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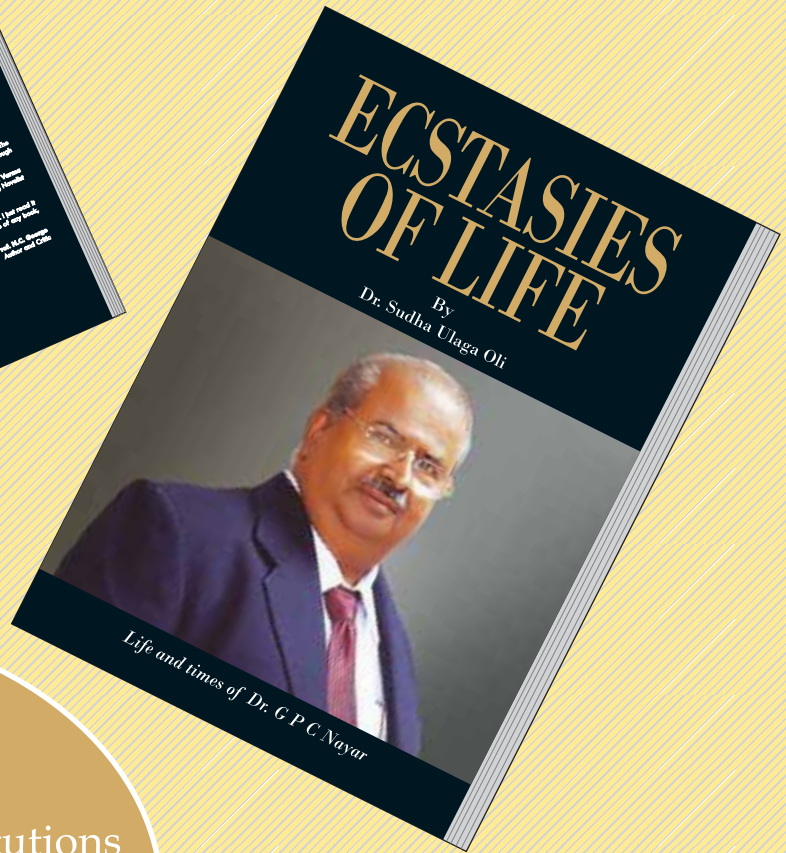
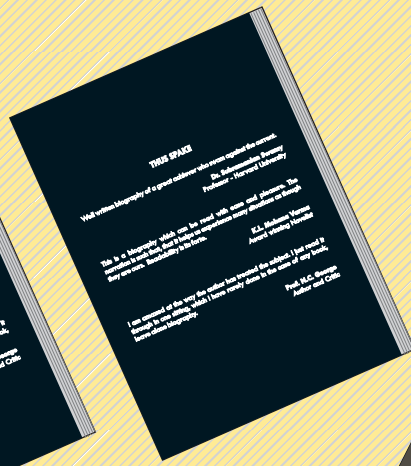
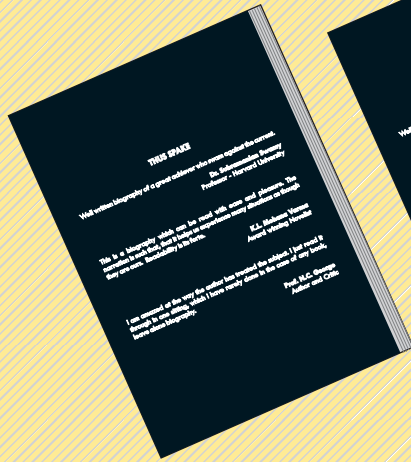
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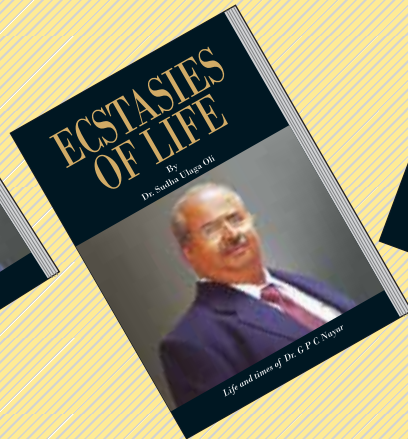
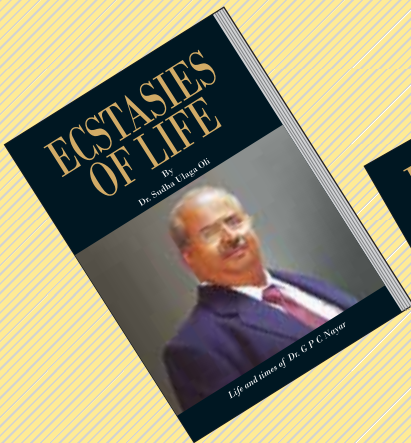
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Here's an entrepreneur who has created some excellent academic institutions in an unfriendly environment. It is a saga of trials and tribulations in an extremely readable manner by a consummate writer in English.



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Editorial



Invoke Solar Energy: Save the Universe!



Energy is life giver. It is life sustainer. It is life destroyer. The Sun is life-giver, life sustainer, and life destroyer all together. The prime source of energy in the cosmos is the Sun. All living and non-living things on earth owe their being to the Sun. The Sun, therefore, is the physical presence of the cause of life on earth.

Have we properly 'understood' the significance of this prime energy provider?

In the olden days, there were ancient cultures which had deemed the Sun the supreme power. Some cultural reminiscences and practices from the Vedic days could substantiate Indians' acceptance of such valued knowledge: people used to worship the prime source of energy and offered prayers. The Vedic Hymn *Ohm Bhur Bhuvah Swaha* is an invocation to the omniscient, the omnipresent, and the omnipotent and, and obviously it's sung in praise of the Sun.

But, human manipulation of political power has been manoeuvring knowledge in a way that didn't let the world tap solar resources cleverly.

People started tapping energy from water, from coal, from oil, from nuclear active materials, and from wind. Direct energy source, solar energy, was ignored at all levels. The world powers that promoted marketing energy grew economically powerful. All these are not perennially reliable sources.

It is in this context that a novel re-conceptualization of knowledge related to energy becomes mandatory and the prudent use of this knowledge demands our attention. We will acknowledge: the Sun is the power that protects and sustains us; the Sun is our god as the Sun is the supreme power; and the Sun is the infinite source of energy.

The B-schools will take up the responsibility to study more and research more and more on solar energy resources, and tap the resources for power generation. The B-school syllabus and curriculum will have to be in tune with solar power generation and distribution. We can use this abundance in energy for the development of our planet: in the production of food materials and other essential requirements.

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Ethical Challenges: Customers' Rights

Morteza Maleki and Maryam Akbarzadeh Pasha

Abstract

The advent of e-commerce brings with it a host of ethical issues surrounding customer privacy, risk, security, and reliability. There are many aspects of ethics that can affect electronic commerce systems, but perhaps the most notable and worrying to both consumers and developers is that of trust. In a world where technology makes it possible to do things that were never before possible and unfortunately many of those things may be illegal, immoral, or unethical and still be easy to do, ethical standards that in general society are applied to this medium, are often ignored or forgotten. This paper discusses some of the ethical challenges in electronic commerce and offers the possible solutions that can encourage developers to consider ethical considerations and prove excellence and trust to the consumer.

Key words: E-Commerce, Ethical Challenges, Trust, Privacy, Security, Advertising, Children Protection.



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The birth of e-commerce was due to the existence of Internet and computer technology. The Internet is increasingly being used as a medium to collect information for consumer profiling. Thanks to rapid advances in technology, companies can now efficiently collect, store and exchange consumer data that are useful for implementing marketing strategies (Blattberg and Deighton, 1991; Blattberg, Glazer, and Little, 1994; Glazer, 2001). This “marketing information revolution” accompanies the development of complicated data-mining devices to analyze Internet users’ data “cookies” and software are designed to track users’ movements over the Internet, and this made it possible to monitor behaviours and preferences without the consent or knowledge of consumers (e.g. Hagel and Rayport, 1997; Hinde, 1999; Olivero, 2000a; Phelps, Nowak, and Ferrell, 2000). It is a great obligation and duty for prosperous electronic commerce websites to ensure visitors that their personal privacy and security are reserved when logging into a website. EC website operators have to prevent any of this

information being available to unauthorized and not permitted users (Leitch and Warren, 2001). However, experts are convinced that “the Internet has still some way to go before attaining its true e-commerce potential” (McCole, Ramsey, and Williams, 2010). Many experts believe the lack of trust between transacting parties and the system facilitating the exchange, is impeding the speed at which this potential has yet to be realized (Dinev et al, 2006). Since perceived mistrust by customers acts as a serious threat to the growing of any enterprise, it is imperative for enterprises to identify and manage these business risks in order to expand, speed up and maintain customers’ trust in e-commerce activities (Hussin, Suhaimi, and Mustafa, 2005). In this paper, first the literature review highlights the ethical concerns and the issue of trust in relation to e-commerce. This is followed by a discussion, conclusions and some suggestion to online merchants and developers in order to attain new customers and retain the old ones by means of trust.

2. Literature Review

2.1. Morals, Ethics and Cyber Ethics

Very often the terms “Morality” and “Ethics” are used interchangeably and closely related, but it is essential to discern the distinctions between these two with respect to the study of ethical matters. The term Morals comes from the Latin “Moralis” which is concerned with the principals of right and wrong behaviour. Morality tends to be more general and prescriptive. Because of this the notion about manners, tastes, customs and even laws, may be considered ethical beliefs, but they are not always part of a moral code.

The originality of the word Ethics comes back to the Greek word “Ethos” which refers to the philosophical science that deals with the rightness and wrongness of human actions. Ethics talks about most important beliefs and values of an individual and/or a society that help to shape the character of the people in that society. It is also considered as an area of study dealing with good or bad with moral duty and obligation. However while “Ethics” generally refers to professional behaviour, “Morality” is about any aspect of human action very often. It is concerned with the fundamentals of right and wrong behaviour. Immorality is different from not being ethicality. To behave unethically in events and certain circumstances, is not equal to be immoral. Immorality is to

possess some fundamental, if not permanent character flaws, that render one untrustworthy in most of the occasions (Dinesh Babu, 2007).

The “cyber” refers to the world of networked computers; the idea of Cyber ethics was first introduced, when William Gibson used the prefix *cyber* in his novel *Neuromancer*. “Cyber ethics is the examination into people’s moral beliefs and behaviours in an online environment (Michael, 2008).” The role of information technology has been significant in individuals’ dealings with each other over recent decades (Ploug, 2009); in other words society has moved from “being a service-oriented society to a computer dependent society” (Johnson, 1984). Ethics, when applied to technology-related issues, is also recognized as Cyber ethics (Dudley Sponaugle, 2008) which is defined as the field of applied ethics that investigates moral, legal, and social issues in the development and use of Cyber technology. Cyber technology, in turn, deals with a broad range of technologies from stand-alone computers to the group of networked computing, information, and communication technologies (Spinello and Tavani, 2003). As e-commerce flows in a cyber-context, subjects of Cyber ethics like protecting individuals, privacy, security, and advertising rules are pertinent.

2.2. E-Commerce (B2C) and Ethical Concerns

Electronic commerce (EC) refers to money-making activities such as buying and selling of products and services, and transferring of funds which are conducted electronically through public or private digital networks. Sellers and buyers (or agents), products, and processes are three parts of a market (Choi and Whinston, 1997) that are mostly digitized at the core of e-commerce. This is the main differentiation of e-commerce from traditional commerce which is referred to as a ‘fully-digital business.’ E-commerce, as a new medium of communication, makes the commerce more convenient and comfortable for both customers and merchants via providing more useful information, expanding choices, simplifying purchasing processes and lowering costs (Shen, Radakrishnan, and Georganasa, 2002).

Jayawardhana argued that e-commerce has thus far failed to fulfill its potential (Jayawardhana, 2004). In particular, business-to-consumer e-Commerce transactions have not reached a point of critical mass, largely due to a lack of online

consumer trust (Head and Hassanein, 2002). Trust is a critical component for any business transaction, and is particularly essential in the e-commerce environment, where transactions are more impersonal, anonymous and automated. Business-to-consumer (B2C) online vendors are particularly challenged when trying to build consumer trust. Compared to business-to-business (B2B) e-commerce, B2C is more transaction-oriented and relationships are typically shorter in term. Therefore, B2C e-commerce trust tends to be more difficult to attain than trust in a B2B environment.

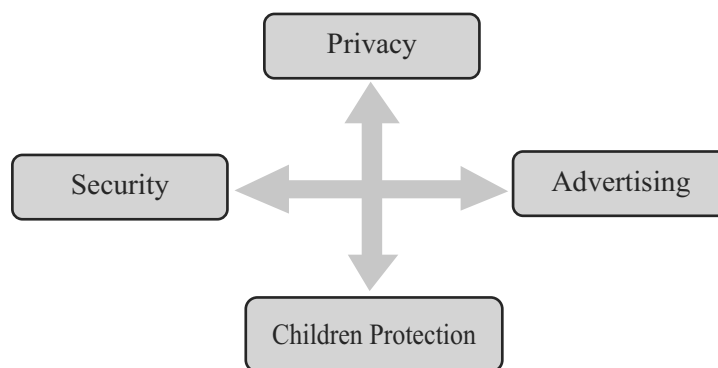
Six critical electronic commerce ethics' issues were identified by Kracher and Corritore: access, intellectual property, privacy and informed consent, protection of children, security of information, and trust (Kracher and Corritore, 2004). But ethical categorization based on Mason's principles including property, access, privacy and accuracy has been applied in many studies (Leonard and Manly, 2008). In this paper, the authors try to introduce another approach to ethical challenges in e-commerce relating to considering consumers' rights in

e-commerce activities. This model is composed of four critical subjects: privacy, security, advertising, and children protection.

Acquiring user information is crucial to e-service providers because it is impossible to complete a transaction without requiring some degree of personal information, such as current location and billing information. But nowadays technology has evolved to the point at which detailed, comprehensive profiles of web roamers can be created and disseminated at extraordinary levels and this tipped the balance of the relationship between customers and merchants in favor of online merchants' commercial interest versus the customers' privacy (Hussin, Suhaimi, and Mustafa, 2005). When talking about privacy, one must separate children from the rest of Internet users, since they are not mature enough to make wise decisions over this new virtual market.

Another issue is the unwanted, sticky ads which flow to the poor customers and make a bunch of problems for them

Figure 1: Four Ethical Challenges in E-Commerce Activities (B2C) [Developed by Authors]



especially when these unwelcome guests are accompanied with some perilous attachments like spyware.

In addition to privacy concerns, the issue of security is well-known worldwide as a major inhibitor to shopping online especially in developing countries (Aljifri, Pons, and Collins, 2003). Internet is the major context for e-commerce activities. When a huge amount of data is saved electronically they are particularly vulnerable, subject to harm, in comparison with the time of traditional transactions. Because current information systems are linked together in different points,

unauthorized access, misuse of data and other security issues are easier to be done.

Unethical contents and ads are the last concerns. The problem grows dramatically when the users are unaware children roaming in e-commerce sites. The above ethical issues will be discussed in details at the rest of the paper.

2.2.1. Influences of E-Commerce on Privacy Concerns

Privacy has been defined as the right of an individual to be left alone and able to control the release of his or her personal

information (Warren and Brandeis, 1890). Concerns about privacy are not new. Businesses have collected customer information for thousands of years. Intel's new Pentium III chip first drew attention from privacy advocates in 1990s when it was exposed that it contains a unique PSN that could allow outside parties to track a user without the user's knowledge. The serial number in Intel's Pentium III chip was initiated by Intel as a way to make electronic commerce easier. After groups protested the PSN, Intel promised to make software available that lets users switch off the serial number function (Lisbeth D'Amico, 1999).

However, privacy concerns often arise when new IT with enhanced capabilities for collection, storage, use, and communication of personal information come into play (Clark,

1987). According to Nahari and Krutz (2011), fundamental principles of individual's right of privacy are: Notice (regarding collection, use and disclosure of PII), Choice (to opt in or out in regarding of PII to third parties), and Access (by consumers to their PII to permit review and correction of information).

Privacy issues include unauthorized sharing of personal information, spam from the online retailer, and disclosure of the patterns of online customer shopping behaviour (Miyazaki and Fernandez, 2001). Brown and Muchira (2004) identified three dimensions of consumer concern in online purchasing behaviour: unauthorized secondary use, errors in personal information, and the invasion of privacy.

Table 1: Previous Studies of Privacy Concerns (Liao, Liu, and Chen, 2011)

Authors	Type of Privacy Concerns	Privacy Concerns	Measures
Malhotra et al. (2004)	General	Internet users' information privacy concerns (IUIPC)	Collection (4 items), control (3 items) and awareness (3 items)
Chen and Rea (2004)	General	Privacy concerns and Control Techniques	Concerns of unauthorized use (6 items) and concerns of giving out personal information (4 items)
Slyke et al. (2006)	General	Concern for information Pprivacy (CFIP)	Collection (4 items), errors(4 items), secondary use (4 items) and improper access (3 items)
Dinev and Hart (2006b)	General	Privacy concerns	Information privacy concerns (4 items)
Dyke et al. (2007)	General	Concern for information Privacy (CFIP)	Collection (3 items), unauthorized access (2 items), errors (3 items) and unauthorized secondary use (3 items)
Pavlou et al. (2007)	Specific	Information privacy Concerns	Information privacy concerns (6 items)
Korzaan and Boswell (2008)	General	Concern for information Privacy (CFIP)	Collection (4 items), unauthorized access (3 items), error (4 items) and secondary use (4 items)
Xu and Gupta (2009)	Specific	Concern for information privacy (CFIP)	Collection (3 items), unauthorized access (3 items), error (3 items) and secondary use (3 items)

In online shopping, while sellers take advantage of personal information to gain an edge, buyers often view this as an invasion of privacy (Culnan and Armstrong, 1999). According to Chechen Liao et al's categorization; there are two popular types of measures for privacy concerns: general versus specific. General privacy concerns refer to the privacy concerns in general, while specific privacy concerns apply to specific situations or entities (Li, Sarathy, and Xu, 2010). Table-1 demonstrates previous studies of privacy concerns (Liao, Liu, and Chen, 2011).

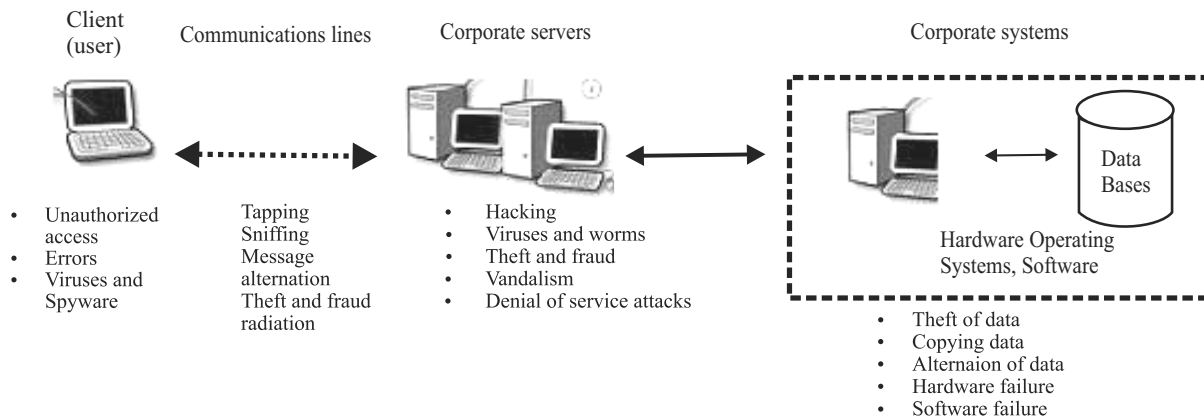
In an internal-based environment, for example, store representatives can monitor one's shopping habits at many locations on the World Wide Web, whereas in a traditional retail outlet, retailers would not be able to follow an individual to many other store locations (Kracher and Corritore, 2004). This may have some advantages for users' customization but can also be viewed as collecting customer information through a survey or information form in a retail store, or by monitoring a customer's click stream in an online store (Kelly and Rowland, 2000). These tools are really vital and common for advertisers and marketers in e-commerce practices. Therefore, it will be more discussed in Advertising challenges.

Privacy is also directly related to protecting children. There are some laws that restrict websites in information they can gather from a child of a particular age (Leonard and Manly, 2008, p.261). Children's issues in e-commerce are particular and sensitive. Thus all will be discussed in a separate topic afterwards.

2.2.2. Security Holes, the Key of Privacy Trespass

What is the relationship between security and ethics in E-Commerce? Why E-commerce security matters? To answer these questions we have to refer to the definition of security in general; "The protection mechanisms that exist (or should exist) for the valuable thing and the efficacy of those mechanisms are collectively called security" (Nahari and Krutz, 2011). Security is a function of threat which is the potential for a threat-source to make the most of a specific vulnerability that can lead to an attack. Large public networks like Internet are more vulnerable, subject to types of invasions compared with small internal ones, because invaders can access to all types of information from any node of the network and make lots of loss in a short time. The following picture demonstrates the major threats before today's information

Figure 2: Security Challenges and Vulnerable Points of IS Systems (Laudon, 2009)



systems and e-commerce which can lead to ethical dilemma for both customers and online vendors. These threats originate from technological, organizational and environmental factors accompanied weak managerial decisions.

As shown in the figure, customers, crackers, companies, and governments are four main angles in making serious security

troubles. Customers via unawareness, crackers via security gaps which govern e-commerce transactions, companies via conniving in preparing updated, powerful and scalable security management policies, and finally governments by low IT infrastructures and lack of efficient laws.

As mentioned, e-commerce is about buying and selling

products and services using networks and information systems. In this transaction, customers use one form of value (money, credit) to exchange for another form of value (products, services). So if an unauthorized entity obtains access to customers' valuable and vulnerable information such as credit card numbers, postal address, account numbers, full face photographic image, medical record numbers, biometric identifiers (finger and voice prints), IP address and the like, it could harm both parties—customer and company—financially, socially, ethically or otherwise (Nahari and Krutz, 2011).

Anyway, functioning of hardware and software like cryptographic protocols is the key of smooth and secure processing of online transactions (Hussin, Suhaimi, and Mustafa, 2005). This is called as “physical” aspect of security. The other aspect of security concerns is “information security” which has six key elements including “validity, confidentiality, integrity, no repudiation, and accountability” (Lao and Wang, 2007). Lack of informational security may lead to data theft and file corruption, and access to personal and classified information of company and its customers (Hussin, Suhaimi, and Mustafa, 2005). Researchers found that in the context of developing countries, growth of e-commerce mostly depends on the security of the websites (Aljifri, Pons, and Collins, 2003).

The other division of threats separates internal and external sources of peril for security of informational assets of organizations. An information system incorporates not just the information component, but also the human aspects of implementing and monitoring the technology. The security solutions in an organization are implemented by employees. The human link has been found to be the weakest in the security solution (Mishra and Goyal Chin, 2008). According to Schultz (2002), the threat to security from the insiders of an organization exceeds that from outsiders like hackers. They count different arguing for this in the research literature including “lack of internal controls and lack of normative pressure, ignorance or disregard for security policies, and no consideration being given to human factors in the system development methodology” (Mishra and Goyal Chin, 2008).

However, Security is one of the issues that e-commerce companies never quite know how much to spend on, though it seems logical that the more they expend, the safer their enterprise and customers will be.

2.2.3. Advertising

Surely advertising is one of the most fundamental tools for e-commerce practitioners. The growth of Internet attracts the attention of advertisers as a more productive source of introducing products and services, because it decreases the cost of advertising and enhances the scope of coverage from a simple local district to a global varied area. Online advertising allows for the customization of advertisements, including content and posted websites. A clear advantage consumers have with online advertisement is the control they have over the item, choosing whether to check it out or not. Examples of online advertising include contextual ads on search engine results pages, banner ads, blogs, Rich Media Ads, Social network advertising, interstitial ads, online classified advertising, advertising networks and e-mail marketing, including spam. Research has proven that online advertising has given results and is a growing business in revenue (Wakolbinger et al., 2009). For the year 2012, Jupiter research predicted \$34.5 billion in US online advertising spending (Wikipedia).

There are three main orientations in unethical advertising. First the content of the ads, second the ways that advertisers try to push ads into the customers' mind, and third the methods of tracking individuals' special experiences over the net with the purpose of promoting companies' products and services.

In the first state, practitioners should try to be honest and tell the whole truth about the items they are publishing. Selling a product by means of trickery and mendacity may bring some money for the company in a short notice but it will damage the reputation of business and cause the customers run away in long term. On the other hand in some Islamic countries, promoting things like booze are prohibited because of the ethical limitations in their religion. So unethical content is an issue related to the accepted morals, beliefs, and cultures in different locales of world.

Nowadays thanks to the advances in computing technology, marketers have lots of choices to introduce products to types of customers. Some of these methods are deployed ethically and some are not. Website operators that ethically use online advertising typically uses a small number of advertisements that are not planned to distract or annoy the user, and do not

detract from the design and layout of their websites (Brown S. 2007). One of the most popular persecutor techniques for advertising is sending unwanted or unsolicited email messages called 'Spam' (Farmer, 2003). Sometimes these commercial junk e-mails are accompanied with perilous malwares that can make serious problems for computer users. Many countries have determined legal solutions for preventing e-commerce companies from using spam for advertising purposes (Wikipedia, 2009).

Finally there are advanced methods for monitoring and tracking Internet users' experiences while roaming in e-shops and even social networking sites like Face book (IB Times Staff Reporter, 2011). One and perhaps the most challenging tool is 'cookie.' Cookies are items of information generated by a web server and stored in the user's computer, ready for future access (leitch and warren, 2001). The subject of browser cookies is a two-sided tale. Their good side makes it easier to visit websites and set browsing preferences; their bad side compromises users' privacy. Last year, the Wall Street Journal featured a multipart series on the dark side of cookies — how they're used to track who we are and how we browse the Web (Bradley, 2011). Cookies are based on a two-stage process. First the cookie is stored in the user's computer without their consent or knowledge. This is the default setting of web browsers. During the second stage, the cookie is clandestinely and automatically transferred from the user's machine to a web server. Whenever a user directs the Web browser to display a certain web page from the server, the browser will, without the user's knowledge, transmit the cookie containing personal information to the web server. This second stage is the main area of concern (Mayer-Schinberger, 1996). Third party cookies, however, pose a higher threat to security and often come from banner ad services that track a user's moves throughout the Internet, presenting ads and other information based on what it determines customers' interests may be. Some advertisers send images (from their third-party servers) that are included on WebPages, but are too small to be visible. A third-party Web site can place a Web bug -which is a tiny graphic- on another site's Web page. It is delivered by the third-party site via loading the Web page by visitors in order to place a cookie on the visitors' computer (Schneider, 2010). Another tracking tool is Web spy which is specialized for Internet Monitoring, Analysis and Reporting. Tracking companies sometimes hide their files within free software

offered to websites, or hide them within other tracking files or ads. When this happens, websites aren't always aware that they're installing the files on visitors' computers (Angwin, 2010). However from a customer perspective, all the three discussed issues are serious threats to information security and privacy. Simple ads that should be only guides for Internet users, now changed to perilous machines to attack individuals that will dramatically destroy trust between customers and e-commerce companies.

2.2.4. Communication with Children

Why do children go online? Today the Internet serves as teens' all-purpose hang out and the Internet mall never closes. Teens see the Internet as more than a tool for homework. Online, they talk to friends in chat rooms via instant messaging; explore new communities, fashions, and attitudes in social networking sites like Face book; send and receive E-mails; play online games; go to online libraries and encyclopedias to learn new things; and spend their after-school-job cash in e-commerce transactions (Korper and Ellis, 2001). The whole concern about children online protection is children putting themselves into dangers as due to their activities online. For example, kids think that it is cool to have a cool profile on their social networking site account by posting even their personal photos and videos to enhance their profile, besides other information. They do this not knowing that this is what attracts online and sexual predators. In 2006, MySpace as a response to concerns about the security of participants in the social networking site, many of whom post personal information and photos hired a former federal prosecutor to serve as the site's security officer. It regularly uses software that compares each registered participant against a database of known sex offenders and deletes the accounts of any it finds. However, for now we have to accept that no technology will ever protect as well as parental involvement in their children's online activities (Schneider, 2010,p.334).

Kids and Online Commerce simply deals with any situation that children make monetary transactions online. This includes purchasing items off Craigslist.com (which may not require a bank account), selling or auctioning items, using a credit or debit card to buy items from online sellers or retailers, and participating in online sites requiring payment (including gambling websites) (SafetyWeb, 2010). According

to a report entitled “The Teens Market in the U.S.” teen shopping grows by approximately 3.5 percent annually and is forecast to climb to \$91.1 billion in 2011 (Lonoff Schiff, 2011). *WeeWorld*, a popular avatar video game, conducted a survey and found that “when it comes to spending online, 34 percent of teens are willing to spend online for ‘anything fun’ while 22 percent will spend online in order to express themselves. Girls are generally more interested in buying goods online to express themselves, 24 percent as opposed to 17 percent of boys” (WebSafety, 2010).

The most harmful effects with regard to online commerce are getting scammed via showy advertisements, damaging the card holder’s credit score, and breaking the law by purchasing prohibited items. E-commerce also opens opportunities for kids to communicate with and meet strangers that may lead to threatening their Privacy, Health, and Life.

2.2.4.1. The Risks of Advertising

Since most of the time young people use the Internet while alone, advertisers really like the Internet as an advanced marketing tool. They can create a much more direct relationship with children in comparison through traditional methods. On the other hand, young people may also accidentally download “spyware” that result in clandestine tracking their activities over the net. All of the most popular commercial sites for children have advertisements which may be in forms of banner ads, embedded on the website activities or the site itself is an advertisement- a site with fun games related to a product or service. Willard (2007) has identified several risks of advertising to young people:

- ◆ The messages advertisers use for children and teens include fully developed information that have an impact on their social, emotional and physical well-being.
- ◆ Children often judge themselves and others based on the “cool” factor in advertising messages which focus on the insecurities of children and teens. This can hurt their self-esteem.
- ◆ Since most products advertised for children are fast foods, soft drinks, candy, and junk food, advertising in this field can result in obesity in children.

- ◆ Advertisers of entry to send this message to young people that they should decide what is right for them. This strategy hinders the ability of parents to grant and teach healthy attitudes and behaviours to children.
- ◆ The underlying message of highly sexualized images of teens in advertising is that popularity and happiness are linked to being skinny and sexy and having these “cool” products. The result is inappropriate sexual behaviour and low self-esteem.

This is not to say that all commercial sites that have advertising directed at children are bad sites. Most parents would consider a web site that promotes creative play with certain kinds of toys as beneficial, despite the fact that the site is promoting the sale for more toys.

2.2.4.2. Privacy Invasion

As mentioned, the communication of private information (such as credit card numbers, shipping addresses, and so on) is a key element in electronic commerce transactions. The difference between adults and children is that the former group, while interacting with Web sites, can read privacy statements and makes informed decisions about whether to communicate personal information to the site, but the latter think that they have to give out their information to any site that asks their private information and it is very cool and natural. So an additional set of privacy considerations arises when Web sites interact with children and engage in some form of communication with them (Schneider, 2010). Companies seeking true competitive advantage in future will work to better understand and monitor the online behaviours of this next generation of customers and this result in gathering children’s private information simply by their negligence. On the other hand, although about one-quarter of the children think that purchasing online is fun and cool, many of them are not sure about the security and reliability of e-commerce (Clarke, 2001). Despite this fact, children post material through the web that is likely to damage their reputation and give out their personal information on the Internet and e-commerce websites; information which is not necessary but the site insists on getting the whole information about them. Many of privacy invasion cases occur by Internet advertisers and marketing practitioners via Permission Marketing - is an opportunity offered to children to “opt in” to receive

advertising-, advergaming which is the integration of advertising messages into online games and activities, and Viral Marketing - a variety of strategies as offers, samples, and discount coupons to persuade children provide their names, addresses and information about personal interests, which then will be provided to all advertisers on the site (Willard, 2007).

These are all evidences that confirm children are really in danger and unguarded on the web and governments, parents and e-commerce websites are the main responsible for supplying kids' online privacy and security.

3. Discussion

Internet Architecture Board (IAB) has defined an activity as unethical and unacceptable if it:

- ◆ Seeks to gain unauthorized access to the resources of the Internet,
- ◆ Disrupts the intended use of the Internet,
- ◆ Wastes resources (people, capacity, and computer) through such actions,
- ◆ Destroys the integrity of computer-based information, or
- ◆ Compromises the privacy of users (Network Working Group, 1989).

It is often easier to identify ethical problems than to provide solutions. One key issue that distinguishes transactions conducted via e-commerce from those with traditional business settings is that of anonymity (Davenport and Beck, 2002). The sense of being nameless and having little accountability allows individuals to behave in ways that they traditionally would not behave if they were known to the other parties involved. "Shame is less common in cyberspace because less strict moral norms pertain ..." (Ben-Ze'ev, 2003). Researchers have found that current ethical issues facing organization that do their business via network technologies are not completely unique but differ from traditional brick-and-mortar in terms of manifestation and scope (Kracher and Corritore, 2004). These differences were discussed in four main subjects in this paper: privacy, security, advertising,

and communication with children. In this section we will bring in some solutions to protect both customers and e-commerce companies from unethical perils flowing in Internet business activities.

3.1. How E-Commerce Companies can protect Customers' Privacy?

Successful electronic commerce in one instance has a requirement and duty to ensure that personal privacy when Logging Into a website. It must try and prevent any of this information being available to unauthorized users. Here are several keys for e-commerce companies in order to preserve users' privacy.

3.1.1. Privacy Policy

Usually, organizations achieve the obligation of informing data subjects by means of privacy policies. A privacy policy is essentially a comprehensive and high-level description of organization's privacy practices (Federal Trade Commission, 1998). Organizations have both internal policies, which include rules about information handling within an organization, and external policies which are designed to inform the data subjects about use of their information (Karata et al., 2005). Organizations generally have a number of internal privacy policies; some to address use of data about internal employees, and others to address use of data about individuals with which the organization interacts (e.g., customers, patients, clients). Any policy includes a number of rules governing the use of data-subject's information. The rules in a privacy policy include data user, data element, purpose, use, condition, and obligations (Ashley et al, 2003). The first four of these elements can be said to be required of any good policy rule, and the last two are optional. According to Guarda and Zannone, (2009) privacy policies shall contain information regarding:

- ◆ The purposes and modalities of the processing for which the data are collected;
- ◆ The obligatory or voluntary nature of providing the requested data;
- ◆ The categories and typologies of data concerned;
- ◆ The recipients or categories of recipients;
- ◆ The rights of data subjects.

E-businesses are urged to disclose their privacy policies and then give the customer the right to “opt in” or “opt out” of data collection. The differences between these two policies are very important since most consumers tend to select the default condition-opt in, by many web browsers- either with or without intention.

