95% of chemical input needs. This percentage had recently dropped to approximately 30%, primarily due to the new certification requirements set by the European Union that had shrunk the number of certified producers that could be reached by the partner. In the last fiscal year, the remaining 70% of inputs had been supplied by other international producers, and procured directly by Top Agro. These purchases in the Far East were crucial to securing Top Agro's long-term profitability. On average, the EU domestic prices for chemicals were 100% to 150% higher than what Top Agro was paying internationally. Obviously, within the EU, procurement strategies were much simpler for Top Agro, but because of costs, the company could afford them only for a limited share of their overall procurement needs. In the last fiscal year, approximately 70% to 80% of chemical inputs were priced in USD, with the remaining 20-30% in Euros. The Hong Kong partner was still allowing the longest payment terms and matching the age of Top Agro's receivables. Payables with other suppliers were shorter, averaging 200 days.

In order to comply with increasingly complex health and safety regulations, Top Agro relied on specialized third parties for the further processing of chemicals and final packaging. Distribution to regional wholesalers and direct delivery to a few large retail accounts was completed directly by Top Agro from their centralized warehouse.

Top Agro's products were highly crop-specific, destined mostly for fruit and horticultural crops in Southern Italy. The business was primarily seasonal, driven by farmers purchasing decisions at a specific time of year.

Inputs were purchased once per crop year, in late winter through early spring before the start of the planting season. Shipments to Milan were a rather routine activity completed through large commercial shipping companies and most of the time an uneventful commodity process. Chemicals were normally received 3 to 6 months after submitting the purchase order. Suppliers were paid an initial deposit of 15% when placing the order; another 15% when the commodity was received; and the remaining 70% of the invoice was settled in the following Fall or Winter for the supplies received from the Hong Kong partner—or 180-210 days for other suppliers. It was not unusual to have two-year payables outstanding with the Hong Kong partner.

Matching TA's payables with their receivables was a lengthy process. Normally TA received payment in Euros at the end of the crop year and then proceeded to complete payments in USD to foreign suppliers for inputs ordered about 18 months earlier. The Hong Kong partner had more than once demonstrated flexibility and significant patience on this matter and George counted on their availability to extend as needed with the age of Top Agro's payables. George knew it was these flexible terms and progressively longer payables that had financed the growing company's larger cash requirements. As a small start-up, it was practically impossible to find a bank financing in the domestic market with the flexible payment terms offered by the Hong Kong based trading company. They provided a practical and effective one stop shopping service, a true life line for the start up. As the company grew financially more established George was increasingly aware of the possible cost of this "flexible trade financing" arrangement.

Although there were large companies in Northern Europe that could provide a far shorter supply chain and significantly simplify both the procurement and regulatory compliance requirements, George was equally aware of their higher prices and rigid payment terms. It was therefore crucial for TA to be able to continue this strategy of international direct purchase. EU domestic prices for chemical inputs were 100 to 200% higher than what Top Agro was paying in the international markets. Recently George had a chance to confirm this when the last shipment of a specific chemical originating from a certified producer in China was paid eight USD/kg compared with 29 USD/Kg charged by a large EU multinational. Sure, an EU based procurement strategy would be simpler for Top Agro, but it was also not affordable.

From a strategic perspective, the key competitive decision for Top Agro was the publication and distribution of its "Crop Year Catalogue". The catalogue and price list were released late in the fall or early winter. The extreme currency volatility that followed with the 2008 sub-prime crisis, forced Top Agro to reset its prices, and this was not well received by clients who were used to considering prices quoted in the catalogue only once for an entire crop year.

Top Agro received most purchase orders for their crop-specific products in late winter to early summer following the publication of the current catalogue. These orders were received about 12 months after placing orders for the inputs. Chemical products were delivered to clients 3 to 6 months after the orders, and payments were received from Top Agro after the harvest of the specific crop, often in the fall through winter of the following year–a full 18 to 24 months after placing the order for the chemicals. The average age of receivables for a specific crop year was about 7 to 10 months later in the fall and at the beginning of the second winter, only to drop to almost zero shortly thereafter.

