

Analysis of merton electronics corporation assignment



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BUSTER**

From sys to sys, Morton began to broaden its product lines by importing Japanese consumer electronics and entered the personal computer (PC) market distributing both hardware and software products. As it was an international company and over half of the equipment sold were imported from Japanese suppliers, Morton should take on currency risk.

However, Patricia Morton didn't realize the volatility of the yen until she dissatisfied with company's results over 1997 that sales had risen by over 12.5% whereas earnings fell by 44.4%. Therefore, she met with her banker and discussed what kind of strategies Morton Electronics could use at the yen-dollar exchange rates. It has to do a financial forecast in order to find out a solution that whether the company should unhinged, hedge or sometimes hedge. Data Forecast I choose exponential smoothing Holt's as my forecasting method because the data horizon is medium from Jan-1994 to Dec-1996. First of all, I used historical data from

Jan-1994 to Dec-1996 to forecast the Jan-1997. Then I added the actual data of Jan-1997 into the historical data, in other words I used data from Jan-1994 to Jan-1997 to forecast Feb.-1997. Step by step, I can get forecast payment average spot from Jan-1997 to Mar-1998. After all forecasted data coming out. I compared the actual average yen/dollar spot with my forecast. I would choose no hedge if the actual was less than the forecast because Japanese Yen was getting weaker and American Dollar was getting stronger. On the contrary, I would choose hedge if the actual number is more than the forecast.

Therefore, I only chose one hedge in Sep-1997 in the spreadsheet, others were all no hedge. From Mar-1997 to May-1997, my forecast was wrong because I thought Japanese Yen would become weaker whereas it became stronger. Therefore, the company lost BIT during these three months. The only period Sep-1997 which I chose hedge would make the forecast change to BIT equal to zero. As a result, the unhinged change to BIT and forecast change to BIT would be 1.13 million and 0.93 million respectively. unhinged

According to the spreadsheet of Morton Electronics case, the company would have a positive change 1.3 million to BIT if they chose unhinged strategy during Jan-97 to Par-98. It seems that not hedging would have been the best policy for the company to do its business. However, it was just true during Jan-97 to Par-98 because Yen was getting weaker and Dollar was getting stronger. From the historical data, we can easily find that Japanese Yen was becoming stronger from Jan-94 to Par-95. That this period. The banker maintained that since neither he, nor anyone else for that matter, could have accurately predicted how the yen-dollar exchange rate would move in the future.

Though forecasting is not one-hundred percent accurate to know the exchange rate, it is still much more accurate than unhinged strategy which likes gambling. Always Hedge Obviously, forecast change to BIT would become zero if Morton chose hedge strategy. The company would not have both positive and negative change to BIT but just paid some cost for hedging. Hedging acts as an insurance to protect currency exchange rate from fluctuations. It is better than unhinged strategy because it is a good solution to lower company's risk during international business.

In a long-term business, managing risk is more important than dangerous profit in a short time. According to the banker, there were two basic choices when hedging. First is to lock in today an exchange rate that would be close to the current spot rate; the forward contracts they had been using provided this type of hedge. Second is to enter into an option contract that would set an upper bound on the cost of yen, but allow them to take advantage of cheaper yen if that should happen by the time the invoices had to be paid.

To buy either forward contracts or option contracts would make Morton lost some cash, and the company also lose some opportunity profit which they may have positive BIT in currency market. Sometimes Hedging In my opinion, this would be the best solution for Morton Electronics to do a long-run business. From our case, the company had 1.13 million change to BIT if they chose unhinged; whereas they had 0.93 million when they chose forecast hedging strategy. Sometimes hedging strategy would have about 83% profit of unhinged, it is also a DOD amount of BIT.

From the spreadsheet, there are four wrong forecast including Mar-97, Par-97, May-97, and Seep-97 among the sixteen months from Jan-97 to Par-98. In other words, our forecasting is about 75% accurate in this case.

Conclusion Generally, unhinged strategy would make the company with half-half positive and negative BIT depending on what the yen would do; always hedge strategy prevents the company losing no matter what the yen would do; sometimes hedging based on forecast has the highest probability for Morton has positive BIT.