3.1.2. Seal Programmes

There have been a number of organizations arisen to monitor privacy issues on the web (EPIC, or Institute for Business Technology Ethics) or provide a “seal of approval” for websites (BBB On-line or TRUSTe). These sites provide guidelines and code of ethics for e-commerce companies to follow, in order to protect customer’s privacy and make online shopping a positive experience. These are third party organizations which attempt to promote self-governance on issues like privacy. For example, TRUSTe (www.truste.com) states to consumers; “When you see the TRUSTe seal, you can be assured that you have full control over the uses of your personal information to protect your privacy.” Once joining the programme, the business is allowed to post the third-party privacy ‘seal’ indicating their participation (Belanger, Hiller, and Smith, 2002). In a 2001 study, Harris reported that when consumers notice privacy seals they consider them important, and are more willing to provide personal information to the site because of the third party verification (Rochester, 2001). Another survey conducted for Privacy and American Business found that 91 percent of consumers would feel more comfortable using sites participating in a third party verification programme, and 84 percent believed that they should be required for electronic businesses. Furthermore, 62 percent believed that third party privacy seals would reduce their privacy concerns (Anonymous, 2002).

3.1.3. Special Attention to Children’s Privacy

Commercial websites for children put a privacy policy link in their sites that outlines the kinds of information the site will collect and how the information will be used. Normally, these policies emphasize on a commitment to protecting privacy with a bold statement. But yet websites gather information about children, and use this precious analyzed data for marketing purposes. The laws of most countries and most sets of ethics consider children to be less capable than adults

in evaluating information sharing and transaction risks. In the United States, as the pioneer of EC in the world, Congress enacted the Children’s Online Privacy Protection Act (COPPA) which applies to US commercial websites for children under the age of 13. COPPA places restrictions on data these sites can request. COPPA requires that the site have a privacy policy that addresses the types of personal information collected, how the site will use information, whether personal information is provided to third parties, parents’ rights to review and remove information, and the site contact. COPPA provides that paternal consent, usually solicited via email, is required for registration (Willard, 2007; Schneider, 2010).

Companies with Web sites that appeal to non-adults must be careful to comply with the laws governing their interactions with these young visitors. Disney Online is a site that appeals primarily to young children. The Disney Online registration page offers three choices to visitors who want to register with the site and receive regular communications and updates. The first registration choice is for adults. The second choice is for “teens,” that asks for the visitor’s name, birthday, and the e-mail address of a parent. The third choice is for “kids” which leads to a screen that asks for a parent’s e-mail address so that Disney can invite the parent to set up a family account. By refusing to enroll any child under age 13 as a site subscriber, Disney Online meets the requirements of the COPPA law. Other sites that appeal to a young audience use similar techniques to limit unsupervised access to their Web pages.

The authors propose some keys for e-commerce websites to protect children online:

- ◆ Spell out children’s online rights to them in simple words and by plays,
- ◆ Explain the ways that the website uses to protect their rights in their own tongue,
- ◆ Remind them things about caring for their private information and online threats via games,
- ◆ Use filtering software for content classification by age,
- ◆ Monitor children’s activities on the web site and send a record for their parents via e-mail or SMS.

- ◆ Do not let them to register on a website without checking with a parent first,
- ◆ Prepare some articles for parents including the ways of protecting their children online,
- ◆ Before buying online, send an instant message and give their approval,
- ◆ Do not accept usernames and e-mail addresses that provide a full name. Always propose them gender-neutral names, and
- ◆ Disable all permissions of sharing registration information with partners for children.

However, there is still a great challenge and that is, not telling the real age. Children may give the wrong age to websites and use the whole contents adults do, deliberately. Thus the threats discussed will pursue them. So e-commerce still faces many unsolved problems in ethics! We have to wait for greater advances in producing cheaper and easier technologies for recognizing the real users in order to preserve the most sensitive part of e-society.

3.2. What makes an E-Commerce System secure?

Lathman D.C, principal of American C3I, utters that information security should include six aspects: communication security, computer security, TEMPEST, transaction security, physical security, and personnel security (Lao and Wang, 2007). Surely for IT intensive organizations including e-commerce companies, security of informational assets is a vital issue and a huge responsibility. Since soft data is more vulnerable to wicked outsider attacks (hackers) than physical hard copies of data which may be securely locked in an office, so it needs special and efficient practices in the form of detection and prevention of breaches in networks. Thanks to advances in hardware and software technology, there are various sophisticated solutions to ensure the security of transactions and customers' information (Mishra and Goyal Chin, 2008).

The process of making a system secure starts by identifying the factors, that make an e-commerce system prone to attacks, and then implementing the mechanisms that counter them. As noted earlier in this paper, this requires a clear understanding

of system's security assets (the valuable items) and attacks that they are vulnerable to. A number of common constructs that contribute to enhancing an e-commerce security are (Nahari and Krutz, 2011):

1) Vulnerability Assessment and Threat Analysis (VATA): The skill-set required to assess system vulnerability and analyze the threats in order to anticipate the mass of loss that may be created in a possible attack to system (Renfroe and Smith, 2011).

2) Updated Hardware and Software for security protection like antivirus, Internet security Packs, spam filtering, firewalls, proxy servers, and virtual private networking.

3) Authentication: "the process of verification of evidence of an entity's identity and asserting the authenticity of the identification material that the entity has presented." Some tools for authentication are: username, password, token, smart card, biometric mechanisms.

4) Authorization: refers to "rights and privileges granted to an individual or process that enable access to computer resources and information assets by defining access levels and access control models," in order to prevent errors and data manipulation by amateur users, employees, and hackers.

5) Secure Transaction Protocols: some enterprises like Netscape, Visa, Microsoft, IBM, GTE, etc, have developed their own protocols or joint paradigms to provide confidentiality and integrity of data exchanged between two communicating entities like Secure Sockets Layer (SSL), Secure HTTP (S-HTTP), Secure Electronic Transaction (SET), 3D SET.

6) Encryption Solutions: "the coding of information by using a mathematically based programme and a secret key to produce a string of characters that is unintelligible." The type of key and associated encryption programme used to lock a message, or otherwise manipulate it, sub-divides encryption into three functions: Hash coding, Asymmetric encryption, and Symmetric encryption (Schneider, 2010).

7) Defense in-depth: this strategy is making multiple layers of defense, even surmountable layers to hinder the attackers as much as possible (Vacca, 2009). This way avoids

introducing a single point of failure to system which in turn could help both security and scalability characteristics of the e-commerce system.

8) ISO/IEC 17799: The International Standards Organization (ISO) has a number of standards that pertain to security, and some organizations have indicated their 'readiness' to conduct electronic business by highlighting the fact that they are ISO 17799 certified. This standard is mainly about security management and highlights that an organization has taken security seriously, at least at a basic level of assurance (Johnson and Goetz, 2007).

9) Human factor in security: As mentioned, one of the sources of threats to security is employees. The best security management initiatives can fail due to the staff's inability to carry them out appropriately. So hiring talent with the right attitude toward general strategic vision of organization is the first step. Second, employees and executives must know their right responsibilities in the system. Third, there must be executives and senior management for data governance and finally there is a need to take out Cyber insurance for incidences like destruction of data and software, business interruption, data theft, denial of services and extortion (Hwanga, Yehb, and Li, 2003).

One important point that all e-commerce practitioners should always take in mind is that security is not static. Companies cannot assume that by applying a promotion set of different types of defensive mechanisms, system is secure forever. This is far from reality. For one, it is practically impossible to list all the attacks against an e-commerce system, and have a unique solution that never changes; that is because of rapid advances in network and Internet technologies.

3.3 Advertising

The Internet is becoming a powerful marketing tool for converting innovation to economic value for business. In particular, the online borderless nature of the Internet raises the possibility of product exposure in the global market (Su Fu and Wu, 2010).

E-commerce websites may outsource their advertising campaigns or do it by themselves. Any way, they must

respect their customers and quit types of promotion methods that bother visitors from sticky banners to unwelcomed spam. Since ethically questionable ads can have a negative impact on companies' brands, an advertiser should care about the ethics of advertising. When users dislike an ad, they tend to extend that dislike to the advertiser. As web usability expert Jakob Nielsen puts it in an article on his web site: "Unethical ads will get you more fixations, but ethical business practices will attract more loyal customers in the long run" (Spizziri, 2011).

As mentioned online advertising encompasses a range of types of advertising, some of which are deployed ethically and some are not. The main threats of online advertising are related to the field of customers' privacy and rationality. Here the author recommends some solutions to e-commerce companies in order to organize their advertising activities ethically acceptable:

- ◆ Following advertising laws in virtual space covered by Government and international institutes like IAB,
- ◆ Joining to Self-regulation and seal programmes in the field of advertising through websites as BBB Online,
- ◆ Avoiding propaganda and omission any type of information that could mislead potential customers or wrongly influence their impressions of a product or service (Schneider, 2010),
- ◆ Taking periodic feedback from website visitors about methods of advertising and amend,
- ◆ Consulting with experts in psychology to develop better ways of advertising with less hidden and vivid torts to customers and more efficiency,
- ◆ Avoiding using tricks (e.g. spywares) to gather visitors' private information through showy and deceptive ads, and
- ◆ Making special codes for children protection in the field of promoting foods, toys, and other products and services for them and of course privacy protection.

4. Conclusion

We live in an exciting time in history. The widespread availability of computers and Internet connections has provided unprecedented opportunities to communicate. Many organizations now emphasize the use of technology that can help them get closer to consumers and build ongoing relationships with them. A critical success factor for customer relationship management is access to customer information. The better the information that is gathered, the better the company is able to meet its customers' needs (Nicovich and Cornwell, 1998).

Cordero (1988) classifies three sorts of unfair exchanges as: 1) in which at least one part does not agree to the exchange, 2) in which at least one party agrees unwittingly, 3) in which at least one party agrees only under pressure of circumstances. Many concerns in e-commerce activities (B2C) raised in the field of ethics seem to fall into the second category where site owners either portray themselves as someone else, or devise ways deviously to divert web traffic. Privacy issues can also be associated with this category where users are unaware that part of the transaction involves personal data collection (Koslowski, Hubig, and Fischer, 2004). Collecting data about consumers is helpful but perhaps even more important is using the data in a way that does not cause consumers to be concerned.

There are several ethical challenges, individuals and e-commerce companies face, in this age of information that stem from the nature of information itself. In this paper, we have identified four main ethical challenges including privacy concerns, security problems, persecutor and unfair advertising campaigns, and children's special dilemmas over the net.

Unlike traditional commerce, e-commerce is impersonal. Individuals are involved in a process that they may never know the counterpart. Consumers need to know that they can trust a company with their personal information (e.g. income, health, postal address and etc) that can identify them personally or be of a potentially sensitive nature (Brown and Muchira, 2004). On the other hand the Internet has proven a fertile ground for marketing and advertising. It readily offers all of the tools needed by an organization attempting to fully embrace relationship marketing and introduces cool customer data-gathering capabilities. According to Kotler (1997),

consumers are known to be sensitive to certain influences and are apt to change their mind about a purchase decision at the last minute. This detail is particularly relevant in the case of Internet users who have more control over the communication and purchase processes. Addressing privacy concerns may be a step in the right direction toward creating good relationships.

Children increasingly have the world on their fingertips, and their role in commerce should not be dismissed for the lack of credit card. The behaviours and psychology of commerce are no different on the Internet. Similarly, companies seeking true competitive advantage in the future will work to better understand the online behaviours of this next generation of consumers. So they try to make maximum profit from this opportunity in forming children's taste in every field they wish and gather information about them and their families. Here Privacy issues become more important and parents have lots of concerns about their children online. So children and teens really need to have the risks of online disclosure spelled out to them clearly and e-commerce companies should observe their rights (Willard, 2007) in ads and private information. In developed countries like U.S.A, there are special laws for protecting children's online interactions with e-commerce websites.

In traditional commercial transactions, customers are the main responsible for their wallet, but in e-commerce as they trust to the website and give out their information to site holders, it is logical to suppose that the main responsible for customers' private information is the website. In providing security, large business and government Web sites are constantly under attack by a variety of potential intruders, ranging from computer-savvy high school students to highly trained espionage workers employed by competing businesses or other governments. These attackers are continually looking for a way to break through computer security defenses in the hope of finding any information that could help their employers embarrass, disable, or hurt competitors or enemies. The software that potential attackers use to scan computers is widely available. So companies should consider security as their first ethical priority before launching the business online. The more secure is the website, the more comfortable they and their customers will be. It is a costly and dynamic process to block the internal and external leaks in order to protect private information and of course company's reputation.

Finally, for users to adopt Business-to-Consumer (B2C) e-commerce, it is imperative that the benefits of using this new commercial medium (e.g. convenience, decreased transaction costs) significantly outweigh potential risks. Trust plays an important role in many social and economic interactions involving uncertainty and dependency. Since uncertainties exist in transactions over the Internet, many researchers have stated that trust is a critical factor influencing the prosperous rapid growth of e-commerce (Thompson and Liu, 2007). The concept of trust is crucial because it affects a number of factors essential to online transactions, including security and privacy. It contributes to satisfaction and long-term association over and beyond the effects of the economic outcomes of the relationship between customer and e-commerce company. Surely eliminating ethical concerns of individuals in B2C e-commerce will make this experience pleasurable for both parties and build trust.

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Comparatistics India Overseas: FEMNCs and MNCs

Vipin Gupta

Abstract

Family firms are disproportionately represented among increasingly prominent emerging market multinational corporations (EMNCs). This paper gradually unravels a model for "typical MNC behaviour" based on selected themes from the received literature, shaped largely by the experiences of the openly held and professionally managed industrialized market MNCs. Using the case study of Indian overseas family businesses (OFBs) over the 19th and 20th centuries, it is shown how the internationalization pathways get diverged from the "typical MNC behaviour" model. Gaps in the "typical model" are identified and implications for refining the MNC literature to be more relevant to the EMNCs are suggested.

Key words: *Emerging Multi-Nationals, Family Business, Indian Overseas Family Business, Multinational Corporations.*



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Over the last decade, there has been a rapid growth in the multinational corporations (MNCs) originating from the emerging markets (EMNCs). The received literature on the MNCs has been shaped mostly by the experiences of openly owned and professionally managed enterprises based in the industrialized markets. Recent research suggests that the pathways to the internationalization of the EMNCs are qualitatively different from the normative behaviours of the industrialized MNCs (Gammeltoft, Barnard and Madhok, 2010). This differentiation should be accentuated in the case of the family EMNCs, as the family business research suggests that the family businesses tend to have behaviours different from the non-family businesses, and that even the emerging market family businesses show behaviours and strategies significantly different from those of the industrialized market family businesses (Gupta et al, 2008). The study of the family EMNCs thus can help test

the robustness and refine the perspectives built on the experiences of the industrialized market non-family MNCs.

In this paper, we first interpret the typical behaviours of the MNCs, based on the received literature. We then underscore the value of using a case study on the historical rise of Indian overseas family business (OFB) during the 19th and 20th centuries, as a way to identify potentially divergent pathways for the internationalization of the EMNCs. Based on the case study, we analyze the typical behaviour of the Indian OFBs, and discuss the gaps in our “typical MNC behaviour” model. We discuss how these identified gaps can help refine our understanding of the MNC behaviours, and offer additional pathways for the internationalization of the EMNCs.

A Model of Typical MNC Behaviour

The literature on the behaviour of the MNCs is extensive. Main citations can be found in the excellent critical theorizing and reviews by Inkpen and Beamish (1994), Ricart et al (2004), Kendall and Kostova (2003), Buckley and Casson (1998), Dunning (2000), Doz and Prahalad (1991), and Kogut and Zander (1993). To motivate our analysis here, we offer a particular interpretation of the typical behaviour of the MNCs, and refer this interpretation loosely as “typical MNC behaviour” model. The model is based on the major themes found in the MNC research. Specifically, the themes include: (1) motivation to invest abroad, (2) liability/challenges of foreignness, (3) pathways for market entry, (4) strategies for success, (5) networking of host operations, (6) corporate social responsibility, (7) impact on global competition, and (8) impact on host markets – including how costs are distributed, benefits are captured, and policy challenges are addressed.

Motivation to invest Abroad

The MNCs invest abroad because they wish to accrue added value by better exploiting resources, capabilities and knowledge either of their home-base or of the host markets. Investments overseas usually occur when there are significant transaction costs for trading home-based resources, and/or when the host market resources of interest are not trade-ready. An illustration of the former is when a firm is concerned about the leakage of intellectual property in its processes and/or products. Examples of latter include the un-extracted

natural or non-migrating human resources in the local market, or the new knowledge being developed by a cluster of locally based firms that is not well codified to be traded in the global market. An example of both together is insufficient traded knowledge about the local market that makes it difficult and costly to adapt the exploitation and trading of home-based resources – and thus risks loss of opportunity or of competitive advantage. These motivating factors encourage the MNCs to seek to conduct business overseas through a system of activities, which complement or substitute trading with other business functions also.

Liability/Challenges of Foreignness

Investing abroad usually carries higher risks than investing at home, especially because the MNCs tend to be more familiar with their home markets and are seen as foreigners in the local market. Lack of familiarity with the host markets imply that the MNCs have to develop new networks locally, either by recreating or reconstituting their global networks and/or by discovering and cultivating appropriate qualified local networks. Perceived foreignness in the host markets requires the MNCs to compensate by offering additional support / premium to the local partners and other local constituencies, and by using up their social capital to induce the global partners to co-invest. Lacking cultural integration, they also need to be sensitive to not stepping over the local sensitivities.

Pathways for Market Entry

Collaboration with the local partners, and/or with the global partners having local footprints, and/or with the home partners interested in co-investing, is the dominant pathway for most MNCs investing overseas. Collaboration serves several purposes, including pooling of resources, capital, knowledge, networks, risks, and responsibilities. Pooling helps in not only building scale by distributing the obligations, but also generates robustness by mobilizing a diverse scope of assets. Collaborations may be complemented, and to some extent substituted, with hierarchy-based control and market-based exchange. Hierarchy-based control requires establishing appropriate organizational, communication, and workforce systems, in both the home market as well as the host market. Similarly, market-based exchange requires market intelligence and presence in the local and global markets.

Strategies for Success

To accrue greatest value from their host operations, the MNCs strive to connect their host operations with both global as well as local networks. Global integration aids in exploitation and development of home-base resources, while local responsiveness aids in discovery and exploitation of host market resources. Through mobilization of trade-ready worldwide resources and through economies of scale, global integration helps achieve cost-effective configuration of and transfer of learning across the value chain spread in different regions. Local responsiveness, on the other hand, works through economies of scope and mobilization of less traded localized resources and learning, and brings differentiation, uniqueness, and empathy to the activities performed in a region. The MNCs may develop a distinctive balance between global integration and local responsiveness at the level of corporate strategy, country strategy, business strategy, functional strategy, and/or collaboration strategy. The success of the strategy chosen tends to be a function of appropriate matching organizational design, and other factors that influence the benefits and costs of integration versus responsiveness.

Networking of Host Operations

Instead of confining their local operations to a single focused area, the MNCs tend to develop a system of activities in each host market, inter-connected locally and/or globally. The MNCs tend to be more sensitive to the differential comparative advantage of different regions, locally as well as globally, and demonstrate lower levels of escalating and continuing commitment to specific regions. They often specialise the host market in specific activities, and network it with others in the region or internationally for complementary activities. They regularly evaluate the benefits and costs of relocating, eliminating, or adding some of the activities performed in a given market, and create networks of knowledge, funds, talent, and other kinds of flows to facilitate system-wide transitions.

Corporate Social Responsibility

The MNCs are citizens of the host nations they operate in, and are expected by their local and global stakeholders to be

conscious of their corporate social responsibility obligations in those nations. Particularly because of their foreignness and their implicit intent to repatriate resources to global investors, the social implications of the MNC behaviours in the host markets tend to be highly visible and monitored. To manage their social case, the MNCs strive to assure social compliance of their organizational and collaboration activities in the host markets. They also strive to support the local community in various ways, and to demonstrate that their business case also serves the interests of the local community. Many MNCs also tend to be sensitive to gender and other forms of diversity, partly because they often face less competition from local organizations for these diverse pools of talent, and are able to push the discourse and frontiers of inclusion in host societies.

Impact on Global Competition

The MNCs help moderate the strength of global competition – sometimes intensifying it, and at other times mitigating it. The markets already dominated by the other MNCs are often attractive for them, because of lower costs of foreignness as well as ease of gaining familiarity as a foreigner. Brokering the relationship between other MNCs and the host organizations/ residents is another attractive area, as they may help cut the transaction costs of that exchange through a stronger commitment to acquiring knowledge about the local market. Many MNCs are able to access low cost financial resources for acquiring core local companies, and/or for supporting their local businesses through intellectual and other assets to obtain a competitive edge over the local companies. In these cases, the MNCs may either completely substitute local businesses, or induce them to move into new niches that are different from or complementary to their own operations. By virtue of their global networks and differentiated cultural endowments, the MNCs also bring innovative opportunities to the host markets – reconfiguring, strengthening and advancing existing activities; and initiating and diffusing new activities. Further, with their outsider perspective, the MNCs are in a unique position to recognize the unique business and cultural endowments of the host communities, and to create new pathways to leverage and sustain the value of these endowments – thereby enabling inclusion of often less privileged and bottom of pyramid groups as players in the national and international economy.

Impact on Host Markets

As foreigners/outside, the MNCs strive to maximize the private benefits and minimize the private costs in the host markets. In order to safeguard and to access new and to expand current avenues of private interest, they develop visible and invisible practices of institutional networking and lobbying. They influence host institutional priorities and assessment of social benefits and social costs pertaining to their activities. They may even seek support of their home institutions towards this end, by implicitly committing to bring a greater proportion of benefits to the home market. Institutional activism in general implies preferential policy revisions and/or enforcement in ways that directly benefit the MNCs, and may have less direct benefits for the local communities. Time-sensitive and centralized institutional activism may not offer opportunities for all constituencies of the civil society to voice their perspectives. That may legitimate MNC behaviours that weaken their popular appeal and invite criticisms and even reversals of institutional mandates, especially during the times of economic and political crisis.

Research Methodology

The “typical MNC behaviour” model reviewed above is necessarily a simplification. One finds considerable diversity amongst the MNCs, based on factors such as the country of origin and destination, ownership, size, sector, leadership, and historical evolution. Yet the typical MNC behaviour model offers a useful starting frame of reference for uncovering the idiosyncratic behaviour of the family EMNCs. Siggelkow (2007: 21) notes that the “talking pigs” or less representative cases can usefully “help sharpen existing theory by pointing to gaps and beginning to fill them.” Particularly in the context of longitudinal research that seeks to unravel how the idiosyncratic dynamics plays out over time, they inspire “getting closer to constructs and being able to illustrate causal relationships more directly” (Siggelkow, 2007: 22). The idiosyncratic case studies can thus help unravel new development pathways that are not evident in the large-sample analysis and theorizing based on the typical cases alone.

Several cases of the family EMNCs have been prominent over the modern history. Notable ones include Jewish, Lebanese, Chinese, and Indian family businesses that internationalized since at least the 19th century. In each case,

the rise of family EMNCs was accompanied with the migration of co-ethnics to specific regions of the world where the family EMNCs invested. In most cases, the family businesses did not have strategic, financial, and operating interests in more than one nation, because the host market was adopted as the home-base through migration. Therefore, the resultant firms are more appropriately referred to as overseas family business (OFBs), some of which were family EMNCs initially or became so subsequently. The case of Indian family OFBs is of particular interest. First, ethnic Indians were the largest group among the overseas migrants during the 19th and the first half of the 20th century (McKeown, 2010), and their collective historical experiences of more than one hundred fifty years can point to diverse pathways. Second, the early Indian family OFBs was among the most international firms, some with networks extending through the Middle East, Africa, Southern Europe, and Central America on the one side, and Southeast Asia and Japan on the other side of the globe (Markovits, 1999). Third, many Indian family OFBs shifted or created their home-base in the overseas nations, taking on the identity of domestic firms in those nations, and subsequently restarted the process of internationalization sometimes after two or three generations. We therefore study the more general case of the Indian OFBs, as a context for uncovering the potentially divergent pathways for the EMNCs.

Indian Overseas Family Business (OFB)

Indian family businesses engagement in international trade and investments in fact dates back to the entire period of recorded history and even pre-history (Markovits, 1999). In the middle of the 19th century, this engagement accelerated and took new forms with the incorporation of India into the British Empire, and involved massive migration. Millions of Indians migrated under the indenture system to Southeast Asia, East Africa, and the West Indies, to work on plantations, roads, railway lines, and ports. Alongside, there occurred voluntary migration – most were impoverished peasants suffering from exorbitant land taxes, but a substantial number were traders who migrated – particularly from mid-1880s onwards – to extend their family businesses overseas (Klein, 1987; Markovits, 1999). Muslims formed a disproportionate – half or more – proportion of the migrants. Most of the traders investing overseas were from a few coastal regions – primarily Gujarat and Tamil Nadu, and secondarily the Punjab,

Sind, and Kerala. Business families from “those communities which were in a more precarious position in regard to internal trade and already had a foothold in trade outside India” were more likely to develop overseas interests (Markovits, 1999). Overall, during 1830-1930, about 27 million people migrated overseas from India (primarily South India), of which five percent were family business traders. Because of a higher returnee rate among the labor class, shift of the labor class to small-scale trading, and under-representation of women in working population, official statistics show that by 1930, a sixth of the working Indian diaspora was in business, with proportion as high as half in some East African nations (Markovits, 1999).

The first generation overseas family business founders in Africa started off in the urban centers, as hawkers or proprietors, selling fresh produce and Indian groceries or working as a salesman or a supervisor in a store or doing skilled work such as tailoring. Most had limited history of business success in India, and had limited capital in hand. Initially, many specialized in selling goods to the Indian laborers. However, given the low purchasing power of the Indian laborers, further expansion was predicated on other opportunities. Markovits (1999) notes, “Supplying the Indian labourers was often only the first step in a process. Thus in South Africa Indian traders increasingly specialized in selling goods to the natives, a field in which their low operating costs and knowledge of the market allowed them to make rapid inroads to the detriment of European competitors, mostly Jewish merchants. The same was true of East Africa.” Some family businesses even “specialized in the sale of ‘European’ goods mostly to European customers. This was the case in particular of the Parsis, who often were specialized in the liquor trade and of the Sindworkies who traded in silk and curios” (Markovits, 1999).

The Indian family businesses invested their accumulated capital to buy out established businesses and set up petty shops – clothing, food, and general merchandise. Some became general dealers, engaged in money lending, banking, and/or cotton or grain trade, and created networks linking large coastal Indian wholesale and import houses to one another and to the hundreds of small traders in the regions. In South and East Africa, they took the vacuum left by the fall of Arab traders under the British Empire, but in Southeast Asia, that vacuum was filled mostly by the Chinese. In Africa, Patel (1997: 9)

observed that the Indian family businesses “constituted the vital middle class, which served as the connecting link on the eastern side of the [African] continent between the African peoples and the peoples of Europe, America and Asia. They introduced the manufactured goods and technology of the industrial centers of the outside world to the indigenous Africans and they brought many of the natural recourse and agricultural produce of the African interior to the international markets.”

Indian family businesses kept low overheads, offered low cost products, and assured fair business dealings, to soon dominate up to 70 percent of the local retail trade, especially in the rural areas of East and South Africa (Hiralal, 2001). The international trading networks of their communities – many dating back several centuries, most specializing in specific industry niches and having community’s specialized interest specific industry associations in host nations– played an important role in their success (Markovits, 1999). The Multani Shikarpurishroff families of Sind, for instance, “established a powerful international banking network extending from Astrakhan on the Caspian Sea to the Straits of Malacca,” where their hundis (i.e. traveler’s checks) were a major trade currency. Similarly, Bhaib and Sindworkies, who specialized in the sale of silk and curios, had an established family business branch network comprising of 5,000 members in the first decade of the 20th century. Their network extended to all major ports along the two main sea routes – India-Japan (via Sri Lanka, Singapore, Indonesia, Vietnam, China, Philippines) and Bombay-Panama (via Sudan, Egypt, Malta, and Spain or alternatively via Mozambique, South Africa and Sierra Leone). In the big Sindworkie firms, telegraph was the main means of communication, yet the principals made regular ‘inspection tours’ of the branches, which took the many months to complete (Markovits, 1999). The Muslim Memon family businesses from Kutch, Gujarat, specialized in rice trade, particularly in Mauritius and South Africa.

In Southeast Asia, a majority of the Indian family businesses hailed from the South Indian States of Tamil Nadu and Kerala. The Tamilian Nattukottai Chettiar family businesses internationalized from the mid-1880s to become major financiers of commercial agriculture in Southeast Asia, using temples as clearing houses. They were main providers of rural credit to the farmers of Sri Lanka, Myanmar, and Malaysia, with operations extending also to Vietnam,

Indonesia, Thailand, and South Africa. The biggest of Nattukottai Chettiar financial houses had more than a hundred overseas branches, controlled from their headquarters in India, although “local managers had a large autonomy in the day-to-day running of the business” (Markovits, 1999). Also, the Tamilian Chulia-muslim family businesses were general merchants and retail shop-owners in cities, towns, as well as remote villages, of Southeast Asia; though their economic significance was dwarfed by the Chinese family businesses in general wholesale and retail business (Markovits, 1999).

Indian family businesses sent their employees or family members overseas as part of a highly organized process through their community’s international business networks. Markovits (1999) notes, “Those who left as employees of commercial firms had contracts for a period of two or three years at most. Others who went on their own just hoped to make good in a few years so as to be able to come back to India in a better economic position.” Official surveys indicate that 95 percent of those employed in the Indian diaspora family businesses were male. In the 1920s, women were fewer than half in numbers than men, as businessmen often tended to leave their wife and children in India unless they had become sufficiently successful. The businessmen also visited India at regular intervals to meet their families. After migration, wives and daughters often gave a helping hand in the business, but were generally not recognized as being employed (Markovits, 1999). However, with success, those who had gone overseas invited additional members of their family or village or religion, to manage expansions, and to diversify their investments into real estate and manufacturing.

In Southeast Asia, many Indian family businesses had initially entered to expand their India-based wholesale trading business, operating in textile, fancy goods, and sports businesses for the colonial and elite clientele (Mani, 2006). Both pull and push factors were at work. Their products were popular among the British in India, and they wanted to tap the opportunity in the other colonial markets. Also, the opportunities in India were limited because of colonial pressures and laws (Markovits, 1999). Though sometimes, family members would themselves migrate, usually non-family employee or partner became the manager, supported by clerks and salesmen hired from the family’s home region in India (Markovits, 1999). Indian families were also prominent in insurance, banking, and money-lending, as the only source of

mid to long term credit. Many Chinese entrepreneurs started their business with a loan from these families, as the colonial banks would lend only against first-rate securities (Sandhu, 2006). New co-ethnics came to work as clerks and salesmen, gradually became vendors by forming relations with the larger firms, and accumulated sufficient wealth to set up new firms in co-ethnic partnership superseding the older firms. In due course, the partnerships broke into smaller firms, or resulted in one buying out the other partners (Mani, 2006). Further, the success stories of those who migrated initially encouraged additional “chain migration” of business families from the same region in India, to start a similar business using credit and networks of the early movers (Markovits, 1999). There was no formal coordination among the family businesses of different Indian ethnicities. However, some were interconnected. For instance, the Kutchi Memons exported rice grown by Burmese farmers with advances from Chettiar money-lenders; the Burmese farmers discounted the bills from Chettiar firms through Shikarpuribankers, who in turn re-discounted them with bankers in Bombay (Markovits, 1999).

Though initially ignored or even welcomed, Indian family businesses attracted local government restrictions, including commercial and residential segregation and even limiting the rights to maintain family and business relationships in India, when with prosperity they sought to penetrate the commercial and residential arenas predominantly monopolized by local elites (Hiralal, 2001). Many decided to settle in their host nations. After the 1950s, many withdrew from commerce and trading to accommodate the locals, and moved into manufacturing, construction and services, including expansion to neighboring nations (Himbara, 1994). However, local entrepreneurs lacked skills and contacts to succeed in the commercial and trading space, and were able to form mostly micro-enterprises (Janjuha-Jivraj, 2006).

During the 1960s, growing American assistance to the Asian region offered opportunities for the Southeast Asian based Indian family businesses to diversify into import-export and money lending business (Chanda, 2006). A classic success story was a bullock-cart driver rising to position of wealth. Though trading and retailing were most common, many operated in other sectors. For instance, some in textile trading diversified into textile manufacturing, and some started schools teaching English and commercial subjects. Women’s involvement was limited to micro enterprises, such as selling

cooked food and spices from home or in the local market or through their children (Mani, 2006).

In the 1960s and 1970s, many Indian family businesses in Africa and Southeast Asia – now under second generation leaders – were subject to a forced sale of their business and real estate at throwaway prices. For instance, in the 1960s, many Indian business families migrated to Singapore, when expelled from Indonesia. Similarly, in the 1970s, when expelled from Uganda and facing expropriations in Kenya and Tanzania, several Indian families in Africa migrated to UK of which they still held passport from the colonial era, or sent their children to be educated and then settle in the UK (Janjuha-Jivraj, 2006). This re-migration to the UK was further encouraged by almost simultaneous developments in the UK, where the government forced the Indian immigrant community to commit to establishing a base in the UK, and induced them to invite over their family members to settle (Janjuha-Jivraj, 2006).

Most first generation Indian family businesses lacked financial resources to educate their children through the college (Janjuha-Jivraj, 2006). They also needed their children to assume the top leadership roles in the family businesses, which were reserved only for the family members. Co-ethnic members were offered the less senior but supervisory roles, while the native Africans were offered lower level roles (Janjuha-Jivraj, 2006). In a few cases, Indian family businesses were able to avoid confiscation because of their relationships with the local elites. They acquired large blocks of land, department stores, hotels, wholesale businesses, and factories, and internationalized with the help of Indian diaspora locally and/or globally (Ginwala, 1977; Arkin, 1981). The diversification and internationalization was driven by the availability of trusted managers having the skills to manage the new ventures successfully, rather than by the intimate knowledge of the new sector (Gidoomal and Porter, 1997). In Southeast Asia, the ongoing national economic development offered opportunities to the Indian family businesses to secure overseas know-how, often from India. Many used their intimate knowledge of local trade and market to enter new sectors through joint ventures with Indian firms who provided capital, machinery, and technical know-how. Some formed overseas collaborations to secure technical know-how. These collaborations allowed diversification and entry into even non-traditional areas, such as making films using local talent,

shipping industry, furniture making industry, and dairy industry (Mani, 2006).

Women as spouses played an important role in the early development of new businesses in all regions. Because of the patriarchal attitudes, men – of this generation and era – as husbands rarely acknowledged the contribution of the wife, and either consciously moved the business away from her, or otherwise outgrew the business beyond her life balance needs and interests. Her role in the family business resurfaced as their children grew, and found her a knowledgeable and supportive mentor in their formative decisions on whether to join the family business, what opportunities existed for the development or change, and how they might prepare for that (Janjuha-Jivraj, 2006).

In the 1990s, many Indian family businesses in Africa were sending their children to get higher education in the UK or in Western-style local universities, to capitalize on the changed local and global environments, such as the fall of apartheid government in South Africa (Hiralal, 2001). They had sufficient financial resources to offer similar educational opportunities to their daughter also. Consequently, in some cases, daughters also returned to assume leadership roles in the family business (Janjuha-Jivraj, 2006). Similar developments were taking place amongst the Indian family businesses of the UK (Janjuha-Jivraj, 2006).