Approximately 60% of sales were generated by small independent distributors, large distributors accounted for 20% of sales; direct sales to large clients accounted for the remaining 20%. Exhibit 1 illustrates the complete timeline of the FY2010 supply chain, for chemicals procured though the Hong Kong partner.

The Financials

George was proud of Top Agro, yet fully aware of the relative fragility of his company. Sales in the most recent fiscal year (FY2009) had for the first time topped 10 million Euros. The cost of imported chemicals was the single largest cost item, at 4.8 million Euros, followed by

processing and distribution at 2 million Euros; operating expenses at 0.8 million Euros; and HR at 0.7 Million Euros. Interest paid in FY 2009 was 0.5 million Euros; depreciation was 0.3 million Euros and corporate taxes were 0.36 million Euros. Net income was 0.54 million Euros. A small dividend of 0.04 million Euros was declared, with 0.5 million Euros in retained earnings.[2]

Exhibit 1. Global supply chain timeline: Crop Year 2009-2010, Hong Kong partner.

Spring–Summer 2008 (Start of supply chain timeline, month =0):
Raw chemical purchased in USD from Far East suppliers, for delivery 3-6 mo later.
Payment: 15% at order, 15% upon receipt at warehouse, 70% expected in fall 2009 – winter 2010. Prices set at time of order, in USD.

Late Summer–Early Fall 2008 (month=3-6):
Raw chemical received. Second payment of 15%.
Top Agro starts further processing and packaging.

Fall 2008–Winter 2009 (month=6-9):
Catalogue produced, & price list defined. Both are widely distributed.

Early Spring–Summer 2009 (month=9-12):
Orders received;
Initial shipments of crop – specific products to wholesalers; terms to the end of the specific crop year, late in fall of 2009, early winter 2010.
Process start ex novo in late winter – early spring of 2009 for the crop year 2010-2011.

Fall 2009 –Winter 2010 (month=15-18):
As age of oldest receivables grows to 6 to 9 months, the first payments are received: Retail clients pay retailers, who pay wholesalers, who pay Top Agro. Payments are received in €; further delays of up to 3 months are not unusual.
Top Argo's outstanding payables are 15-18 months old for 2008 orders and 3 – 6 months old for 2009 orders. Average age of payables hits 13-17 months (30% of invoice paid when chemicals received).

Fall 2009 –Winter 2010 (month=15-18 +):
Company completes payment of USD invoices for the summer – fall 2008 shipments.
Average age of payables drops to 4-6 months (all for 2010-2011 crop year).

Top Agro's Balance Sheet was equally simple. The 12.15 million Euros in assets included 0.5 million Euros in cash and in short term bank' deposits, and 8.64 million Euros in receivables. Long term assets included 1 million Euros in land and buildings, before cumulative depreciation of 0.1 million Euros, and 2.5 million Euros in equipment, before cumulative depreciation of 0.35 million Euros. Total liabilities were 8.35 million Euros. Short term liabilities listed 5.75 million Euros of payables (mostly USD denominated) and 0.1 million Euros of current portion of long term debt. Long term debt amounted to 2.5 million Euros. Shareholders equity included 0.5 million Euros in capital stock and 3.3 million of retained earnings.

Top Agro' statement of cash flow for FY 2009 reflected the ongoing challenges of financing a business expansion, the importance of trade financing, and the attempt by management to

[2] Data has been modified to protect confidentiality of TA business results.

consolidate at least part of Top Agro's corporate financial needs in long term debt. Operations had required 0.044 million Euros; Long term bank financing had provided 0.35 million Euros; Investments had required 0.25 million Euros. Cash did increase from 0.44 to 0.5 million Euros. At the end of the 2010 fiscal year, Top Agro had available an additional 1 million Euros in a short-term line of credit from local banks. Top Agro's FY 2009 Income Statement; Balance Sheet; and Statement of Cash Flow are presented in Exhibits 2, 3 and 4.

