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PRODUCT CURRENCY PRICING MODELS FOR INDOFIL CHEMICALS COMPANY

A PROJECT REPORT

Submitted by

M.KEERTHIKA

Reg. No. 0820400021

In partial fulfilment of the requirements

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Of

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KCT Business School

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Kumaraguru College of Technology

(An autonomous institution affiliated to Anna University, Coimbatore)

Coimbatore – 641 006


CERTIFICATE

INDOFIL CHEMICALS COMPANY

ion of Indofil Organic Industries Ltd.

June 8, 2010

To Whomsoever It May Concern

This is to certify that **Ms. Keerthika.M**, Roll No 08MBA21, MBA student of KCT Business School,Kumaraguru College of Technology,Coimbatore had undergone a Project entitled **PRODUCT CURRENCY PRICING MODELS FOR INDOFIL CHEMICALS COMPANY** from 10-03-2010 to 08-6-2010.

During the tenure, her performance was very good.

Yours faithfully
INDOFIL CHEMICALS COMPANY

P.V. Kamat

PRADEEP KAMAT
GENERAL MANAGER - HR

BONAFIDE CERTIFICATE

DEPARTMENT OF MANAGEMENT STUDIES
KUMARAGURU COLLEGE OF TECHNOLOGY (AUTONOMOUS)
COIMBATORE

BONAFIDE CERTIFICATE

Certified that this project titled **"PRODUCT CURRENCY PRICING MODELS FOR INDOFIL CHEMICALS COMPANY"** is the bonafide work of **Ms. M.KEERTHIKA (08MBA21)** who carried out this project under my supervision. Certified further, that to the best of my knowledge the work reported herein does not from part of any other project report or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

Prof.K.R.Ayyaswamy
Faculty Guide

Prof. Dr. S.V.Devanathan
Director

Evaluated and viva-voce conducted on ...14-06-2010.....

Examiner I

Examiner II

DECLARATION

DECLARATION

I hereby declare that the dissertation entitled **"PRODUCT CURRENCY PRICING MODELS FOR INDOFIL CHEMICALS COMPANY"** submitted for the Master of Business Administration degree is my original work and the dissertation has not formed the basis for the reward of any Degree, Associate ship, Fellowship or any other similar titles.

Keerthika

Signature of the candidate

(M. KEERTHIKA)

(08MBA21)

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I thank the GOD, Almighty for his blessings bestowed upon me, which gave strength, confidence and health for completing this project.

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EXECUTIVE SUMMARY

Agriculture in India, the preeminent sector of the economy, is the source of livelihood of almost 2/3rd of the workforce in the country. The contribution of agriculture and allied activities to India's economic growth in recent years has been not less significant than that of industry and services. The importance of agriculture to the country is best summed up by this statement: "if agriculture survives, India survives 90% of the company's export products are quoted in USD. So the study is undertaken to identify the reason why the products are quoted in USD. The USD fluctuation affects the exports to a greater extent. The study also finds out the reason why the products are not quoted in the regional currencies of the exporting countries. Product pricing plays a major role in the international business. Products can be priced either in the home currency or the exporter's currency or a common currency. The exchange rate fluctuations affect the profitability of the organization. The study is analysed by comparing the spot and forward rates of the USD, EURO, JAPANESE YEN, UAE AND DIHRAN. The study is conducted for the financial year 2008-2009. The analysis used is comparative analysis and the deviations in the forward and spot rates are analysed by calculating standard deviation. The findings of the study is that the forward rates of the USD are increasing over a period of 3 months, whereas the forward rates of the EURO are stable and there is a decrease in the forward rates of Japanese Yen and UAE DIHRAM.

CHAPTER I

INTRODUCTION

1.1. BACKGROUND OF THE STUDY

Product Pricing plays a major role in the international business. Products can be priced either in the home currency or the exporter's currency or a common currency. The exchange rate fluctuations affect the profitability of the organization.

Factors that Influence Exchange Rates

- Exchange rates fluctuation is caused by the interaction of supply and demand of that currency. The rule of thumb is when demand exceeds supply, the currency will strengthen. As the opposite, the currency will weaken when supply exceeds demand.
- Relative inflation rates can affect exchange rates. Inflation, in definition, is a rise in the general level of prices of goods and services caused by a sudden increase in the number of demand.
- Another factor that influences exchange rates is relative interest rates. Interest rate perhaps is the most dominant factor in determining the value of currency.
- Another factor affecting exchange rates is relative income levels. Other things being equal, when income level rises, so is the amount of imports demanded.

Factors that are considered for pricing

- Number of competitors present in the market
- Market share required
- Intellectual property rights owned
- Freight charges
- Credit terms
- Cost of production
- Profit margin

Four basic components to a successful pricing strategy:

1. **Costs.**

   Focus on your current and future, not historical, costs to determine the cost basis for your pricing strategy.

2. **Price Sensitivity.**

   The price sensitivities of buyers shift based on a number of factors and your pricing strategy must shift with them.

3. **Competition.**

   Pay attention to them, but don't copy them - when it comes to pricing strategy they may have no idea what they're doing.

4. **Product Lifecycle.**

   How you price, and what value you provide for that price, will change as you move through the product lifecycle.

PRICING STRATEGIES

- Competition-based pricing
- Cost-plus pricing
- Creaming or skimming
- Limit pricing
- Loss leader
- Market-oriented pricing
- Penetration pricing
- Price discrimination
- Premium pricing
- Predatory pricing

- Contribution margin-based pricing
- Psychological pricing
- Dynamic pricing
- Price leadership
- Target pricing

Exchange rate regimes

The **exchange rate regime** is the way a country manages its currency in respect to foreign currencies and the foreign exchange market. It is closely related to monetary policy and the two are generally dependent on many of the same factors.

The basic types are a floating exchange rate, where the market dictates the movements of the exchange rate, a pegged float, where the central bank keeps the rate from deviating too far from a target band or value, and the fixed exchange rate, which ties the currency to another currency, mostly more widespread currencies such as the U.S. dollar or the euro.

When the exchange rate can **freely move**, assuming any value that private demand and supply jointly establish, "**freely floating** exchange rate" will be the name of currency institutional regime. Equivalently, it is called "**flexible**" exchange rate as well.

Indian foreign exchange rate system

India FX rate system was on the fixed rate model till the 90s, when it was switched to floating rate model. Fixed FX rate is the rate fixed by the central bank against major world currencies like US dollar, Euro, GBP, etc. Like 1USD = Rs. 40. Floating FX rate is the rate determined by market forces based on demand and supply of a currency. If supply exceeds demand of a currency its value decreases, as is happening in the case of the US dollar against the rupee, since there is huge inflow of foreign capital into India in US dollar.

1.2. REVIEW OF LITERATURE

Derming lieu[1] in this study reviews the econometric models used in the past to estimate the option prices and finds most of them conceptually deficient. However, this paper finds and proves that the indirect Kassouf model is the only one econometric model which not only satisfies the major boundary conditions for call options but also is flexible enough to span all feasible option prices. The Kassouf model is modified to estimate empirical pricing equation for foreign-currency options. Among the econometric models tested, the modified Kassouf model performs the best. Empirical results also show that the modified Kassouf model performs better than the modified Black-Scholes arbitrage-free model for foreign-currency options.

Valencia James Walke[2]r in his paper examined the pricing policy of foreign car manufacturers in the UK market to reveal the degree of pass-through of exchange-rate fluctuations on profit margins over an extensive time horizon where the market witnessed substantive structural change. Rather than examining the relationship between prices and exchange rates, they derive profit margins directly using discrete choice modeling and then examine the effect of changes in the bilateral rate of exchange rates on profit margins. The results reveal that profit margins adjust in the UK car market to changes in exchange rates. The direction of the mark-up adjustments reveals that exporters try to stabilize local currency prices; this is particularly the case during periods of pound appreciation. The results also reveal that local producers are sensitive to exchange rate fluctuations; in particular, non- Japanese UK car models increase their profit margins more during pound depreciation periods than during pound appreciation periods.

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[1] Estimation of empirical pricing equations for foreign-currency options: econometric models vs. Arbitrage-free models derming lieu, professor. national sun yat-sen university, kaohsiung, taiwan, r.o.cJournal of Applied Economics. Vol X, No. 1 (May 2007).

[2] The impact of exchange rate fluctuations on profit margins: the uk car market, 1971-2002 francisco requena-silvente* university of valencia james walker.