The educated third generation leaders introduced formalized frameworks for regulating the role of family members in the business, allowing access to external human capital, private equity and debt, and for help raising of public equity and pursuing acquisitions and organic growth. The second generation predecessors created foundations by involving non-family senior managers in strategic discussions involving the entry and roles of the third generation. It was usual for the third generation successors “to undergo a period of apprenticeship... to spend a year working their way around the company being exposed to the full range of activities and processes across all levels of organization” (Janjuha-Jivraj, 2006: 37). Once this happened, they seized to use mothers as their mentors – as they “became more confident of their position within the business and, more importantly, their relationship with the father, they were willing to let go of the apron strings and assert their independence” (Janjuha-Jivraj, 2006: 71).

The third generation leaders had rather limited emotional bonds with co-ethnic community, and were more willing to reward locals with senior management positions for their loyalty. A few Indian family businesses – such as Universal Print Group in South Africa - even embraced missions to empower less privileged indigenous communities, through employment and vendor and distributor partnerships. Those who failed to do so - such as Damjee Jewellers and Mistry's / Dash Super Market – and consequently suffered erosion in their business interests (Hiralal, 2001).

In the 1990s, significant numbers of educated South Asians began migrating to North America also. Several found employment as cashier and other key roles in the retail and hospitality sector – gas stations, motels, fast food franchises, restaurants, and jewelry stores, often owned by the earlier generations of South Asian migrants. As they accumulated experience, they created a profit sharing partnership with their employers to set up a new unit, with an option to buy out the former employer's share. Typically, founders and their wives worked together as a co-preneurial team running all aspects of business; sometimes parents or siblings also joined in as the business grew with the help of the embedded co-ethnic community ties. As the business expanded, women withdrew from the primary business, but looked for the diversification opportunities. Once women established the new business, their husbands sold off the earlier business – usually to siblings or co-ethnic members– or brought in their children as successors to lead further growth. Typically, children were involved in the business from their formative years, such as during school holidays, that created a sense of confidence. After receiving higher education, these children worked in professional organizations, before deciding to join the family business to help with taking on different set of opportunities based on new strategic directions and skills (Janjuha-Jivraj, 2006). Similarly, in the high-tech sector, after accumulating professional experience through employment, some ventured into their own businesses. Angel funding and other support was generated through co-ethnic ties, formed through professional and social activities (Clark, 2000). Often, partnerships, offices, or other support services for these firms were situated in India, as born global firms.

Discussion

The rich history of Indian OFBs can be used to examine how their behaviours diverge from the “typical MNC behaviour”

model, in order to identify gaps in the latter and to refine the model.

Motivation to invest Abroad

Some Indian family firms did start operations overseas to leverage their home-base endowments, i.e. as an expansion of their Indian businesses. However, the firms with strongest home-base endowments were usually not the ones to invest overseas – instead, those with more limited success in India were more likely to invest overseas. The firms from the coastal regions of India, and the religious minorities (Muslims) were more likely to invest overseas. Further, in some cases, the start-up investment in the wholesale and retail trade of Indian products and services helped reduce the transaction cost for bilateral international exchange. However, in most cases, the primary investment was in the form of human resources and had limited implications for bilateral international exchange except in a deeper sense of culture embodied in these human resources. Similarly, the start up operations of many Indian entrepreneurs did seek to leverage the host-base endowments, including the local market knowledge, the local language, and the local products and services. These entrepreneurs, however, in most cases decided to permanently settle in the host markets, and did not seek to trade the host-base endowments – at least during the initial generations – to India or other nations. In both cases, a key motivation to invest overseas appears to be the opportunity to make a difference in the lives of the host residents, and an emergent vision – formed usually after the initial migration – of visualizing the family business as an author and a participant in scripting this different and better life in the host markets.

Liability/ Challenges of Foreignness

The Indian family firms investing overseas certainly faced high risks in the host markets, because of their limited familiarity with those markets and perception of being foreigners. However, both established firms as well as individual entrepreneur migrants did not invest in a vacuum. Rather, their entry and development relied actively on the established trade, and later investment, networks of the co-ethnic and inter-ethnic home nationals. They were therefore able to quickly gain sufficient familiarity about the host markets, that allowed them to either completely out-compete

the Western MNCs or to situate themselves strategically as brokers between the Western MNCs and the local residents, and to even become traders intermediating among various host residents and sub-regions. Their presence actually reduced the transaction cost premiums for both the Western MNCs as well as the local residents, and forced out those firms who were responsible for higher cost premiums. Being outsiders, the Indian family firms and entrepreneurs were able to recognize the opportunities for reducing the transaction cost premiums. However, once these premiums had been reduced across almost the entire range of trade, the local residents expected the Indian family firms to shift their investments into manufacturing and other services, as a test of their loyalty and commitment to the adopted host nation. In summary, the foreignness appears to be an advantage as long as the Indian family OFBs filled important gaps in the host market, and moved to fill new gaps when the initial gaps were filled. The foreignness appears to be a liability when the Indian family MNCs sought to hold their control over the gaps already filled, and did not help build local resident capacity in assuming leadership in those areas.

Pathways for Market Entry

Collaboration with the local and global players was certainly part of the launch and growth strategy, as were hierarchy-based control and market-based exchange. However, the most proximate pathways to market entry of the Indian family MNCs were family workers, knowledge, contacts, and trust. Members of the extended family, including co-ethnics from the same village, helped lead geographical and product diversification. In some cases, new arrivals took employment with the established co-ethnics, learnt and progressed up, took the financial and know-how support to form new businesses in partnership, and then bought out the share of the established co-ethnics. These new arrivals sometimes competed out the established co-ethnics in specific segments, inducing the established ones to diversify or move into other segments. In other cases, the established co-ethnics maintained distance from the new arrivals, forcing the new arrivals to use minimalist approaches to survive. The established co-ethnics also strengthened their dominant power in specific markets by controlling manufacturing, trading, wholesaling, retailing, financing, as well as logistics. They typically sent their children for schooling and higher education to the major regional centers or to the West, in order to gain

modern knowledge and then to apply that to the family business. In some cases, wealthier business families or their children migrated to the Western nations.

Strategies for Success

The established Indian family OFBs tended to connect their host operations globally, while the upstart ones tended to focus more on building the local networks. At some points, these two networks intersected, for instance, the established Indian family OFB bankers financing the retail trade of the upstart Indian family entrepreneurs in the host markets. Thus, the balance between global integration and local responsiveness was often achieved not at the level of individual firm, but at the level of the entire Indian diaspora. Further, the global integration was not always achieved at the level of a corporation. More often, different ethnic groups of family OFBs tended to focus on different product-markets, and the co-ethnics often established similar operations in the other regions. Knowledge and other resource transfers among these co-ethnic enterprises situated in different regions occurred through various co-ethnic networks. In other words, the global integration usually occurred at the level of co-ethnic networks. There were no pan-region co-ethnic associations or coordinating bodies, though such bodies did exist at the local level and may have facilitated some pan-regional interaction also. Global integration through co-ethnic and inter-ethnic networks allowed most Indian family OFBs to focus their priorities on local responsiveness, and to reinforce that by inviting additional members of their family to support the growth and development of their business in the host markets. Over time, they also mentored the next generation of family successors and local managers to sustain the local responsiveness. In addition, as the initial power of the co-ethnic and inter-ethnic networks weakened, they put renewed priorities on forming new connections with those networks locally and globally.

Networking of Host Operations

The leading Indian family OFBs networked their host operations with other regions. They also networked these operations locally, by expanding to different sub-regions and by investing in or acquiring operations in manufacturing and various service domains. They demonstrated very high level of continuing commitment to host regions, shaken only in the

face of high levels of institutional backlash through expropriation or other discriminatory risks locally that hindered their ability to continue making a positive difference to their and to the local lives. They also demonstrated high levels of sensitivity to assuring global competitiveness of their operations, by prioritizing on collaborations with other co-ethnics, inter-ethnics, or even other players globally, and by preparing their children through overseas education and experience.

Corporate Social Responsibility

The Indian family OFBs tended to lag behind in the social compliance of their organizational and collaboration activities in the host markets. They gave preferential treatment to their family members and co-ethnics in employment and in leadership roles, as well as in collaborations. They compensated for their weak linkages with the local masses by offering privileged patronage to the local elites, which put them at severe risk when the power of those local elites eroded and shifted to others. A possible explanation for the low priority on gaining local mass support through philanthropic activities may lie in the emphasis of the Indian family OFBs to serve the local communities through their business model. However, as the business model matured, the local communities felt confident of filling the space and did no longer perceive the Indian family OFBs to be generating any additional social benefits. The second generation of family leaders experienced greatest challenges, but the third and later generation of leaders identified more with the local population, than with their co-ethnics. These later generation leaders also had greater resources, education, and will power to identify new avenues through global connections to add value, and to make philanthropic interventions. Moreover, though women played an important role in some of the first generation Indian family OFBs, their role was curtailed with the success of the firm, and not acknowledged due to the patriarchal attitudes. Only by the third and later generation the women began getting education and exposure that allowed them to assume some leadership roles, including around corporate social responsibility.

Impact on Global Competition

The Indian family OFBs had an important influence on global competition. They reduced the power of the Western MNCs,

and helped strengthen the power of the Chinese and local firms. Thus, overall, they helped redistribute terms of trade from the European and Arab firms to the Asian and African firms. More recently, Indian family OFBs have been active in sourcing technology and other resources from the international markets using various co-ethnic and other networks, and to make them accessible in their host markets at more favorable terms of trade. They are also securing more favorable terms of trade for the local resources, through overseas alliances, and through various developmental initiatives in wide ranging domains.

Impact on Host Markets

The Indian family OFBs did seek to maximize their private benefit cost ratio through alliances with the local institutional elites. At times, they also sought to lobby with the Indian institutions to take up their case whenever they faced local backlash. However, they lacked a mechanism to coordinate their joint interests with either host or home institutions, and in general, their interests were rather diverse, and so did not perceive a need to even do so. Consequently, they showed a growing sensitivity – especially across successive generations – to maximizing social benefit cost ratio in host markets, and in aligning their private benefit cost ratio with that. In other words, the identity of the Indian family businesses has merged with that of their host markets that they have adopted as their homes.

Overall, the biggest gap in the received literature on the MNCs is about their espoused strategic intent. Based largely on the experiences of the larger publicly held and professionally managed enterprises based in the industrialized nations, the implicit view in the literature on the MNCs is that their strategic intent is to leverage and internalize home and/or host market resources as firm-specific proprietary assets, in order to gain, sustain, and enhance their competitive advantage locally and globally. The case of the Indian family OFBs suggests that this may not generalize to the family businesses from the emerging nations. Core competencies of these OFBs do not necessarily reside at the firm-level – in fact, at the firm-level, the EMNCs may face significant disadvantages, because of not only liability of foreignness but also disadvantage of late internationalization compared to the industrialized MNCs. The family-EMNCs actively rely on the core competencies residing at the level of extended family,

co-ethnic, and inter-ethnic networks. Further, they also appear to rely more on the embodied form of overseas investment particularly migration of human resources, rather than disembodied forms of investment. The global market for the embodied investments is comparatively more limited than that for the disembodied investment, and thus they may be able to offset their disadvantages compared to the industrialized MNCs. Also, the family, co-ethnic, and inter-ethnic networks tend to be more enduring, and allow the family EMNCs to rapidly gain epic knowledge about the host markets and to minimize the potential liabilities of foreignness. They also offer a qualitatively different approach to the critical strategic challenges of global integration and local responsiveness. More embodied investments and enduring high touch presence in the host markets, however, brings new sort of challenges – such as managing institutions. These challenges take new shape and form with each successive generation of family, institutional leaders, and host community participants. At the core, the family EMNCs must resolve the balance between cultural integration and cultural differentiation. The process of embodied overseas investments tends to invite institutional demands for cultural integration, which promote massive transformations in the cultures of both host and immigrant communities, and serve to homogenize these cultures (Kuran and Sandholm, 2008). However, cultural integration and homogenization also generates significant “commitment costs,” because as the immigrant communities become similar to the host communities, the case for maximizing their private benefit cost ratio also weakens and the society is called upon to make a commitment to give them same privileges as those to the dominant groups. Some level of cultural differentiation is also helpful for the family EMNCs to access and leverage co-ethnic and inter-ethnic networks from their home markets, even after space of several generations.

Conclusions

The “typical MNC behaviour” model is inspired by the experiences primarily of the large openly held firms from the industrialized markets. The case of Indian OFBs suggests potential pathways for the family EMNCs that diverge from the “typical MNC behaviour” model. In particular, human embodied investments, and by extension co-ethnic and inter-ethnic embodied networks, can be an important – and sometimes primary – pathway for the overseas investments

of the family EMNCs. The human and ethnic embodied investments generate qualitatively different challenges related to cultural integration versus cultural differentiation. Greater cultural integration may weaken the case for promoting the private benefit cost ratio of the family EMNCs in the host markets. Conversely, greater cultural differentiation may result in community isolation, and may limit the enduring viability of human-embodied investments, and of ethnic networks. The Indian OFBs paradoxically appear to have responded to these twin challenges by attaining greater cultural integration in the host markets, while retaining cultural differentiation, over successive generations. They have sought to align their private interests with the interests of the host nations, and have leveraged their cultural differentiation to identify and expand into new opportunity arenas, often using reconstituted bridges with their co-ethnic and inter-ethnic community networks even after a gap of several generations. Thus, they have been able to continue to make a difference in their own and the host community lives – a core intent of initial overseas expansion and migration of these OFBs.

There are three major limitations of the present research. First, it is based on a particular interpretation of the typical MNC behaviour. There are sure to be other interpretations, and the MNC behaviours are also likely to vary significantly within and across different industrialized MNCs. Second, the research uses a specific interpretation of the history of Indian OFBs, during a specific period and in selected regions. Moreover, most of the Indian OFBs were not MNCs in the sense of having strategic, financial and operating interests across more than one nation. In most cases, the Indian OFBs adopted their host nation as their new home-base. Third, the experiences of the Indian OFBs may differ significantly from the experiences of other contemporary OFBs, such as those from China or Lebanon, and it would be desirable to triangulate the analysis using these alternative experiences. Also, there was a substantial diversity in the experiences of the Indian OFBs also, including in different host nations. Therefore, the analysis discussed here necessarily represents some degree of generalization and theorization, which would need to be refined for any gaps through further in-depth studies.

As for the implications for further research, the emergent body of research on the EMNCs should be sensitive to the family form of business, and the role of family and ethnic

networks. Given the disproportionate presence of the family businesses even amongst the largest of the emerging market firms, the non-family EMNCs may be and may need to be more conscious of the strategies and behaviours of the family EMNCs. Ignoring the important role of family and ethnic networks may put non-family EMNCs at a disadvantage, and take away an important potential source of generating advantage compared to the better resourced and early moving industrialized MNCs. The collective resources and historical experiences of the family and ethnic networks may help EMNCs achieve a level playing competitive field in not only local but also global markets.

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Vibrant Oxidizer: Operational Efficiency and Risk Mitigation

Anjali Ganesh

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Organizations must innovate and adapt their corporate governance practices so as to grasp new opportunities and paradigms to remain competitive in the changing world. The companies that have good corporate governance practices enjoy better reputation. They are rated as highly positive in terms of financial transparency and operational efficiency. There is no single universal model for corporate governance. Depending upon the legal framework and ethical norms applicable, the companies can choose the appropriate model of corporate governance to manage risks and add value. Transparency and disclosure should be the core concepts of any corporate governance model; no matter whichever organization adopts it. To achieve a responsible and value oriented management and control of companies, an umbra of corporate governance no doubt acts as an oxidizer for operational efficiency and risk mitigation..

Key words: *Operational Efficiency, Risk Mitigation, Oxidizer, Financial Transparency*



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The business corporation is a vital engine for wealth creation across the continents. How organizations are run influences the well being of the society. In order to serve the function of wealth creation, companies must operate within the scaffold of their ethics and values. Organizations must not only be focused on their objectives but also must be accountable for their actions. In simple words they need to establish adequate and credible array of corporate governance. To remain competitive in the changing world, organizations must innovate and adapt their corporate governance practices so as to grasp new opportunities and paradigms. Better corporate governance increases the likelihood that the companies satisfy the legitimate claims of all the stakeholders in the society. The companies that have good corporate governance practices enjoy better reputation and are rated as highly positive in terms of financial transparency and operational efficiency. Strong corporate governance has the ability to reduce the risks of misappropriation of funds and acts as a key to ensure that

the company is acting in the best interest of the shareholders. Thus, the stronger the policy of corporate governance, the greater is the resistance for the organizations to involve in corrupt and unethical practices. Thus it is essential to know the benefits of Corporate Governance that act as a tool for enhancing operational efficiency and reducing risks to the organizations.

Objectives

'Corporate Governance; an Oxidizer for Operational Efficiency and Risk Mitigation' is a conceptual study that has the following objectives.

- ◆ To give insight into the key principles of corporate governance that benefits the organizations to act as an oxidizer in enhancing the operational efficiency and reducing the risks.
- ◆ An article also takes a bird's eye view on the literature of corporate governance in different countries across the various organizations in varied fields, that furnishes thoughts not only to conduct the research in the relevant field but intuitive to the academicians, practitioners as well as the students.

Corporate Governance- an Oxidizer for Operational Efficiency and Risk Mitigation

The new breeds of managers believe in professionalism and transparency in operational functioning of the business that enhances the corporate value. There is absolutely a need of good corporate governance which acts as a sound business strategy. Corporate Governance no doubt is an important medium to tap domestic as well as international funds. Spectacular business failures and serious frauds in the USA as listed and several high profile scandals in Russia and Asian countries have brought corporate governance issues to the forefront all over the world (Patrick, 2005). Business communities across the sectors world over have realized the fact that there is no substitute for proper business and management systems through Corporate Governance than by any covert and opaque practices. The following practices ensure how corporate governance ensures operational efficiency so as to mitigate the risks of business failures and financial crisis.

- ◆ **Separation of Ownership from Management:** Corporate Governance is seen as the tool to address the problems that result from the separation of ownership and control (OECD, 2001). Corporate Governance focuses on some structures and mechanisms that would ensure the proper internal structure and the rules of the board of directors, creation of independent committees' rules for disclosure of information to shareholders, creditors, transparency of operations and an impeccable process of decision making and control of management.
- ◆ **Assurance to the Suppliers of Finance:** Corporate Governance deals with the ways in which suppliers of finance to corporations assure themselves of getting return on their investment (Shleifer, 1997). Since shareholders themselves elect directors who represent them, decisions in the organization are made in a transparent manner so that shareholders and financiers can hold the directors accountable. The composition of the board is a major issue in Corporate Governance as the board acts as the link between the shareholders and the management and its decisions affect the performance of the company. The authorities on corporate governance recommend strongly that the chairman of the board should be an independent director in order to provide the appropriate counter balance and check to the power of CEO (IFSA Guidelines, 1999).
- ◆ **Rights and Equitable Treatment of Shareholders:** Organizations should respect the rights of shareholders and help shareholders to exercise those rights (Sarbanes-Oxley Act of 2002, US Congress, Title VIII). They can help shareholders exercise their rights by openly and effectively communicating information and by encouraging shareholders to participate in general meetings (Cadbury, Adrian, 1992).

Interests of other stakeholders: Organizations should recognize that they have legal, contractual, social, and market driven obligations to non-shareholder stakeholders including employees, investors, creditors, suppliers, local communities, customers, and policy makers (OECD Principles of Corporate Governance, 2004). Up to date discussions of corporate governance tend to refer to principles raised in three documents released since 1990: The Cadbury Report (UK, 1992), the Principals of Corporate Governance (OECD, 1998 and 2004), and the Sarbanes-Oxley Act of 2002 (US, 2002). The Cadbury

and OECD reports present general principals around which businesses are expected to operate to assure proper governance.

- ◆ **Disclosure and Transparency:** As per the principles of corporate governance, organizations should clarify and make publicly known the roles and responsibilities of board and management to provide stakeholders with a level of accountability. They should also implement procedures to independently verify and safeguard the integrity of the company's financial reporting. Disclosure of material matters concerning the organization should be timely and balanced to ensure that all investors have access to clear, factual information.
- ◆ **Role and Responsibilities of the Board:** The board needs sufficient relevant skills and understanding to review and challenge management performance. It also needs adequate size and appropriate levels of independence and commitment.
- ◆ **Integrity and Ethical Behaviour:** Integrity should be a fundamental requirement in choosing corporate officers and board members. Organizations should develop a code of conduct for their directors and executives that promotes ethical and responsible decision making.
- ◆ **Adherence to Laws:** Corporate Governance tends to focus on a simple model of company policies and practices in line with the national, state and local laws. Corporate Governance system depends upon a set of institutions such as laws, regulations, contracts and norms that ensure the code of Corporate Governance procedures to the institutions. These institutions ensure that the internal Corporate Governance procedures adopted by them are in adherence to laws and regulations (Fernando, 1997). When policies are practiced under the well laid out system, it leads to building of the legal, commercial and institutional framework and demarcate the boundaries within which these functions are performed.
- ◆ **Practising Business Ethics:** Ethical code of conduct that is a part of the Corporate Governance not only protects organization's own interest but also the interests of the business community, society, general public, stakeholders and Government. Walking in ethical

path protects their reputation and credibility. It may range any policies and practices against bribery, coercion, deception, theft, unfair discrimination, insider trading, conflicts of interest and many more. Corporate Governance is meant to run companies ethically in a manner such that all the stakeholders are dealt in a fair manner (Rituparna, 1999). Good Corporate Governance looks at all the stakeholders and not just the shareholders. Corporate Governance is not something which regulators have to impose on the management, it should come from within. There is no point in making statutory provisions for enforcing ethical conduct (Weiss, 1988).

- ◆ **Prerequisite for Globalization:** If the companies want to compete globally, then good governance is utmost necessity. Companies are voluntarily adopting Corporate Governance codes such as professional management, rule of law and proper financial systems. According to Fernando (2006), if Indian companies want to globalize, they must adopt good Corporate Governance standards. One reason why the Indian infotech companies were able to raise funds in the markets like Nasdaq was because they had adopted global Corporate Governance standards that satisfied the foreign investors in general and American investors in particular.

Thus good corporate governance is an oxidizer for Operational Efficiency and Risk Mitigation, by acting as the key driver for sustainable growth and long term value creation. Corporate governance is viewed as a differentiator among firms as good governance practices provide a higher market valuation and sustainable competitive advantage. Numerous benefits of enhanced level of corporate governance are; increased management credibility, more long term investors, improved access to funds and infrastructure, lower cost of capital, constitution of better image and goodwill, financial transparency and accountability, higher valuation of a company, higher credit rating. Improved corporate governance structures and processes help insure quality decision making, encourage effective succession planning for senior management and enhance the long term prosperity of companies (Thomas 2004). Improvement in governance practices lead to an improvement in the accountability system, minimizing the risk of fraud or self dealing by the company's officers (Denis and McConnell 2003). Strong corporate governance standards ensure that the company is acting in the best interest of the

shareholders. Higher corporate governance index relates to high price to book ratios. Good corporate governance reduces the agency costs brought about by the separation of ownership and control (Crawford, 2007).

Investors need not spend more time and resources monitoring management teams as the governance mechanisms result in transparent financial information and more public disclosure of private information. This reduces the information risk faced by the shareholders resulting in an increase in firm value. A good system of corporate governance will facilitate the resolution of corporate conflicts between minority and controlling shareholders, executives, and other stakeholders. This will enable the company officers to reduce the risk of personal liability. Corporate governance can reduce the non-diversifiable expropriation risk by corporate insiders (Johnson, 2000). The insiders are expected to expropriate more when the market is bad and less when the market is good (Durnev and Kim 2003). Corporate governance reduces the cost of equity by limiting insider trading and discourages the information asymmetry. The inverse relation between expropriation and the market condition can magnify the firm's systematic risk, which must be compensated with the higher rate of return. Thus the corporate governance acts as an oxidizer by imposing a higher cost on expropriation by reducing the relation between the degree of expropriation and the market condition. The cost of capital depends upon the level of risk assigned to the company by investors: the higher the risk, the higher the cost of capital. The efficient governance practices protect the investor rights, translating in to reduced cost of debt and equity capital. Corporate governance becomes important when a company seeks outside investment by accessing the capital markets. Thus, high quality corporate governance streamlines all the business processes and leads to better operating performance and lower capital expenditures, which in turn will lead to growth of sales and profit.

Corporate Governance in different Countries across the Sectors- Literature Review

The survey of related literature becomes imperative to understand the previous research work carried out by various researchers in the field of Corporate Governance and their findings mainly from the point of view of establishing the research gap in order to continue further research in the field. An insight into the available literature in the field throws

light on improving the Corporate Governance practices selected for study.

Corporate governance first appeared as a subject during 1980s. The first book to use the title 'Corporate Governance' was published in 1984 (Tricker, 1984). Research into corporate governance began during the 1980s. The research journal Corporate Governance, an International Review was founded in 1992, the year in which Sir Adrian Cadbury published his seminal UK corporate governance report. Much of the early research in corporate governance originated in the United States, but as Denis and McConnell (2001) have reported that the first generation of international corporate governance research typically examined governance mechanisms such as board composition and equity ownership in individual countries, mirroring the U.S. research that had preceded it. The second generation of international corporate governance research, however, recognized the impact of differing legal systems on the structure and effectiveness of corporate governance and compared systems across countries. The reason for corporate governance grown so fast and the concept become so widespread was fueled by board-level corruption and the abuse of power. Others see a growing societal dissatisfaction with corporate behaviour. Dawkins (1998) suggested that culturally-determined ideas are transmitted from person to person. The development of ideas is analogous to the natural selection, replication, and mutation of physical genes, in other words, successful ideas propagate and spread, poor ones become extinct. So it may be with corporate governance.

As per Jackson and Carter, (1995), Corporate Governance describes an apparent attempt by the corporate sector to put its house in order. Relative to a number of notorious examples of illegal or unethical corporate malpractice, corporate governance is seen as a recent, welcome and well-intentioned concern. Far from being a new response to a contemporary problem, corporate governance is shown to have a long history, both of academic interest and of ineffectuality.

The corporation is owned by its shareholders: managers exert power and responsibility on behalf of their shareholders: corporate governance is a question of effective accountability to shareholders. If there are problems, they should be dealt with by making these mechanisms more effective. The Kay and Silberston (1995) challenge that view. The principal-agent model bears no relationship to the way large companies are

actually run. The attempt to bring reality in line with the model is one possible road to reform: another is to adjust the model to reality. Shareholders do not own large companies, in any ordinary sense of the word own. Firms like BT or BP are social institutions, owned by nobody. The distinction between plc and the owner managed limited company should be real, and not just titular. Corporate managers are not the agents of the shareholders, but the trustees of the assets of the corporation, which include its reputation, its distinctive capabilities, and the skills of the employees and suppliers. Their objective should not be to maximize shareholder value but to further the interests of the business (John Kay and Aubrey Silberston, 1995).

John Roberts, (2001) reformulated the problem of corporate governance through a shift of analytic focus, away from the problems of securing the interests of remote owners, to an understanding of processes of accountability and their effects, both objective and subjective, within Anglo-American systems of corporate governance. The article explored the complex interaction of these effects in the context of Anglo-American systems of corporate governance. The article concluded by offering a fourfold typology of the combinatory potentials of individualizing and socializing effects.

Coles, et al, (2001) in their paper drew together the many different facets of corporate governance that have been examined in the extensive literature in both strategic management and finance. They identified a sample of firms and examine CEO compensation, CEO tenure, board composition, leadership structure and ownership structure and their contribution to both market performance: Market Value Added, and risk-adjusted accounting performance: Economic Value Added. Their results indicated that while some of the traditional agency variables do impact performance, both individually and as interactions, industry performance is a strong and significant driver of performance for our sample of firms.

(Bartkus, et al, 2002) stated that although corporate decision makers may justify charitable contributions on strategic grounds, extremely large corporate philanthropic contributions may be perceived by shareholders as unnecessary. If stockholders attempt to limit corporate philanthropy, then governance mechanisms should put a cap on giving amounts. Study suggested that high levels of corporate philanthropy might be perceived as excessive by influential stockholders, and some governance mechanisms act to curtail it.

Catherine et al, (2002), stated that Corporate Governance has been a central focus of strategic management research, particularly the associations among governance structures, strategic leaders, and firm performance. Accordingly, authors have provided an overview and synthesis of the entrepreneurship literature addressing the intersection of governance and strategic leadership with firm performance. The strongest relationships reflected in this literature were consistent with a resource dependence perspective of the firm.

Arun and Turner (2003) stated that the partial divestment of Public Sector Banks (PSBs) has not brought about any significant changes in the quality of corporate governance mechanisms. The corporate governance of banks in developing economies is important, if for no other reason than the prevalence and severity of banking instability in many of these economies. In India, although the issues of corporate governance have not received much attention in the first generation of financial sector reforms, this issue will become a natural choice in the second set of reforms. The study also confirmed the urgent need to review the size and composition of the PSB boards in India; particularly on adequate board-level representation for private shareholders when there was mixed ownership between the government and the private sector. The authors stated that the considerations of the Government of India (GOI) in making board-level appointments and the degree of transparency in the appointment process required adequate attention. The issues of limited operational autonomy and inadequate representation for private shareholders in the boards could affect the recapitalization strategy of PSBs.

Aguilera and Cuervo-Cazurra (2004), examined the mechanisms underlying the worldwide diffusion of organizational practices. They suggested that the two main theoretical explanations in the diffusion literature, efficiency and legitimating, could be complementary. They argued that endogenous forces seek to enhance the efficiency of existing systems, while exogenous forces seek to increase legitimating. To assess their argument, they explored the worldwide diffusion of codes of good governance. Those codes were a set of 'best practice' recommendations regarding the behaviour and structure of a firm's board of directors issued to compensate for deficiencies in a country's corporate governance system regarding the protection of shareholders' rights. In addition, our empirical results showed that countries with legal systems with strong shareholder protection rights

tend to be more prone to develop codes, possibly for efficiency reasons.

Lubatkin et al (2005), proposed what constitutes opportunistic behaviour and what can be done to limit it might vary due to differences in national background and formal institutions. They then tested the validity of this nationally bounded model using historical sociology analysis of three nations whose corporate governance heritages are believed to differ (USA, Sweden, and France). Specifically, they reviewed their political, cultural, and economic institutions to explore the different ways that their governance practices.

Kimber and Lipton, (2005) in their article investigated the relation between corporate governance and business ethics in the Asia-Pacific region. It drew on four examples of countries in the region (Australia, China, Singapore, and India), not because they were representative of certain regional characteristics, but as a means of reflecting on the diversity in this region. These countries displayed pronounced differences in terms of inter alia, historical development, cultural and social factors, legal system, corporate governance model, political system, and economic development. The complex interaction of all these considerations provides the context for corporate governance and business ethics in each of the countries. The article highlighted different orientations to stakeholder management and integrity behaviour in the boardroom and executives' offices. Although globalization and financial market hegemony suggested a convergent model, this research proposed that the human capacity to protect diversity and enshrine regional and local interests seemed likely to inhibit rapid change.

Josef Wieland, (2005), argued that the practical implementation of a corporate governance code could not be realized by a compliance program alone. Its relevance in everyday business was determined by the moral values of the company culture. In this context, governance was defined as a company's resources and capabilities, including the moral resources, to take on responsibility for all its stakeholders. A critical discussion of the agency theory, transaction cost theory, and organization theory showed that such an approach is possible only when a company is not perceived as a maximizing machine for shareholders' interests but as an economic form of co-operation of internal and external resources and stakeholders. An empirical study on 22 European corporate governance codes showed that the

predominant majority of European codes orientated themselves to stakeholders and the company. The discussion of the empirical data revealed six basic principles that determine all European corporate governance codes: shareholder rights, transparency, voting rights, regulation of remuneration, design of organizational structures, and corporate social responsibility.

(Ryan, 2005) articulated that all three corporate governance systems in North America were embroiled in fundamental transformations. Most of Mexico's corporations were run by a small group of controlling shareholders and operate in an economic system rife with corruption. Recent political reforms and a desire to tap global equity markets have heightened their interest in improving corporate governance structures. United States corporations face a dispersed ownership base that has tended toward inattentiveness, allowing such infamous scandals as Enron to rock the global investing community. A backlash against the ensuing, restrictive Sarbanes-Oxley legislation was underway. Like Mexico's, Canada's major corporations are led by a handful of controlling shareholders, but corruption is uncommon. Although these three corporate governance systems vary in terms of ownership dispersion, level of corruption, and legislative intervention, they currently share a common focus on fundamental reform.

Rossouw, (2005) stated that in recent years there has been a surge in corporate governance reform around the world. On the African continent this phenomenon was evident in the number of national corporate governance reports that have been produced. This article analyzed these national codes of corporate governance in Africa to determine how the relationship between corporate governance and business ethics was being perceived. The article commenced by providing a background to the corporate governance reform process that still was in the making in Africa. It then explored the relation between corporate governance and business ethics by looking at various aspects of corporate governance that might have an impact on how business ethics is being perceived and practised.

Bedicks and Arruda, (2005) determined what the role of business ethics was within the Latin American corporate governance context. Authors analyzed five sources of information that provided vital information on the state of corporate governance in Latin America. Based on the analysis

of an overview of Corporate Governance in Brazil, developed by the IBGC (Brazilian Institute of Corporate Governance) in partnership with Booz Allen Hamilton in 2003; the third version of the Code of Best Practices of Corporate Governance produced by the IBGC in March 2004; and the IBGC Corporate Governance Survey in Brazil, conclusions were drawn on the role of business ethics within Latin American corporate governance.

Nobuyuki Demise (2005) conducted a research in Japanese organizations and stated that, in Japan, although many people are interested in corporate governance and business ethics, there is little consensus on what good corporate governance entails. After the recent exposure of various corporate malpractices, many Japanese companies have started institutionalizing business ethics in their organizations. Nevertheless, ethical issues such as death from overwork (*karoshi*), harassment at work, illegal collusion (*dangou*), and defrauding consumers and governments still remain prominent.

Kimber, et al (2005), in their paper compared the development of corporate law and associated regulatory processes in Australia, China, India and Singapore as examples of governance in this geography. Corporate governance has been a major issue in the Asia Pacific region since the Asian crises of 1997-98 and in Australia following several recent high-profiles corporate collapses. Governance issues affect HRM practitioners generally as business people and specifically in their role of developing policies and processes that promote the company's culture and values. These four countries have demonstrated the significant diversity of social and cultural patterns and economic development within the total region and corresponding differences in their respective approaches to corporate governance. A common feature of the Asian jurisdictions reviewed here was the high concentration of ownership by national governments and families operating complex corporate structures. Such concentration had direct implications for the level of share market trading and the protection of minority shareholders. The diversity of regional and local cultures will likely inhibit any short-to medium term convergence to international governance standards, although it was probably inevitable if Asian markets continue to access international finance. They suggested that there was a strong need for HRM practitioners to take the lead in shaping, communicating and representing the firm's values and behaviours, internally and externally, to reinforce ethical behaviour and business integrity.

Bivens and Weller, (2005) stated that trend appears to be largely in a shift in the balance of corporate governance. The recent recovery continued a trend that started in the mid-1970s of a growing divergence between capital and labour incomes. A growing concentration of financial assets among institutional investors was juxtaposed by a declining unionization rate. Consequently, institutional investors had the incentives and increasingly the ability to allocate a growing share of corporate resources towards capital, particularly in the form of share repurchases and dividend payouts instead.