Exhibit 2. Top Agro: Income Statement, FY ending Dec. 31, 2009 (1000€)

Sales	10000
Cost of chemicals	4800
Operating margin	5200
Processing and distribution	2000
Op expenses	800
HR costs	700
EBITA	1700
Depreciation	300
Interest	500
Taxes at 40%	360
Income	540
Dividend paid	40

Note: Based on actual data, modified to protect confidentiality

Exhibit 3. Top Agro: Balance Sheet, FY ending Dec. 31, 2009 (1000 €)

Assets	
Cash and short term deposits	500
Accounts receivables	8600
Short term assets	9100
Equipment (book)	2500
Cumulative depreciation	350
Building (book)	1000
Cumulative depreciation	100
Long term assets	3050
Total assets	12150
Liabilities	
Accounts payables	5750
Current portion, long term debt	100
Short term liabilities	5850
Long term debt	2500
Long term liabilities	2500
Capital stock	500
Retained earnings	3300
Shareholders equity	3800
Total liabilities and shareholders equity	12150

Note: Based on actual data, modified to protect confidentiality

Exhibit 4. Top Agro: Statement of Cash Flow, FY ending Dec. 31, 2009(1000€)

Income & depreciation	840
Change in inventory	-1000
Change in receivables	-1700
Change in payables	1816
Cash flow, operations	-44
Equipment purchases	-250
Cash flow, investing	-250
Long term bank financing	-250
Cash flow, financing	-250
Initial cash	444
Final cash	500
Change in cash	56

Note: Based on actual data, modified to protect confidentiality

Human Resources

The company's early success resulted from the professionalism and dedication of the two senior partners, each with an advanced research degree in Crop Protection and a sound understanding of the Italian marketplace. From the beginning finances and accounting had been the responsibility of a formally trained accountant who was also the spouse of one of the partners. Two clerical secretaries and four warehouse workers completed the lean team of Top Agro.

Further processing and the packaging of the chemicals were contracted. This choice was essential in order to remain flexible and cost competitive, given the complexity of the environmental and safety regulations and the relative small scale of product batches. Third party distributors were also used. The two partners managed all finances, HR, registrations and certification requirements, purchases of raw chemicals, and coordinated wholesale and retail marketing and sales through a network of non exclusive regional salespersons.

This structure had served Top Agro well and provided a flexible and a very lean corporate structure.

The Future

The two principals agreed that further sales growth in the domestic market was almost impossible, given the increasing restrictions placed by EU's health and environmental regulations on most chemical compounds used by the company. Compliance with increasingly complex regulatory requirements was extremely expensive and time consuming; for example, certification of a single product could easily require in excess of 250,000 Euros and several months of testing and true patience. At the same time, the cost of a viable R&D pipeline was simply unaffordable for TA. This cost was the key driver of industry consolidation, and

restricted access to the latest generation of chemicals.[3] The effective distribution of finished products was an increasing challenge, as distribution opportunities were shrinking given the retirements of many independent agents and small retailers.[4]

Long discussions had convinced the partners of the need to improve the efficiency and the financial performance of Top Argo's current global supply chain. Credit risk in the domestic market was expected to increase. Given the limited dimension of clients, Top Agro could not rely on information from conventional providers, and credit insurance was too expensive and rigid to be a viable alternative for Top Agro, so that the modeling and the management of this risk was largely a matter of experience and common sense more than a rational process. Very little could be done to recover credits in a timely fashion via legal action and the principals agreed that prevention and flexible negotiation were the only practical tools Top Agro had available.