Giovannini, Alberto[3] in his paper presents a partial equilibrium model of the determination of domestic and export prices by a monopolistic competitive firm. The model stresses the role of exchange rate uncertainty and expectations. The most important result of the analysis is that the stochastic properties of deviations from the `law of one price' are crucially affected by the currency of denomination of export prices. Using data on domestic and dollar export prices of Japanese goods, the author has found that deviations from the `law of one price' are due to exchange rate surprises, but also to price staggering and ex ante price discrimination.

Magda Kandil[4] - The analysis of this paper has focused on the effects of exchange rate fluctuations on components of aggregate demand in a sample of industrial and developing countries. Recent waves of currency crises have brought to the forefront the discussion about the appropriate exchange rate system and the effects of currency fluctuations on the macro-economy. The evidence across industrial countries indicates that unanticipated currency appreciation may increase consumption of tradables or decrease consumption of non-tradables. Similarly, currency depreciation may decrease consumption of tradables or increase consumption of non-tradables across industrial countries. This is in contrast to the evidence across developing countries that indicate clearly the positive dependency of consumption on exchange rate shocks. Consistent with a high share of imports in total consumption, currency depreciation is observed to decrease consumption in a number of developing countries

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[3] **"THE EXCHANGE RATES AND TRADED GOODS PRICES". Journal of international economics on february 2010** and the author is **Giovannini, Alberto**

[4] Eastern Economic Journal, 2008, 34, (190–212) r 2008 EEA 0094-5056/08 $30.00 **Exchange Rate Fluctuations And The Macro-Economy: Channels Of Interaction In Developing And Developed Countries** Magda Kandil Western Hemisphere Department, International Monetary Fund, 700 nineteenth Street, Washington, DC 20431, USA. E-mail: mkandil@imf.org.

Howard Forman and JamesM.Hunt[5] **-** In developing pricing strategies, managers typically take into account a wide array of factors, including those that are internal to the firm as well as those that are external to its operations. However, little attention has been paid to how managers consider these factors in combination and how such judgments affect their ultimate choice of pricing strategy. These questions are the focus of this study, particularly as they pertain to international pricing decisions. Drawing on key dimensions thought to influence the relative weights that pricing managers place on both internal and external factors, the study details how those relative weightings influence the ultimate strategies managers employ. Findings indicate that international experience, product technology, degree of internationalization, market share, and certain external factors influence weightings managers give to internal and external factors in the process of making international pricing decisions.

Poon, Wai-Ching; Choong, Chee-Keong; Habibullah, Muzafar Shah[6] gives Exchange rate volatility is a form of risk and obstacle to international trade. Since the breakdown of the Bretton-Wood agreement, the trading nations have embraced a regime of floating exchange rate determination. This transition brought up the issue of exchange rate volatility in general and its impact on foreign trade in particular, and it has been the subject of numerous studies. In addition, the experience of currency crash in Thailand and the Asian financial crisis have led to explosive research on the causes and impacts on temporal exchange rate volatility. Previous literature studies have been inconclusive; most hold the notion that exchange rate uncertainty has either positive or negative effects on trade volume.

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[5] Howard Forman and JamesM.Hunt- **Managing The Influence Of Internal And External Determinants On International Industrial Pricing Strategies.**

[6] Poon, Wai-Ching; Choong, Chee-Keong; Habibullah, Muzafar Shah- **Exchange Rate Volatility And Exports For Selected East Asian Countries: Evidence From Error Correction Model** Asean Economic Bulletin August 1, 2005

Solberg, Carl Arthur, Stöttinger, Barbara, Yaprak, Attila[7] in his qualitative study, the authors offer a framework through which they examine the information use, strategic approach, and managerial control behavior in the export pricing practices of 24 firms based in Austria, Norway, and the United States. They offer propositions about export pricing behavior and suggestions for empirical research in the field.

Bowe, Michael, Saltvedt, Thina[8] The paper investigates the long-run relationship between exchange rate volatility and the pricing-to-market policies of international exporting firms when such firms choose between different currencies (exporters, importers or vehicle) for invoicing their trading partners. Distinctively, our analysis is conducted at the level of the product, using data from the Norwegian fishing industry. Dynamic error correction models are formulated to capture the long-run relationship between exchange rate pass-through elasticities and the different currency invoicing strategies. Exchange rate pass-through coefficients vary from 0.07 to 0.98 across products. Moreover, for a given product, pass-through coefficients vary significantly both across and within destination markets, depending upon the invoicing currency chosen. This variation is linked to nominal rigidities and exchange rate uncertainty. The findings also suggest that the choice of invoicing currency may be an important strategic variable facilitating discriminatory pricing by exporting firms. Finally, the results also corroborate theoretical predictions linking pass-through to exchange rate volatility; namely, pass-through is lower the more volatile the exchange rate.

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[7] Solberg, Carl Arthur, Stöttinger, Barbara, Yaprak, Attila- **A Taxonomy Of The Pricing Practices Of Exporting Firms: Evidence From Austria,Norway And United States,** Journal of International Marketing; 2006, vol. 14 issue 1, p23-48.

[8] Bowe, Michael, Saltvedt, Thina M.- **Currency Invoicing Practices,Exchange Rate Volatility And Pricing- To-Market:Evidence From Product Level Data,** International Business Review; Jun2004, Vol. 13 Issue 3.

Goldberg, Pinelopi Koujianou[9] - The article presents a discourse on goods prices and exchange rates. By the standards of the post Bretton Woods era, the 1990s have been a period of calm in foreign exchange markets. An economist who hadn't lived through the turbulence of the foreign exchange market in the 1970s and '80s might worry about the implications of such a large swing in currency values for these countries. In the absence of differences in productivity growth or wage inflation, labor costs in Japan relative to the U.S. would increase by the full amount of the yen appreciation against the dollar. In a world where agents respond to incentives, one might expect tremendous substitution of U.S. for Japanese labor in manufacturing. A large part of the answer is provided by the fact that foreign buyers of Japanese products did not experience substantial price increases in spite of the sharp increase in Japanese labor costs. Empirical research on the relationship between exchange rates and goods prices has been abundant since the 1970s and this forms the centerstage of the article.

Donnenfeld,Shabtai,Zilcha,Itzhak[10] in his paper examines the implications of different pricing-cum-invoicing strategies available to an exporting firm which sells its product in domestic and foreign markets when the exchange rate is uncertain. The firms' decisions are made sequentially. Throughout the decision making process the firm receives new information about the distribution of the random exchange rate. The information arrives after output decisions have been made but before setting prices and allocating sales. We state conditions which lead to the dominance of invoicing exports in the importers currency over the alternative invoicing strategies

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[9] Goldberg, Pinelopi Koujianou- **Goods Prices And Exchange Rates:What Have We Learned?** Journal of economic literature; sep97, vol. 35 issue 3.

[10] Donnenfeld,Shabtai,Zilcha,Itzhak-**Pricing of Exports And Exchange Rate Uncertainity-** International Economic Review; Nov91, Vol. 32 Issue 4.

1.3 OBJECTIVES OF THE STUDY

PRIMARY OBJECTIVE:

Identification of Product Pricing in regional currencies of the exporting countries.

SECONDARY OBJECTIVES:

- Monetary advantage of exporting due to invoicing in the exporting countries regional currency.
- Identifying the potential regions for price advantages.

1.4 STATEMENT OF THE PROBLEM

90% of the company's export products are quoted in USD. So the study is undertaken to identify the reason why the products are quoted in the USD. The USD fluctuation affects the exports to a greater extent. The study also finds out the reason why the products are not quoted in the regional currencies of the exporting countries.

1.5 SCOPE OF THE STUDY

- The study helps to identify the currency in which the product is to be quoted.
- The study also helps to identify the difference in forward and spot rate.

1.6 METHODOLOGY

a) **Type of the study**

Exploratory Study

b) **Period of the study**

For the financial year 2008 – 2009.

c) **Data collection**

Secondary data

d) Regions considered for the study

- Asia pacific –Malaysia,Thailand,China.
- Latin america –Argentina,Cuba,Jamaica,Colombia.
- Europe – France,Belgium,Poland,Spain.
- Middle east – Iraq, Jordan & Morroco

e) Tools of analysis

- ✓ Comparative analysis
- ✓ Standard Deviation

1.7 LIMITATIONS OF THE STUDY

- Out of 5 regions only 4 regions are considered for the study.
- Only one year data (2008-2009) is taken for the analysis.

CHAPTER - 2 ORGANIZATION PROFILE

CHAPTER II

ORGANIZATION PROFILE

2.1. HISTORY OF THE ORGANIZATION

INDOFIL CHEMICALS COMPANY, established more than four decades ago, headquartered in Mumbai, a research-led and fully integrated Chemical Company has EMERGED as a successful and vibrant enterprise, riding high on a simple philosophy of retaining loyalty and enlarging the fold of satisfied customers. Employing 468 people, INDOFIL has a sales turnover of Rs. 654 crores, as on 31st March, 2009.