In India the debate on corporate governance practices is sporadic and shrouded in ambivalence. Public policy on various aspects of the functioning of the corporate sector is evolving in terms of legal and regulatory support in the more recent past. The post-Cadbury debate the world over focuses on the central dimensions of corporate governance such as accountability and transparency. In countries like USA, special legislation has been introduced to promote a greater measure of transparency and accountability. Several countries have also adopted country codes and best practices. India needs to learn a great deal from the experiences of UK, USA, Canada and Europe in evolving an appropriate framework for enforcing higher standards of corporate governance (Baxi, 2005).

Sinha, (2006) examined the utility of shareholder value analysis for corporate governance. In corporate governance today, there is a lot of emphasis on structural reform. Individual aspects of the board have increasingly been the focus of policy reform and shareholder activism. Specific attributes of board structure like the separation of the posts of chairperson and the CEO, percentage of outside directors on the board, have become important considerations in the quest for effective corporate governance. In contrast, taking a process view of corporate governance, first, it provided the necessary 'pre-commitment' between shareholders and managers regarding the goal of the firm. Second, it necessitated a greater flow of firm-specific information and the disaggregation of financial information.

Jayesh Kumar, (2006) investigated the association between corporate governance and the dividends payout policy for a panel of Indian corporate firms over the period 1994–2000. Author explained the differences in the dividend payout behaviour of the firms with the help of firms' financial structure, investment opportunities, dividend history, earnings

trend and the ownership structure. There was a positive association of dividends with earnings and dividends trends. Debt-equity ratio was found to be negatively associated, whereas, past investment opportunities exerted a positive impact on the dividends. Ownership by the corporate and directors was positively related with dividends payout in level and corporate ownership was negatively related in square. Institutional ownership had inverse effect on dividends in comparison to corporate ownership in levels as well as in its squares. The author found no evidence in an association between foreign ownership and dividend payout growth.

Enrione, et al (2006) defined four groups of actors: law-makers, model makers, market makers, and governance enactors. They analyzed a sample of 150 codes of governance introduced in 78 countries from 1978 to 2004 to describe the following stages of institutionalization: precipitating jolts, theorization, diffusion, and re-institutionalization. Economic systems are undergoing a generalized effort to improve corporate governance structures and processes. Waves of scandals and increasing public scrutiny push institutional regulators and corporate boards of directors to establish and adopt new practices. Codes of good governance have emerged as a primary tool to increase the effectiveness of corporate governance systems. Building on extant views of institutional change, the authors studied the process of the institutionalization of codes of governance and the role of the different actors involved in issuing the codes.

Tang, et al (2006) stated that although the winds of change ripple through China's hotel industry, many properties are still owned by the local or regional government and are operated on a noneconomic basis. The authors have stated that often, local officials have arranged for construction of the state-owned hotel (SOH) for their own reasons, including improving the image of their own by improving the corporate governance.

David Seidl (2007) pointed out the increasing significance of standards in all areas of contemporary life. In this article author analyzed the effectiveness of codes of corporate governance as a specific type of standard that has become particularly prominent. On the basis of an observation-theoretical approach, codes were conceptualized as schemas of observation that establish a field of mutual observations. The effectiveness of codes depended on the one hand on the extent to which they became integrated into recursive cycles of mutual observation between the corporation and the various

actors in the field. On the other hand, effectiveness depends on how codes related to other observational schemas.

Firms are central actors in innovation, and their actions are much affected by their corporate governance and the financial availability. Thus a country's finance and corporate governance system is a key element of its national system of innovation. The technological regimes of sectors (and sub-sectors) vary in ways that affect the demands innovation makes on the financial and corporate governance system (Andrew Tylecote, 2007).

Administrative leadership in UK central government has been reformed through the creation of boards in all departments and agencies. This 'boardization' is modelled on principles of private sector corporate governance and is a civil service designed response to the administrative implications of de-politicisation. It raises issues of political accountability and adaptation of private sector models to the public sector and therefore poses a challenge to the UK Whitehall model (Stephen Wilks, 2007).

Cassill and Hill (2007) explained the implications for socially responsible corporate governance. Corporate environments dominated by recessions and takeovers (the equivalent of scarcity and predation) require investors, management, and boards (the wealthy) to share profits with employees and the surrounding community.

Morag Mc Dermont (2007) raised questions about the application of corporate governance models to the housing association sector, and the appropriateness of applying private sector principles of corporate governance to organizations in the voluntary/quasi-public sector. Using Foucault's insights on the subject and power the article would consider how tenant board members are constructed by others and themselves, and how these constructions could affect their potential for intervening in the power relations of the board.

Nordberg (2007) looked at Reuters and in even greater detail at Dow Jones, where the private actions of the board and shareholders came into rare public view. It was suggested that stewardship theory played a large role in protecting a perceived social value of the integrity of the news, figuring more heavily in crucial board decision-making than shareholder value.

Judge et al (2008), studied panel data for corporate governance ratings in 50 countries between 1997 and 2005

to understand what the country-level predictors of corporate governance legitimacy might be. Using neo-institutional theory, they found that all three pillars of institutionalization influenced perceptions of corporate governance at the national level specifically, (a) the greater the extent of law and order, (b) the more the culture emphasized global competitiveness, and (c) the less the prevalence of corruption, the higher the corporate governance legitimacy within a nation. This study refined and extended the comparative corporate governance literature, as well as the neo-institutional perspective.

Beritelli, et al, (2007) conducted a study and their research used six selected dimensions of corporate governance, and the operations through concrete items, to analyze and assess twelve destinations in the Swiss Alps. Various corporate governance forms and mechanisms revealed the context for conditions for success.

The above research studies enrich us with lot of knowledge and practicalities with respect to corporate governance, which gives valuable insights regarding the benefits of Corporate Governance. They are:

1. High-quality Corporate Governance ensures corporate success and economic growth.
2. Strong Corporate Governance maintains investors' buoyancy, as a result of which, company can raise capital resourcefully and successfully.
3. It lowers the capital cost and there is a positive impact on the share price.
4. It provides proper encouragement and incentive to the owners as well as managers to achieve objectives that are in wellbeing of the shareholders and the organization.
5. Good Corporate Governance also minimizes wastages, dishonesty, risks and unprofessional conduct.
6. Corporate Governance ensures organization is managed in a manner that fits the best interests of all and thus ensures in building brand equity and qualitative expansion.

Conclusion

There is no single universal model for corporate governance that is applicable to all the countries across the organizations. Depending upon the legal framework and ethical norms applicable, the companies can choose the appropriate model of corporate governance to manage risks and add value. The companies to achieve distinctive competence must adopt model corporate governance practices to emulate in performance. Even though the companies will not be able to materialize improvements in performance in the short run because of incorporation of corporate governance practices, the long term benefits are quite sustainable. Transparency and disclosure should be the core concepts of any corporate governance model; no matter whichever organization adopts it. To achieve a responsible and value oriented management and control of companies, corporate governance no doubt acts as an oxidizer for operational efficiency and risk mitigation.

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Export Performance: Indian Coffee

Rekha Chinappa K. and H. Rajashekar

A b s t r a c t

The price realisation of coffee depends on the international market as 70 percent of the coffee produced in the country is exported. This paper analyses the performance of coffee exports from India for a period of 1996-97 to 2010-11. It is found that Italy is the strong partner with four percent compound growth rate. Ukraine and Finland are the small importers. Exports grew at 38 percent and 14 percent respectively. The exports to USA, Russian Federation, Germany and Japan declined. The markov chain analysis indicated that Italy is retaining 50 percent of the market share of the previous year and Japan, Russian Federation and Germany retained 80 percent, 39 percent and 32 percent respectively. USA, Greece, Spain, Belgium and other countries are not loyal. This study reveals the strategies to diversify India's coffee exports by increasing India's exports to the loyal importers and to identify new markets.

Key words: Export Performance, Indian Coffee.



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Coffee industry has made significant contribution to the Indian economy during the last 50 years. Indian coffee has created a niche for itself in the international market particularly Indian Robusta which is highly sought after for its blending quality. Arabica coffee from India is also well received in the International market. There are approximately 250,000 coffee growers in India; 98 percent of them are small growers. India exports coffee to over 50 countries. According to ICO and Board estimates, Coffee exports during 2009-10 were 1.96 lakh MT accounting for 4.14 percent of global exports. Almost 70 percent of the country's coffee production is exported. 30 percent of Indian coffee is exported to Italy. 70 percent is exported for Germany, Russian federation, Spain, Belgium, Slovenia, United States, Japan, Greece, Netherlands, and France. The value of total exports from India during 2009-10 was ₹ 3732 crores and the unit value realization was ₹ 105638 per tonne. 2001 to 2003 was considered to be bad years, during which period the unit value realization from exports plummeted to

₹ 50,000 per tonne. Too much dependence on export market is also not desirable especially in the long run. Alternatively, in addition to exports, the vast untapped domestic market needs to be focused. The all India productivity of Arabica during 2009-10 was 592 kgs/hectare and Robusta stood at 997 kgs/hectare.

The types of coffee exported are plantation, Arabica Cherry, Robusta Parchment, Robusta Cherry, Instant, Roasted and Grounded. Among these varieties, the most preferred type, the Robusta Parchment export picked up significantly during the calendar year 2010. Under value added coffee, Instant coffee exports increased steadily from 43000 MT in 2001 to 73800 MT in 2010. Specialty coffee segment like Robusta Kapi Royale, Monsooned Malabar AA, Monsooned Robusta AA and Mysore Nuggets EB's share tripled from 5000 MT in 2001 to 14500 MT in 2010. The total export earnings from Specialty coffee and value added coffee during the year 2010 was 846 crores.

Raj Gopal (1999) reports "Coffee in India is grown under two tiers of shade trees and are generally associated with other crops like orange, pepper, ginger and cardamom. In addition to this, variety of shade trees can be spotted in Indian plantations. As a result of diversity coffee beans acquire certain aroma and flavour components from the surrounding species which can be spotted in the final Indian cup making it as an Indian unique coffee." This is where specialty coffee comes into picture. Since it is grown under monsoon rainfall conditions is also termed as "Indian monsooned coffee." Its flavour is, it defined as: "The best Indian coffee which has the flavour characteristics of Pacific coffees. Coffee grown in India has huge reputation in world markets in terms of grade and quality. Hence there is a scope to branding the coffee with characteristics of estates and other unique quality parameters. However, with less percentage of volume of produce/sales it can hardly make a dent on the huge shadow cast by the World's largest producers namely Brazil and Vietnam. Moreover, the Indian planters with small land holdings with lower volume of produce and lack of market expertise cannot take advantage of direct marketing. Thus the industry is exposed to high level export risk. As a result, they are forced to depend on the market intermediaries who are interested in farmers who have large quantity of the produce for sale. Moreover the products available for sale are innumerable small quantities which are of inconsistent in quality. Hence, they get little

attention from marketing agencies and also the charges per unit of product are higher for small lot than for a larger lot.

World Scenario

Coffee is the second largest traded commodity in the world market next to crude oil. About 5.5 million tonnes (92 million bags) enter the International market annually. World production of coffee during 2009-10 was 74 lakh tonnes. The coffee producing countries are not the major coffee consuming countries and on the other hand coffee consuming countries are the developed countries of the world. Therefore, the income realisation of the producing farmers very much depends on the price realisation that happens in the two commodity exchanges at USA and UK. Brazil, Colombia and Vietnam being the major exporters the price realisation depends on the demand and their supply of coffee. India is the marginal producer producing 2.90 lakh tonnes, accounting to four percent global export share. Hence, it is not in a position to influence the price of the produce thereby India is the price taker. Though, traditionally coffee trade is well established, *the global market for coffee is characterised by volatile prices as it passes through trade cycles resulting in peaks and troughs which will impact the incomes of producers.* Downstream processing is often seen as a way of adding value to a raw product at origin as the roasters of coffee procure from various sources depending upon the tastes and preferences of the consumers especially in the developed countries. There seem to be a lengthy supply chain till the produce reaches the ultimate consumers in the sophisticated markets in the form of roasted and ground coffee. As a result the prices passed on to the producer farmer are too low in the supply chain and that makes it difficult for them to operate at the lower margin levels. Alternatively, the small and marginal level growers will have to improve the quality of coffee through appropriate certification process and increase the bargaining power through forming commodity groups. However, for the long term viability it is essential to pursue a transparent, truly sustainable approach to coffee buying, in which the balanced needs of farmers and consumers are met. Mathai and Vittal (2006) observe that a future exchange for coffee may provide price risk management mechanism to the coffee market by ensuring liquidity. Coffee futures exchange set up by the coffee industry would be a new institutional mechanism for evolving an orderly marketing that would protect everyone's interest.

Countries with comparative cost disadvantages especially the traditional small scale structures of coffee production are worse affected by the development of large scale producers. According to the statistics from the International Coffee Organisation, Vietnam, being a huge player in the world Robusta coffee market, exported more than 18 million 60 kg bags of Robusta coffee from Nov., 2006 to Oct., 2007, an in creditable five million upon the previous 12 months. Indonesia and Indian exports are at four and three million bags respectively, though India has the advantage of gourmet coffee, it is not been conceived as the specialty coffee. In a period of cycles of volatility the smaller independent business at origin and destination are threatened with the comparative negative price movements. As a result, profitability becomes increasingly questionable and runs a heavier risk of being undercut by lower prices. Marketing chain also distances itself further every year from that of

industrial coffees with distinct importers, distributors, and retail points. Increasing specialisation in production, higher marketable/marketed surplus of the produce and alternative channels of marketing have increased the importance of coffee marketing which is fiercely price competitive. Robert Pregal (2007) assessed that “The global market is asking for more coffee, more quality, better accessibility and new beverages. In order to give people what they want there must be multiple products and multiple channels”. Since the world of coffee has joined forces with environment conscious trends, many steps have been made to further advance the industry. Producing a premium bag of coffee safely and cleanly for profitability is now much more than the reality. Creating a new market place will be an ongoing process requiring, supplying quality coffee in order to reward farmers for their efforts and allow everyone involved in the industry along the value chain to prosper.

Table 1: World Coffee Production -2010-2011 ('000bags)

Countries	Production	Percent
Brazil	48095	36%
Vietnam	18500	14%
Columbia	9200	7%
Indonesia	8500	6%
Ethiopia	7450	6%
India	4733	4%

Source: Data Base, Coffee Board, Bangalore

According to the table1 India is the sixth largest (after Brazil, Colombia, Vietnam, Indonesia and Ethiopia) producer of coffee. The comparative edge in coffee exports which India exhibited during the initial years of liberalization, deteriorated over the years. Not being able to keep pace with the rapid challenges to increase the brand identity and market share in the continuous changing market environment, is a threat to the coffee industry. Another serious concern was that Vietnam is improving its position at a much rapid pace posing a serious threat to Indian coffee in the international markets. Along with Vietnam, Indonesia also challenges India's coffee exports, though to a lesser extent.

Table 2 represents the transition probability matrix of Indian coffee exports to major destinations for the initial period

(1996 - 2001). According to the table Japan, Italy and Russian Federation retained considerable import share of Indian coffee to the tune of 80 percent, 52 percent and 39 percent respectively. Coffee annual and IACO bulletin (1990) reported that the ready to drink product had shown significant growth. Iced Coffee with ice cubes made from coffee syrup had become the favourite beverage in every Japanese household and Kissaten during hot and humid summers. It was also observed that the Japanese coffee market grew at a steady pace because of the efficiency of the agreement with the International Coffee Organizations. The positive fact is that Indian coffee has a significant presence in each of the five million cups of espresso coffee sold by major coffee bars across the world. Being part of the

Table-2: Transition Probability Matrix for Indian Exports (1996-97 to 2000-01)

TPM for initial years of study	Italy	Russian Federation	Germany	Belgium	Spain	Greece	Japan	U.S.A.	Others
Italy	0.5244	0.3903	0.0000	0.0000	0.0000	0.0000	0.0000	0.0854	0.0000
Russian Federation	0.1005	0.3944	0.2542	0.0000	0.0000	0.0000	0.0000	0.2509	0.0000
Germany	0.1777	0.0000	0.3267	0.3700	0.0000	0.0000	0.0000	0.1255	0.0000
Belgium	0.0000	0.0000	0.0000	0.0000	0.7451	0.0000	0.0000	0.0000	0.2549
Spain	0.0000	0.4698	0.0000	0.2469	0.1321	0.1512	0.0000	0.0000	0.0000
Greece	0.0000	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Japan	0.0000	0.0000	0.1979	0.0000	0.0000	0.0000	0.8021	0.0000	0.0000
U.S.A	0.4565	0.1084	0.4352	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Others	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000	0.0000	0.0000	0.0000

Note: Others refers to Slovakia, Ukraine, Finland and France

illy blend gives an identity for Indian coffee which it has not yet achieved in the global market as a standalone brand. It is not a trivial accomplishment for an Indian coffee to be selected by the Italian producer and roaster illy café as their suppliers of the well known espresso coffee. The Italian coffee has further strengthened their rendezvous with the Indian coffee.

Germany and Spain were among the small retainers of Indian coffee exports. Rest of the countries seems to have given out their imports to other countries. Greece has given whole of its exports to Russian Federation. 74 percent of Belgium exports were taken away by Spain (74.5 percent), while Spain gave out 47 percent to Russian Federation. Germany gained 43.52 percent of USA's export share. Greece and other countries group gave out cent percent (100 percent) of its export share to Russian Federation and Greece respectively. The boom in specialty coffee made the business of coffee take its toll in the US. It is due to the problems like inconsistent product, mislabeling and misinformation resulted in the subtraction effect on Indian coffee.

The booming market and increasing competitions in the area of coffee preparations using the single serve system not only extracts higher demand on quality but also the efficiency

of manufacturing process. Even the smallest qualitative variations can have a strong impact on the taste of individual persons. The Indian coffee industry comprises majority of small land holders with lower economic backing, low capacity towards marketing expertise and other trade skills. Also, they with the mind frame of the traditional cultivation on the farm are ignorant of the intricacies of the market at which their produce is sold. Hence the Indian coffee could not meet the International standards. It is also observed that the major weakness of small scale industrial units in marketing their products arises due to their small size of market surplus and weak financial base. Therefore, the real remedy for overcoming their problems lies in an organized management of marketing of their products. This involves proper co-operation and co-ordination among the small and marginal farmers to even sacrifice their individual freedom to some extent.

According to the table 3 of the Transition Probability Matrix of Indian exports to major destinations for the terminal period (2005-06 – 2009-2010) Italy showed a slight improvement in the import share of Indian coffee to the tune of 54 percent (2 percent increase). The status of the quality of coffee and coffee industries in India with Italy and ex-communist bloc has been identified as the major

Table -3: Transition Probability Matrix for Indian Exports(2005-06 to 2009-10)

	Italy	Russian Federation	Germany	Belgium	Spain	Slovakia	Ukraine	Greece	U.S.A.	Others
Italy	0.5478	0.0000	0.3553	0.0109	0.0000	0.0860	0.0000	0.0000	0.0000	0.0000
Russian Federation	0.5345	0.0000	0.0000	0.2329	0.1802	0.0000	0.0524	0.0000	0.0000	0.0000
Germany	0.0000	0.2231	0.2219	0.0000	0.1327	0.1000	0.2361	0.0000	0.0000	0.0863
Belgium	0.0000	0.2669	0.0000	0.0000	0.0000	0.0000	0.0000	0.2436	0.4894	0.0000
Spain	0.0000	0.0000	0.0000	0.0000	0.4624	0.2857	0.0000	0.2520	0.0000	0.0000
Slovakia	0.0000	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Ukraine	0.0000	0.0000	0.5171	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.4829
Greece	0.0000	0.0000	0.0000	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
U.S.A.	0.0000	0.0000	0.0000	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Others	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Note: others refer to Finland, France and Japan

export destination. Spain has retained considerable share of import of coffee from India. Germany remained a small retainer of Indian coffee exports. The group of other countries have given whole of its exports to Italy. The exports of Russian Federation were taken by Belgium (23 percent) and Spain (18 percent). While Ukraine and USA gave cent percent (100 percent) of its export share to Belgium. Likewise, other countries and Slovakia gave cent percent export share to Italy and Russian Federation, while Germany gained 51.71 percent of Ukraine's export share. Other countries gained 48 percent of the exports of USA

The world coffee economy noted that US coffee imports were declining, while non traditional consumers like Japan has increased their import of coffee. For the coffee export market where the organoleptic expertise is found, the matter of beverage flavour is extremely important. In the exporting houses the potential buyers discover and determine exactly the standards required as to quality and grade. Units in the roasting and packing trades in Europe and the USA have evolved into fewer and bigger concerns over the last 35 years and this has produced a demand for large volumes of standardized qualities, both in green coffee stage and retail

Table-4: Coefficient of Variation of the Exports of Coffee to Major Destinations (1996-97 to 2009-10)

Destinations	CV(%)	Destinations	CV(%)
Italy	24.81	Ukraine	69.03
Russian Federation	27.38	Finland	64.62
Germany	34.63	Greece	23.93
Belgium	38.20	France	34.97
Spain	29.34	Japan	51.71
Slovakia	109.26	U.S.A	79.12
Total	24.67		
Total Exports	17.06		

stage. While exporting directly on the basis of the samples established with a natural product, which is vulnerable in many ways during processing and transit, mutual

understanding is necessary particularly in Europe and USA. In order to boost export trade it is necessary for India to identify the export potential capitalizing its geographical

advantage. Thereby ensuring its position as a dependable long term supply source of qualitative products through progressive export policies.

Co-efficient variations indicating (CV) the instability of Indian coffee exports is depicted in the table-4 for the period 1996-97 to 2009-10. Slovakia was the most instable market with value of 109.26 percent. Though initially USA was one of the major importers of Indian coffee shows instability with the variation of 79.12 percent. Ukraine, Finland and Japan also show the instability to the extent of 69.03 percent, 64.62 percent, and 51.71 percent respectively. Indian coffee does not enjoy international market acceptance like the Brazilian coffee as it is unfortunately used to fill the gap whenever there is a coffee shortfall in the world or due to natural calamities or price differentials. Hence, Indian coffee is unable to compete with the world leaders like Brazil, Vietnam and Colombia in the matter of quality. The importing countries also complain that Indian coffee does not fit into the International quality mark. The economic recession also contribute to the higher level of uncertainty and volatility. Therefore, branding is an important means relative to other decision criteria to reduce uncertainties and volatilities.

Greece was the most stable and consistent market for Indian coffee export, as it started with less quantity gradually increasing over the years. Italy, Russian Federation and

Spain indicated stability for Indian coffee export. However, the total exports of Indian coffee stood at 17.06 percent indicating stability to a certain extent but not totally encouraging considering the natural environmental advantages of Indian coffee plantations which has all possibility of capturing the market advantage in the global arena. However, www.commodityindia.com reports that Italy tops the Coffee importers' list of India surpassing Russian federation. There is a potential for Indian coffee industry to make further inroads into Italian markets. Every effort should be made to analyze the preference of Italian coffee consuming sector to design the product accordingly and bang on the target. It is nearly impossible to consider the value of coffee without exploring parameters relating to quality certifications such as bird-friendly, fair trade and organic coffee. The time is ripe to address the value additions of Indian coffee in order to encourage and compensate the coffee farmers for sustenance. The quality is the most conservative, time tested method of differentiating a product, tied to value and sustainability. It is the need of the hour that the status of the Indian coffee industries as an export industry be inflated with various research activities of the Coffee Board of India to find out the comprehensive problem of contamination, qualitative production and marketing system in order to fall in line with international standards.

Table-5: Compound Annual Growth Rate (%) in Indian Export to major Destinations (1996-97 to 2010-11)

Countries	Growth Rate (%)	Countries	Growth Rate (%)
Italy	3.90	Finland	14.22
Russian Federation	-5.00	Greece	-1.85 NS
Germany	-6.56	France	-1.18 NS
Belgium	-0.44 NS	Japan	-11.91
Spain	-7.76	U.S.A	-13.55
Ukraine	38.07		
Total	0.81 NS		

Note: + indicates the growth rate pertaining to the period 1999 -00 to 2010-11

In past years, most of India's coffee was exported to the former Soviet Union and European countries. After the breakup of the Soviet Union, the country lost two-thirds of the market. Now, in the global market, Indian coffee is facing stiff competition from Vietnam with their higher productivity

and lower cost of production. The growth rate table 5 represents the growth rate of Indian coffee exports to major destinations. The major consistent growing exporter as indicated in the table is Ukraine which has a highest growth rate of 38.07 percent per annum, but this country started

importing only from the year 2000 in very small volumes (90MT). Apart from Ukraine only Finland and Italy were the countries exhibiting positive growth. The growth figures were 14.22 percent and 3.9 percent respectively. USA had the highest negative growth during the study period to the tune of 13.55 percent. Even Japan, Spain and Germany had considerable negative growth in exports. The existence of pesticide residues in beverages like tea and coffee has also affected our exports of these commodities in the last few years. The overall total export of coffee from India was insignificant and negative. Initially the confidence in Indian coffee as a blend had been strengthened by the export performance. In spite of impressive performance, the Indian coffee market shares in the world coffee exports is not greater than five percent. In any market, volumes are important for an effective presence. This shows the instability in Indian coffee exports which mostly declined during the last decade. Damodaran (1998) analyzed the changing scenario of the India's coffee exports in 2001 and concluded that keeping track of international price trends was a sure way to overcome the lags in international coffee marketing. More aggressive marketing strategies could be adopted for premium markets having 'player gaps.' New and innovative methods of brand promotions to give our coffee their 'produce' identity should complement the flexible response strategies. However, the coffee industry in India is interestingly placed in the WTO era. It requires carefully guided strategies and plans to take Indian coffee on to the road of free multilateral trade based on principles of environmental sustainability exploring ecology as the marketing tool.

Conclusion

The global coffee market has become increasingly competitive and sophisticated as the process of producing products is by its nature global in scope. Studies on direction of India's coffee exports over the years suggests that majority of the importing countries are not loyal except Italy which is the major trade partner. This calls for developing appropriate marketing strategies and strengthening value chain management. The consumer preferences for various types and brands of coffee vary across the countries especially in Europe. 'Focus market approach' in major coffee consuming countries helps in gaining market share. The advantage of India producing fine shade grown coffee under environmental friendly conditions which is the need for the hour can be

highlighted by vertically integrating the firms that they produce products from "cradle to grave" or from "conception to customer." In the liberalised front the relationship between the producer and the world market should be built up to enhance the competitive strength.

The quality of coffee should be improved through adopting good agricultural, processing and manufacturing practices. Value addition throughout the chain at each point like input application, harvesting, drying, pulping, curing, grading, storing will enhance value to the produce. Therefore there is a great need for capacity building and education at the farmer level. Quality and safety are key drivers of vertical integration. The introduction of private standards and product traceability ie a record of production information about coffee throughout the value chain helps in identity and preservation along the chain. This helps in quality factored pricing at farm gate. Certification, GI indicators, growing specialty coffee, organic coffee, single origin is the approaches for better price realization. This will ensure that the coffees are produced and delivered in a consistent and reliable manner in order to ensure consumer loyalty. The result will be a sustainable and commercially advantageous coffee business for all parties in the supply chain from farmers to retailers.

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Mobile Connections: Consumer Satisfaction

Anil Kumar

A b s t r a c t

This study is to evaluate the consumer satisfaction of mobile connections and its impact on consumer buying behaviour. Customers of Kurukshetra city of Haryana State are surveyed. The effects of different services and schemes on mobile connections on consumer are measured. Today, a purely technical segmentation of the market is no longer appropriate, as usage benefits are more important than technological performance. Consumer's satisfaction plays a very important role for making appropriate strategies to increase sale and customer retention. A face-to-face interview survey is conducted on 100 consumers on random basis. Data are analyzed by using Fisher's Exact Test SPSS 19.0.

Key words: *Consumer Satisfaction, Technical Segmentation, Market Typology, Fisher's Exact Test.*



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Exchange of information becomes the necessity of life to a common man. In the modern world an individual tends to communicate anything to everything right from the place where he/she stands. Telecommunication industry has its origin in the recent past and the growth has been excellent. Consumer feedback is providing the market reflections to the marketer. This enables them to gain awareness about their market performance, consumer preference and their satisfaction level towards the services offered by them. The study at hand will throw light on the customer satisfaction status on various service offerings offered by different mobile connections service providers. Consumer preferences indicate choices among neutral or more valued options available. The preference of the consumer is the result of their behaviour they show during searching, purchasing and disposing the products. Every human being is a consumer of different produces. If there is no consumer, there is no business. Therefore, consumer satisfaction is very

important to every business person. The consumer satisfaction after purchase depends on the product performance in relation to his/her expectations. Philip Kotler (2008) observed that satisfaction is a person's feelings of pressure or disappointment resulting from product's perceived performance (outcome) in relation to his or her expectations.

Objective of the Study

The objective of this study is to determine the consumer satisfaction about their existing mobile connections and their satisfaction level towards various services offered by mobile connections service providers, schemes, periodical offers, and outgoing call charges.

Demographic Profile

Table 1 - Composition of Respondents on the Basis of Gender

Gender	No. of Respondents	% of Respondents
Male	79	79
Female	21	21
Total	100	100

Table 2 - Composition of Respondents on the Basis of Marital Status

Marital Status	No. of Respondents	% of Respondents
Unmarried	34	34
Married	66	66
Total	100	100

Table 3 - Composition of Respondents on the Basis of Age Group

Age Group	No. of Respondents	% of Respondents
Below-25	37	37
25-35	34	34
36-55	26	26
Above-55	3	3
Total	100	100

Table 4 - Composition of Respondents on the Basis of Income Group

Income Group	No. of Respondents	% of Respondents
Below-10,000	52	52
10,001-25,000	11	11
25,001-40,000	11	11
Over 40,000	26	26
Total	100	100

Table 5 -Composition of Respondents on the Basis of Qualification

Qualification	No. of Respondents	% of Respondents
Under Graduation	58	58
Graduation	28	28
Post-Graduation	14	14
Professional Degree	-	0
Total	100	100

Research Methodology**Primary Data Collected****Table 6 -Consumer Preference towards Cell Phone Service Provider**

Name of cellular service provider	No. of Respondents	% of Respondents
Airtel	13	13
TATA Docomo	4	4
Idea	27	27
BSNL	14	14
TATA INDICOM	4	4
Vodafone	38	38
Total	100	100

Table 7 - Consumer Preference towards Cell Phone Service Provider on the Basis of Scheme

Service Provider	Prepaid Scheme		Postpaid Scheme		Total	
	Total	%	Total	%	Total	%
Airtel	11	12.36	2	18.18	13	13
Tata Docomo	4	4.4	0	0	4	4
Idea	26	29.21	1	9.1	27	27
BSNL	11	12.37	3	27.27	14	14
Tata Indicom	4	4.4	0	0	4	4
Vodafone	33	37.1	5	45.5	38	38
Total	89		11		100	100

Table 8 - Influencing Factors to Purchase the Cell Phone Service

Influencing Factors	No. of Respondents	% of Respondents
Brand Image	27	27
Availability	30	30
Customer care Service	11	11
Service charges	13	13
Price	19	19
Total	100	100

Table 9 - Consumer Satisfaction Level on the Basis of Price

Service provider	Highly Satisfied		Satisfied		Not Satisfied		Total	
	Total	%	Total	%	Total	%	Total	%
AirteL	6	13.3	7	13.5	-	0	13	13
Docomo	2	4.4	2	3.85	-	0	4	4
Idea	12	26.7	14	27	1		27	27
BSNL	6	13.3	8	15.4	-	0	14	14
Indicom	1	2.23	3	5.8	-	0	4	4
Vodafone	18	40	18	34.5	2		38	38
Total	45		52		3		100	

Table 10 - Consumer Satisfaction Level on the Basis of Performance of Service Provider

Service Provider	Highly Satisfied		Satisfied		Not Satisfied		Total	
	Total	%	Total	%	Total	%	Total	%
AirteL	3	8.33	10	16.4	-	0	13	13
Docomo	-	0	4	6.56	-	0	4	4
Idea	11	30.6	16	26.2	-	0	27	27
BSNL	3	8.33	9	14.8	2	66.7	14	14
Indicom	2	5.6	2	3.3	-	0	4	4
Vodafone	17	47.2	20	32.8	1	33.3	38	38
Total	36		61		3		100	

Table 11 - Consumer Satisfaction Level on the Basis of Performance of Schemes

Service Provider	Highly Satisfied		Satisfied		Not Satisfied		Total	
	Total	%	Total	%	Total	%	Total	%
AirteL	3	10	8	13.6	2	18.2	13	13
Docomo	2	6.67	2	3.4	-	0	4	4

Idea	8	26.7	15	25.4	4	36.4	27	27
BSNL	3	10	8	13.6	3	27.3	14	14
Indicom	1	3.33	2	3.4	1	3.4	4	4
Vodafone	13	43.3	24	40.7	1	3.4	38	38
Total	30		59		11		100	

Table 12 - Consumer Satisfaction Level on the Basis of Periodical Offers

Service Provider	Highly Satisfied		Satisfied		Not Satisfied		Total	
	Total	%	Total	%	Total	%	Total	%
Airtel	7	26	5	10.6	1	3.9	13	13
Docomo	1	3.7	3	6.4	-	0	4	4
Idea	6	22.2	15	31.9	6	23.1	27	27
BSNL	3	11.1	6	12.8	5	19.2	14	14
Indicom	1	3.7	2	4.3	1	3.9	4	4
Vodafone	9	33.3	16	34.1	13	50	38	38
Total	27	100	47	100	26	100	100	

Table 13 - Consumer Satisfaction Level on the Basis of Outgoing Call Charges

Service Provider	Highly Satisfied		Satisfied		Not Satisfied		Total	
	Total	%	Total	%	Total	%	Total	%
AirteL	9	24.3	4	7.1	-	0	13	13
Docomo	2	5.5	2	3.2	-	0	4	4
Idea	7	19	19	34	1	14.3	27	27
BSNL	7	19	6	10.7	1	14.3	14	14
Indicom	1	2.7	3	5.4	-	0	4	4
Vodafone	11	29.7	22	39.3	5	71.4	38	38
Total	37		56		7		100	100

Data Analysis and Interpretation

Assumptions of chi-square test: **a)** all expected frequencies are greater than or equal to 1. **b)** No more than 20 percent of the expected frequencies are less than five. If our data do not fulfil above assumptions of chi-square it is appropriate to use Fisher's exact test, in particular when dealing with small counts. The chi-square test is basically an approximation of the results from the exact test. If the assumptions ($n < 20$, one of the cells < 5) one can stick to Fisher's Exact Test. If we do chi-square test for small counts we may come up with erroneous results because of the approximation. So Fisher's

Exact Test is appropriate test to use here in all cases do not fulfil the assumptions of Chi-Square Test.

◆ Gender of the Respondents and the Level of Satisfaction towards their Existing Mobile Connection

In order to find out the association between the gender of the respondents and their level of satisfaction towards their existing mobile connection, the fisher's exact test is applied because, three cells (37.5 percent) have expected count less than five.