Both principals felt that additional efficiencies and opportunities could be found by improving control of input costs, which largely meant improving the handling of currency and interest rate risks. Top Agro appreciated the flexible trade financing terms offered by their offshore partners and were satisfied this would continue in the future, but they also knew this patience and flexibility carried its implicit price. The financial results at Top Agro had improved their own credit rating and their direct access to a sufficient credit line. George observed the recent exchange rate fluctuations had benefited Top Agro. On the other hand, the memory of the cost of a strong dollar following the 2008 sub-prime crisis was instrumental in convincing them that currency risk would remain high and was a key challenge for TA. In fact, a large chart posted in George's office illustrated a 15 years history of the Euro-US dollar exchange rate and this chart was updated regularly. A copy of this chart is presented as Exhibit 5.

* * * *

George suddenly realized that the news story he was reading had prompted him to review several key issues for Top Agro. It was time to return to work and finalize the documents he needed for the meeting with the Far East partner. His plan was to discuss how to complete an enterprise risk management assessment for Top Agro, and identify a number of priorities that could be effectively addressed. This could improve Top Agro`s credit rating and profitability. George felt this was a safe and strategic way to initiate a comprehensive discussion about the currency exposures within Top Agro`s supply chain. It offered ways to reduce them, without the risk of upsetting their patient and trusted supply chain and equity partner.

As George went back to work on his documents, these key deliverables became increasingly clear: prepare a reasoned map of the many risks faced by Top Agro; identify criteria that should be used to quantify these risks; and, identify the potential tools and strategies that TA could use to control them.

[3] George estimated that the cost of a complete EU regulatory dossier for a single chemical input could exceed 2 million Euros. This was simply unaffordable for Top Agro.
[4] George estimated that the number of independent retail outlets had decreased 25% over the last 24 months.

This would be complemented by a reasoned list of risk management priorities for Top Agro after having considered each exposure, the cost, and the expected effectiveness of the appropriate risk control measures that could be implemented by Top Agro.

Based on the due diligence already completed, George decided that a key request to be tabled at the meeting was the development of a transparent, efficient protocol to control exchange rate risk at Top Agro. In order to do so, George was determined to develop a detailed model of Top Argo's exposure to currency risk, detailing its timeline, the amount and type (long/short) of the exposure, and develop a currency risk management protocol for Top Agro, including the necessary policy and procedures for its safe implementation.

To this end, George gathered weekly and monthly spot exchange rate data. The monthly data are presented in Exhibit 6, with descriptive statistics for weekly percentage changes presented in Exhibit 7, and calculated the actual impact on EBITDA of the observed exchange rate fluctuations for the last 10 crop years, almost 30% in absolute value, in Exhibit 8. To illustrate the need to invest in order to improve TA's forecasting ability, George calculated the possible range of EBITDA obtained if the exchange rate had been set by perfect foresight at the best possible observed value or by complete managerial failure at the worst possible value for each crop year from 1999 to 2008; and the annual range, presented in Exhibit 9, averaged 41%. George felt confident that the meeting would be long but fruitful. Sure this was a lot to plan for in a single meeting, but it seemed absolutely necessary in order to protect the long-term competitiveness of his company.

Appendix 1.

Exhibit 5. €/USD Spot Exchange Rate, Friday Close, Jan.

Appendix 2.