INDOFIL has a very strong domestic base and a well recognized international presence. Both businesses viz Agricultural Chemicals and Specialty & Performance Chemicals are poised for much faster growth by partnering/joint ventures for manufacturing, marketing and research and development activities with prospective companies across the world.

INDOFIL which is a very strong QMS ISO-9001-2000 and ISO 14001 Company is professionally managed by its Chief Executive Officer & President, Mr. R. K. Malhotra, and a Post Graduate in Agriculture with 35 years "hands-on" experience and is an active and advisory member of various related Technical and Trade Associations.

The Company believes in Complete Team working, Team winning strategies and innovation in its products, services and business processes with an unending urge to excel.

Vision

"Global leader in growth

With

Customer success"

Mission

The mission is to achieve leadership in growth rate. The company will leverage its efficient R&D, registration, manufacturing and marketing competencies through committed and proficient team.

2.2. MANAGEMENT

- **Mr. K. K. Modi - Chairman & Managing Director.**
- **Ms. Charu Bhartia – Director**
- **Mr. Lalit Kumar Modi – Director**
- **Mr. Samir Kumar Modi – Director**
- **Prof. J. Ramachandran – Director**
- **Mr. S. K. Alagh – Director**
- **Mr. M. N. Thakkar – Director**
- **Mr. Munesh Khanna – Director**
- **Mr. Sanjay Buch - Director**
- **Mr. S. K. Verma – Director**

2.3. INTERNATIONAL BUSINESS – ORGANISATION

2.4. PRODUCT PROFILE AND MARKET POTENTIAL

AGRO CHEMICALS

Indofil has ventured in International Agrochemical market with an objective of being a most preferred supplier of Mancozeb. Since then they have covered a lot of ground in the international market; staying in tune with customer's pulse, offering wider range of quality products, technical & logistic support, customized packing and prompt delivery. In other words, it has been an uphill challenge of pulling out all the stops that would deter us from achieving their vision and striving to delight customer. Today they have carved out a presence in the Global arena and earned the recognition of being a reputed supplier.

TABLE 2.1

TABLE SHOWING PRODUCT RANGES

EBDC	OTHER TECHNICALS
MANCOZEB 85% TECHNICAL	TRICYCLAZOLE TECHNICAL
MANCOZEB 80% WP	TRICYCLAZOLE 75% WP
MANCOZEB 75% WG	CYMOXANIL TECHNICAL
MANCOZEB FLOWABLE	METALAXYL TECHNICAL

EBBDC MIXTURES	OTHER PRODUCTS
MANCOZEB 64% + METALAXYL 8% WP	SULFUR 80% WG
MANCOZEB 74% + CARBENDAZIM 12% WP	SULFUR LIQUID FLOWABLE
MANCOZEB 64% + CYMOXANIL 8% WP	INDTRON AE (STICKER,SPREADER & ACTIVATOR)

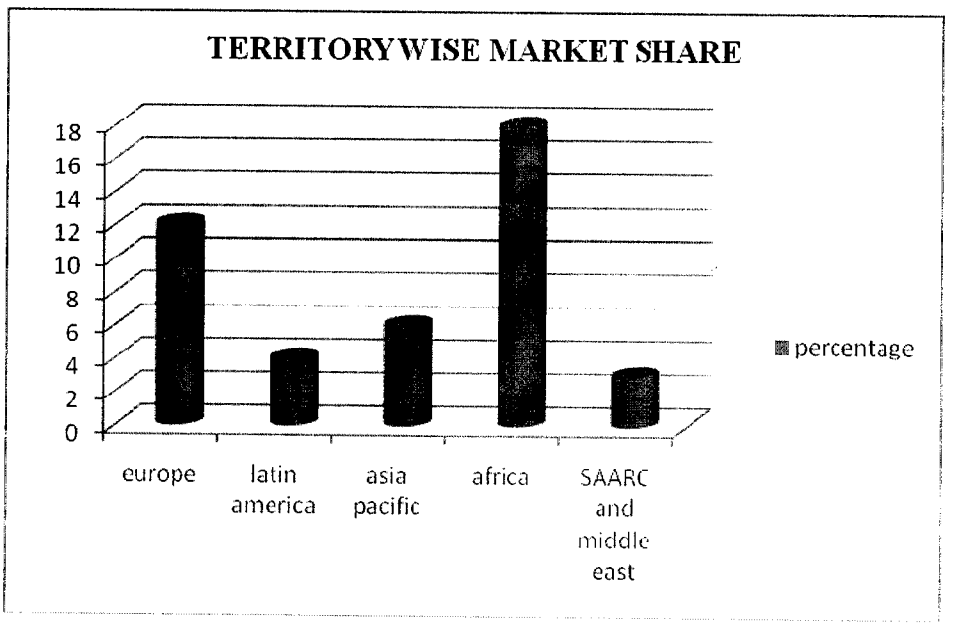
TABLE 2.2

TABLE SHOWING TERRITORYWISE MARKET SHARE

Territory	Percentage
Europe	12
Latin America	4
Asia pacific	6
Africa	18
Saarc and Middle East	3

CHART 2.1

CHART SHOWING TERRITORYWISE MARKET SHARE



2.5. COMPETITIVE STRENGTH OF THE COMPANY

The Competitive Strength of the company lies in the sales channels. They have the best channels in Europe and Asia.

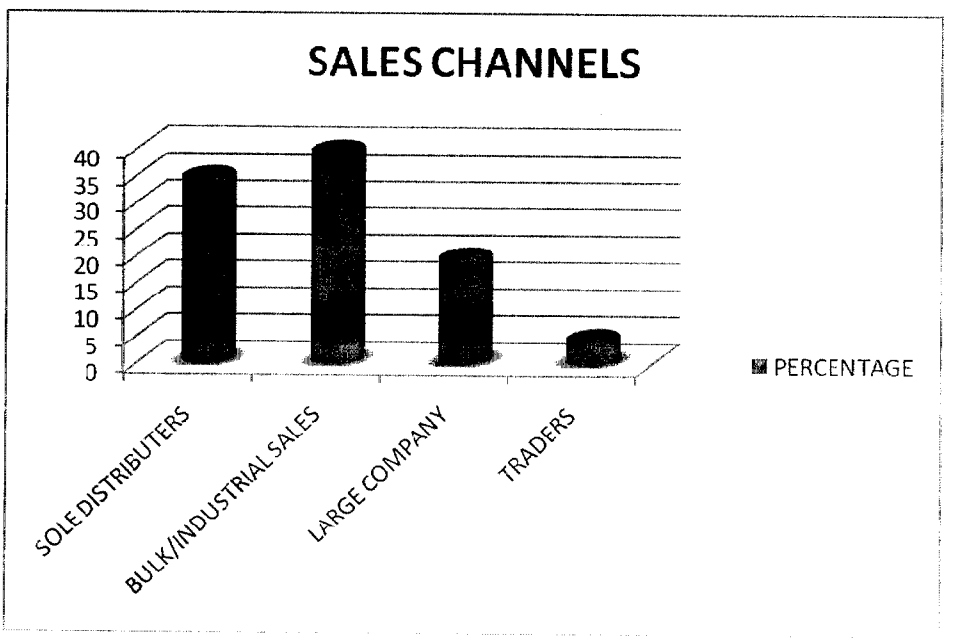
TABLE 2.3

TABLE SHOWING COMPETITIVE STRENGTH OF THE COMPANY

SALES CHANNELS	PERCENTAGE
SOLE DISTRIBUTERS	35
BULK/INDUSTRIAL SALES	40
LARGE COMPANY	20
TRADERS	5

CHART 2.2

CHART SHOWING COMPETITIVE STRENGTH OF THE COMPANY



CERTIFICATIONS

- GOTS (Global Organic Textile Standard) Certificate
- Certificate of Accreditation by National Accreditation Board for Testing & Calibration Laboratories(NABL).
- Det Norske Veritas Management Certificate - ISO 14001 : 2004.
- Det Norske Veritas Management Certificate - ISO 9001 : 2000.
- Export House : 2005.

ACHIEVEMENTS

- PFFCASTAR 2005, December 13, 2000
- Best Export Performance Award for the year 1999-2000 in the Large Scale Sector at the 37th Annual General Meeting of Thane Manufacturers' Association held at TMA House, Thane.
- In 1998 Indofil bagged three awards for M-45 Tri-Laminate Pillow Pouch made of a new generation of polymers.
- At the National Level : "India Star 98"
- At the Asia Pacific Level : "Asia Star 98"
- At the Global Level : "World Star 98"
- "Safety Merit Award 1997" received from the Council of Industrial Safety.