Table 14 - Gender and the Level of Satisfaction

Gender	Totally Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Totally Satisfied	Total
Male	3(4.6)	5(5.4)	26(26.2)	43(40.8)	77
Female	3(1.4)	2(1.6)	8(7.8)	10(12.2)	23
Total	6	7	34	53	100

(Source: Survey data, Figures given in the brackets represent the Expected Frequency)

Table 15 - Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	3.109 ^a	3	.375	.377		
Likelihood Ratio	2.725	3	.436	.534		
Fisher's Exact Test	3.289			.317		
Linear-by-Linear Association	2.614 ^b	1	.106	.126	.074	.030
N of Valid Cases	100					

Null Hypothesis: The association between the gender of the respondents and their level of satisfaction towards their existing mobile connection is not significant.

Calculated Fisher's Exact Test value (3.289) is less than the table value (7.815) at five percent level of significance for three degrees of freedom; the null hypothesis is accepted and it is interpreted that the association between the gender of the respondents and their level of satisfaction towards their existing mobile connection is not significant.

◆ **Marital Status of the Respondents and the Level of Satisfaction towards their Mobile Connection**

In order to find out the association between the marital status

of the respondents and their level of satisfaction towards the mobile connection, the Fisher's Exact Test is applied because four cells (50.0 percent) have expected count less than five.

Null Hypothesis: The association between the marital status of the respondents and their level of satisfaction towards their existing mobile connection, is not significant.

Calculated Fisher's Exact Test value (7.899) is greater than the table value (7.815) at five percent level of significance for three degrees of freedom, the null hypothesis is rejected and it is interpreted that the association between the marital status of the respondents and their level of satisfaction towards their existing mobile connection, is significant.

Table 16 - Marital Status and the Level of Satisfaction

Marital Status	Totally Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Totally Satisfied	Total
Married	0(2.0)	5(4.6)	28(23.8)	33(35.6)	66
Unmarried	3(1.0)	2(2.4)	8(12.2)	21(18.4)	34
Total	3	7	36	54	100

(Source: Survey data, Figures given in the brackets represent the Expected Frequency)

Table 17 - Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	8.716 ^a	3	.033	.027		
Likelihood Ratio	9.522	3	.023	.029		
Fisher's Exact Test	7.899			.033		
Linear-by-Linear Association	.069 ^b	1	.792	.890	.446	.106
N of Valid Cases	100					

◆ **Age Group of the Respondents and the Level of Satisfaction towards their Existing Mobile Connections**

In order to find out the association between the gender of the respondents and their level of satisfaction towards their existing mobile connections, the Chi-square test is applied because ten cells (62.5 percent) have expected count less than five.

Null Hypothesis: The association between the age group of the respondents and their level of satisfaction towards their existing mobile connection is not significant. Calculated Chi-square value (7.899) is less than the table value (13.512) at five percent level of significance for nine degrees of freedom, the null hypothesis is accepted and it is interpreted that the association between the age group of the respondents and their level of satisfaction towards their existing mobile connection, is not significant.

Table 18 - Age Group and the Level of Satisfaction

Age Group	Totally Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Totally Satisfied	Total
Below-25	3(1.1)	1(2.6)	13(13.3)	20(20.0)	37
25-35	0(1.0)	5(2.4)	11(12.2)	18(18.4)	34
36-55	0(.8)	0(1.8)	12(9.4)	14(14.0)	26
Above-55	0(.1)	1(.2)	0(1.1)	2(1.6)	3
Total	3	7	36	54	100

(Source: Survey data, Figures given in the brackets represent the Expected Frequency)

Table 19 - Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	15.815 ^a	9	.071	.089		
Likelihood Ratio	17.678	9	.039	.041		
Fisher's Exact Test	13.512			.086		
Linear-by-Linear Association	.601 ^b	1	.438	.448	.245	.046
N of Valid Cases	100					

◆ **According to the Income level of the Respondents and the Level of Satisfaction towards their Existing Mobile Connections**

In order to find out the association between the Income of the respondents and their level of satisfaction towards their existing mobile connections, the Chi-square test is applied because ten cells (62.5 percent) have expected count less than five.

Null Hypothesis: The association between the Income of the respondents and their level of satisfaction towards their existing mobile connection, is not significant. Calculated Fisher’s Exact Test value (7.899) is greater than the table value (7.292) at five percent level of significance for nine degrees of freedom, the null hypothesis is rejected and interprets that the association between the income of the respondents and their level of satisfaction towards their existing mobile connection, is significant.

Table 20 - Income Group and the Level of Satisfaction

Income Level	Totally Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Totally Satisfied	Total
Below-10,000	2(1.5)	3(3.6)	21(18.4)	25(27.5)	51
10,000-25,000	0(.3)	2(.8)	1(4.0)	8(5.9)	11
25,001-40,000	0(.3)	1(.8)	4(4.0)	6(5.9)	11
Over 40,000	1(.8)	1(1.9)	10(9.7)	15(14.6)	27
Total	3	7	36	54	100

Source: Survey data, Figures given in the brackets represent the Expected Frequency)

Table 21 -Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	6.955 ^a	9	.642	.648		
Likelihood Ratio	7.954	9	.539	.657		.036
Fisher’s Exact Test	7.292			.547		
Linear-by-Linear Association	.290 ^b	1	.590	.613	.318	
N of Valid Cases	100					

◆ **Qualification of the Respondents and the Level of Satisfaction towards their Existing Mobile Connections**

In order to find out the association between the qualification of the respondents and their level of satisfaction towards their existing mobile connections, the Chi-square test is applied because Ten cells (62.5 percent) have expected count less than five.

Null Hypothesis: The association between the qualification of the respondents and their level of satisfaction towards their existing mobile connection, is not significant. Calculated Chi-square value (7.899) is less than the table value (13.512) at five percent level of significance for nine degrees of freedom, the null hypothesis is accepted and interprets that the association between the qualification of the respondents and their level of satisfaction towards their existing mobile connection, is not significant.

Table 22 -Qualification and the Level of Satisfaction

Qualification	Totally Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Totally Satisfied	Total
Undergraduate	3(1.7)	4(4.1)	20(20.9)	31(31.3)	58
Graduate	0(.8)	2(1.9)	11(9.7)	14(14.6)	27
Post Graduate	0(.4)	1(1.0)	5(5.0)	8(7.6)	14
Professional Degree	0(0)	0(.1)	0(.4)	1(.5)	1
Total	3	7	36	54	100

(Source: Survey data Figures given in the brackets represent the Expected Frequency)

Table 23 -Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	3.260 ^a	9	.953	.949		
Likelihood Ratio	4.700	9	.860	.895		
Fisher's Exact Test	5.408			.983		
Linear-by-Linear Association	.823 ^b	1	.364	.390	.210	.048
N of Valid Cases	100					

Conclusion

The association between the gender, age, experience, and qualification of the respondents and their level of satisfaction towards their existing mobile connection, is not significant. According to these factors consumers are satisfied with their mobile connection. But the association between marital status, income of the respondents and their level of satisfaction towards their existing mobile connection, is significant, means there is gap about satisfaction level among the different income level and marital status consumer of their mobile connection. In income level, 54 percent consumers are totally satisfied and 36 percent are somewhat satisfied. May be the reasons being no good network, related to good scheme and other promotional things? Today in this competitive environment, consumer satisfaction plays very vital role for every service provider, if consumer is not satisfied then probability of switching from one service to another will increase and if consumer is satisfied with us, consumer can do good word opinion in the market to increase brands value of our product and services. A purely technical segmentation of the mobile

phone market is no longer appropriate. In today usage benefits are more important than technological performance and the generalization of mobile phone has complicated the market typology. Consumer's satisfaction of his/her mobile connections plays an important role for a service provider for making appropriate strategies to increase satisfaction level of consumers.

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Employee Attrition: Marketing of Financial Products

Jins Joy P. and R. Radhakrishnan

A b s t r a c t

In this regard, this study is carried to test the factors are responsible for attrition. For conducting this study in a fruitful manner 200 samples are collected by using simple random sampling method. The sampling frame is marketing executives of financial products companies. A well-structured interview schedule is prepared and detailed questionnaire is presented to collect the data from the respondents. This study conducted with primary source of data and secondary data. Questionnaire consists of three sections, the first section deals with personal profile, second part contains factors responsible for attrition and third part collects their expectation to avoid attrition. Percentage analysis employed to analyze personal profile of respondents; factors analysis and correlation performed for knowing attrition factors, Chi-square test measures relationship between personal profile of the respondents and expectations to avoid employee attrition.

Key words: Attrition, Marketing Executives, Work Attrition Factors, Human Resource Policy, Superior Behaviour.



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Employee attrition in organizations has received extensive concentration from both academics and corporate. The volatility in business conditions has significant impact on the way of conducting business in the country. The ups and downs not only affect the business they affect the employees' health. The new world of work puts the importance of human capital and indeed human capital development at the centre of organizational success or failure. Work force is the most important drivers of productivity and sustainable economic growth in developed countries. The scenario is not far from the organizational success, the organization has to deal with men, money, machine and material. Money can't alone make more money, which needs other three 'm's to manage it. Men are the topmost and primary source of business, the effective management on men can bring extra-ordinary performance to the firm. In adverse business conditions machine and material will not corrode resources of the firm but men

oxidize the wealth of the firm. This is one side of the employee attrition and severe competition in the field can cause for abrasion in another side.

The problem of attrition would not have arisen if employees loved their jobs and their co-workers, they were able to integrate their individual goals to organizational goals along with a balanced work life, and they got well paid for their effort. But, despite the existence of some or most of these parameters, employees leave on account of even just a partial inadequacy. Generally employees react for the changes in the human resource policy of the firm. If the firms' human resource policies are employee centric, the employees feel free to work for long time. If the policies are detrimental to them, they search for another better opportunity to work. The need for this study is useful to the management, as it helps to analyze the causes of Attrition which will lead to the formulation and implementation of effective and powerful retention strategies. The scope of this study is wide and has impact on all areas of management. The project thus aims to know the expectation of employees and to know how far they have understood the company's policies and procedures and to find solutions to control attrition and to retain the talents.

Statement of the Problem

Attrition may diminish if the harmful characteristics of the job are taken care of. However, that does not mean employees augment their readiness to stay in the same organization. Thus different set of factors emerge for attrition and preservation respectively. Looking at the big picture of the much realized prospective of the marketing sector in India and the impending curse of attrition in this sector, it can be confidently said that the problem cannot be overlooked. There is a terrible need of tackling the problem of attrition in the marketing sector of India and for this employee stimulus has been selected as an effectual tool. There is need to develop a synchronized tactical method, an innovative development paradigm that can be utilized to curb the ever-increasing attrition rate in the marketing sector. Attrition can be of two types i.e., forced attrition and voluntary attrition.

As companies engaging in financial sector continue to grow in India they have created an enormous demand for qualified and experience employees. Unfortunately, demand for labour

is exceeding the supply forces and finance companies must fight among themselves for acquiring best talent. There is an opportunity to the employees to shift their job from one place to another place. This trend shows three in five employees in financial product marketing intend to leave their employer within a year. Recruiting, training and replacement of employees can be costly and utilize considerable internal resource. Hence deploying effort to preserve employees to stay long time for the organizational development is advisable. Generally employees had little trouble recalling the reasons for their departure from previous positions. Most cited a single reason rather than a combination of motives. When there were multiple causes for leaving, one was predominant. Increasing job mobility, rising aspirations and a dilution of the psychological contract that stimulates organizational loyalty has resulted in the increased trend in attrition rates across the country in various industrial sectors. Employee attrition is a very big problem not only in India but outside India too. Attrition rate is increasing day by day and it's especially the marketing sector which is affected the most. Why an employee leaves a company is the question asked by most of the employers. Hence focus on conducting exit interview is helpful to sort out the problems associated in the conduction of business.

Review of Literature

Review of literature shows how various researchers have identified a plethora of reasons behind the escalating problem of attrition and how many of them have even suggested recommendations to combat it (Misra 2007, Prakash and Chowdhary 2004, Joshi 2004). Many researchers have also worked on various domains like the human resource management systems and practices (Budhwar et al. 2006), job satisfaction (Sharma 2006), and burnout prevention (Kanwar et al. 2008). However, no systematic and comprehensive work has been found that collaborates all the facets viz. attrition, retention, employee motivation, involvement etc., to combat the most smoldering problem of the present times i.e. attrition.

As noted by several observers, however, the consequences of turnover have received significantly less attention from researchers (Staw 1999, Glebbeek and Bax 2004). The major inspiration of this study is resulting from the studies of Mehta (2006), Budhwar et al. (2006), Shah and Sharma (2007), Misra (2007). It is clear from the review of earlier

research that solutions are required to some specific problems of practical significance in the field of increasing attrition in BPOs. The broad objective of this study is to identify the root causes of attrition in BPOs, analyzing the level of employee motivation, satisfaction and involvement, generate a model for maximizing nourishment of employees in the organization and come up with concrete recommendations, which will eventually be valuable to the organizations to retain their employees for a long term.

Human resource recruitment agencies give details that high attrition rates considerably increase the investment made on employees (Steensma et al. 2002). Considerable investments in time and money need to be made for acquiring employees in any organization. These can never be translated into profit when attrition is high. Also the unfriendly working conditions, late night work shifts, high tension jobs act as a deterrent for people to stick to this industry for long time. In addition, the marketing jobs are not being taken with a positive spirit by the society on a large. Research says that nearly 50 percent of those who quit leave the industry (Prakash and Chowdhary 2004). Researchers determine that the decision to complete a distance education course depends on a variety of interrelated factors such as age, marital status, educational level, and gender, which are particular to an individual's context (Morgan, 1999). Other factors that have been investigated as causes of attrition include number of courses and source of financial aid (Parker, 1999).

Objectives of the Study

The study was undertaken with the following objectives:

- ◆ To make sure the personal profile of employees engaged in the distribution of financial products,
- ◆ To investigate the factors influencing employee attrition in the marketing companies,
- ◆ To analyze the employee expectation from the employer to avoid attrition, and
- ◆ To discover the relationship between personal profile of employees and their expectations from the employer.

Research Methodology

Sample and Data

This study involved a sample of 200 employees of financial product marketing companies like private sector banks, life insurance companies, mutual fund companies, brokerage firms undertaking the business of marketing of share market trading, currency trading, and so on. The sample is collected from the employees engaged in the function of distributing financial products like life insurance policies, mutual fund schemes, loans and deposits, portfolio services, share and currency account opening; demat service etc in private sector. This study is conducted in the major cities of Tamilnadu. The sample is chosen by appointing qualified enumerators and time consumed for the study is four months from September 2011 to December 2011. In order to conduct this study in a fruitful manner, the questionnaire is pretested with more than two dozens of employees working in the financial product marketing. Two sets of data have been used to the present study. The first set of data is the primary data. This type of data has been collected from the employees working in the private sector banks, life insurance, mutual fund companies and brokerage firms by distributing through a structured and non-disguised questionnaire. For the purpose of data collection, the questionnaire has been divided into three parts. First part is intended with the questions to get personal profile of the employees and second part is prepared with the questions to ask attrition issues in their job. Third part deals with their expectations from the employer to avoid frequent job rotations. The second set of data used for the study is the secondary data. The secondary data relating to employee attrition, working environment in marketing of financial product, employee's behaviour and attitude are collected from internet sources, books, journals, news papers and reports of various organizations.

Data Analysis

The data collected from the respondents are analyzed as per its contents and quantum. Personal profile of respondents is analyzed with simple percentage analysis. The data collected from the second part of questionnaire has been distinguished on five point summation scale with sufficient dimensions. Marks awarded from 5 to 1 for each dimensions, 5 is for Strongly Agree, 4 is for Agree, 3 is for Neutral, 2 is

for Disagree and 1 is for Strongly Disagree. This part is tested with the employment of factor analysis. In factor analysis large number of variables can be condensed into lesser dimensions and it is used to identify the significant factors affecting attrition of employees. The interrelationship among attrition factors are checked with correlation analysis. The relationship between employee's personal profile and expectations from the working company is tested with the chi-square analysis.

Results and Discussions

Analysis of Respondents Profile

The socio-economic characteristics of investors were analyzed and the results are discussed in the following sub-headings. Table 1 presents the distribution of prominent personal characteristics like gender, age, education, marital status, monthly income, experience and nature of employment. Simple percentage analysis has been used to analysis personal profile.

From the below table, personal profile is clearly analyzed and the results show that about 86.5 percent are males while the rest of 13.5 percent are females. Age of the respondents clearly shows that about 43 percent are in the age group of 21–25 years, 31 percent falls between 26–30 years, followed by 14.5 percent belonging to 31–35 years, eight percent of respondents are in 36–40 years and 3.5 percent are more than 41 years of age. Education of the respondents shows that 17.5 percent of respondents are diploma holders, 39.5 percent of respondents are under graduates, 22 percent are post graduate degree holders and rest 20.5 percent are having qualification of ITI, HSC etc. It is observed from the monthly salary of respondents, 26 percent are getting salary of less than 8,000. 34 percent of respondents are getting salary from 8,001 to 12,000. 21 percent of respondent's salary ranges from 12,001 to 20,000, 11.5 percent of respondents are drawing salary from 20,001 to 25,000. 7.5 percent are getting salary more than 25,001 per month. Marital status of the respondents reveals that 45.5 percent are married

Table – 1: Personal Profile of Respondents

Profile	Characteristics	Frequency	Percentage
Gender	Male	173	86.5%
	Female	27	13.5%
Age	21 – 25	86	43%
	26 – 30	62	31%
	31 – 35	29	14.5%
	36 – 40	16	8%
	41 & Above	7	3.5%
	Education	Diploma	35
	UG	79	39.5%
	PG	45	22.5%
	Others	41	20.5%
Monthly Salary	Below 8,000	52	26%
	8,001 – 12,000	68	34%
	12,001 – 20,000	42	21%
	20,001 – 25,000	23	11.5%
	Above 25,001	15	7.5%

Marital status	Married	91	45.5%
	Unmarried	109	54.5%
Experience	Up to 1 year	32	16%
	1 – 4 years	83	41.5%
	4 – 8 years	62	31%
	8 – 12 years	12	6%
	More than 12 years	11	5.5%
Employment	Off roll	63	31.5%
	Regular	135	67.5%
	Contract	2	1%

(Source: Primary Data)

and 54.5 percent are unmarried category. Experience of the employees is gathered in five intervals: 16 percent of respondents are having experience of less than one year, 41.5 percent are exceeding one year but less than 4 years; 31 percent are having experience between 4–8 years, 6 percent possess experience of more than eight years but less than 12 years and 5.5 percent are having experience of more than 12 years. The nature of employment shows that 31.5 percent are off roll employees, 67.5 percent

are regular employees and only one percent is working on contract basis.

Factor Analysis

Employee attrition is resulted because of several reasons in the company and economy at large. The factors having impact on the employee attrition are identified and measured through the factor analysis. The factors having impact in the attrition of employees are presented in table 2.

Table – 2: Outcome of Factor Analysis

Sl. No.	Responsible Factors	Eigen Value	Variance (%)
1	Work Specific Attrition	8.61	20.16
2	HR Policy of the Organization	6.38	12.40
3	Boss Behaviour with Sub-ordinates	6.01	11.52
4	Prevailing Economic Forces	4.72	7.73
5	Fellow Employees Influence	4.11	4.29
6	Opportunities in the Society	2.15	2.67
		Total Variance	58.77

Employee attrition is resulted because of several reasons; the reasons may be internal or external to the organization. The internal attrition factors are controllable whereas external attrition factors are uncontrollable. Plenty of reasons having attrition in the workplace are segregated into six distinctive dimensions. Here the attrition factors are explained in form of work attrition, human resource policy, boss behaviour, economic forces, employees influence, and opportunities in

the society. Putting together the entire factor account for 58.77 percent of variance, and work specific attrition is the highest attrition factor in employees working in the marketing of financial products. Work specific attrition explains 20.16 percent of variance and has Eigen value of 8.61. The employees are highly reliable on the provision of services and welfare measures of the company. HR policy of the organization occupies 12.40 percent of variance and has

Eigen value of 6.38. Similarly boss behaviour with subordinates (11.52 percent), prevailing economic forces (7.73 percent), fellow employees' influence (4.29 percent), and opportunities in the society (2.67 percent) have impact on the employee attrition.

It could be noted from table 3; work specific attrition is caused several ways in the organization. Marketing executives are the income generating human asset and utilized by assigning target to achieve its objectives. From the list of seven variables, more travel (0.833) is the toughest among

Table – 3: Factor Loadings of Work Specific Attrition

Variables in Work Specific Attrition	Factor Loadings
More Travel	0.833
Concept selling nature of work	0.792
Monthly Target	0.814
Rigorous Competition	0.589
Stress in the Work	0.784
Lack of Scope for self-development	0.767
Lack of Job Security	0.805

(Source: Primary data)

all other attrition factors. Assigning monthly target to get business is the second important factor accounting for employment attrition (0.814). Marketing is target oriented, if an employee failed to achieve his/her target he/she may be warned by issuing performance improvement plan. If this activity continues in the

subsequent month, the employee may be expelled. Hence job security (0.805) plays key role in employee attrition. Followed by that concept selling nature of work (0.792), stress in work (0.784), lack of scope for self-development (0.767), and rigorous competing (0.589) have significant impact on the marketing professional job attrition.

Table – 4: Factor Loadings of Prevailing Economic Forces

Variables in Prevailing Economic Forces	Factor Loadings
Inflation impact in Cost of Living	0.789
More Earnings Opportunities	0.753
Major Economic Depression	0.702
Impact of Fiscal and Monetary Policy	0.565
Political Instability	0.714
Finance Availability to Start Business	0.467

(Source: Primary data)

Economic forces play significant role in the employee attrition, table 4 presents its different dimensions. Inflation impact in cost of living (0.789) is the highest factor loading variable from the total of six variables. Inflation deteriorates the monthly earnings of the employees, if the salary is not sufficient to meet the cost of living, employees can search for new opportunities. Then the existence of more earnings

opportunities (0.753) can affect the employees working decisions. Political instability in the country can give symptoms of economic progress. Industry performance largely depends on the economy and political instability (0.714) issues giving warning signal to shift from one job to another job. Major economic depression (0.702), impact of fiscal and monetary policy (0.565), finance availability with

Table – 5: Factor Loadings of HR Policy of the Organization

Variables in HR Policy of the Organization	Factor Loadings
Low Monetary Benefits	0.841
High Work load	0.787
Excess Working Time	0.710
Lack of Scope for Employee welfare	0.627
Unethical Procedures	0.493
Culture of the Organization	0.528

(Source: Primary data)

banks and financial institutions (0.467) are the essential ingredients in the employee attrition.

Table 5 presents the variables in HR policy of the organization, it explains six variables. Human resource management and development is the prime function in a company to nurture its employees to accomplish its goals. From the list of six variables, low monetary benefits (0.841) attracted highest factor loadings. Low monetary benefit can

exhaust the employees from the company to search for better opportunities. High work load (0.787) is another responsible factor for employee attrition in the organization. The employees are often compelled to work extra time or during weekend and leave days (0.710) can be causes for employee attrition. If the organization failed to fulfill the employee welfare (0.627), bad corporate culture (0.528), and unethical principles and procedures (0.493) account for employee attrition.

Table – 6: Factor Loadings of Boss Behavior with Sub-ordinates

Variables in Boss Behavior with Sub-ordinates	Factor Loading
Autocratic Leadership	0.732
Torturing and Teasing Character	0.639
No Participation in Decision making	0.599
No Recognition and Value	0.688
Differential Treatment	0.637
Frequent Transfers	0.574

(Source: Primary data)

In marketing field employees are managed by their immediate boss. His designation may be in the form of branch manager or team leader. Boss behaviour with their team management plays crucial role in employee attrition. Table 5 presents a list of variables; autocratic leadership (0.732) is the highest influencing factor in this category. No recognition and employee value (0.688) often failed to bring increased turnover. Torturing and teasing character (0.639), differential treatment (0.637), no permission to take decisions, (0.599) and frequent transfers from one place to another

(0.574) give an explanation for employee attrition in this category.

Employee attrition is inclined by fellow workers influence; table 7 presents five important variables. Conflict and dispute among fellow employees (0.749) has big impact on the marketing employees' attrition. Politics among the marketing executives in work place (0.722), co-workers guidance to get another employment opportunity (0.635), interaction of fellow workers (0.547) and mischief of fellow workers (0.526) are responsible for employee attrition.

Table – 7: Factor Loadings of Fellow Employees Influence

Variables in Fellow Employees Influence	Factor Loadings
Conflict and Dispute	0.749
Politics in work place	0.722
Co-workers guidance to get another opportunities	0.635
Interaction of Fellow workers	0.547
Mischief of Fellow workers	0.526

(Source: Primary data)

Table – 8: Factor Loadings of Opportunities in the Society

Variables in Opportunities in the Society	Factor Loadings
New Employment with more Salary	0.748
Opportunities to Start business	0.649
Social Respect on the Job	0.657
Earnings Potential	0.664

(Source: Primary data)

Table 8 shows attrition factors that resulted due to opportunities in the society. New employment opportunities with more salary (0.748) than the current job attract employee to switch over their job to new one. The existence of earnings potential (0.664) in the society has significant impact in the employee attrition. Social respect on the job (0.657) creates attrition to the marketing employee, prevailing opportunities to start business (0.649) impairs attrition. This indicates that the opportunities in the society have an eminent impact on the work place.

Correlation Analysis

With a view test the inter-relationship among the six variable having impact in the employee attrition is tested with the correlation analysis. Table 9 shows the correlation matrix among the attrition factors, which shows a minimum correlation of 0.43 and maximum correlation of 0.71. Work attrition shows minimum correlation with HR policy (0.48) and maximum correlation with fellow employees' influence and employee attrition (0.71). HR policy correlated 0.55 with prevailing economic forces and 0.67 with boss behaviour with the sub-ordinates. Economic forces have low correlation with fellow employees, social opportunities and employee

attrition. Fellow employees influence has moderate correlation with employee attrition and low correlation with social opportunities. The relationship between social opportunities and employee attrition has moderate positive correlation.

Employee Expectation to avoid Attrition

Expectation acts momentous role in the success of an organization, the organization has to satisfy the expectations of employees to bring maximum possible results. In financial products marketing, the employees are selling concepts rather than the products; their job is exposed to more stress. Resolved stress can create attrition in the work place. The several stress factors are identified and the employees shows their expectation such as at par money benefits, good attitude supervisor, training and development, adequate workload, welfare facilities, and job security to avoid attrition. Employees expectations and their personal profile are analyzed with chi-square test.

Testing of Hypothesis

Chi-square test is conducted to find the relationship between the personal profile of the respondents and their

Table - 9: Correlations between Attrition factors

	Work Attrition	HR Policy	Boss Behaviour	Economic Forces	Fellow Employees	Social Opportunitie	Employee attrition
Work Attrition	1.0	0.48	0.51	0.58	0.71	0.67	0.71
HR Policy		1.0	0.67	0.55	0.57	0.56	0.57
Boss Behaviour			1.0	0.49	0.53	0.55	0.54
Economic Forces				1.0	0.44	0.43	0.53
Fellow Employees					1.0	0.48	0.67
Social Opportunities						1.0	0.63

Table – 10: Chi-square Analysis

No relationship between	Degrees of Freedom	Table Value	Calculated Value	Result
Gender and Expectations of employees in the workplace	5	11.070	9.454	Accepted
Age Group and Expectations of employees in the workplace	20	31.410	18.735	Accepted
Monthly Salary Expectations of employees in the workplace	20	31.410	17.582	Accepted
Experience and Expectations of employees in the workplace	20	31.410	23.893	Accepted
Education and Expectations of employees in the workplace	15	24.996	12.526	Accepted

(Source: Primary Data)

expectations in the company. Here, the null hypothesis (H_0) states there is no significant relationship between the personal profile of respondents and their expectation in the workplace. As against to this, the alternate hypothesis (H_1) states there is significant relationship between the personal profile of respondents and their expectation in the workplace.

It could be acknowledged from the table 10 that the calculated Chi-square value is less than table value at five percent level of significant and the null hypothesis is accepted for all cases. Hence there is no significant relationship between personal profile of the respondents and their expectations in the work place.

Conclusion

This study explains that the employee attrition depends on variety of factors associated with the discharge of work and economy wide factors. The respondents profile is investigated by using simple percentage analysis, the majority of employee's profile explained here. 86.5 percent of respondents are male, 43 percent of respondents are falling in the age group of 21-25 years. Majority of respondents (39.5 percent) are undergraduate degree holders, 34 percent of respondents are getting monthly salary of more than Rs.8,001 and less than Rs.12,000. Unmarried respondents (54.5 percent) are more than the married respondents, 41.5

percent of respondents are having experience of less than 4 years but exceed one year. Nature of employment shows 67.5 percent of employees are working as regular employees. Employees work performance is based on the nature of work, superior behaviour, human resource policy of the company, fellow employees influence, opportunities in the society and prevailing economic sources. Factor analysis shows that all the factors are having impact in the employee attrition; it jointly explains 58.77 percent of variance. Work specific attrition alone accounts for 20.16 percent in the total variance explained. Human resource policy of the organization shows 12.40 percent variance, boss behaviour with sub-ordinates comes to 11.52 percent. Subsequently, prevailing economic forces (7.73 percent), fellow employee influence (4.29 percent) and opportunities in the society (2.67 percent). Correlation matrix shows the positive relationship among all the factors. Chi-square test accepts null hypothesis framed with the relationship between personal profile and their expectation to avoid employee attrition. This present study may be an aid to the management in implementing an effective and efficient retention strategy to control the rate of attrition and retain the precious employees.

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Elucidation of Green Audit: Panoramic Vision

Mahesha V.

A b s t r a c t

Most countries today face environmental threats due to the increase in pollution of the atmosphere, water and land. Wildlife habitats continue to be threatened. Water contamination and air pollution are critical problems facing most countries. Environment related problems are linked closely to the rapid growth of population, as well as to technological advancements. Opportunities in environmental law are rapidly expanding, driven by various government regulations and movements by business and industry to reduce environmental liabilities associated with their operations. Government agencies, industries, manufacturing sectors, nuclear stations, waste disposal organizations, consultancies, research organizations, and NGO's offer opportunity in the environmental sector. Green Audit ultimately speaks about corporate responsibility. Scientific research and statistical analysis conducted by Green Audit uncover the truth about statements made by statutory bodies like governments, large multinationals and the military with regard to the health effects of environmental pollution.

Key words: *Green Audit, Green Audit Skills, Green Audit Planning and Green Audit Report.*



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“M an has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well being and he bears a solemn responsibility to protect and improve the environment for present and future generation.”

Since time immemorial, there has been a love hate relationship between man and Nature. Nature has been very benevolent and extends its bounty liberally. However, when exploited too much, it takes back in equal measure what it gives in abundance.

In the name of so called economic development, when nature is exploited to an extent that it can't bear the burden (or the mad race for) economic growth, it crumbles under its own burden. Rapid population increase, dramatic changes in production and consumption patterns and massive rural-to-urban migration

have transformed the way environment and natural resources are used. Ultimately, we are heading towards the collapse of ecological system thereby leading to the doom of the civilization.

Laws and regulations are a major tool in protecting the environment. To put those laws into effect, government agencies create and enforce regulations. Environmental law is a complex and interlocking body of statutes, common law, treaties, conventions, regulations and policies which, very broadly, operate to regulate the interaction of humanity and the rest of the biophysical or natural environment, toward the purpose of reducing or minimizing the impacts of human activity, both on the natural environment for its own sake, and on humanity itself.

Meaning of Green

Green is the colour of nature, fertility and life. The word *green* comes from the Old English word *grænne*, or, in its older form, *græni*. This adjective is closely related to the Old English verb *grôwan* ("to grow, turn green"), which in its wonted usage referred primarily to plants, and goes back into Western Germanic and Scandinavian languages. It is used to describe plants or the ocean. Sometimes it can also describe someone who is inexperienced, jealous, or sick. Several minerals have a green colour, including emerald, which is coloured green by its chromium content. Animals such as frogs, lizards, and other reptiles and amphibians, fish, insects, and birds, appear green because of a mixture of layers of blue and green colouring on their skin. By far the largest contributor to green in nature is chlorophyll, the chemical by which plants photosynthesize. Many creatures have adapted to their green environments by taking on a green hue themselves as camouflage.

Culturally, green has broad and sometimes contradictory meanings. In some cultures, green symbolizes hope and growth, while in others; it is associated with death, sickness, envy, or the devil. The most common associations, however, are found in its ties to nature. Green is also associated with regeneration, fertility and rebirth for its connections to nature.

Recent political groups have taken on the colour as symbol of environmental protection and social justice, and consider themselves part of the Green movement, some naming themselves Green parties. This has led to similar campaigns in advertising, as companies have sold green, or environmentally friendly, products. Apart from this there is Green HR, Green Policy, and Green Building etc.

Green HR is nothing but an environmentally friendly HR practice by reducing the carbon foot print by less printing of paper, video conferencing and interviews, etc.

A Green Policy is a written statement that clearly indicates the position and values of an organization on environmental and sustainability issues.

Green building is one which uses less water, optimizes energy efficiency, conserves natural resources, generates less waste and provides healthier spaces for occupants, as compared to a conventional building.

What is Green Audit?

Green Audit was founded in 1992 as an environmental consultancy and review organization with the aim of monitoring the performance of companies and organizations whose activities might threaten the environment and the health of citizens. Democratic values are threatened when information is kept from the public and all routes of access are controlled. The aim of Green Audit is to give citizens the information they need to be able to question the companies which are destroying the environment we all depend on. It was the worrying recognition that such information is presently suppressed and restricted which provided the impetus for the founding of Green Audit.

Green audit is all about corporate responsibility. It uncovers the truth about statements made by statutory bodies like governments and companies with regard to the effects of environmental pollution. The aim of Green Audit is to review the measures taken by the company to combat pollution. Green audit is defined as an official examination and verification of the effects a company has on the environment. It is also widely known as Environmental Audit.

Green audit can also be described as the inspection of a company to assess the total environmental impact of its activities or of a particular product or process. It covers not only the technical aspects but also the legal aspects. Green audit also checks if the environment laws applicable to a company are complied with.

Green audit also refers to the monitoring of environmental management system of the Unit, checking the status of consent orders, compliance of consent orders, water cess, other legal requirements, industrial data collection regarding product

process, electric consumption, water consumption, raw materials and energy balance etc.

According to the World Bank, environmental audit is a methodical examination of environmental information about an organization, a facility or a site, to verify whether, or to what extent, they conform to specified audit criteria. The criteria may be based on local, national or global environmental standards.

Green Audit Skills

Green audit is highly skill-oriented task. It calls for not only a high level of professional audit skills, but also a deep understanding of environmental issues. The auditor must be

familiar with international treaties and conventions on environmental issues apart from having an excellent grasp of the national policy, strategies and programmes for environmental protection and conservation and climate change control.

Advantages of Green Audit

Next to the environmental advantages green audit clearly has many other advantages. Adopting green audit practices offers businesses and individuals financial and other benefits. Green audit operations achieve better energy efficiency through green initiatives, which financially benefit them, especially when electrical energy is at a premium and energy prices are rising. Also, green audit can contribute to improving a company's

Table 1: Attributes for conducting Green Audit

Sl.No.	Attributes
01	Adequate knowledge in all aspects of auditing and capability to carry out financial compliance and performance audits is required. In other words, the audit team should have a mix of different professional expertise.
02	Comprehensive knowledge of environmental and climate change issues is mandatory.
03	Adequate knowledge of environmental auditing acquired through training followed by practical experience is necessary.
04	An independent and unbiased approach, with aptitude for research is desired.
05	Being an emerging and expanding field of audit, inclination to develop and apply new techniques and methodologies to assess the environmental related performance of the entity, by drawing experience from elsewhere shall be shown.
06	Good human relations and communications skills are essential.