Exhibit 6. Monthly Euro/USD Cash Exchange Rate Jan. 1999 – Dec. 2009

Month	Open	High	Low	Close	Month	Open	High	Low	Close
Jan-98	108820	111620	106090	106840	Jan-04	125470	128980	123720	124600
Feb-98	106890	109600	106450	107700	Feb-04	124630	128630	124000	124850
Mar-98	107690	108590	105500	105860	Mar-04	124800	125030	120830	123020
Apr-98	105870	109760	105370	108920	Apr-04	123700	123700	118020	119760
May-98	108930	111510	108910	109500	May-04	119550	122740	117890	122060
Jun-98	109500	110980	107640	108180	Jun-04	122320	123300	120000	121810
Jul-98	108170	110860	106730	110090	Jul-04	121680	124540	120090	120180
Aug-98	109790	112210	107870	111630	Aug-04	120600	123710	119800	121790
Sep-98	111630	117730	111010	117240	Sep-04	121710	124310	120370	124310
Oct-98	117190	123200	116950	118250	Oct-04	124020	128120	122340	127870
Nov-98	118250	118840	114090	115500	Nov-04	127510	133130	126640	132850
Dec-98	115500	119090	115500	117170	Dec-04	132920	136500	131880	135430
Jan-99	117400	118900	113430	113570	Jan-05	135100	135100	129400	130290
Feb-99	113710	113950	109340	110260	Feb-05	130320	132690	127420	132410
Mar-99	110240	110650	106850	107660	Mar-05	132190	134680	128660	129620
Apr-99	107730	108810	105500	105800	Apr-05	129610	131120	127910	128600
May-99	105900	108270	104030	104130	May-05	128580	129670	123000	123020
Jun-99	104230	105570	102660	103380	Jun-05	122480	123280	120230	121010
Jul-99	103420	107430	101120	106970	Jul-05	120840	122440	118790	121260
Aug-99	107000	108250	104100	105730	Aug-05	122160	124580	121430	123340
Sep-99	105730	107270	102900	106950	Sep-05	123810	125510	119930	120120
Oct-99	106890	109090	104370	105410	Oct-05	119290	121840	119070	119920
Nov-99	105460	105910	100400	100890	Nov-05	120160	120680	116480	117900
Dec-99	100890	102930	99920	100880	Dec-05	117530	120410	116630	118330
Jan-00	100850	104130	96750	96880	Jan-06	118800	123050	118700	121470
Feb-00	96960	100850	94060	96450	Feb-06	121030	121050	118440	119220
Mar-00	96400	97900	94810	95540	Mar-06	119390	121970	118710	121220
Apr-00	95600	97510	90340	91130	Apr-06	120640	126270	120620	126110
May-00	91060	94100	88470	93730	May-06	126270	129210	125960	128440
Jun-00	93750	96960	92850	95250	Jun-06	127390	129610	124940	127850
Jul-00	95200	95950	91960	92600	Jul-06	127990	128270	124680	127700
Aug-00	92600	92890	88430	88770	Aug-06	127640	129090	127140	128140
Sep-00	88780	90370	84430	88310	Sep-06	128140	128370	126420	126840
Oct-00	88370	88560	82300	84850	Oct-06	126960	127720	124910	127650
Nov-00	84860	87930	83750	87260	Nov-06	127530	132600	126850	132470
Dec-00	87270	94250	87050	94220	Dec-06	132470	133400	130670	131970
Jan-01	94260	95920	91170	93680	Jan-07	132750	132900	128870	130260
Feb-01	93650	94440	90200	92320	Feb-07	130170	132450	129230	132310
Mar-01	92380	93800	87590	87590	Mar-07	132230	133820	130840	133530
Apr-01	87720	90870	87040	88680	Apr-07	133650	136690	133290	136500
May-01	88680	90050	84420	84580	May-07	136470	136610	134170	134530
Jun-01	84530	86690	84140	84930	Jun-07	134360	135380	132770	135310
Jul-01	84910	88210	83520	87560	Jul-07	135900	138360	135870	136890
Aug-01	87550	92370	87400	91250	Aug-07	136560	138190	133980	136240
Sep-01	91020	93300	88270	91120	Sep-07	135850	142690	135540	142690
Oct-01	91000	92440	88650	89980	Oct-07	142180	145020	140290	145020
Nov-01	90050	91200	87370	89580	Nov-07	144240	148820	144200	146360
Dec-01	89570	90810	87430	89120	Dec-07	146590	147620	143230	146000
Jan-02	88980	90630	85740	85800	Jan-08	146890	149070	145000	148750
Feb-02	85880	87990	85650	86870	Feb-08	148850	152210	144570	151900
Mar-02	86950	88690	86330	87180	Mar-08	151980	158440	151830	157810
Apr-02	87170	90440	87130	90050	Apr-08	156750	160080	155300	156370
May-02	90030	94160	89890	93260	May-08	155180	157900	153690	155550
Jun-02	93270	99880	93040	99130	Jun-08	155160	157910	153180	157490
Jul-02	99140	102120	97160	97820	Jul-08	157800	159960	155390	155920
Aug-02	97750	99320	96240	98260	Aug-08	155740	156070	145840	146660
Sep-02	98180	100060	96100	98750	Sep-08	145130	148020	139020	140790
Oct-02	98670	99260	96880	99060	Oct-08	140740	140760	124220	127560
Nov-02	99050	101710	98810	99430	Nov-08	128250	130560	124510	127050
Dec-02	99460	105050	98630	104930	Dec-08	126330	146450	125930	139500
Jan-03	104900	109050	103360	107730	Jan-09	138650	139440	127870	127900
Feb-03	107810	109350	106670	108040	Feb-09	127670	130680	125290	126960
Mar-03	107780	110830	105040	109310	Mar-09	125850	137270	124940	132800
Apr-03	109120	111870	105620	111830	Apr-09	132530	135020	129190	132620
May-03	111800	119330	111580	117750	May-09	132790	141500	132390	141320
Jun-03	117160	119300	114000	115140	Jun-09	141960	143190	137710	140370
Jul-03	115160	116110	111160	112380	Jul-09	141290	143040	138430	142570
Aug-03	112310	114260	107940	109780	Aug-09	142560	144470	140460	143340
Sep-03	109930	117390	107640	116610	Sep-09	143320	148440	141780	146380
Oct-03	116580	118600	115350	115950	Oct-09	146420	150620	144810	147180
Nov-03	115810	120190	113770	119850	Nov-09	147200	151440	146270	150057
Dec-03	119730	126490	119380	125880	Dec-09	150050	151410	142180	143260