CHAPTER III

MACRO-MICRO ANALYSIS

3.1. History

3.1.1 Origin of Agriculture

The beginning of 'agro' or 'agriculture' marks the beginning of 'civilized' or 'sedentary' society. Climate change and increase in population during the Holocene Era (10,000 BC onwards) led to the evolution of agriculture. During the Bronze Age (9000 BC onwards), domestication of plants and animals transformed the profession of the early homo sapiens from hunting and gathering to selective hunting, herding and finally to settled agriculture. Eventually the agricultural practices enabled people to establish permanent settlements and expand urban based societies. As per the modern definition of agriculture which would be" an aggregate of large scale intensive cultivation of land, mono-cropping, organized irrigation, and use of a specialized labor force", the title "inventors of agriculture" would go to the Sumerians, starting ca. 5,500 BC

3.1.2 Agriculture in India

Agriculture in India, the preeminent sector of the economy, is the source of livelihood of almost two thirds of the workforce in the country. The contribution of agriculture and allied activities to India's economic growth in recent years has been no less significant than that of industry and services. The importance of agriculture to the country is best summed up by this statement: "If agriculture survives, India survives

Early Years of Independence

The early years of Independence witnessed accentuation on the development of infrastructure for scientific agriculture. The steps taken included the establishment of fertilizer and pesticide factories, construction of large multi-purpose irrigation-cum-power projects, organization of community development and national extension programmes and, above all, the starting of agricultural universities as well as new agricultural research institutions across the length and breadth of the country.

Green Revolution

Policy makers and planners, in order to address the concerns about national independence, security, and political stability realized that self-sufficiency in food production was an absolute prerequisite. This perception led to a program of agricultural improvement called the Intensive Agriculture District Programme (IADP) and eventually to the Green Revolution. The National Bank for Agriculture and Rural Development (NABARD) was set up. All these steps led to a quantum jump in the productivity and production of crops.

White and Yellow Revolution

The Green revolution generated a mood of self-confidence in our agricultural capability, which led to the next phase characterized by the Technology Mission. Under this approach, the focus was on conservation, cultivation, consumption, and commerce. An end-to-end approach was introduced involving attention to all links in the production-consumption chain, owing to which progress was steady and sometimes striking as in the case of milk and egg production

Present Times

Indian agriculture continues to face internal and external challenges. While monsoon dependence, fragmented land-holding, low level of input usage, antiquated agronomic practices, lack of technology application and poor rural infrastructure are some of the key internal constraints that deter a healthy growth, while subsidies and barriers have been distorting international agricultural trade, rendering agri-exports from developing nations such as India uncompetitive

The objective of every policy initiative has been to make Indian agriculture globally competitive — by investing it with the ability to produce globally acceptable quality at globally comparable cost.

3.2. Agro Industry Scenario

3.2.1 An Introduction

The agro industry is regarded as an extended arm of agriculture. The development of the agro industry can help stabilise and make agriculture more lucrative and create employment opportunities both at the production and marketing stages. The broad-based development of the agro-products industry will improve both the social and physical infrastructure of India. Since it would cause diversification and commercialization of agriculture, it will thus enhance the incomes of farmers and create food surpluses.

The agro-industry mainly comprises of the post-harvest activities of processing and preserving agricultural products for intermediate or final consumption. It is a well-recognized fact across the world, particularly in the context of industrial development, that the importance of agro-industries is relative to agriculture increases as economies develop. It should be emphasized that 'food' is not just produce. Food also encompasses a wide variety of processed products. It is in this sense that the agro-industry is an important and vital part of the manufacturing sector in developing countries and the means for building industrial capacities

The agro Industry is broadly categorized in the following types

(i) Village Industries owned and run by rural households with very little capital investment and a high level of manual labour; products include pickles, papad, etc.

(ii) Small scale industry characterized by medium investment and semi-automation; products include edible oil, rice mills, etc.

(iii) Large scale industry involving large investment and a high level of automation; products include sugar, jute, cotton mills, etc.

The development of agro-based industries commenced during pre-independence days. Cotton mills, sugar mills, jute mills were fostered in the corporate sector. During the post-Independence days, with a view to rendering more employment and using local resources, small scale and village industries were favored

The increasing environmental concerns will give further stimulus to agro based industries. Jute and cotton bags, which have begun to be replaced by plastic bags, have made a comeback. It is the right time to engage in mass production of low cost jute/cotton bags to replace plastic bags

The agro industry helps in processing agricultural products such as field crops, tree crops, livestock and fisheries and converting them to edible and other usable forms. The private sector is yet to actualize the full potential of the agro industry. The global market is mammoth for sugar, coffee, tea and processed foods such as sauce, jelly, honey, etc.

The market for processed meat, spices and fruits is equally gigantic. Only with mass production coupled with modern technology and intensive marketing can the domestic market as well as the export market be exploited to the fullest extent. It is therefore imperative that food manufacturers understand changing consumer preferences, technology, with modernization, innovation and incorporation of latest trends and technology in the entire food chain as well as agro-production, the total production capacity of agro products in India and the world is likely to double by the next decade.

India is the second largest producer of food in the world. Whether it is canned food, processed food, food grains, dairy products, frozen food, fish, meat, poultry, the Indian agro industry has a huge potential, the significance and growth of which will never cease.

3.3. Indofil Chemicals Company

Around a decade ago, in 1995 we launched into International Business with a vision to be present in all the International markets where there is scope for Indofil's products. With a modest beginning of entry in 4 countries with Agrochemical product Mancozeb, today Indofil is selling its Agrochemicals and Specialty & Performance Chemicals in 60 countries. Indofil and its products has good acceptance in international market because of quality standards, extraordinary logistic service and professional business conduct.

International Operations

Territory Managers are the back bone of International Business. There are four Territory Managers looking after Asia Pacific, Africa & Middle East, Europe and Americas. The Territory Managers are responsible for profitability in respective territory with a well defined authority for decision making. The Territory Managers are supported by a team of Product Managers and Technical Specialists from Agrochemicals and Specialty & Performance Chemicals Division

In certain countries Indofil operated through local marketing consultants and agents for effective handling of business operations. Indofil has representative office in Milan (Italy) to keep administrative control of Europe business.

Agro Chemicals

Indofil has ventured in International Agrochemical market with an objective of being a most preferred supplier of Mancozeb. Since then we have covered a lot of ground in the international market; staying in tune with customer's pulse, offering wider range of quality products, technical & logistic support, customized packing and prompt delivery. In other words, it has been an uphill challenge of pulling out all the stops that would deter us from achieving our vision and striving to delight customer. Today we have carved out a presence in the Global arena and earned the recognition of being a reputed supplier.

CHAPTER – 4 DATA ANALYSIS & INTERPRETATION

CHAPTER – IV

DATA ANALYSIS AND INTERPRETATION

ANALYSIS FOR ASIA PACIFIC REGION

TABLE 4.1

Table showing the difference in spot and forward rate in Indian Rupees and Japanese Yen

MONTH	DIFFERENCE in Rupees	DIFFERENCE in JAPANESE YEN	VARIENCE (Rs)	VARIENCE (YEN)
APRIL	6.980881	-10.7639	0.007286	0.017323
May	5.266409	-11.4442	0.007036	0.033227
JUNE	11.31868	-14.1557	0.01544	0.024151
JULY	27.85308	-23.3723	0.044884	0.031605
August	4.10736	-4.68181	0.044884	0.031605
September	2.641048	-10.2753	0.586891	0.052465
October	1.23554	-7.47531	2.67244E-05	0.000978
November	2.217873	-1.82694	-	-
December	11.24552	-6.88785	21.57698	0
January	1.604201	-0.59549	-	-
February	5.3361	-3.193	0.000784	0.000281
March	5.451136	1.872843	0.001964	0.000232

Interpretation:

From the table 4.1 it is interpreted that there is an increase in Indian rupees in the three months forward rates when compared with the spot rates, whereas in Japanese Yen there is a decrease in the three months forward rates when compared with the spot rates.