Source: www.xa.yimg.com/kq/groups/2610803/.../Green+audit+book+082611a.do... dated 27th June 2012 @.3.07pm

relationship with important stakeholders like banks, investors and government agencies (Carter, 2004; Carter et al. 2000). These improved relationships can result in economic benefits and thus reduce costs. Furthermore, costs can be reduced by packaging material efficiently. Carter et al (2000) identified that environmental (audit) implementing can improve a company's economic position, by reducing disposal and liability costs and conserving resources. Related to this is the elimination in waste. Carter et al (2000) concluded that lower costs can also result from reduced material waste and the identification and reduction of inefficient processes. Next to initiatives that lead to cost reduction, innovation can lead to new revenues. Maignan et al (2002) state that there is a relation between CSR and the increased innovations because of the

process of seeking alternative environmental efficient processes. The organisational value can increase as well by improving brand image and loyalty. Green audit can be used to gain increased brand image for attracting and keeping both customers and employees, as reputation can be a source of competitive advantage (Carter, 2004). Green labels are a good way of communicating the achievements on green audit to the stakeholders, especially the customers (Hansmann et al, 2004; Maignan et al. 2002).

Disadvantages of Green Audit

Green audit has some disadvantages as well. For implementing new initiatives, investments have to be made. As identified by

McGuire et al (2005) and Carter (2005), cost can come from several sources: training and top management support, establishing environmental protection procedures, implementing software that enhances greenness, executing the move towards e.g. cloud computing or virtualization, investing in sustainable hardware etc. Additionally, concerns for a green audit policy may limit a firm's strategic alternatives.

Green Audit Planning

Good audit planning is an essential pre-requisite for the efficient conduct of the audit and will contribute significantly for the successful and timely completion of the audit.

Planning for green audit should begin with the collection of all required data and information about the selected topic, research on the background, status, visibility and auditability of the subject, and establishing the audit scope, objectives and audit criteria. Other aspects for consideration will include the materiality and risk perceptions to the environment, importance of the environment problem to be addressed and the magnitude of the intended effect on implementing the programme.

A detailed audit plan should be prepared with information about the entity, its objectives and activities, funding pattern, budget documents, press reports and performance indicators.

Table 2: The Audit Plan Inputs

S1.No	Audit Plan Input
01	Description of the environmental issues form the focus of the audit.
02	Description of the entity, its objectives, programmes, environmental commitments and obligations, funding, organizational structure etc is provided.
03	Preliminary analysis of the programme under audit, progress of implementation, status, performance indicators and other criteria is given.
04	Audit objectives, scope, limitations and audit risks, if any are given.
05	Composition of the audit team, recourse to external resources and experts where applicable, audit period and schedule for field visits are known.
06	Suggested areas for close scrutiny, documents and audit evidence are checked, audit methodology (including interviews, questionnaires, statistical surveys) are followed.
07	Expected outputs of the audit with focus on environmental issues,
08	Details of previous audits, and evaluations by outside agencies including environmental experts, and
09	Reference to international and national/regional laws, regulations and conventions etc. are provided.

Source: www.xa.yimg.com/kq/groups/2610803/.../Green+audit+book+082611a.do... dated 27th June 2012 @.3.07pm

Information required for Green Audit

Information on the entity on which green audit is conducted, can be obtained from the following sources –

- Financial statements/policies of the company
- Environment statement
- Environmental clearances obtained by the company from government agencies/regulatory authorities
- Environment policy of the entity
- Rules and regulations governing the company relating to environmental compliance
- Annual Reports
- Internal audit reports of the entity/evaluation reports by external experts, if available.
- Commitments and assurances provided by the entity to government agencies, regulatory bodies etc.

- Materials from civil society organizations, peer review reports, media reports etc.

Compliance of Environmental Laws

Organizations have a legal and moral duty to comply with environmental laws and regulations. Regulatory compliance is society's license to operate. Given the complexity of legal requirements regarding environmental protection this indeed is a significant challenge for organizations. The first difficulty comes from finding out what laws and regulations actually apply; followed by the need to understand how they apply and what needs to be done to comply and ensure compliance on an ongoing basis.

Compliance of environment laws under Green Audit should cover the following: –

- National Environment Laws, Rules and Regulations;
- Notifications issued by the Government and the agencies under them;
- Standards issued by responsible bodies such as those for Environment Impact Assessments (EIA), ISO 14001 for Environment Management System, pollution control orders and standards issued by oversight and implementation bodies such as CPCB etc.;
- Sanctions and permits issued in respect of the entity by the regulatory bodies concerned;
- EIA reports, reviews by independent organisations, company's environment policy etc.

Green Audit Report

The Audit report should be complete, precise, accurate and balanced. It should contain constructive and precise recommendations. It must be persuasive and instrumental in inspiring the managements of entities to take corrective actions. The violations and omissions should also be effectively mentioned in the report. Last but not the least, the contents of green audit report should be easy to understand and free from vagueness or ambiguity, include information which is supported by complete and relevant audit evidence and be independent, objective fair and constructive.

Conclusion

Green audit importance has increased in value due to the global climate change, green building regulations and impending

regulations. Organizations and their stakeholders desire to exploit the green audit advantages related to efficient energy use, improved stakeholder relationships, cost reduction, elimination in waste, revenues from innovation and improved brand image and loyalty. These advantages motivate to effectively implement green initiatives. However, green audit leads to new implementation costs for investing in new techniques and ways of working. In line with this, new security dangers might arise which should be anticipated by organizations.

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Weak Form Efficiency: Indian Stock Market

G.S. David Sam Jayakumar, Bejoy John Thomas, and S. Dawood Ali

Abstract

This study examines the random walk hypothesis to determine the validity of weak-form efficiency of major stock market in India, BSE. The study uses daily observation over the span from 3rd July 2007 to 31st December 2011, comprising a total of 1116 observations. The random walk hypothesis is examined using Auto correlation test, unit root tests, Augmented Dickey-Fuller test and the Runs test. The result of ADF and unit root tests clearly reveals that the null hypothesis of unit root is convincingly rejected in the case of stock market returns of BSE SENSEX and the industry indices. This suggests that the Indian stock markets do not show characteristics of random walk. But the ACF and Unit root test does not show characteristics of random walk. This implies that the Indian stock markets are not weak form efficient. This provides an opportunity to the traders for predicting the future prices and earning abnormal profits on the auto industry. The implication of rejection of weak form efficiency for investors is that they can better predict the stock price movements.

Key words: *Weak form efficiency, Auto correlation, unit root test, Augmented Dickey-Fuller test, Runs test, random walk, BSE SENSEX, Portfolio.*



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The efficient-market hypothesis (EMH) asserts that financial markets are “informationally efficient.” That is, one cannot consistently achieve returns in excess of average market returns on a risk-adjusted basis, given the information publicly available at the time the investment is made. There are three major versions of the hypothesis: “weak,” “semi-strong,” and “strong.” Weak EMH claims that prices on traded assets (e.g., stocks, bonds, or property) already reflect all past publicly available information. Semi-strong EMH claims both that prices reflect all publicly available information and that prices instantly change to reflect new public information. Strong EMH additionally claims that prices instantly reflect even hidden or “insider” information. Since the research contribution of Fama, there is a common observation among analysts, researchers and practitioners in financial economics that

stock prices or returns exhibit random walk behaviour. This randomness, which forms the theoretical basis of the weak-form efficient market hypothesis, states that successive stock prices or returns are independently and identically distributed; that past stock prices have no predictive content to forecast future stock prices. Statistically, the random walk hypothesis is an independence test, which hypothesizes that stock prices are characterized by a white-noise process, a stable first-order autoregressive pattern, a unit root process, or a low correlation dimension. Because financial time series such as stock prices exhibit nonlinearity and time-varying volatility, studies that are more recent tend to employ variance ratio and BDS tests to examine the existence of long-term dependence in stock prices or returns. Over recent decades, there has been a large body of empirical research concerning the validity of the random walk hypothesis or weak-form efficient market hypothesis with respect to stock markets in both developed and developing countries. Empirical research on testing the random walk hypothesis has produced mixed results. For example, most early research is supportive of the weak and semi-strong forms of the efficient market hypothesis in developed capital markets. Recent research, however, has reported that stock market returns are predictable. The empirical evidence is also mixed for the developing countries. These studies on emerging stock markets can be divided into two groups depending on findings. A researcher who finds the evidence to support the weak-form efficiency, and others show the evidence of predictability or rejection of the random walk hypothesis in stock returns. Considering the theoretical and practical significance, the testable implications and conflicting empirical evidence of the random walk hypothesis motivates us to have a fresh look at this issue of weak-form efficiency in the context of an emerging market, namely Indian stock market. This study is potentially interesting case study for a developing capital market, which shares most of the characteristics of a typical emerging market.

Research Problem

The concept of Efficient Market Hypothesis is a vital aspect of Efficient Market Theory. Since new information is publicly available in an unbiased manner it is not possible to earn excess return on the basis of that information. In other words the efficient market hypothesis is a concept of informational efficiency, and refers to market's ability to process information into prices. Capital market, being a vital

institution, facilitates economic development. It is true that so many parties are interested in knowing the efficiency of the capital market. The small and medium investors can be motivated to save and invest in the capital market only if their securities in the market are appropriately priced. The information content of events and its dissemination determine the efficiency of the capital market. That is how quickly and correctly security prices reflect these information show the efficiency of the capital market. In the developed countries, many research studies have been conducted to test the efficiency of the capital market with respect to information content of events. Whereas in India, very few studies have been conducted to test the efficiency of the capital market with respect to stock split announcements, even after these studies have been conducted with different industries with different period. Hence the present study has been conducted in an attempt to test the efficiency on the Indian stock market during the financial crises which took place through out the world during the period 2007–2011. This research analyses the weak form of Efficient Market hypothesis in the context of global crisis impact on Indian Capital Market which took place in the recent years.

Profile of Mumbai Stock Exchange (MSE)

The old Bombay Stock Exchange Ltd. (BSE) and now it is BSE Ltd. is located on Dalal Street, Mumbai and it is the oldest stock exchange in Asia. The equity market capitalization of the companies listed on the BSE was US\$1.63 trillion as of December 2010, making it the 4th largest stock exchange in Asia and the 8th largest in the world. The BSE has the largest number of listed companies in the world. As of December 2010, there are over 5,034 listed Indian companies and over 7700 scrips on the stock exchange, the Bombay Stock Exchange has a significant trading volume. The BSE SENSEX (sensitive index), also called the "BSE 30," is a widely used market index in India and Asia. History: - The Bombay Stock Exchange is the oldest exchange in Asia. It traces its history to the 1850s, when 4 Gujarati and 1 Parsi stockbroker would gather under banyan trees in front of Mumbai's Town Hall. The location of these meetings changed many times, as the number of brokers constantly increased. The group eventually moved to Dalal Street in 1874 and in 1875 became an official organization known as 'The Native Share and Stock Brokers Association.' In 1956, the BSE became the first stock

exchange to be recognized by the Indian Government under the Securities Contracts Regulation Act. The Bombay Stock Exchange developed the BSE Sensex in 1986, giving the BSE a means to measure overall performance of the exchange. In 2000 the BSE used this index to open its derivatives market, trading Sensex futures contracts. The development of Sensex options along with equity derivatives followed in 2001 and 2002, expanding the BSE's trading platform. Historically an open outcry floor trading exchange, the Bombay Stock Exchange switched to an electronic trading system in 1995. It took the exchange only fifty days to make this transition. This automated, screen-based trading platform called BSE On-line trading (BOLT) currently has a capacity of eight million orders per day. The BSE has also introduced the world's first centralized exchange-based internet trading system, BSEWEBx.co.in to enable investors anywhere in the world to trade on the BSE platform. The BSE is currently housed in Phiroze Jeejeebhoy Towers at Dalal Street, Fort area. BSE Indices: - The launch of SENSEX in 1986 was later followed up in January 1989 by introduction of BSE National Index (Base: 1983-84 = 100). It comprised 100 stocks listed at five major stock exchanges in India - Mumbai, Calcutta, Delhi, Ahmedabad and Madras. The BSE National Index was renamed BSE-100 Index from October 14, 1996 and since then, it is being calculated taking into consideration only the prices of stocks listed at BSE. BSE launched the dollar-linked version of BSE-100 index on May 22, 2006. BSE launched two new index series on 27 May 1994: The 'BSE-200' and the 'DOLLEX-200.' BSE-500 Index and 5 Sectorial indices were launched in 1999. In 2001, BSE launched BSE-PSU Index, DOLLEX-30 and the country's first free-float based index - the BSE TECK Index. Over the years, BSE shifted all its indices to the free-float methodology (except BSE-PSU index). BSE disseminates information on the Price-Earnings Ratio, the Price to Book Value Ratio and the Dividend Yield Percentage on day-to-day basis of all its major indices. The values of all BSE indices are updated on real time basis during market hours and displayed through the BOLT system, BSE website and news wire agencies. All BSE Indices are reviewed periodically by the BSE Index Committee. This Committee which comprises eminent independent finance professionals frames the broad policy guidelines for the development and maintenance of all BSE indices. The BSE Index Cell carries out the day-to-day maintenance of all indices and conducts research on development of new indices. Thousands of

companies are listed under different Industries in MSE based on the regulations framed by the SEBI. For the past one decade, Auto Industry, Oil and Gas Industry, Power Industry and Health care Industry are the dominant players in the MSE.

Review of Literature

There were numerous researches conducted in the efficient market hypothesis and here we highlight some selected reviews. P. Srinivasan (2010) examined the random walk hypothesis to determine the validity of weak-form efficiency for two major stock markets in India. The study uses daily observation over the span from 1st July 1997 to 31st August 2010, comprising a total of 3244 observations. The random walk hypothesis is examined using unit root tests namely, Augmented Dickey-Fuller (1979) test and the Phillips-Perron (1988) test. The ADF and PP unit root tests clearly reveals that the null hypothesis of unit root is convincingly rejected in the case of stock market returns of two major indices, viz. S&P CNX NIFTY and the SENSEX. This suggests that the Indian stock markets does not show characteristics of random walk and as such are not efficient in the weak form implying that stock prices remain predictable. The empirical results do not support the validity of weak-form efficiency for stock market returns of Indian stock exchanges. This implies that the Indian stock markets are not weak form efficient signifying that there is systematic way to exploit trading opportunities and acquire excess profits. This provides an opportunity to the traders for predicting the future prices and earning abnormal profits. The implication of rejection of weak form efficiency for investors is that they can better predict the stock price movements, by holding a well diversified portfolio while investing in the Indian stock markets. Similarly, Kabir M. Hassan, Waleed S. Al-Sultan (2003) explained unlike previous studies in stock market efficiency literature on KSE, examines the weak-form efficiency by taking into consideration the institution - all features of the KSE. The authors employed a testing methodology that empowers us to recognize the non-linearity and infrequent trading of the KSE. Furthermore, as robustness check on the predictability of returns, EGARCH and GARCH-M to account for time-varying risk premia in the KSE. Finally, the KSE is weak-form inefficient, even though the efficiency improves towards the end of 1990s. In order to make the KSE informationally more efficient, the policymakers should improve the liquidity

of the market, ensure that participants have access to high quality and reliable timely information, and minimize institutional restrictions on trading on the other hand, Faiq Mahmood, Xia Xinping, Humera Shahid, Muhammed Usman (2006) endeavored to examine the efficiency of Chinese stock market and how the global financial crisis influences the efficiency of Chinese stock market. In order to determine the efficiency of Chinese stock market, efficient market hypothesis of random walk and they divided the data sample into two periods: one is before global financial crisis and other one is during crisis. They applied ADF, DFGLS, PP and KPSS tests on stock market returns in order to check the unit root in data series for both Shenzhen and Shanghai stock exchanges separately. The results of the study shows that Chinese stock market is weak form efficient and past data of stock market movements may not be very useable in order to make excess returns and the global financial crisis has no significant impact on the efficiency of Chinese stock market. Hin Yu Chung (2006) also examined the random walk hypothesis to determine the validity of weak-form efficiency for two major stock markets in China. This study also provides evidence on the existence of the day-of-the-week effect on Chinese stock market. Daily returns from February 21, 1992 to December 30, 2006 for the Shanghai A-share, Shanghai B-share, Shanghai Composite and Shenzhen Composite, and from October 5, 1992 to December 30, 2005 for Shenzhen A-share and Shenzhen B-share are used in this study. The random walk hypothesis is examined using four statistical methods, namely a serial autocorrelation test, a non-parametric runs test, a variance ratio test, and an Augmented Dickey-Fuller unit root tests. The day-of-the-week effect is tested using the ordinary least squares (OLS) regression. The statistical tests are conducted for full sample period and three sub-periods. The empirical results of this study supported previous studies that Chinese stock markets are weak-form inefficient. With the exception of the results from unit root test, results from serial autocorrelation test, runs test and variance ratio test are similar and reject random walk hypothesis for both Chinese stock markets. The results show that the behaviour of B-share displays considerably more violations of the random walk hypothesis than A-share in both Chinese stock markets. Except the B-share market, efficiency also seems to improve after market boom in 2001 for both Chinese stock markets. The result also provides evidence that a day-of-the-week effect is existed on the Shanghai stock exchange, but not on the Shenzhen stock

exchange during the full sample period. Bizhan Abedini (2009) explored some evidence whether Kuala Lumpur Stock Exchange (KLSE) is efficient in the weak form or not for the period January 2006 to June 2008 using daily General Index. The methods used for the study are Autocorrelation Function test (ACF), Runs tests, Variance ratio test and Unit root test Augmented Dickey-Fuller Test (ADF). The result shows that in method ACF, they can accept EMH (Efficient Market Hypothesis) but can't be accepted EMH in methods Runs test and ADF test. The variance ratio test shows that Kuala Lumpur Stock Exchange (KLSE) not supported EMH. Ankit Agarwal (2006) tells us that the efficient market hypothesis has been and continues to be one of the most contentious issues in finance. The study conducted till 1960's and 1970's fairly supported EMH until recent years, when some academicians proved that the theory is not applicable in real markets. This was done either by using statistical tests or by testing with simple technical trading rules. In this two of the most popular trading rules have been used to test the efficiency of Indian stock markets. The trading rules used in this study are moving average rule and trading range break out rule. In the study, it has been proved that the technical trading rules work well in the Indian stock markets even after considering transaction costs. Hence the Indian markets are still not weak form efficient. Nikolay Angelov (2009) explained that the development of capital markets in transition and emerging market economies is a very important prerequisite for fostering their growth as it allows the available funds to be channeled easily to their best investment uses. An important question, in this respect, is how quickly the markets for capital in transition countries like Bulgaria can reach the stage of efficient functioning, so that the economies can fully benefit from their operation. In this paper, we are going to focus on the one that concerns the asset price formation mechanism. The idea of market efficiency, defined above, differs in meaning from the concept of allocation efficiency also frequently attributed to the markets. The latter refers to the way scarce resources are distributed among competing uses and affects the overall increase in social welfare, resulting from the operation of the markets and the exchange among economic agents that takes place in them. The former, on the other hand, deals with the fairness of the asset prices at any point in time and the availability of profit opportunities stemming from improper price formation mechanisms. Why is the presence of market efficiency so important in reality? There are both

theoretical and practical reasons for that. From theoretical point of view, the efficient markets hypothesis provides some of the assumptions upon which most of the asset pricing models are built. These include the “no arbitrage” argument and the random walk processes for the evolution of the prices of the underlying assets, conjectured by some derivatives pricing models. If, in reality, it turns out that markets are not efficient, then finance professionals will not be able to rely on the correctness of the asset prices derived from such models. Furthermore, new pricing models would have to be developed to take into account the specific sort of inefficiency present in the financial market under investigation. From practical point of view, the violation of the market efficiency might imply the availability of (almost) risk less profit opportunities. They can be seized by devising a proper trading strategy which extracts signals from the incoming news to determine the right moment to buy/sell assets on the inefficient market. Kian-Ping Lim (2000) provided a systematic review of the weak-form market efficiency literature that examines return predictability from past price changes, with an exclusive focus on the stock markets. Their survey showed that the empirical studies examine whether the stock market under study is or is not weak-form efficient in the absolute sense, assuming that the level of market efficiency remains unchanged throughout the estimation period. However, the possibility of time-varying weak-form market efficiency has received increasing attention in recent years. We categorize these emerging studies based on the research framework adopted, namely non-overlapping sub-period analysis, time-varying parameter model and rolling estimation window. An encouraging development is that the documented empirical evidence of evolving stock return predictability can be rationalized within the framework of the adaptive markets hypothesis. Korkmaz (2001) explained in his study, that the efficiency concept was emphasized. Weak Form Market Efficiency of Efficient Market Hypothesis was tested in Istanbul Stock Exchange (ISE). For this purpose, an analysis was taken up by selecting two indices from Istanbul Stock Exchange. These indices are ISE 100 and ISE Industrial indices. It was concluded after the implementation that ISE was “Weak Form Efficient.” Unit root and co-integration tests were used to be analyzed the efficiency in our study. Following the co-integration test implemented, it was resolved that there was not a co-integration among indices in the long term. Ibrahim Awad (2009) examined the

efficiency of the Palestine Security Exchange (PSE) at the weak-level for 35 stocks listed in the market by using daily observations of the PSE indices: Alquds index, general index, and sector indices. Parametric and nonparametric tests for examining the randomness of the PSE stock prices were utilized. The parametric tests include serial correlation test, and Augmented Dickey-Fuller (ADF) unit root tests. The nonparametric tests include runs test, and Phillips-Peron (PP) unit root test. The study utilized nonparametric tests for investigating the efficiency of the PSE at the weak level, especially, the results of Jarque-Bera test for normality showed that the daily returns of the PSE are not normally distributed. The serial correlation tests and the runs tests both revealed that the daily returns are inefficient at the weak-form. Also, the unit root tests (Augmented Dickey-Fuller (ADF) unit root test and Phillips-Peron (PP) unit root test) suggest the weak-form inefficiency in the return series. However, the PSE is inefficient at the weak level; as a result, this is likely to be evidence that the prudent investor who deals with the PSE will achieve abnormal returns using historical data of stock prices, and trading volume. Andrew Worthington (1996) investigated the weak-form market efficiency of Asian equity markets. Daily returns for ten emerging (China, India, Indonesia, Korea, Malaysia, Pakistan, the Philippines, Sri Lanka, Taiwan and Thailand) and five developed markets (Australia, Hong Kong, Japan, New Zealand and Singapore) are examined for random walks using serial correlation coefficient and runs tests, Augmented Dickey-Fuller, Phillips-Perron and Kwiatkowski, Phillips, Schmidt and Shin unit root tests and multiple variance ratio tests. The serial correlation and runs tests concluded that all of the markets are weak-form inefficient. The unit root tests suggest weak form efficiency in all markets, with the exception of Australia and Taiwan.

Objectives of the Study

The main objective of this study is to examine whether the major Indian stock market BSE is weak-form efficient over the period 2007-2011. The Purpose of this study is also to find out whether Indian stock returns violate the random walk hypothesis. This study applies a classical framework of testing market efficiency, to determine whether or not the time series predictability in Indian stock returns violate the random walk model, which maintains that past stock return changes cannot be used to predict future stock returns.

Selection of Industry

Examining the efficient market hypothesis in its weak form in the context of Indian stock market being the objective, leading stock exchange in India, BSE was selected because of their undoubted popularity across the globe so as to represent the Indian stock market. Under the BSE, four top industry indices were selected namely Automobile, Oil and Gas, Power, Healthcare. These industries were selected keeping in mind that these industries were considered to have steady growth for the past five years and will also continue to grow in the future to come.

Description of Data Sample

In this study we calculate daily returns using daily index values for the Mumbai Stock Exchange (BSE). The data, obtained from data Stream, are collected on basis of the daily closing prices for weekdays (Mondays to Fridays) between the period July 2007 and December 2011.

These four of the BSE stock market indices are chosen because they are the most authoritative statistical indices used by domestic and overseas investors in measuring the performance of Indian securities market. Since the Indian

Notations	Index	Sample Period	Observations
BSESN	BSE Sensex Index	03.07.2007 – 31.12.2011 1116	
BSEAT	BSE Auto Index		
BSEOG	BSE Oil and Gas Index		
BSEPW	BSE Power Index		
BSEHC	BSE Healthcare Index		

stock market has experienced major structural changes because of the global financial changes with the potential for affecting market efficiency, we divide our chosen sample period into three following sub-periods of differing market environments: 1) July 3rd, 2007 – December 31st, 2008 periods during which the Indian stock grew significantly in size and number, and which is known as the Indian stock market boom; 2) January 1, 2009 – June 30th, 2010 periods during which the Indian stock market went a recession during the global financial crises; 3) July 1st, 2010 - December 30th, 2011 periods after market crash. Stock exchanges are closed for trading on weekends and this may appear to be in contradiction with the basic time series requirement that observations be taken at a regularly spaced intervals. The requirement however, is that the frequency be spaced in terms of the processes underlying the series. The underlying process of the series in this case is trading of stocks and generation of stock exchange index based on the stock trading, as such for this study the index values at the end of each business day is appropriate. We believe that the sample of this study provides us with a greater variety of information, which should reflect the dramatic changes that have taken place in Indian securities sector in the past five years.

Data Analysis with Hypotheses

The data which was collected was used in order to find out if the Indian stock market followed a random walk pattern or weak form efficiency. Therefore in order to check the above stated time series analysis where used to determine a result. The tests which were used in the time series analysis includes the test of Normality test, Descriptive statistics, Auto Correlation Function, Augmented Dickey Fuller test and Runs test. For the data analysis Gnu Regression, Econometrics and Time-series Library (GRET version 1.9) was used. The description of the time series techniques with specific hypothesis are given below. The main objective of this study is to examine whether the Indian stock market follows a random walk or is weak form efficient. Accordingly, the hypothesis of the study is:

H0: The Indian stock market follows a random walk/ is a weak-form efficient.

H1: The Indian stock market does not follow the random walk.

Statistical Tests for Market Efficiency

In this study, we use the following statistical methods, namely a serial correlation test, a runs test, and an Augmented Dickey-Fuller unit root test to examine market efficiency. The data is subjected to a serial correlation test, a non-parametric runs test to determine the level of dependency among successive returns of Chinese stock market. The non-parametric run test is one of the most well known earlier tests of the random walk hypothesis, which are based on the test of IID assumptions of the random walk increments, while the serial correlation tests are based on the test of the weakest version of the random walk, RW3. Test for unit roots are also used to determine if the series is difference or trend non-stationary as it is a necessary condition for random walk. These statistical tests are discussed more closely in each following sub-sections.

Auto Correlation

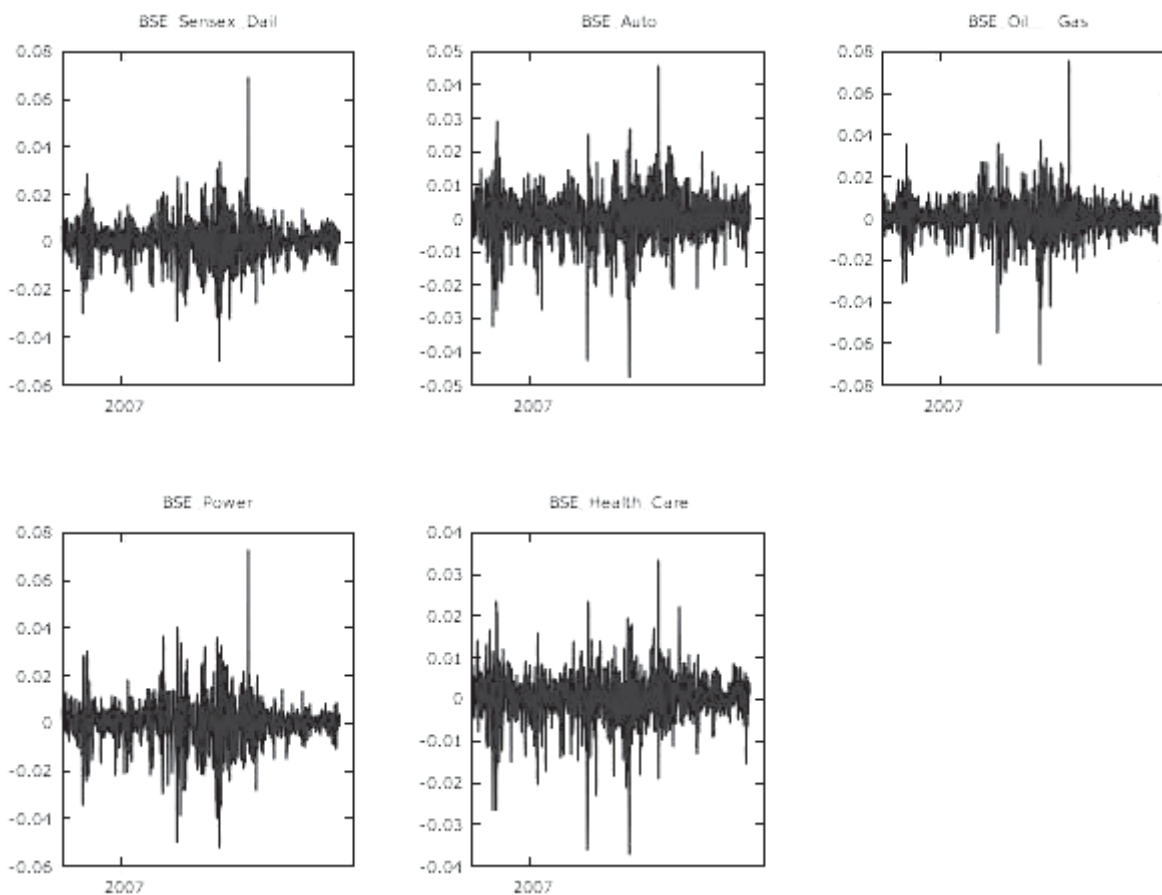
As noticed in the literature, a serial correlation test is the most commonly used as the first tool for randomness. Under the weakest version of the random walk (RW3), the increments or first-differences of the level of the random walk is uncorrelated at all leads and lags. Serial correlation test measures the correlation coefficient between a series of returns and lagged returns in the same series, whether the correlation coefficients are significantly different from zero. The hypothesis for the Auto Correlation Test is as follows:

- $H_0: \rho_k = 0$ (price changes are independent).**
- $H_1: \rho_k \neq 0$ (price changes are not independent)**

Unit Root Test

The subsequent research about the market efficiency has

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AUTO INDUSTRY

Table 1

Sl.No	Test name	Type	Period 1 July' 06 – Dec' 07 n = 373	Period 2 Jan 08 – June' 09 n = 362	Period 3 July' 09 – Dec' 10 n = 374
1	Normality test	Doornik – Hansen test Shapiro – Wilk W Lilliefors test Jarque – Bera test	27.24 0.97 0.06 68.44	82.008 0.964 0.059 163.72	33.75 0.97 0.05 43.19
2	Descriptive statistics	Mean Minimum Maximum Standard deviation Co-efficient of variation	0.0002 -0.028 0.015 0.006 29.001	-0.0002 -0.05 0.04 0.009 36.49	0.0009 -0.02 0.02 0.006 6.882
3	Optimal Lag length	Akaike criterion Schwarz Bayesian criterion Hannan – Quinn criterion	-41.28(2) -40.89(1) -41.12(1)	-36.96(1) -36.55(1) -36.80(1)	-43.12(1) -42.73(1) -42.96(1)
4	ACF	Auto correlation function Q – static p-value	0.07 1.98 >0.05	0.22*** 18.23 <0.01	0.10** 4.14 <0.05
5	ADF test	With constant With constant & trend	Tau value (-17.88) Tau value (-17.86)	Tau value (-15.10) Tau value (-15.34)	Tau value(-17.39) Tau value(-17.44)
6	Runs test	Test of independence	Z-score (-0.53)	Z-score (-2.13)	Z-score (1.02)
			p-value<0.01 p-value<0.01 p-value<0.01 p-value<0.01	p-value<0.01 p-value<0.01 p-value<0.01 p-value<0.01	p-value<0.01 p-value<0.01 p-value<0.01 p-value<0.01
			p-value>0.05	p-value<0.05	p-value>0.05

OIL AND GAS INDUSTRY
Table 2

Sl.No	Test name	Type	Period 1 July' 06 – Dec' 07 n = 373	Period 2 Jan' 08 – June' 09 N = 362	Period 3 July' 09 – Dec' 10 n = 374
1	Normality test	Doomik – Hansen test Shapiro – Wilk W Lilliefors test Jarque – Bera test	35.57 0.97 0.07 46.64	120.4 0.957 0.052 248.4	14.36 0.989 0.049 19.96
2	Descriptive statistics	Mean Minimum Maximum Standard deviation Co-efficient of variation	0.001 -0.023 0.027 0.007 6.711	-0.0004 -0.07 0.08 0.01 34.17	0.0001 -0.03 0.02 0.005 46.626
3	Optimal Lag length	Akaike criterion Schwarz Bayesian criterion Hannan – Quinn criterion	-41.28(2) -40.89(1) -41.12(1)	-36.96(1) -36.55(1) -36.80(1)	-43.12(1) -42.73(1) -42.96(1)
4	ACF	Auto correlation function Q – static p-value	0.03 0.35 >0.05	0.09* 3.24 <0.10	0.01 0.07 >0.05
5	ADF test	With constant With constant & trend	Tau value (-18.68) Tau value (-18.79)	Tau value (-17.25) Tau value (-17.32)	Tau value(-19.05) Tau value(-19.03)
6	Runs test	Test of independence	Z-score (-0.007)	Z-score (-0.26)	Z-score (-0.41)
			p-value <0.01 p-value <0.01	p-value <0.01 p-value <0.01	p-value <0.01 p-value <0.01 p-value <0.05 p-value <0.01
			p-value >0.05	p-value >0.05	p-value >0.05

POWER INDUSTRY
Table 3

Sl.No	Test name	Type	Period 1 July' 06 – Dec' 07 n = 373	Period 2 Jan' 08 – June' 09 N = 362	Period 3 July' 09 – Dec' 10 n = 374
1	Normality test	Doomik – Hansen test Shapiro – Wilk W Lilliefors test Jarque – Bera test	67.34 0.94 0.08 155.8	79.07 0.96 0.05 142.6	95.93 0.958 0.075 220.3
2	Descriptive statistics	Mean Minimum Maximum Standard deviation Co-efficient of variation	0.001 -0.030 0.037 0.007 6.379	-0.0005 -0.05 0.07 0.01 23.27	0.004 -0.02 0.02 0.005 108.49
3	Optimal Lag length	Akaike criterion Schwarz Bayesian criterion Hannan – Quinn criterion	-41.28(2) -40.89(1) -41.12(1)	-36.96(1) -36.55(1) -36.80(1)	-43.12(1) -42.73(1) -42.96(1)
4	ACF	Auto correlation function Q – static p-value	0.17*** 11.35 <0.01	0.07 1.95 >0.05	0.02 0.30 >0.05
5	ADF test	With constant With constant & trend	Tau value (-14.26) Tau value (-14.34)	Tau value (-17.60) Tau value (-17.82)	Tau value(-18.77) Tau value(-18.76)
6	Runs test	Test of independence	Z-score (-1.65)	Z-score (-1.68)	Z-score (-0.99)
			p-value >0.05	p-value >0.05	p-value >0.05
			p-value <0.01 p-value <0.01	p-value <0.01 p-value <0.01	p-value <0.01 p-value <0.01

HEALTH CARE INDUSTRY
Table 4

Sl.No	Test name	Type	Period 1 July' 06 – Dec' 07 n = 373	Period 2 Jan' 08 – June' 09 N = 362	Period 3 July' 09 – Dec' 10 n = 374
1	Normality test	Doomik – Hansen test Shapiro – Wilk W Lilliefors test Jarque – Bera test	30.83 0.96 0.08 90.4	83.33 0.95 0.06 216.4	61.52 0.978 0.048 95.13
2	Descriptive statistics	Mean Minimum Maximum Standard deviation Co-efficient of variation	0.0003 -0.02 0.016 0.005 12.46	-0.0002 -0.04 0.03 0.008 29.99	0.0007 -0.016 0.022 0.004 5.62
3	Optimal Lag length	Akaike criterion Schwarz Bayesian criterion Hannan – Quinn criterion	-41.28(2) -40.89(1) -41.12(1)	-36.96(1) -36.55(1) -36.80(1)	-43.12(1) -42.73(1) -42.96(1)
4	ACF	Auto correlation function Q – static p-value	0.01 0.10 >0.05	0.040 0.568 >0.05	0.07 2.3 >0.05
5	ADF test	With constant With constant & trend	Tau value (-18.90) Tau value (-18.87)	Tau value (-11.80) Tau value (-11.85)	Tau value(-17.87) Tau value(-17.87)
6	Runs test	Test of independence	Z-score (-0.48)	Z-score (-1.1)	Z-score (-1.05)
			p-value >0.05	p-value >0.05	p-value >0.05
			p-value <0.01 p-value <0.01 p-value <0.01	p-value <0.01 p-value <0.01 p-value <0.01	p-value <0.01 p-value <0.01 p-value <0.01

used a new methodology to test the random walk nature of stock prices that is known by unit root test. This methodology developed by Dickey and Fuller (1981) is used to examine the stationary of the time series. The unit root test is designed to discover whether the series is difference-stationary (the null hypothesis) or trend-stationary (the alternative hypothesis) (Campbell et al. 1997, 65). A series with unit root is said to be non-stationary indicating nonrandom walk. The most commonly used test to examine the existence of a unit root is the Dickey-Fuller test. This unit root test provides evidence on whether the stock prices in Chinese stock market follow a random walk. Therefore, it is also a test of the weak-form market efficiency.