Exhibit 7. Summary Data: Weekly Euro/USD Cash Exchange Rate, Jan. 1999 – Dec. 2009

	ER	1-wk % change
Min	0.8383	-6.13%
Max	1.5891	5.33%
Stdev	0.1983	1.4333%
Average	1.1772	0.05%

Exhibit 8. Observed impact of currency volatility on a 20% EBITDA, 1999 – 2008.

Crop Year	ER at purchase of inputs	ER at printing of finished products catalogue	ER at payment of inputs	Exchange rate fluctuation	Actual input cost given ER change (*)	Impact on a 20% EBITDA (**)
1999	108180	117240	96880	-17%	58%	-50%
2000	103380	106950	93680	-12%	55%	-34%
2001	95250	88310	85800	-3%	49%	-7%
2002	84930	91120	107730	18%	41%	37%
2003	99130	98750	124600	26%	38%	50%
2004	115140	116610	130290	12%	43%	25%
2005	121810	124310	121470	-2%	49%	-6%
2006	121010	120120	130260	8%	44%	19%
2007	127850	126840	148750	17%	41%	35%
2008	135310	142690	127900	-10%	54%	-28%
				Average	47%	4%
				Stdev	7%	34%

(*) Initial input cost -before currency fluctuation- is set to equal 48% of finished good price.
(**) Initial EBITDA -before the impact of currency fluctuation- is set at 20% of finished good price.

Exhibit 9. Range of possible impact of best and worst timing in the pricing of Exchange Rate on a 20% EBITDA, 1999 - 2009.

Crop Year	Best observed ER change, %	Worst observed ER change, %	Impact of best-worst ER on 20% EBITDA (*) (**)
1999	9%	-10%	48%
2000	3%	-18%	60%
2001	-1%	-11%	28%
2002	27%	1%	48%
2003	27%	0%	52%
2004	18%	4%	27%
2005	11%	-3%	32%
2006	9%	-3%	27%
2007	16%	-1%	36%
2008	17%	-6%	50%

(*) Initial input cost -before currency fluctuation- is set to equal 48% of finished good price.
(**) Initial EBITDA -before the impact of currency fluctuation- is set at 20% of finished good price.