CHART 4.1

Chart showing the variance in spot and forward rate in Indian Rupees and Japanese Yen

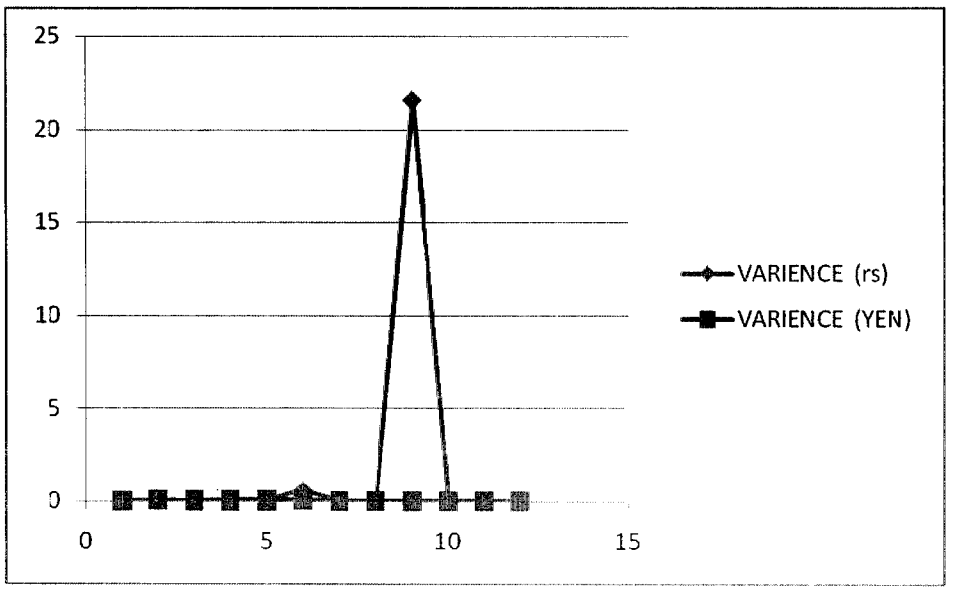


TABLE 4.2

Table showing the difference in spot and forward rate in Indian Rupees and Japanese Yen and the total profit /loss earned.

MONTH	QTY	USD /KG	DIFFERENCE IN RS	DIFFERENCE IN YEN
Apr	22	3	0.93287	-1.43839
Apr	30	3	0.93287	-1.43839
Apr	23.6	2.95	0.91731	-1.41441
Apr	45	3.5	1.088333	-1.67812
Apr	30	3.5	1.088333	-1.67812
Apr	45	3.5	1.088333	-1.67812
Apr	28	3	0.932857	-1.43839
May	22	3.50	0.87565	-1.90283
May	20.8	4.00	1.000743	-2.17467
May	22	3.50	0.87565	-1.90283
May	6	3.60	0.900669	-1.9572
May	15	3.50	0.87565	-1.90283
May	23.6	2.95	0.738048	-1.60382
June	60	3.5	1.37315	-1.71733
June	28	3	1.176986	-1.472
June	6.6	4	1.569314	-1.96267
June	4	4	1.569314	-1.96267
June	24	3.6	1.412383	-1.7664
June	15	3.5	1.37315	-1.71733
June	23.6	3.65	1.431999	-1.79093
June	15	3.6	1.412383	-1.7664
July	28	3.5	2.26975	-1.90461
July	45	3.5	2.26975	-1.90461
July	23.6	3.65	2.367025	-1.98623
July	23.6	3.65	2.367025	-1.98623
July	15	4	2.594	-2.1767
July	15	4	2.594	-2.1767
July	11	4	2.594	-2.1767
July	11	4	2.594	-2.1767
July	15	4	2.594	-2.1767
July	20.8	4.65	3.015525	-2.53041
July	15	4	2.594	-2.1767

Aug	15	4.05	2.028635	-2.31236
Aug	23.6	4.15	2.078725	-2.36945
Sept	22	4.65	1.395554	-3.68959
Sept	23.6	4.15	1.245494	-3.29286
Sept	23.6	4.15	0	-3.29286
Oct	23.6	4.2	0.61411	-3.71554
Oct	15	4.25	0.62142	-3.75977
Nov	23.6	4.2	2.217873	-1.82694
Dec	23.6	4.2	2.338168	-3.44393
Dec	2	16	8.907345	-3.44393
Jan	15	4.3	1.604201	-0.59549
Feb	23.6	4.2	1.35828	-0.81276
Feb	28	4.05	1.30977	-0.78374
Feb	23.6	4.2	1.35828	-0.81276
Feb	28	4.05	1.30977	-0.78374
Mar	15	4	1.772727	0.609055
Mar	15	4.1	1.817045	0.624281
Mar	23.6	4.2	1.861364	0.639507
Total	1099.6	202.4	85.25783	-92.799017
Profit/kg			2.373975	-18782.52104
Varience			0.431051	2.158827971
Total Profit			2610.423	-20653260.14
Standard Deviation			11.76399	12.7713831

Interpretation:

From the table 4.2 it is interpreted that the total sales for the year 2008-2009 in the Asia Pacific region is 1099.6 kg. The profit/loss earned out of the three month forward and the spot rate difference is 2610.423 in Indian Rupees and -20653260.14 in Japanese yen.

ANALYSIS FOR LATIN AMERICA REGION

TABLE 4.3

Table Showing the Difference In Spot And Forward Prices In Indian rupees

MONTH	DIFFERENCE IN RS	VARIENCE
April	2.533835	0.042852
May	3.87779	0.021672
June	8.395862	0.001796
July	2.5926	0.013128
August	9.96791	0.089885
September	2.77611	0.002815
October	0.694545	-
November	5.175086	0.001394
December	5.706278	0.087167

Interpretation :

From the table 4.3 it is interpreted that the varience in Indian rupees is stable and therefore the company can quote the products in USD in this region.

CHART 4.2

Chart Showing The Difference In Spot And Forward Prices In Indian Rupees

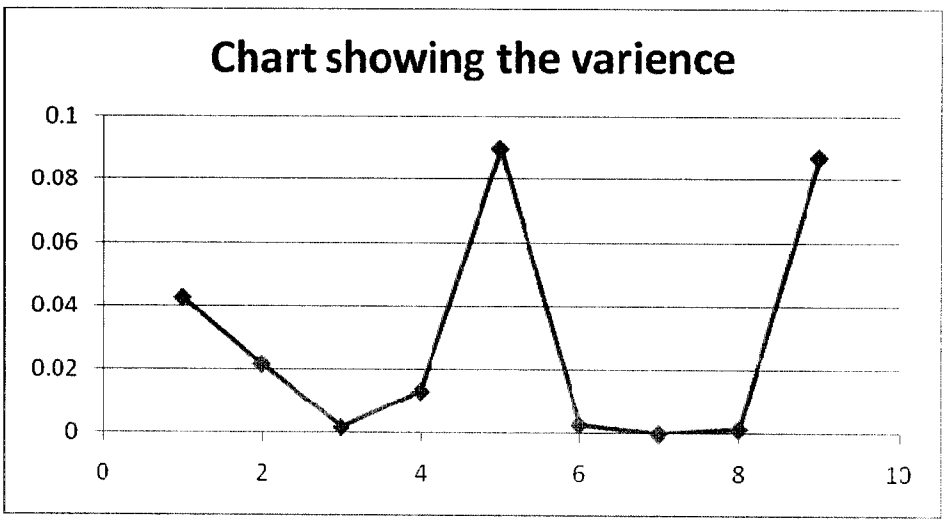


TABLE 4.4

Table Showing The Difference In Spot And Forward Prices In Us Dollars and the total profit earned.

MONTH	QTY	USG/KG	DIFFERENCE
Apr	30	1.95	0.606255
Apr	16.5	3.15	0.979335
Apr	15	3.05	0.948245
May	15	3.05	0.763049
May	30	2.1	0.525378
May	15	3.35	0.838103
May	15	3.5	0.87563
May	28	3.5	0.87563
June	14	3.5	1.373155
June	30	3.5	1.373155
June	28	3.5	1.373155
June	30	3.75	1.471238
June	30	3.65	1.432005
June	100	3.5	1.373155
July	15	4.25	2.754637
July	14	4	2.5926
Aug	50	3.65	1.828285
Aug	70	3.5	1.75315
Aug	30	3.5	1.75315
Aug	28	4.5	2.25405
Aug	30	4.75	2.379275
Sept	20	4.5	1.35054
Sept	30	4.75	1.42557

Oct	30	4.75	0.694545
Nov	30	4.95	2.613947
Nov	15	4.85	2.56114
Dec	4	4.75	2.644373
Dec	6	5.5	3.061905
Total	76.5	11.2	3.296884
Profit /kg			0.294365
Varience			0.639026
Total profit			22.5189
Standard deviation			0.747202

Interpretation:

The total quantity sold in the year 2008-2009 in Latin America is 76.5 kg and the total profit earned out of the three month forward and spot rate difference is Rs. 22.5189 .