H0: There is a presence of unit root (non stationary)

H1: No unit root (Stationary)

Runs Test

A runs test is another common approach to test for statistical independencies or RW1, but unlike autocorrelation coefficient, it does not require returns to be normally distributed. The runs test is a non-parametric test that is designed to examine whether successive price changes are independent. The test is based on the premise that if a series of a data is random, the observed number of runs in the series should be close to the expected number of runs.

H0: No of observations = No of expected(r)

H1: No of observations \neq No of expected(r)

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Discussion

Table 1 shows the results of the BSE AUTO industry for the periods 1, 2, and 3. It indicates that none of these return series is well approximated by the normal distribution. But we assume that the returns are normally distributed. While on the other hand ACF test Cleary gives us a picture that period 2 and 3 are weak forms inefficient. While considering the ADF test, it indicates that all the three periods are weak form inefficient. The runs test also indicates weak form inefficiency for the period 2 of the BSE AUTO industry index. Hence it can be concluded that the above tests prove that the investors have a fruitful opportunity to earn excess profit by investing in the auto industry. Similarly, Table 2

shows the results of the BSE OIL and GAS industry for the periods 1, 2, and 3. It indicates that none of these return series is well approximated by the normal distribution. But we assume that the returns are normally distribute. While on the other hand ACF test Cleary gives us a picture that period 2 is weak form inefficient. While considering the ADF test, it indicates that all the three periods are weak form inefficient. The runs test indicates weak form efficiency for the period 1, 2, and 3 of the BSE OIL and GAS industry index. Hence the tests prove that the investors have no opportunity to earn excess profit by investing in the oil and gas industry. Table 3 shows the results of the BSE POWER industry for the periods 1, 2, and 3. It indicates that none of these return series is well approximated by the normal distribution. But we assume that the returns are normally distributed. While on the other hand ACF test Cleary gives us a picture that period 1 is weak form inefficient. While considering the ADF test, it indicates that all the three periods are weak form inefficient. The runs test also indicates weak form inefficiency for the period 2 of the BSE POWER industry index. Hence it can be concluded that the above tests prove that the investors have no opportunity to earn excess profit by investing in the power industry. Table 4 shows the results of the BSE HEALTH CARE industry for the periods 1, 2, and 3. It indicates that none of these return series is well approximated by the normal distribution. But we assume that the returns are normally distributed. While on the other hand ACF test Cleary gives us a picture that period 1, 2 and 3 are weak forms efficient. While considering the ADF test, it indicates that all the three periods are weak form inefficient. The runs test also indicates weak form efficiency for the period 1, 2, and 3 of the BSE HEALTH CARE industry index. Hence it can be concluded that the above tests prove that the investors have no fruitful opportunity to earn excess profit by investing in the healthcare industry. Table 5 shows the results of the BSE SENSEX index for the periods 1, 2, and 3. It indicates that none of these return series is well approximated by the normal distribution. But we assume that the returns are normally distribute. While on the other hand ACF test Cleary gives us a picture that period 1, 2 and 3 are weak form efficient. While considering the ADF test, it indicates that all the three periods are weak form inefficient. The runs test also indicates weak form efficiency for the period 1, 2, and 3 of the BSE SENSEX index. Hence it can be concluded that the above tests prove that the investors have no fruitful

opportunity to earn excess profit by investing in the BSE Sensex.

Suggestion and Conclusion

Theoretical basis of the weak-form efficient market hypothesis states that successive stock prices or returns are independently and identically distributed that past stock prices have no predictive content to forecast future stock prices. Following the theoretical literature, empirical studies on the weak-form efficient market hypothesis in emerging markets have been intensively investigated, especially in recent years. The empirical evidence obtained from these studies is mixed. Indeed, some studies show results of evidence empirical that reject the null hypothesis of weak-form market efficiency, while others report evidence to support the weak-form efficiency. Based on the theoretical and empirical literature that is reviewed in this study, the weak form market efficiency in the context of an emerging market, namely Indian stock market is investigated. This study examines the random walk hypothesis and tests the weak-form efficiency of major stock market in India using daily data of five BSE index series from the period 2007 to 2011. Indian stock markets have experienced tremendous changes during this period. Therefore, we have examined the weak-form efficient market hypothesis over three sub-periods in order to analyze whether the Indian stock market exhibits a trend towards increased efficiency over time. Three different statistical methods, namely a serial correlation test, a runs test, and an Augmented Dickey-Fuller unit root tests are employed in this study. The results of this study indicate that stock returns in Indian stock market do not behave in a manner consistent with the weak – form of efficient market hypothesis. The Augmented Dickey – Fuller unit root test shows there is no existence of a unit in all five index series namely BSE SENSEX, BSE AUTO, BSE OIL and GAS, BSE POWER, BSE HEALTHCARE. The results obtained from the auto correlation, shows evidence of a non-random walk pattern in BSE AUTO (period 2 and 3), BSE OIL and GAS (period 2), BSE POWER (period 1) where the other index series shows some weak form efficiency. The runs test shows some weak form efficiency in all the index series except a few for some particular periods such as the BSE AUTO (period 2). This suggests that the Indian stock markets does not show characteristics of random walk and as such are not efficient in the weak form implying that stock prices remain predictable. While we are taking a look at the industries

index series, the findings state that there is a good opportunity for the investors to invest in the following industry such as the Automobile Industry, in India because the results give a clear picture that the above industries do not follow a random walk pattern and are not weak form efficiency. Since the auto industry is not weak form efficient the investors have an opportunity to earn excess profits by investing in these industries. This implies that the auto industry is not weak form efficient signifying that there is systematic way to exploit trading opportunities and acquire excess profits. This provides an opportunity to the traders for predicting the future prices and earning abnormal profits. The implication of rejection of weak form efficiency for investors is that they can better predict the stock price movements, by holding a well-diversified portfolio while investing in the Indian stock markets. For all the other industries the ADF implies that it is weak form inefficient, which gives us a clear picture that the other industries also can be considered that it's weak form inefficient where the investor can earn profit up to a level. Further research can be constructed to investigate whether the Indian stock market is weak-form efficient using weekly or monthly data. Alternatively, using the largest and liquid stocks might have more power to detect the weak-form efficiency of Indian stock market. Another fruitful area of research can be testing whether any trading rules can make profitable investment strategy for the test of weak-form of efficient market hypothesis. Finally, possible sources of calendar anomalies could be also investigated.

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Impact of Fluctuation: Stock / Forex / Crude Oil on Gold

Vikram K. Joshi

A b s t r a c t

Gold which traditionally viewed as a safe haven in uncertain times, hit record highs in post-2000. The current bull-run in gold has lasted for a decade from ₹ 4473.60 per 10 gms in 2000-01 to record highs of ₹ 14,578.08 per 10 gms in 2009-10. Before 2000, the demand for gold was elastic. However, now the gold market seems entirely inelastic, as the appetite for the metal is high even as the prices move higher. In this paper the efforts are made to analyze the reasons for rising gold demand and prices in Indian market and its relationship with the forex market, the fluctuations in the stock market and the soaring crude oil price in the international market.

Key words: Stock Market, BSE SENSEX, Gold prices, FOREX Market, Crude oil prices. dwells on the rise in price of the yellow metal.



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In India, gold standard was treated as one of the most important measures or instruments of monetary system. The gold standard ceased to function a long time back but gold bullion still retains some of its old halo. Gold bullion still figures in the discussions of the monetary system. Gold bullion is prized even in the age of demat trading and plastic money, because of its inherent quality as the original currency for trading, and therefore, a symbol of financial security. Paper money has been known to become worthless in a matter of days and stocks in a matter of hours. But gold hardly loses its glitter. Since 1980s, the perception of gold has slowly changed from an asset that must be hoarded to guard against a rainy day to a commodity that can be traded. This may be one of the reasons why India is the world's largest consumer of gold, importing around 800 tonnes annually.

As gold which traditionally is viewed as a safe heaven in uncertain times, hit record highs in post-2000. The current

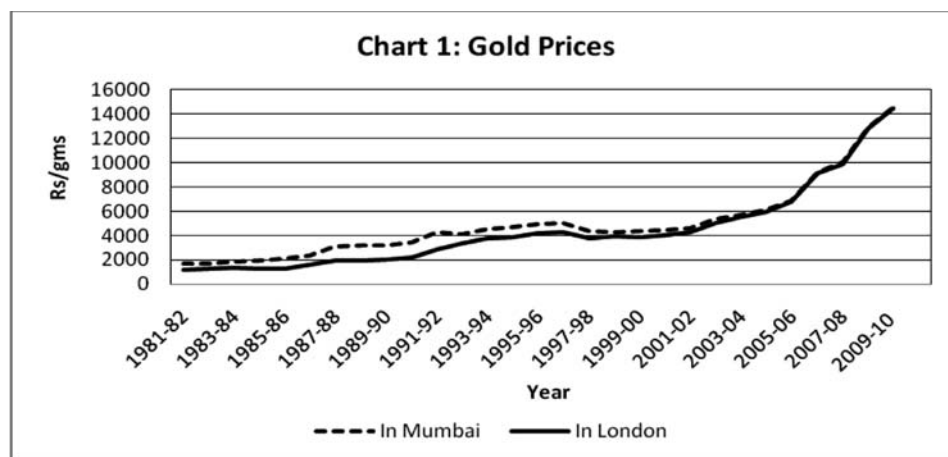
bull-run in gold has lasted for a decade from ₹ 4473.60 per 10 gms in 2000-01 to record highs of ₹ 14,578.08 per 10 gms in 2009-10 as can be seen from table 1. It is seen that, before 2000, the demand for gold was elastic, however,

now the gold market seems entirely inelastic, as the appetite for the metal is high even as the prices move higher. The table below shows the gold prices during 1980-81 to 2009-10 in India and London.

Table 1: Prices of Gold

Year	Mumbai Gold Prices (₹ per 10 gms)	London Gold Prices (₹ per 10 gms)	Spread (in ₹)	Percentage rise during decade
1980-81	1522.44	1484.67	37.76	112.11 %
1981-82	1719.17	1209.94	509.23	
1982-83	1722.54	1250.38	472.16	
1983-84	1858.47	1342.06	516.41	
1984-85	1983.92	1293.78	690.13	
1985-86	2125.47	1289.76	835.71	
1986-87	2323.49	1577.02	746.46	
1987-88	3082.43	1912.54	1169.89	
1988-89	3175.22	1960.38	1214.84	
1989-90	3229.33	2063.01	1166.32	
1990-91	3451.52	2164.26	1287.26	36.05 %
1991-92	4297.63	2841.07	1456.55	
1992-93	4103.66	3332.95	770.71	
1993-94	4531.87	3766.28	765.58	
1994-95	4667.24	3864.15	803.09	
1995-96	4957.60	4188.58	769.03	
1996-97	5070.71	4283.94	786.77	
1997-98	4347.07	3775.92	571.15	
1998-99	4268.00	3952.00	316.00	
1999-00	4393.56	3896.66	496.90	
2000-01	4473.60	4007.79	465.81	231.80 %
2001-02	4579.12	4260.24	318.88	
2002-03	5332.36	5062.11	270.25	
2003-04	5718.95	5573.53	145.41	
2004-05	6145.38	5976.14	169.24	
2005-06	6900.56	6790.26	110.30	
2006-07	9240.32	9137.79	102.53	
2007-08	9995.62	9897.12	98.50	
2008-09	12889.74	12816.81	72.94	
2009-10 (Till May)	14578.08	14449.29	128.79	

Source: Compiled and Computed from Economic & Political Weekly, EPW Research Foundation, Current Statistics, Jan 5-11, 2008, p.73 & http://rbidocs.rbi.org.in/rdocs/Publications/PDFs/178T_HB150909.pdf (for 2007 onwards data).



From the table it can be seen that the prices of gold have increased by 112.11 percent during 1980-81 to 1989-90, 36.05 percent during 1989-90 to 1999-00 and again it rose sharply by 231.80 percent during 1999-00 to 2009-10. The percentage rise in gold prices during 1989-90 to 1999-00 was less as compared to the previous decade and last decade. The prices of gold plummeted sharply during 1996 to 1999 due to the following reasons. Firstly, the dollar price of gold has gone by 25 percent in the same period. Secondly, the Indian gold import regulations have been

liberalized and some benefits of globalization have been passed on to the consumers in the form of lower rupee prices.

The higher demand for gold in India is the reason why prices of gold in India are higher as compared to the international market as can be seen from the chart above. (Chart 1).

The following table shows the consumer demand of gold in India and world by use during 2001 to 2009.

Table 2: Gold: Consumer Demand – India and World by Use

Year	World	India	Percentage to world total
2001 (Jan – Dec)	3370.1	702.0	20.8
2002 (Jan – Dec)	3026.4	547.3	18.1
2003 (Jan – Dec)	2848.4	568.7	20.0
2004 (Jan – Dec)	2236.0	617.7	27.6
2005 (Jan – Dec)	3098.5	721.6	23.3
2006 (Jan – Dec)	2662.0	715.5	26.9
2007 (Jan – Dec)	2810.9	769.2	27.4
2008 (Jan – Dec)	3048.2	712.6	23.4
2009 (Jan – Dec)	2423.5	480.0	19.8

Source: 1. Economic and Political Weekly, EPW Research Foundation, Current Statistics, Jan 5-11, 2008, p.73. 2. http://www.gold.org/assets/file/pub_archive/pdf/GDT_Q4_2009.pdf (Annual Report RBI February 2010), and 3. <http://www.scribd.com/doc/14037125/Gold-commodity-profile#fullscreen:on> (for 2007 figures).

From the tables it can be seen that the consumption of gold in India is very high and India is largest consumer of gold in the entire world. The import of gold was 715.5 tonnes in the year 2006 and it rose to 769.2 tonnes during the year 2007 (Jan to June) i.e., rise of around 7.50 percent and was expected to reach 880 tonnes by the end of the year 2010 which represents the growth of 25.35 percent as compared to the year 2001. Also if we look at the consumption of gold in India as compared to the world consumption it is appreciably high and lies in the range of 18 percent to 27.6 percent. Thus, when one thinks of gold one think of India – world's largest consumer of gold.

Review of Literature

Wang M L et al (2010) have studied the relationship between the fluctuations in crude oil prices, gold price and exchange rate of US dollar with various currencies on the stock price indices of the US, Germany, Japan, Taiwan and China for the period 2006 to 2009. The results show that there exists a significant relationship between gold prices and the exchange rate. Toramana C. et al (2011), have analyzed the factors affecting gold prices in USA for the period 1992 to 2010. The factors considered for the study are Oil prices, USA exchange rate, USA inflation rate and USA real interest rates. They have found highest negative correlation between gold prices and oil prices in USA. Also the study proved that there exists a high degree of correlation between gold prices and USA dollar. The other variables have no significant relationship with the gold prices. Kalra N. et al (2012), has carried out the research to study for the period 2008 to 2011 to analyze the impact of various global and domestic factors on the Indian stock market. They have shown that there exists a positive and significant relationship of gold prices with BSE SENSEX.

In Indian context, the rally in gold prices were triggered by the global trend which normally sets prices in domestic bullion markets, is closely linked with the forex market and moves in the opposite direction of the US dollar. Secondly, the soaring crude oil price is another factor which pushes demands and prices of gold. Thirdly, the fluctuation in the stock market, which causes economic uncertainty, favours the investment demand of gold. In this paper the impact of BSE SENSEX, FOREX and crude oil prices on movement of prices of gold in India are analyzed through an econometric enquiry.

Data Collection

The data are collected for the fluctuations in the BSE SENSEX, gold prices and value of Rupees/Dollar during 30th January 2008 to 14th March 2008 and 3rd June 2010 to 4th August 2010. The above period is selected to study the relationship between the SENSEX, gold prices and the value of Rupees/Dollar as the SENSEX was relatively volatile and the value of Rupees/Dollar was relatively stable during the first period and the SENSEX was relatively stable and the value of Rupees/Dollar was relatively volatile during the second period. From the table 3 and chart 2, it can be seen that when SENSEX falls gold price increases and vice versa, but it is not true always. Whenever there are high fluctuations in the market, people prefer to make investment in gold and seasonal demand is the another factor. Also when the value of Rupees/Dollar appreciates demand for gold increases and vice versa as can be seen from chart 3. When dollar depreciates in value in international market, demand for gold increases in our country. Thus, it seems that there exists an inverse relationship between value of dollar and gold prices (and also demand) in India. Finally, the soaring crude oil price in international market increases the demand and price of gold in the country. This is evident from the fact that soaring crude oil prices and falling dollar pushed gold to an all-time high of Rs. 13,030 on March 14, 2008. This paper analyses these facts with the help of an econometric enquiry about whether these facts hold true statistically or are mere coincidences at different occasions.

Let us consider the following tables showing the comparison between BSE SENSEX, Gold prices and Value of Rupees/Dollar during 30th Jan to 14th Mar 2008 and 3rd June to 4th August 2010 and the comparison between BSE SENSEX, Gold prices, Value of Rupees/Dollar and Crude Oil Prices during the same period (Table 3 and Table 4).

As seen in Chart 2 and Chart 4, when SENSEX – Relatively volatile; Value of Rupees/Dollar – relatively stable and Crude Oil Prices – relatively volatile, the trend lines of SENSEX and gold prices are going in opposite direction which shows an inverse relationship between SENSEX and gold prices. If we compare the trend lines of gold prices and value of Rupees/Dollar, the trend lines go in the same direction which show that there exists a direct relationship between gold prices and value of Rupees/dollar. Also, the

**Table 3: Comparison between BSE SENSEX, Gold prices and Value of ₹/Dollar during
30th Jan to 14th Mar 2008 and 3rd June to 4th August 2010**

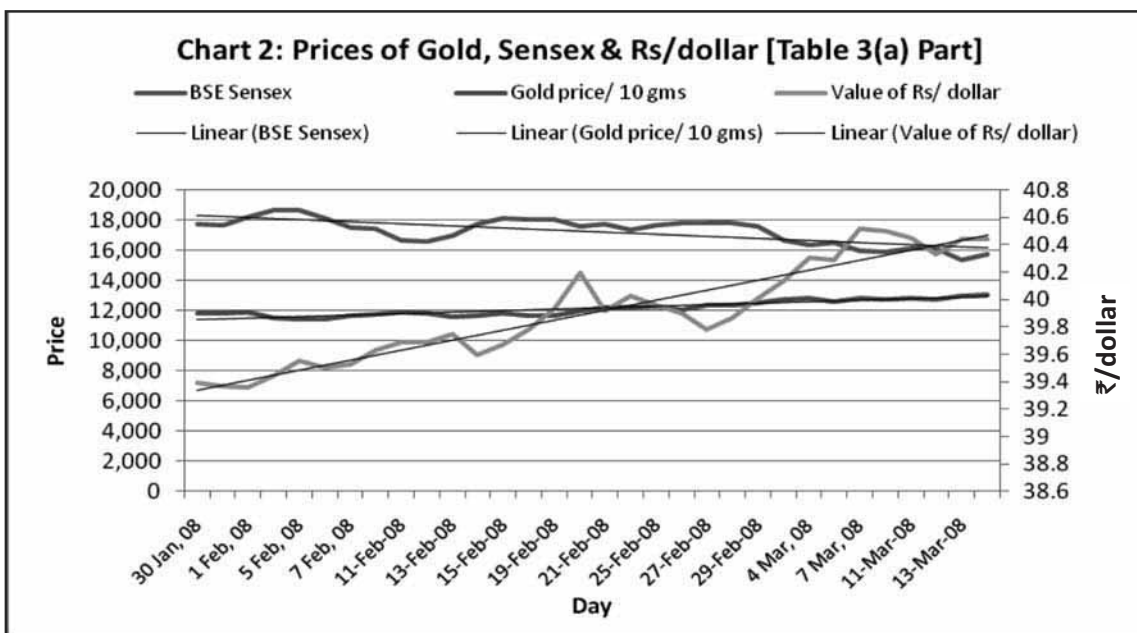
Part (a) Sensex – Relatively Volatile Value of ₹/Dollar – Relatively Stable				Part (b) Sensex – Relatively Stable Value of ₹/Dollar – Relatively volatile			
Day	BSE Sensex	Gold price/ 10 gms	Value of Rs/ dollar	Day	BSE Sensex	Gold price/ 10 gms	Value of Rs/ dollar
30 Jan, 08	17,759	11,785	39.39	3 June, 10	16,742	18,725	46.99
31 Jan, 08	17,649	11,785	39.37	8 June, '10	16,781	18,645	47.10
1 Feb, 08	18,233	11,890	39.36	9 June, '10	16,617	19,050	46.95
4 Feb, 08	18,660	11,515	39.44	11 June, '10	16,922	18,725	46.97
5 Feb, 08	18,663	11,405	39.55	12 June, '10	17,065	18,640	46.85
6 Feb, 08	18,139	11,470	39.50	15 June, '10	17,338	18,615	46.49
7 Feb, 08	17,527	11,630	39.53	16 June, '10	17,413	18,580	46.57
8 Feb, 08	17,465	11,710	39.63	18 June, '10	17,617	18,690	46.32
11 Feb, 08	16,631	11,895	39.69	19 June, '10	17,571	18,790	46.17
12 Feb, 08	16,608	11,835	39.69	22 June, '10	17,877	18,790	45.75
13 Feb, 08	16,949	11,620	39.75	23 June, '10	17,750	18,615	46.25
14 Feb, 08	17,766	11,685	39.60	24 June, '10	17,756	18,735	46.19
15 Feb, 08	18,115	11,788	39.67	25 June, '10	17,730	18,665	46.49
18 Feb, 08	18,048	11,650	39.78	26 June, '10	17,575	18,820	46.29
19 Feb, 08	18,076	11,650	39.93	29 June, '10	17,774	18,895	46.21
20 Feb, 08	17,613	12,005	40.20	30 June, '10	17,534	18,770	46.49
21 Feb, 08	17,735	12,200	39.92	1 July, '10	17,701	18,830	46.45
22 Feb, 08	17,349	12,230	40.03	3 July, '10	17,461	18,465	46.77
25 Feb, 08	17,651	12,265	39.96	7 July, '10	17,614	18,495	46.91
26 Feb, 08	17,806	12,055	39.90	8 July, '10	17,471	18,290	47.04
27 Feb, 08	17,826	12,345	39.78	13 July, '10	17,937	18,390	46.78
28 Feb, 08	17,824	12,325	39.87	14 July, '10	17,986	18,410	46.77
29 Feb, 08	17,578	12,520	40.01	15 July, '10	17,938	18,460	46.70
3 Mar, 08	16,678	12,745	40.14	17 July, '10	17,956	18,395	46.77
4 Mar, 08	16,340	12,805	40.31	20 July, '10	17,928	18,290	47.13
5 Mar, 08	16,542	12,585	40.29	21 July, '10	17,878	18,220	47.36
7 Mar, 08	15,976	12,855	40.52	27 July, '10	18,020	18,245	47.05
10 Mar, 08	15,924	12,740	40.50	28 July, '10	18,078	18,065	46.68
11 Mar, 08	16,123	12,845	40.45	29 July, '10	17,957	17,765	46.77
12 Mar, 08	16,128	12,725	40.33	30 July, '10	17,992	17,445	46.54
13 Mar, 08	15,357	12,965	40.44	3 Aug, '10	18,081	17,810	46.25
14 Mar, 08	15,761	13,030	40.44	4 Aug, '10	18,115	17,905	46.17

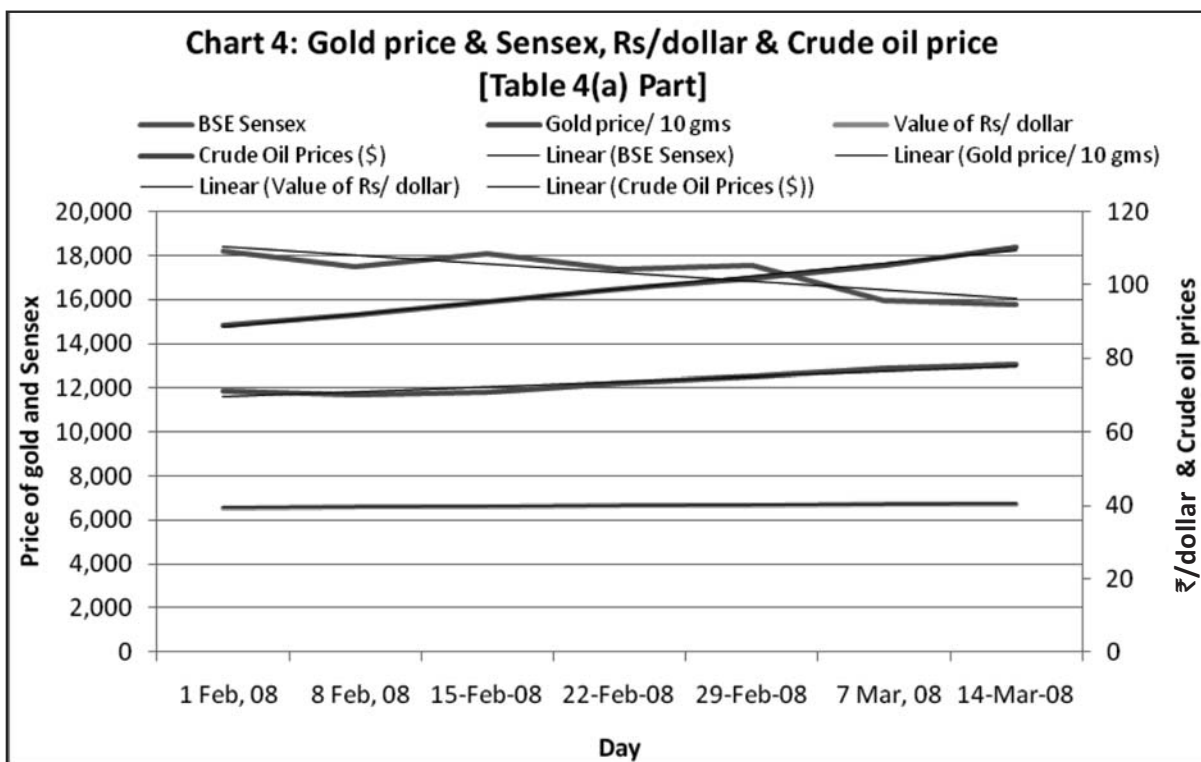
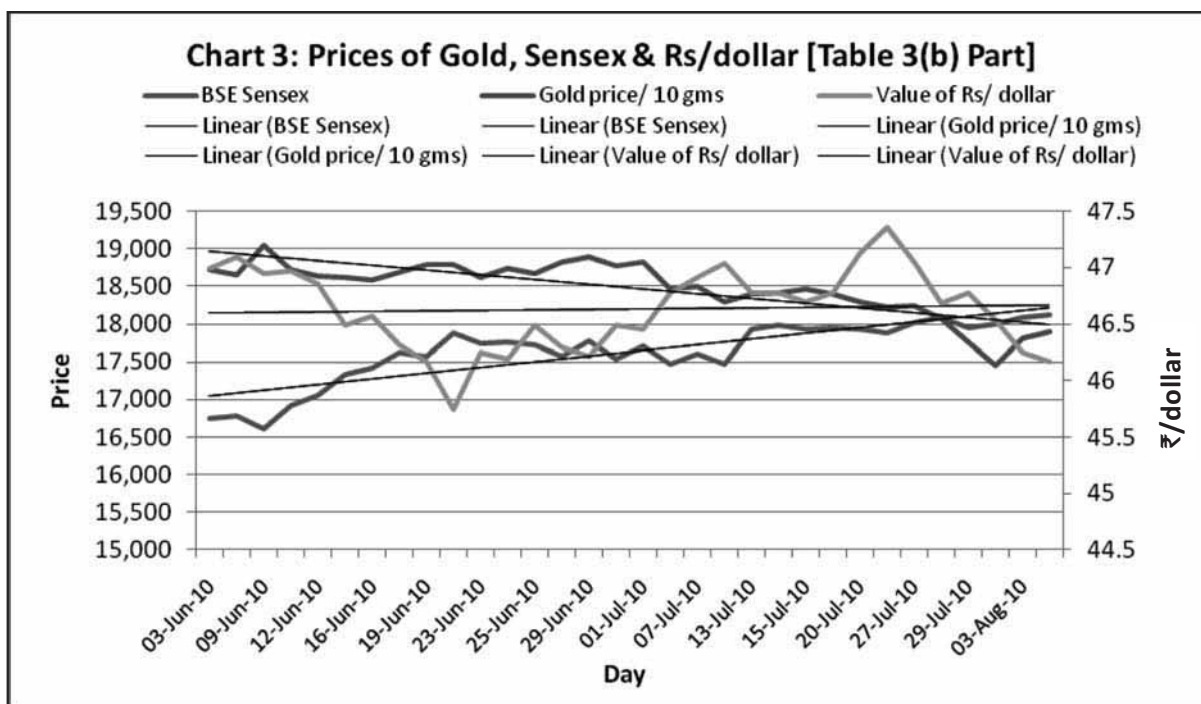
Source: Market Watch, Times of India, Jan 30 to March 14, 2008 & June 3 to August 4, 2010.

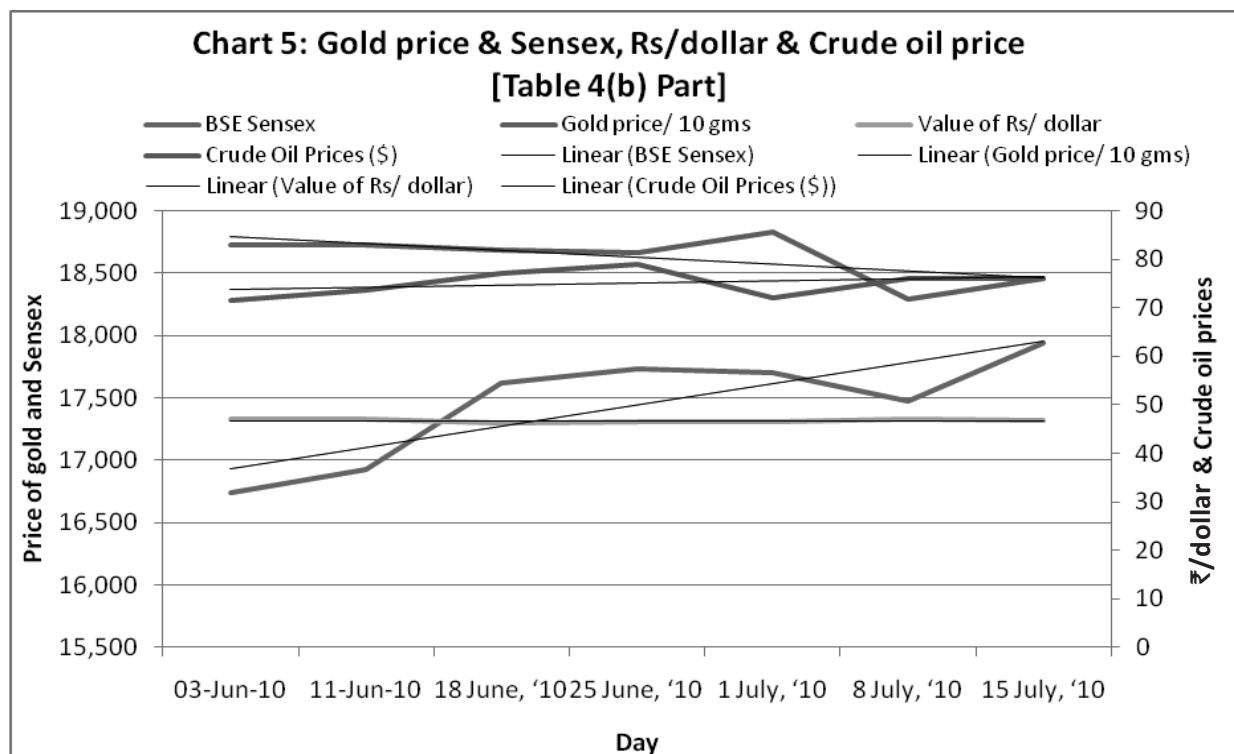
Table 4: Comparison between BSE SENSEX, Gold prices, Value of `Dollar and Crude Oil Prices

Part (a) :Sensex – Relatively Volatile; Value of ₹/Dollar – Relatively Stable; Crude Oil Prices – Relatively Volatile				
Day	BSE Sensex	Gold Price/10 gms	Value of ₹/-dollar	Crude Oil Prices (\$)
1 Feb, 08	18,233	11,890	39.36	88.96
8 Feb, 08	17,465	11,710	39.63	91.77
15 Feb, 08	18,115	11,788	39.67	95.50
22 Feb, 08	17,349	12,230	40.03	98.81
29 Feb, 08	17,578	12,520	40.01	101.84
7 Mar, 08	15,976	12,855	40.52	105.15
14 Mar, 08	15,761	13,030	40.44	110.21
Part (b):Sensex – Relatively Stable; Value of ₹/Dollar – Relatively Volatile; Crude Oil Prices – Relatively Stable				
Day	BSE Sensex	Gold price/10 gms	Value of Rs/dollar	Crude Oil Prices (\$)
3 June, 10	16,742	18,725	46.99	71.51
11 June, 10	16,922	18,725	46.97	73.78
18 June, '10	17,617	18,690	46.32	77.18
25 June, '10	17,730	18,665	46.49	78.86
1 July, '10	17,701	18,830	46.45	72.14
8 July, '10	17,471	18,290	47.04	76.09
15 July, '10	17,938	18,460	46.70	76.01
21 July, '10	17,878	18,220	47.36	78.89

Source: <http://www.nyse.tv/crude-oil-price-history.htm> & Table 5 above.







trend lines of gold prices and crude oil prices as seen in chart 4 goes in the same direction, implies that there exists a direct relationship between gold prices and crude oil prices.