ANALYSIS FOR EUROPE REGION

TABLE 4.5

TABLE SHOWING THE DIFFERENCE IN INDIAN RUPEES AND EURO

MONTH	DIFFERENCE IN RS	DIFFERENCE IN EURO	VARIENCE IN RS	VARIENCE IN EURO
April	9.558603	4.719174	0.010382	0.002531
May	22.87146	-0.66517	0.389093	0.000329
June	26.14879	0.654053	2.929482	0.001695
July	38.24085	-0.44457	22.9367	0.0031
August	17.55655	-0.24735	12.31657	0.002445
September	14.36074	-0.1824999	0.044268	7.1493E-06
October	13.13787	-0.1797	0.382742	7.16066E-05
November	73.00568	-0.30761	9.197298	0.000163
December	72.73416	-0.3653	4.450718	0.000112
January	102.016	-0.81351	5.031486	0.00032
February	67.12814	-0.290598	0.996354	1.8672E-05
March	87.21979	-0.0814752	0.970999	8.47304E-07

Interpretation:

From the table 4.5 it is interpreted that there is an increase in the three month forward and spot rate in the Indian rupees when compared with the Euro.In euro there is increase only in the month of april and in all the other months there is a decrease in the three month forward price when compared with the spot price.

CHART 4.3

CHART SHOWING THE VARIENCE IN INDIAN RUPEES AND EURO

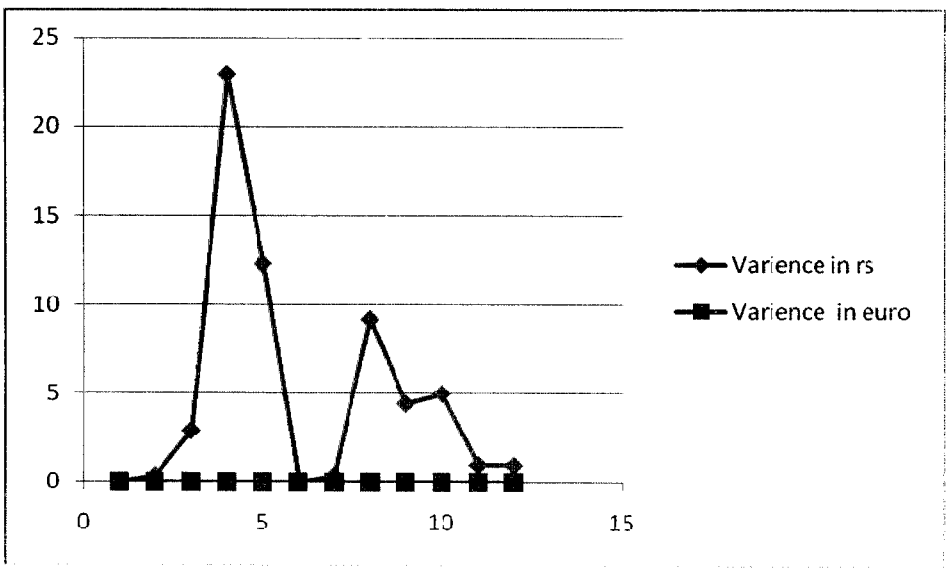


TABLE 4.6

Table Showing The Difference In Indian Rupees And Euro And The Total Profit Earned.

MONTH	QTY	USD/KG	DIFFERENCE IN RS	DIFFERENCE IN EURO
Apr	45	2.30	0.715185	0.353094
Apr	15	2.25	0.699637	0.345418
Apr	15	3.25	1.010587	0.498937
Apr	30	2.30	0.715185	0.353094
Apr	60	2.25	0.699637	0.345418
Apr	30	2.30	0.715185	0.353094
Apr	9.6	2.35	0.730732	0.36077
Apr	56	2.35	0.730732	0.36077
Apr	11	2.60	0.80847	0.399149
Apr	20	2.06	0.640557	0.316249
Apr	30	2.03	0.631228	0.311644
Apr	30	2.03	0.631228	0.311644
Apr	10.4	2.67	0.830236	0.409896
May	15	2.35	0.587923	-0.0171
May	4.5	16.25	4.065425	-0.11824
May	5.5	2.6	0.650468	-0.01892
May	24	3.2	0.800576	-0.2328
May	15	2.3	0.575414	-0.01673
May	12	2.35	0.587923	-0.0171
May	14	2.35	0.587923	-0.0171
May	14	2.45	0.612941	-0.01783
May	14	2.45	0.612941	-0.01783
May	22	3	0.75054	-0.02183
May	24	2.25	0.562905	-0.1637

May	15	3.35	0.838103	-0.02437
May	15	2.25	0.562905	-0.01637
May	15	2.35	0.587923	-0.0171
May	20	2.35	0.587923	-0.0171
May	14	2.3	0.575414	-0.01673
May	15	2.3	0.575414	-0.01673
May	28	2.35	0.587923	-0.0171
May	24	3.2	0.800576	-0.02328
May	15	2.3	0.575414	-0.01673
May	42	2.35	0.587923	-0.0171
May	24	2.25	0.562905	-0.01637
May	15	2.3	0.575414	-0.01673
May	14	2.15	0.537887	-0.01564
May	14	2.35	0.587923	-0.0171
May	15	3.25	0.813085	-0.02365
May	14	2.15	0.537887	-0.01564
May	45	2.3	0.575414	-0.01673
May	11	3	0.75054	-0.02183
May	42	2.35	0.587923	-0.0171
May	5.2	2.67	0.667981	-0.01943
June	14	2.35	0.921976	0.022179
June	40	2.5	0.980825	0.023595
June	9.6	2.55	1.000442	0.024067
June	10.4	2.67	1.047521	0.025199
June	10	2.68	1.051444	0.025294
June	10	2.3	0.902359	0.021707
June	1.2	15	5.88495	0.14157
June	8.32	2.65	1.039675	0.025011
June	15	16.25	6.375363	0.153368
June	15	3.55	1.393772	0.33505

June	15	2.2	0.863126	0.020764
June	45	2.3	0.902359	0.021707
June	14	2.45	0.961208	0.023123
June	14	2.45	0.961208	0.023123
June	15	2.45	0.961208	0.023123
June	30	2.3	0.902359	0.021707
June	5.6	2.65	1.039675	0.025011
July	45	3.5	2.268525	-0.02637
July	7.995	16.25	10.53244	-0.12244
July	30	2.25	1.458337	-0.01695
July	15	3.65	2.365748	-0.0275
July	15	2.5	1.620375	-0.01884
July	0.3	22.3	14.45374	-0.16803
July	15	3.65	2.365748	-0.0275
July	14	2.45	1.587967	-0.01846
July	30	2.45	1.587967	-0.01846
Aug	30	2.45	1.227205	-0.01729
Aug	15	2.5	1.25225	-0.01764
Aug	15	3.65	1.828285	-0.02576
Aug	2.62	20.1	10.06809	-0.14185
Aug	50	2.7	1.35243	-0.01905
Aug	15	3.65	1.828285	-0.02576
Sept	30	2.45	0.0.735294	-0.00934
Sept	14	3.1	0.930372	-0.01182
Sept	28	3.1	0.930372	-0.01182
Sept	9.6	3.25	0.97539	-0.0124
Sept	30	4.25	1.27551	-0.01621
Sept	28	3.2	0.960384	-0.0122
Sept	30	4	1.20048	-0.01526
Sept	15	3.3	0.990396	-0.01259

Sept	11	4	1.20048	-0.01526
Sept	10.4	4.05	1.215486	-0.01545
Sept	11	5.2	1.560624	-0.01983
Sept	22	3.95	1.185474	-0.01507
Sept	10.4	4	1.20048	-0.01526
Oct	30	3.4	0.497148	-0.0068
Oct	14	3.25	0.475215	-0.0065
Oct	14	3.25	0.475215	-0.0065
Oct	14	3.25	0.475215	-0.0065
Oct	15	3.1	0.453282	-0.0062
Oct	30	2.45	0.358239	-0.0049
Oct	11	4	0.58488	-0.008
Oct	30	3.25	0.475215	-0.0065
Oct	28	3.1	0.453282	-0.0062
Oct	10.4	4.05	0.592191	-0.0081
Oct	9.6	3.25	0.4752156	-0.0065
Oct	11	4	0.58488	-0.008
Oct	20.8	4.05	0.592191	-0.0081
Oct	15	3.2	0.467904	-0.0064
Oct	9.6	3.25	0.475215	-0.0065
Oct	15	4.75	0.694545	-0.0095
Oct	16	4.75	0.694545	-0.0095
Oct	15	3.25	0.475215	-0.0065
Oct	11	3.95	0.577569	-0.0079
Oct	1.8	22.3	3.260706	-0.0446
Nov	45	3	1.58421	-0.00667
Nov	15	4.55	2.402718	-0.01012
Nov	45	4.75	2.508332	-0.01057
Nov	30	3.25	1.716228	-0.00723
Nov	28	3.25	1.716228	-0.00723

Nov	28	3.25	1.716228	-0.00723
Nov	42	3.15	1.66342	-0.00701
Nov	15	3.25	1.716228	-0.00723
Nov	11	3.78	1.996105	-0.00841
Nov	10.4	3.82	2.017227	-0.0085
Nov	15	3.25	1.716228	-0.00723
Nov	13.325	3.25	1.716228	-0.00723
Nov	0.705	24.75	13.06973	-0.05507
Nov	13.325	3.25	1.716228	-0.00723
Nov	0.705	24.75	13.06973	-0.05507
Nov	60	3.3	1.742631	-0.00734
Nov	11	3.95	2.085877	-0.00879
Nov	11	3.95	2.085877	-0.00879
Nov	15	4	2.11228	-0.0089
Nov	28	3.35	1.769035	-0.00745
Nov	28	3.35	1.769035	-0.00745
Nov	22	4.05	2.138683	-0.00901
Nov	11	4	2.11228	-0.0089
Nov	11	4.1	2.165087	-0.00912
Nov	10.4	4.15	2.19149	-0.00923
Nov	16.5	4.75	2.508332	-0.0157
Dec	30	3.25	1.809307	-0.00909
Dec	60	3.15	1.753637	-0.00881
Dec	14	3.25	1.809307	-0.00909
Dec	14	3.25	1.809307	-0.00909
Dec	15	3.1	1.725801	-0.00867
Dec	45	3.5	1.948485	-0.00979
Dec	50	3.2	1.781472	-0.00895
Dec	15	3.25	1.809307	-0.00909
Dec	11	3.95	2.199005	-0.01104

Dec	45	3.3	1.837143	-0.00923
Dec	30	3.25	1.809307	-0.00909
Dec	20.8	4.05	2.254676	-0.01132
Dec	16	4.75	2.644373	-0.01328
Dec	50	3.2	1.781472	-0.0895
Dec	15	3.45	1.92065	-0.00965
Dec	11.2	3.5	1.48485	-0.00979
Dec	14	3.2	1.781472	-0.00895
Dec	14	3.25	1.809307	-0.00909
Dec	14	3.25	1.809307	-0.00909
Dec	14	3.25	1.809307	-0.00909
Dec	14	3.25	1.809307	-0.00909
Dec	45	3.45	1.92065	-0.00965
Dec	60	3.2	1.781472	-0.00895
Dec	22	4.05	2.254676	-0.1132
Dec	28	3.35	1.864979	-0.00937
Dec	28	3.35	1.864979	-0.00937
Dec	42	3.15	1.753637	-0.00881
Dec	60	3.2	1.781472	-0.00895
Dec	11	4.15	2.310347	-0.0116
Dec	12.6	3.25	1.809307	-0.00909
Dec	1.395	24.75	13.77857	-0.0692
Dec	60	3.15	1.753637	-0.00881
Jan	11	3.95	1.473636	-0.01175
Jan	45	3.25	1.212478	-0.00967
Jan	11.2	3.5	1.305745	-0.01041
Jan	15	3.45	1.287092	-0.01026
Jan	33	4.75	1.77028	-0.01413
Jan	30	3.45	1.287092	-0.01026
Jan	20	3.5	1.305745	-0.01041

Jan	15	3.45	1.287092	-0.010263
Jan	60	3.2	1.193824	-0.00952
Jan	45	3.15	1.17517	-0.00937
Jan	60	3.3	1.231131	-0.00982
Jan	60	3.3	1.231131	-0.00982
Jan	45	3.45	1.324399	-0.01026
Jan	10.8	3.55	1.324399	-0.01056
Jan	9.6	3.55	1.324399	-0.01056
Jan	11.2	3.65	1.361706	-0.01086
Jan	14	3.15	1.17517	-0.00937
Jan	15	3.45	1.287092	-0.01026
Jan	10.4	4.25	1.585547	-0.01264
Jan	11	4.2	1.566894	-0.0125
Jan	15	3.45	1.287092	-0.01026
Jan	10.4	4.2	1.566894	-0.0125
Jan	30	4.6	1.716122	-0.01369
Jan	30	3.2	1.193824	-0.00952
Jan	11	4.2	1.566894	-0.0125
Jan	45	3.15	1.17517	-0.00937
Jan	15	3.3	1.231131	-0.00982
Jan	11	4.2	1.566894	-0.0125
Jan	10.4	4.25	1.585547	-0.01264
Jan	14	3.35	1.249785	-0.00997
Jan	14	3.35	1.249785	-0.00997
Jan	14	3.35	1.249785	-0.00997
Jan	14	3.35	1.249785	-0.00997
Jan	70	3.2	1.193824	-0.00952
Jan	15	3.35	1.249785	-0.00997
Jan	1.005	15	5.59605	-0.04463
Jan	11	4.2	1.566894	-0.0125

Jan	13.5	3.35	1.249785	-0.00997
Jan	0.9	24.75	9.233483	-0.07363
Jan	13.5	3.35	1.249785	-0.00997
Jan	0.9	24.75	9.233483	-0.07363
Jan	13.5	3.35	1.249785	-0.00997
Jan	0.9	24.75	9.233483	-0.07363
Jan	13.5	3.35	1.249785	-0.00997
Jan	0.9	24.75	9.233483	-0.07363
Jan	10	4.2	1.566894	-0.0125
Jan	22	4.2	1.566894	-0.0125
Jan	15	3.45	1.287092	-0.01026
Jan	9.6	4	1.49228	-0.0119
Feb	60	3.3	1.06722	-0.00462
Feb	30	3.21	1.038114	-0.00449
Feb	56	3.35	1.08339	-0.00469
Feb	15	3.45	1.11573	-0.00483
Feb	11.2	3.65	1.18041	-0.00511
Feb	15	3.45	1.11573	-0.00483
Feb	10	3.5	1.1319	-0.0049
Feb	42	3.2	1.03488	-0.00448
Feb	20	4.2	1.35828	-0.00588
Feb	30	3.5	1.1319	-0.0049
Feb	15	3.45	1.11573	-0.00483
Feb	15	3.21	1.038114	-0.00449
Feb	56	3.2	1.03488	-0.00448
Feb	30	3.3	1.06722	-0.00462
Feb	11	4.2	1.35828	-0.00588
Feb	45	3.3	1.06722	-0.00462
Feb	15	3.35	1.08339	-0.00469
Feb	15	3.45	1.11573	-0.00483

Feb	60	3.35	1.08339	-0.00469
Feb	33	4.6	1.48764	-0.00644
Feb	30	3.2	1.03488	-0.00448
Feb	30	3.45	1.11573	-0.00483
Feb	10.4	4.05	1.30977	-0.00567
Feb	11	4	1.2936	-0.0056
Feb	30	3.21	1.038114	-0.00449
Feb	45	3.2	1.03488	-0.00448
Feb	9.6	3.2	1.03488	-0.00448
Feb	60	3.2	1.03488	-0.00448
Feb	15	3.45	1.11573	-0.00483
Feb	15	4.5	1.4553	-0.0063
Feb	15	3.45	1.11573	-0.00483
Feb	10.4	4.05	1.30977	-0.00567
Feb	15	3.45	1.11573	-0.00483
Feb	10.005	19	6.1446	-0.0266
Feb	28	3.35	1.08339	-0.00469
Feb	56	3.35	1.08339	-0.00469
Feb	11	4.2	1.35828	-0.00588
Feb	15	3.45	1.11573	-0.00483
Feb	10.4	4.25	1.37445	-0.00595
Feb	56	3.35	1.08339	-0.00469
Feb	30	3.2	1.03488	-0.00448
Feb	90	3.2	1.03488	-0.00448
Feb	28	3.3	1.06722	-0.00462
Feb	90	3.05	0.98637	-0.00427
Feb	90	3.1	1.00254	-0.00434
Feb	0.84	19	6.1446	-0.0266
Feb	30	3.45	1.11573	-0.00483
Feb	15	3.49	1.128666	-0.00489

Feb	10.4	4.2	1.35828	-0.00588
Feb	9.6	4	1.2936	-0.0056
Mar	30	3.21	1.42264	-0.00133
Mar	28	3.3	1.462527	-0.00137
Mar	70	3.35	1.484687	-0.00139
Mar	90	3.2	1.418208	-0.00132
Mar	8	4.6	2.038674	-0.0019
Mar	11	4.2	1.861398	-0.00174
Mar	10.4	4.25	1.883558	-0.00176
Mar	15	3.45	1.529006	-0.00143
Mar	15	3.45	1.529006	-0.00143
Mar	15	3.45	1.529006	-0.00143
Mar	30	3.21	1.42264	-0.00133
Mar	30	3.21	1.42264	-0.00133
Mar	15	3.15	1.396048	-0.0013
Mar	14	3.3	1.462527	-0.00137
Mar	30	4.6	2.038674	-0.0019
Mar	105	3.1	1.373889	-0.00128
Mar	56	3.2	1.418208	-0.00132
Mar	30	3.45	1.529006	-0.00143
Mar	15	3.5	1.551165	-0.00145
Mar	30	3.21	1.42264	-0.00133
Mar	30	3.45	1.529006	-0.00143
Mar	45	3.4	1.506846	-0.00141
Mar	4.005	19	8.42061	-0.00787
Mar	15	3.25	1.440368	-0.00135
Mar	15	3.3	1.462527	-0.00137
Mar	30	4.5	1.994355	-0.00186
Mar	11	4.05	1.794919	-0.00168
Mar	10.4	4.25	1.883558	-0.00176

Mar	15	3.45	1.529006	-0.00143
Mar	15	3.45	1.529006	-0.00143
Mar	15	3.45	1.529006	-0.00143
Mar	15	3.45	1.529006	-0.00143
Mar	10.4	4.25	1.883668	-0.00176
Mar	11	4.2	1.861398	-0.00174
Mar	15	3.45	1.529006	-0.00143
Mar	30	3.45	1.529006	-0.00143
Mar	15	4.1	1.817079	-0.0017
Mar	105	3.05	1.53173	-0.00126
Mar	45	4.34	1.923445	-0.0018
Mar	30	3.35	1.484687	-0.00139
Mar	11	4.05	1.794919	-0.00168
Mar	60	3.2	1.418208	-0.00132
Mar	14	3.2	1.418208	-0.00132
Mar	25	3.2	1.418208	-0.00132
Mar	60	3.35	1.484687	-0.00139
Mar	30	4.23	1.874694	-0.00175
Mar	30	4.23	1.874694	-0.00175
Mar	30	4.23	1.874694	-0.00175
Mar	15	4.23	1.874694	-0.00175
Total	7376.445	1369.93	544.0359976	1.552512
Profit /kg			0.397126859	0.001133278
Varience			3.843806754	0.006813299
Total profit			2929.384432	8.359565365
Standard Deviation			1.960562867	0.082542713

Interpretation:

From the table 4.6 it is interpreted that the total quantity sold in the year 2008-2009 is 7376.445 kg.The total profit earned in Indian rupees is 2929.384432 and the profit earned in Euro is 8.35956536.

ANALYSIS FOR MIDDLE EAST REGION

TABLE 4.7

Table Showing The Difference In Spot And Forward Rate In Indian Rupees And Uae Dirham

MONTH	DIFFERENCE IN RS.	DIFFERENCE IN DIRHAM	VARIANCE IN RS.	VARIANCE IN DIRHAM
APRIL	4.054819	-0.16754	0.003697	6.31E-06
MAY	1.088333	-0.0415	-	-
FEBRUARY	0.948397	0	-	-

Interpretation:

From the table 4.7 it is interpreted that there is an increase in the three month forward and spot rates in Indian Rupees and there is a decrease in the three month forward and spot rate in the UAE Dirham.

Chart 4.4

Chart Showing The varience In Spot And Forward Rate In Indian Rupees And Uae Dirham.

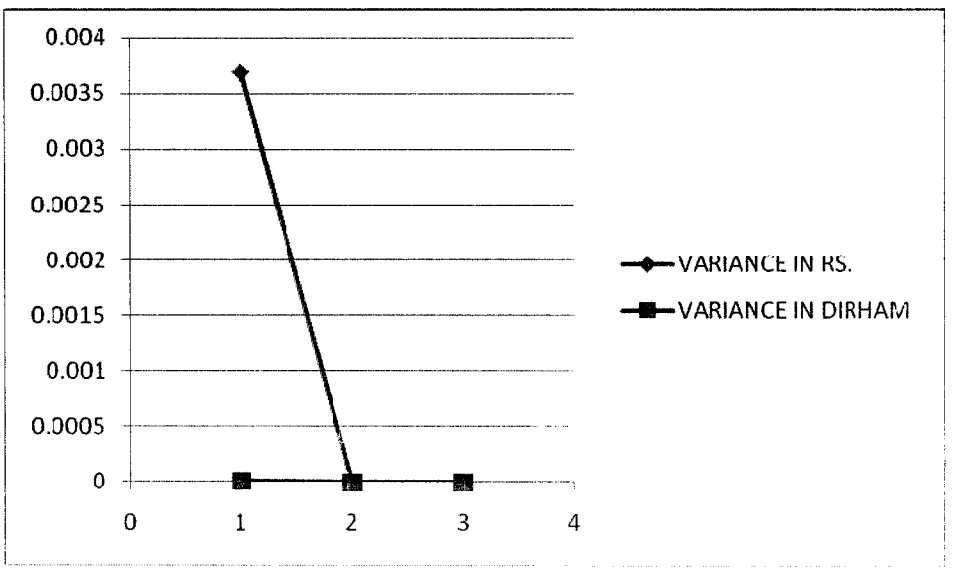


TABLE 4.8

Table Showing The Difference In Spot And Forward Rate In Indian Rupees And Uae Dirham and the profit earned.

Month	Qty	Usd/kg	Difference in dirham	Difference in rs
Apr	2	4.33	-0.05563	1.346424
Apr	1.5	4.55	-0.05846	1.414833
Apr	1.5	4.16	-0.05345	1.293562
May	28	3.5	-0.0415	1.088333
Feb	15	3.5	.0	0.948397
Total	48	20.04	-0.20904	6.091549
Profit /kg			-0.01043	0.30397
Varience			0.000588	0.037611
Total Profit			-0.50069	14.59054
Standard deviation			0.024248	0.193936

Interpretation:

From the table 4.8 it is interpreted that the total sales in the year 2008-2009 is 48 kg and the total profit earned out of the difference in spot and forward rate in Indian rupees is 14.59054 and the loss in UAE Dirham is -0.50069.

CHAPTER -5 CONCLUSION

CHAPTER V

CONCLUSIONS

5.1 Results and Discussions:

- In the Asia Pacific region the total profit earned out of the forward and spot rates in Indian Rupees is 2610.423 and the loss incurred in the difference in forward and spot rate is -20653260.14.
- In the Latin America the total profit earned out of the difference in forward and spot rate is Rs. 22.5189.
- In the European Region the total profit earned due to the difference in the forward and spot rate in Indian rupees is 2929.384432 and the total profit earned due to the difference in euro is 8.359565365.
- In the Middle east region the total profit earned in the difference in spot and forward rate in Indian Rupees is 14.59054 and the loss incurred due to the difference in forward and spot rate in UAE Dirham is -0.50069.
- The company gains profit when the products are quoted in US Dollars than quoting the products in the regional currencies.
- When comparing the US Dollar and the Euro the volatility in Euro is less wheras there is high volatility in the US Dollar for the year 2008-2009.

5.2 Considered Recommendations

- In the Asia Pacific region the company can continue to price the products in the US Dollars as it earns profit when it is quoted in the US Dollars.
- In the Latin America region the company quote the products in the Us Dollars itself.
- In the European region the company can quote the products in the US Dollars instead of Euro as there is high volatility in the US Dollars and therefore the profit in that region can increase whereas the Euro is stable and therefore the profit earned is less.
- In the Middle East region the Products can be quoted in US Dollars as the company will incur loss if it quotes the product in UAE Dirham.

5.3. Conclusion:

Agriculture in India, the preeminent sector of the economy, is the source of livelihood of almost two thirds of the workforce in the country. The contribution of agriculture and allied activities to India's economic growth in recent years has been no less significant than that of industry and services. The importance of agriculture to the country is best summed up by this statement: "If agriculture survives, India survives."

Product Pricing plays a major role in the international business. Products can be priced either in the home currency or the exporter's currency or a common currency. The exchange rate fluctuations affect the profitability of the organization. Exchange rates fluctuate due to the following reasons: Demand and supply of the currency, Inflation,Interest rates and Income Levels. The exchange rates have an impact over the profit earning of the organisation as the products are sold in a credit basis for a period of three months.The spot and the three month forward rates are compared and it is found that the organisation can earn profit if it enters into forward contract as there is increase in the forward rates when compared with the spot rates.

In the Euro region the company can quote the products in the Us Dollars as there is no profit in the forward rates of the Euro currency. In the Asia Pacific region and the Middle East region the company can continue to quote the products in the US Dollars as the regional currencies do not provide profit to the organization.

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