Similarly, as seen in Chart 3 and Chart 5, when SENSEX – Relatively stable; Value of Rupees/Dollar – relatively volatile and Crude Oil Prices – relatively stable, the trend lines of SENSEX and gold prices are going in opposite direction which show an inverse relationship between SENSEX and gold prices. If we compare the trend lines of gold prices and value of Rupees/Dollar, here the trend lines go in the opposite direction (chart 3) which shows that there exists an inverse relationship between gold prices and value of Rupees/Dollar when value of Rupees/Dollar is volatile. Also, the trend lines of gold prices and crude oil prices as seen in chart 5 goes in the opposite direction, implies that there exists an inverse relationship between gold prices and crude oil prices when crude oil prices are relatively stable.

For analyzing the impact of the various variables on gold prices, the hypotheses are formulated for different occasions as mentioned in the various cases as discussed below:

Data Analysis

Case 1: When SENSEX – Relatively volatile

H₀: There is no relationship between gold prices and SENSEX.

H₁: There exists a relationship between gold prices and SENSEX.

The output generated for the regression equation between gold prices and BSE Sensex when Sensex is relatively volatile using Analyse-it tool-pack of EXCEL, is given as below:

As seen in table 5, the slope coefficient of regression equation indicates that as BSE Sensex increases by 1 unit, gold price decreases by 0.4543 units. Since Sensex is an index measured in 100s, the coefficient of Sensex implies that gold price decreases by ₹ 45.43 for every 100 extra BSE Sensex rise. Similarly, when Sensex = 0, the price of gold is determined at ₹19,986. Secondly, the value of adj R² comes to be 0.63 and R² comes to be 0.64 which is moderately high. Thus, we can conclude that the

Table 5: Regression Analysis - Gold Price vs SENSEX

n							32
R ²							0.64
Adjusted R ²							0.63
SE							304.7
Term	Coefficient	95% CI	SE	t statistic	DF	p	
Intercept	19986	17811 to 22160	1065	18.77	30	<0.0001	
Slope	-0.4543	-0.5801 to -0.3285	0.06159	-7.38	30	<0.0001	
Gold price/ 10 gms = 19986 - 0.4543 BSE Sensex							
Source of Variation	Sum squares	DF	Mean Square	F statistic	p		
Model	5,051,131.0	1	5,051,131.0	54.40	<0.0001		
Residual	2,785,481.5	30	92,849.4				
Total	7,836,612.5	31					

explanatory variable (Sensex) is relatively good measure of gold prices as it explains 64 percent influence in the fluctuation in gold prices. But the model is unable to determine 36 percent influence of the other extraneous variables.

The value of t given corresponding to intercept comes to be 18.77 which is much greater as compared to t value of 1.96 at 5 percent level of significance and 30 degrees of freedom. Thus, we reject H_0 (null hypothesis) and conclude that there exists a relationship between gold prices and Sensex. Also the value of p is 0.0001 which is too small to reject H_0 . Thus there exists a relationship between gold prices and Sensex when BSE Sensex is relatively volatile. The value of F statistics comes to be 54.40 which is much greater as compared to $F_{0.05}$ (4.1709) at (1, 30) degrees of freedom, hence the variation between gold prices and SENSEX is significant.

Thus, when SENSEX is relatively volatile there exists an inverse relationship between gold prices and SENSEX. So we can conclude that, when SENSEX goes up gold prices comes down and vice versa.

Case 2: When Value of ₹/Dollar – Relatively Stable

H_0 : There is no relationship between gold prices and Value of Rupees/Dollar.

H_1 : There exists a relationship between gold prices and Value of Rupees/Dollar.

The output generated for the regression equation between gold prices and value of Rupees/Dollar when value of Rupees/Dollar is relatively stable using Analyse-it tool-pack of EXCEL is given as below:

As seen in table 6, the slope coefficient of regression equation indicates that as value of Rupees/Dollar increases by 1 unit, gold price increases by 1216 units. Since value of Rupees/Dollar is measured in Rupees/Dollar, the coefficient of value of Rupees/Dollar implies that there is an increment of ₹ 1216 in gold prices every extra fall in the value of Rupees/Dollar rise. Considering the value of Rupees/Dollar = 0, doesn't give any meaningful result as the value of intercept is negative. The value of adj R² comes to be 0.77 and R² comes to be 0.78 which is relatively high as compared to Case 1. Thus, we can conclude that the explanatory variable (value of Rupees/Dollar) is relatively better measure of gold prices as it explains 78 percent influence of the fluctuation in gold prices.

The value of t given corresponding to intercept comes to be -7.73 which is much lesser as compared to t value of -1.96 at 5 percent level of significance and 30 degrees of freedom. Thus, we reject H_0 (null hypothesis) and conclude

Table 6: Regression Analysis - Gold Price vs Value of ₹/Dollar

n							32
R ²							0.78
Adjusted R ²							0.77
SE							239.7
Term	Coefficient	95% CI	SE	t statistic	DF	P	
Intercept	-36375	-45981 to -26769	4703	-7.73	30	<0.0001	
Slope	1216	975 to 1457	117.9	10.32	30	<0.0001	
Gold price/ 10 gms = -36375 + 1216 Value of ₹/ dollar							
Source of Variation	Sum squares	DF	Mean Square	F statistic	p		
Model	6,113,146.6	1	6,113,146.6	106.41	<0.0001		
Residual	1,723,465.9	30	57,448.9				
Total	7,836,612.5	31					

Table 7: Regression Analysis - Gold Price vs Crude Oil Prices

n							7
R ²							0.89
Adjusted R ²							0.87
SE							190.8
Term	Coefficient	95% CI	SE	t statistic	DF	P	
Intercept	5712	3063 to 8362	1030.6	5.54	5	0.0026	
Slope	66.5	39.8 to 93.2	10.40	6.40	5	0.0014	
Gold Price/10 gms = 5712 + 66.5 Crude Oil Prices (\$)							
Source of Variation	Sum squares	DF	Mean Square	F statistic	p		
Model	1,489,704.1	1	1,489,704.1	40.92	0.0014		
Residual	182,017.9	5	36,403.6				
Total	1,671,722.0	6					

that there exists a relationship between gold prices and value of Rupees/Dollar. Also the value of p is less than 0.0001 which is too small to reject H_0 . Thus there exists a relationship between gold prices and value of Rupees/Dollar when value of Rupees/Dollar is relatively stable. The value of F statistics comes to be 106.41 which is much greater as compared to $F_{0.05}$ (4.1709) at (1, 30) degrees of freedom,

hence the variation between gold prices and value of Rupees/Dollar is significant.

Thus, when value of Rupees/Dollar is relatively stable there exists a direct relationship between gold prices and value of Rupees/Dollar. Here we conclude that, when value of Rupees/Dollar goes up gold prices goes up and vice versa.

Case 3: When Crude Oil Prices – Relatively volatile

H₀: There is no relationship between gold prices and Crude Oil Prices.

H₁: There exists a relationship between gold prices and Crude Oil Prices.

The output generated for the regression equation between gold prices and Crude Oil Prices when Crude Oil Prices are relatively volatile using ‘Analyse - it’ tool-pack of EXCEL is given as below:

As seen in table 7, the slope coefficient of regression equation indicates that as Crude Oil Price increases by 1 unit, gold price increases by 66.5 units. Since Crude Oil Price is measured in dollars, the coefficient of Crude Oil Price implies that gold price increases by Rs. 66.5 for every extra dollar of Crude Oil Price rise. When Crude Oil Price = 0, the price of gold is determined at Rs 5712. The value of adj R² comes to be 0.87 and R² comes to be 0.89 which is moderately on higher side. Thus, we can conclude that the explanatory variable (Crude Oil Price) is relatively better measure of gold prices as it explains 89 percent influence in the fluctuation in gold prices. But the model is unable to determine only 11 percent influence of the other extraneous variables.

The value of t given corresponding to intercept comes to be 5.54 which is greater as compared to t value of 1.96 at 5 percent level of significance and 5 degrees of freedom. Thus, we reject H₀ (null hypothesis) and conclude that there exists a relationship between gold prices and Crude Oil Price. Also the value of p is 0.0026 which is too small to reject H₀. Thus there exists a relationship between gold prices and Crude Oil Price when Crude Oil Price is relatively volatile. The value of F statistics comes to be 40.92 which is much greater as compared to F_{0.05} (6.6079) at (1, 5) degrees of freedom, hence the variation between gold prices and Crude Oil Price is significant.

Thus, when Crude Oil Price is relatively volatile there exist a direct relationship between gold prices and Crude Oil Price. So we conclude that, when Crude Oil price goes up gold prices goes up and vice versa.

Case 4: When SENSEX – Relatively Volatile and Value of Rupees/Dollar – Relatively Stable

H₀: The variation between gold prices, SENSEX and Value of Rupees/Dollar is not significant.

H₁: The variation between gold prices, SENSEX and Value of Rupees/Dollar is significant.

Table 8: Regression Analysis – Gold Price, SENSEX and Value of ₹/Dollar

n							32
R ²							0.81
Adjusted R ²							0.80
SE							227.5
Term	Coefficient	95% CI	SE	t Statistic	DF	P	
Intercept	-21631	-38788 to -4474	8389	-2.58	29	0.0153	
Sensex	-0.1565	-0.3107 to -0.0023	0.07539	-2.08	29	0.0469	
₹/\$	914.1	538.9 to 1289.2	183.42	4.98	29	<0.0001	
Gold = -21631 – 0.1565 Sensex + 914.1 ₹/\$							
Source of Variation	Sum Squares	DF	Mean Square	F Statistic	p		
Model	6,336,092.6	2	3,168,046.3	61.23	<0.0001		
Residual	1,500,519.8	29	51,742.1				
Total	7,836,612.5	31					

The output generated for the regression equation between gold prices, SENSEX and Value of Rupees/Dollar when SENSEX is relatively volatile and Value of Rupees/Dollar is relatively stable using ‘Analyse-it’ tool-pack of EXCEL is given as below:

As seen in table 8, the slope coefficient of regression equation indicates that as BSE SENSEX increases by 1 unit, gold price decreases by 0.1565 units and value of Rupees/Dollar increases by 914.10 units. Since SENSEX is an index measured in 100s, the coefficient of SENSEX implies that gold price changes (decreases) by ₹ 15.65 times SENSEX and Rs 914.1 times value of Rupees/Dollar. Similarly, when SENSEX = 0, the price of gold is negative. Secondly, the value of adj R² comes to be 0.80 and R² comes to be 0.81 which is moderately high. Thus, we can conclude that the explanatory variables (SENSEX and value of Rupees/Dollar) is relatively good measure of gold prices as it explains 81 percent influence in the fluctuation in gold prices. But the model is unable to determine only 19 percent influence of the other extraneous variables.

The value of F statistics comes to be 61.23 which is much greater as compared to F_{0.05} (3.3277) at (2, 29) degrees of

freedom. Thus, we reject H₀ (null hypothesis) and conclude that the variation between gold prices, SENSEX and value of Rupees/Dollar is significant. Thus there exists a relationship between gold prices, SENSEX and value of Rupees/Dollar when BSE SENSEX is relatively volatile and value of Rupees/Dollar is relatively stable.

Thus, when SENSEX is relatively volatile and Value of Rupees/Dollar is relatively stable there exist an inverse relationship between gold prices and SENSEX. When SENSEX goes up gold prices come down and vice versa when value of Rupees/Dollar is relatively stable.

Case 5: When SENSEX – Relatively volatile; Value of Rupees/Dollar – relatively stable and Crude Oil Prices – relatively volatile

H₀: The variation between gold prices, SENSEX, Value of Rupees/Dollar and Crude oil prices is not significant.

H₁: The variation between gold prices, SENSEX, Value of Rupees/Dollar and Crude oil prices is significant.

The output generated for the regression equation between gold prices, SENSEX, Value of Rupees/Dollar and Crude

Table 9: Regression Analysis - Gold Price, Sensex, Value of ₹/Dollar and Crude Oil Prices

n							7
R ²							0.90
Adjusted R ²							0.81
SE							231.5
Term	Coefficient	95% CI	SE	t Statistic	DF	P	
Intercept	6205	-113484 to 125894	37609.1	0.16	3	0.8795	
Sensex	-0.1093	-0.9183 to 0.6998	0.25422	-0.43	3	0.6963	
₹/\$	75.56	-2923.61 to 3034.72	942.408	0.08	3	0.9411	
Crude Oil	50.02	-82.77 to 182.81	41.727	1.20	3	0.3167	
Gold = 6205 – 0.1093 Sensex + 75.56 ₹/\$ + 50.02 Crude Oil							
Source of Variation	Sum Squares	DF	Mean Square	F Statistic	p		
Model	1,510,977.2	3	503,659.1	9.40	0.0491		
Residual	160,744.8	3	53,581.6				
Total	1,671,722.0	6					

Oil Prices when SENSEX is relatively volatile, Value of Rupees/Dollar is relatively stable and Crude Oil Prices are relatively volatile using 'Analyse-it' tool-pack of EXCEL is given as below:

As seen in table 9, the slope coefficient of regression equation indicates that as BSE SENSEX increases by 1 unit, gold price decreases by 0.1093 units, value of Rupees/Dollar increases by 75.56 units and crude oil prices increases by 50.02 units. Since SENSEX is an index measured in 100s, the coefficient of SENSEX implies that gold price changes (decreases) by ₹ 10.93 times SENSEX, ₹ 75.56 times value of Rupees/dollar and Rs 50.02 times crude oil prices. Similarly, when SENSEX = 0, i.e., when it remains stable, the price of gold is determined at Rs 6,205 at market prices. Secondly, the value of adj R² comes to be 0.81 and R² comes to be 0.90 which is moderately high. Thus, we can conclude that the explanatory variables (SENSEX, value of Rupees/Dollar and crude oil prices) is relatively good measure of gold prices as it explains 90 percent influence in the fluctuation in gold prices. But the model is unable to determine only 10 percent influence of the other extraneous variables.

The value of F statistics comes to be 9.40 which is greater as compared to F_{0.05} (9.2766) at (3, 3) degrees of freedom. Thus, we accept H₀ (null hypothesis) and conclude that the variation between gold prices, SENSEX, Value of Rupees/dollar and Crude oil prices is significant. Thus there exists a relationship between gold prices, SENSEX, value of Rupees/dollar and crude oil prices when BSE SENSEX is relatively volatile, Value of Rupees/Dollar is relatively stable and Crude Oil Prices are relatively volatile.

Thus, when SENSEX is relatively volatile and Value of Rupees/Dollar is relatively stable there exist an inverse relationship between gold prices and SENSEX. When SENSEX goes up gold prices come down and vice versa when value of Rupees/Dollar is relatively stable and Crude Oil Prices are relatively volatile.

Case 6: When SENSEX – Relatively Stable

H₀: There is no relationship between gold prices and SENSEX.

H₁: There exists a relationship between gold prices and SENSEX.

The output generated for the regression equation between gold prices and BSE Sensex when Sensex is relatively volatile using Analyse-it tool-pack of EXCEL is given as below:

As seen in table 10, the slope coefficient of regression equation indicates that as BSE SENSEX increases by 1 unit, gold price decreases by 0.5185 units. Since SENSEX is an index measured in 100s, the coefficient of SENSEX implies that gold price decreases by ₹ 51.85 for every 100 extra BSE SENSEX rise. Similarly, when SENSEX = 0, i.e., when it remains stable, the price of gold is determined at ₹ 27,618 at market prices. Secondly, the value of adj R² comes to be 0.32 and R² comes to be 0.34 which is considerably low. Thus, we can conclude that the explanatory variable (SENSEX) is relatively bad measure of gold prices as it explains only 34 percent influence in the fluctuation in gold prices and unable to determine 66 percent influence of the other extraneous variables.

The value of t given corresponding to intercept comes to be 12.00 which is much greater as compared to t value of 1.96 at five percent level of significance and 30 degrees of freedom. Thus, we reject H₀ (null hypothesis) and conclude that there exists a relationship between gold prices and SENSEX. Also the value of p is less than 0.0001 which is too small to reject H₀. Thus there exists a relationship between gold prices and SENSEX when BSE SENSEX is relatively stable, but the correlation between gold prices and BSE SENSEX is less. The value of F statistics comes to be 15.78, which is much greater as compared to F_{0.05} (4.1709) at (1, 30) degrees of freedom, hence the variation between gold prices and SENSEX is significant.

Thus, when SENSEX is relatively stable there exists an inverse relationship between gold prices and SENSEX, but the relationship between them is considerably weak when BSE Sensex is relatively stable.

Case 7: When Value of Rupees/Dollar – Relatively Volatile

H₀: There is no relationship between gold prices and Value of Rupees/Dollar.

H₁: There exists a relationship between gold prices and Value of Rupees/Dollar.

Table 10: Regression Analysis - Gold Price vs SENSEX

n							32
R ²							0.34
Adjusted R ²							0.32
SE							300.1
Term	Coefficient	95% CI	SE	t statistic	DF	P	
Intercept	27618	22917 to 32319	2302	12.00	30	<0.0001	
Slope	-0.5185	-0.7851 to -0.2520	0.13053	-3.97	30	0.0004	
Gold price/ 10 gms = 27618 - 0.5185BSE Sensex							
Source of Variation	Sum squares	DF	Mean Square	F statistic	P		
Model	1,421,636.9	1	1,421,636.9	15.78	0.0004		
Residual	2,702,334.9	30	90,077.8				
Total	4,123,971.9	31					

Table 11: Computation of Values - Gold Price vs Value of ₹/Dollar

n							32
R ²							0.02
Adjusted R ²							-0.01
SE							366.4
Term	Coefficient	95% CI	SE	t Statistic	DF	P	
Intercept	25591	8360 to 42823	8437	3.03	30	0.0050	
Slope	-152.6	-522.1 to 216.9	180.93	-0.84	30	0.4057	
Gold Price/ 10 gms = 25591 - 152.6Value of ₹/ Dollar							
Source of Variation	Sum squares	DF	Mean Square	F Statistic	P		
Model	95,506.9	1	95,506.9	0.71	0.4057		
Residual	4,028,465.0	30	134,282.2				
Total	4,123,971.9	31					

The output generated for the regression equation between gold prices and value of Rupees/Dollar when value of Rupees/Dollar is relatively stable using Analyse-it tool-pack of EXCEL is given as below:

As seen in table 11, the slope coefficient of regression equation indicates that as value of Rupees/Dollar increases

by 1 unit, gold price decreases by 152.6 units. Since value of Rupees/Dollar is measured in Rupees/Dollar, the coefficient of value of Rupees/Dollar implies that there is an increment of ₹ 152.6 in gold prices every extra rise/fall in the value of Rupees/Dollar rise. Considering the value of Rupees/Dollar = 0, the value of intercept comes to be ₹ 25,591. The value of adj R² comes to be -0.01 and R²

Table 12: Computation of Values - Gold price vs Crude Oil Prices

n							8
R ²							0.35
Adjusted R ²							0.25
SE							194.7
Term	Coefficient	95% CI	SE	t Statistic	DF	P	
Intercept	22126	17329 to 26924	1961	11.29	6	<0.0001	
Slope	-46.99	-110.45 to 16.46	25.932	-1.81	6	0.1199	
Gold Price/10 gms = 22126 - 46.99 Crude Oil Prices (\$)							
Source of Variation	Sum squares	DF	Mean Square	F statistic	P		
Model	124,448.5	1	124,448.5	3.28	0.1199		
Residual	227,373.4	6	37,895.6				
Total	351,821.9	7					

comes to be 0.02 which comes to be very low. Thus, we can conclude that the explanatory variable (value of Rupees/Dollar) cannot be used as a measure of gold prices when value of Rupees/Dollar is relatively volatile as it gives misleading values for meaningful interpretation.

The value of t given corresponding to intercept comes to be 3.03 which is greater as compared to t value of 1.96 at 5 percent level of significance and 30 degrees of freedom. Thus, we reject H₀ (null hypothesis) and conclude that there exists a relationship between gold prices and value of Rupees/Dollar though it is weak. The value of p is 0.005 which is too small (less than 0.05) to reject H₀. Thus there exists a relationship between gold prices and value of Rupees/Dollar when value of Rupees/Dollar is relatively volatile. The value of F statistics comes to be 0.71 which is lesser as compared to F_{0.05} (4.1709) at (1, 30) degrees of freedom, hence the variation between gold prices and value of Rupees/Dollar is not significant.

Thus, when Rupees/Dollar is relatively volatile, there exists a relationship between gold prices and value of Rupees/Dollar, but the degree of correlation is very weak to draw any meaningful interpretation. Also the variation between them is not significant.

Case 8: When Crude Oil Prices – Relatively Stable

H₀: There is no relationship between gold prices and Crude Oil Prices.

H₁: There exists a relationship between gold prices and Crude Oil Prices.

The output generated for the regression equation between gold prices and Crude Oil Prices when Crude Oil Prices are relatively volatile using 'Analyse-it' tool-pack of EXCEL is given as below:

As seen in table 12, the slope coefficient of regression equation indicates that as Crude Oil Price increases by 1 unit, gold price decreases by 46.99 units. Since Crude Oil Price is measured in dollars, the coefficient of Crude Oil Price implies that gold price decreases by ₹ 46.99 for every extra dollar of Crude Oil Price rise. When Crude Oil Price = 0, the price of gold is determined at Rs 22,126 at market prices. The value of adj R² comes to be 0.25 and R² comes to be 0.35 which is very less. Thus, we can conclude that the explanatory variable (Crude Oil Price) is not a good measure of gold prices as it explains only 35 percent influence in the fluctuation in gold prices. But the model is unable to determine 65 percent influence of the other extraneous variables.

The value of t given corresponding to intercept comes to be 11.29 which is greater as compared to t value of 1.96 at 5 percent level of significance and 6 degrees of freedom. Thus, we reject H_0 (null hypothesis) and conclude that there exists a relationship between gold prices and Crude Oil Price. Also the value of p is less than 0.0001 which is too small to reject H_0 . Thus there exists a relationship between gold prices and Crude Oil Price when Crude Oil Price is relatively stable. The value of F statistics comes to be 3.28 which is less as compared to $F_{0.05}$ (5.9874) with (1, 6) degrees of freedom, hence the variation between gold prices and Crude Oil Price is not significant.

Thus, when Crude Oil Price is stable there exists in general an inverse relationship between gold prices and Crude Oil Price, but the variation in them is not significant. Also the crude oil price cannot be a good measure of gold prices when crude oil prices are stable.

Case 9: When SENSEX – Relatively stable and Value of Rupees/Dollar – relatively volatile

H_0 : The variation between gold prices, SENSEX and Value of Rupees/Dollar is not significant.

H_1 : The variation between gold prices, SENSEX and Value of Rupees/Dollar is significant.

The output generated for the regression equation between gold prices, SENSEX and Value of Rupees/Dollar when SENSEX is relatively stable and Value of Rupees/Dollar is relatively volatile using ‘Analyse-it’ tool-pack of EXCEL is given as below:

As seen in table 13, the slope coefficient of regression equation indicates that as BSE SENSEX increases by 1 unit, gold price decreases by 0.6258 units of SENSEX and by 380.2 units of value of Rupees/Dollar. Since SENSEX is an index measured in 100s, the coefficient of SENSEX implies that gold price changes (decreases) by Rs 62.58 times SENSEX and Rs 380.2 times the value of Rupees/Dollar. Similarly, when SENSEX = 0, i.e., when it remains stable, the price of gold is Rs 47,236. Secondly, the value of adj R^2 comes to be 0.44 and R^2 comes to be 0.47 which is relatively low. Thus, we can conclude that the explanatory variables (SENSEX and value of Rupees/Dollar) are relatively bad measures of gold prices as it explains only 47 percent influence in the fluctuation in gold prices. But the model is unable to determine 53 percent influence of the other extraneous variables. This implies that there are some other extraneous variables influencing the prices of gold.

Table 13: Computation of Values – Gold Price, SENSEX and Value of ₹/Dollar

n	32					
R ²	0.47					
Adjusted R ²	0.44					
SE	273.6					
Term	Coefficient	95% CI	SE	t Statistic	DF	P
Intercept	47236	31587 to 62886	7652	6.17	29	<0.0001
Sensex	-0.6258	-0.8826 to -0.3689	0.12559	-4.98	29	<0.0001
₹/\$	-380.2	-671.8 to -88.5	142.59	-2.67	29	0.0124
Gold = 47236 – 0.6258 Sensex - 380.2 ₹/\$						
Source of Variation	Sum Squares	DF	Mean Square	F Statistic	p	
Model	1,953,621.8	2	976,810.9	13.05	<0.0001	
Residual	2,170,350.0	29	74,839.7			
Total	4,123,971.9	31				

The value of F statistics comes to be 13.05 which is much greater as compared to $F_{0.05}$ (3.3277) at (2, 29) degrees of freedom. Thus, we reject H_0 (null hypothesis) and conclude that the variation between gold prices, SENSEX and value of Rupees/Dollar is significant. Thus there exists a relationship between gold prices, SENSEX and value of Rupees/Dollar when BSE SENSEX is relatively stable and value of Rupees/Dollar is relatively volatile.

Thus, when SENSEX is relatively stable and Value of Rupees/Dollar is relatively volatile there exists an inverse relationship between gold prices and SENSEX, but these extraneous variables are not that effective in predicting the prices of gold due to bad coefficient of determination.

Case 10: When SENSEX – Relatively stable; Value of Rupees/Dollar – relatively volatile and Crude Oil Prices – relatively stable

H_0 : The variation between gold prices, SENSEX, Value of Rupees/Dollar and Crude oil prices is not significant.

H_1 : The variation between gold prices, SENSEX, Value of Rupees/Dollar and Crude oil prices is significant.

The output generated for the regression equation between gold prices, SENSEX, Value of Rupees/Dollar and Crude Oil Prices when SENSEX is relatively stable, Value of Rupees/Dollar is relatively volatile and Crude Oil Prices are relatively stable using ‘Analyse-it’ tool-pack of EXCEL is given as below:

As seen in table 14, the slope coefficient of regression equation indicates that as BSE SENSEX increases by 1 unit, gold price decreases by 0.2204 units of SENSEX, decreases 480.3 units of value of Rupees/Dollar rise and by 22 units of crude oil prices increase. Since SENSEX is an index measured in 100s, the coefficient of SENSEX implies that gold price changes (decreases) by Rs 22.04 times SENSEX, Rs 480.3 times value of Rupees/Dollar and Rs 22 times crude oil prices. Similarly, when SENSEX = 0, i.e., when it remains stable, the price of gold is determined at Rs 46,566 at market prices. Secondly, the value of adj R^2 comes to be 0.75 and R^2 comes to be 0.86 which is moderately high. Thus, we can conclude that the explanatory variables (SENSEX, value of Rupees/Dollar and crude oil prices) are relatively good measure of gold prices as it explains 86 percent influence in the fluctuation

Table 14: Computation of Values - Gold price, Sensex, Value of ₹/Dollar and Crude Oil Prices

n							8
R ²							0.86
Adjusted R ²							0.75
SE							111.5
Term	Coefficient	95% CI	SE	t Statistic	DF	P	
Intercept	46566	28164 to 64968	6628	7.03	4	0.0022	
Sensex	-0.2204	-0.6048 to 0.1641	0.13847	-1.59	4	0.1867	
₹/\$	-480.3	-833.6 to -127.0	127.25	-3.77	4	0.0195	
Crude Oil	-22	-80 to 36	20.8	-1.06	4	0.3489	
Gold = 46566 – 0.2204 Sensex - 480.3 ₹/\$ - 22 Crude Oil							
Source of Variation	Sum Squares	DF	Mean Square	F Statistic	p		
Model	302,074.3	3	100,691.4	8.10	0.0357		
Residual	49,747.6	4	12,436.9				
Total	351,821.9	7					

in gold prices. But the model is unable to determine only 14 percent influence of the other extraneous variables.

The value of F statistics comes to be 8.10 which is greater as compared to $F_{0.05}$ (6.5914) at (3, 4) degrees of freedom. Thus, we reject H_0 (null hypothesis) and conclude that the variation between gold prices, SENSEX, Value of Rupees/Dollar and Crude oil prices is significant. Thus there exists a relationship between gold prices, SENSEX, value of Rupees/Dollar and crude oil prices when BSE SENSEX is relatively stable, Value of Rupees/Dollar is relatively volatile and Crude Oil Prices are relatively stable.

Thus, when SENSEX is relatively stable and Value of Rupees/Dollar is relatively volatile there exists an inverse

relationship between gold prices and SENSEX. When SENSEX goes up gold prices comes down and vice versa when value of Rupees/Dollar is relatively volatile and Crude Oil Prices are relatively stable.

Conclusion:

The above cases are summarised in the table given below. From the table it is observed that the value of R^2 is moderately high for Cases 1, 2, 3, 4, 5 and 10. Thus we can infer from the above table that when SENSEX is relatively volatile; Value of Rupees/Dollar is relatively stable and Crude Oil Prices are relatively volatile, the coefficient of determination R^2 is moderately high for all the cases i.e, Case 1 to Case 5. Similarly when SENSEX is relatively stable; Value of Rupees/Dollar is relatively

Table 15: Summary of the Cases

When SENSEX – Relatively Volatile; Value of ₹/Dollar – Relatively Stable and Crude Oil Prices – Relatively Volatile				
Case	Variable(s)	Stable/Volatile	R^2	Relationship with gold prices
Case 1	SENSEX	Volatile	0.64	Inverse
Case 2	Value of Rs/dollar	Stable	0.78	Direct
Case 3	Crude Oil Price	Volatile	0.89	Direct
Case 4	SENSEX, Value of ₹/dollar	Volatile,Stable	0.81	Inverse
Case 5	SENSEX, Value of ₹/dollar, Crude Oil Price	Volatile, Stable, Volatile	0.90	Inverse
When SENSEX – Relatively Stable; Value of ₹/Dollar – Relatively Volatile and Crude Oil Prices – Relatively Stable				
Case 6	SENSEX	Stable	0.34	Inverse
Case 7	Value of Rs/dollar	Volatile	0.02	Inverse
Case 8	Crude Oil Price	Stable	0.35	Inverse
Case 9	SENSEX, Value of Rs/dollar	Stable,Volatile	0.47	Inverse
Case 10	SENSEX, Value of Rs/dollar, Crude Oil Price	Stable,Volatile, Stable	0.86	Inverse

volatile and Crude Oil Prices are relatively stable, then also these three variables are useful in predicting the value of gold prices. But for rest of the cases the variables are not very useful and cannot be used for predicting the value of gold price even though the variation between them and gold prices comes to be significant as discussed above for

each case. Thus, we conclude that, when SENSEX is relatively volatile; Value of Rupees/Dollar is relatively stable and Crude Oil Prices are relatively volatile, i.e., Table 3(a) part and Table 4(a) part, the individual value of SENSEX determines only 64 percent influence on gold prices, individual value of Rupees/Dollar determines 78

percent influence and crude oil price determines 89 percent influence. If two variables SENSEX and Value of Rupees/Dollar are taken into consideration together into an econometric relationship, it determines 81 percent influence of these variables. But when SENSEX is relatively stable; Value of Rupees/Dollar is relatively volatile and Crude Oil Prices are relatively stable, i.e., Table 3(b) part and Table 4(b) part, the individual value of SENSEX determines only 34 percent influence on gold prices, individual value of Rupees/Dollar determines 2 percent influence and crude oil price determines 35 percent influence. If two variables SENSEX and Value of Rupees/Dollar are taken into consideration together into an econometric relationship, it determines only 47 percent influence of these variables. Hence if all the three variables are taken into consideration for determining gold prices then irrespective of the occasions as mentioned in Part (a) or (b) of Tables 4, the econometric model determines 90 percent influence of the relationship and 86 percent influence of the relationship which is highly appreciable and reliable.

Thus, in a nutshell, we conclude on the basis of an econometric analysis and enquiry that for determination of gold prices if individual values are taken for consideration for formulating an econometric model, they may give misleading figures at different occasions. Hence the best method is to take all the three variables viz., SENSEX, Value of Rupees/Dollar and Crude Oil Price for determination of gold prices irrespective of whether one is volatile and others are stable and vice versa as the coefficient of determination is moderately high for their econometric relationship with gold prices.

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Book Title : *Public Relations
The Profession and the Practice*
Author : **Dan Lattimore, Otis Baskin,
Suzette T. Heiman, and
Elizabeth L. Toth**
Edition : **Third**
ISBN 13 : **978-1-25-902569-3**
ISBN 10 : **1-12-902569-1**
Pages : **393**
Publisher : **Tata McGraw-Hill Education Private
Limited, New Delhi.**

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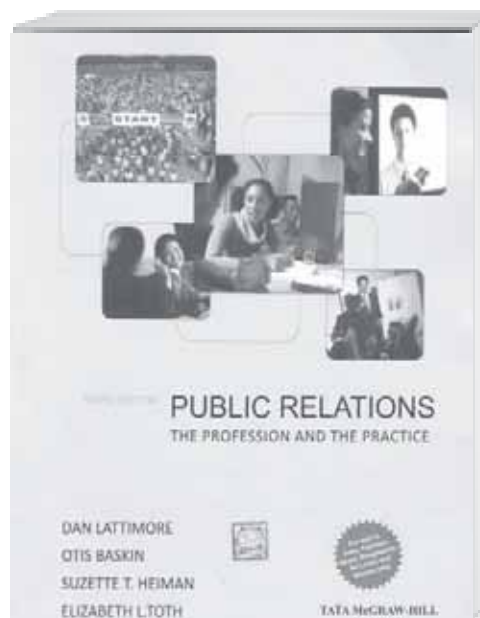
The potential power and scope of good public relations practice is enormous. It has not yet been fully realised or utilized by many business managements in India, not to speak of the governments in power. In essence, good public relations is synonymous with good management. It is the good behaviour of an organization or an individual. It is the most powerful tool available to us for building favourable public opinion. And, public opinion is the most powerful force known to us in this present day world. Wherever public opinion is in favour we gain acceptance, authority and power. So, whoever wants to gain power and remain in authority will benefit by learning good public relations practices.

There are many instances of established organizations resorting of all sorts of methods in the name of public relations in order to manipulate favourable public opinion. And, they miserably fail in their attempt because of lack of expertise in good public relations.

The damage due to the Bhopal gas tragedy, referred to as one of the world's worst industrial disasters, could have been minimised if the public relations department of Union Carbide had bothered to intimate their employees and the local community in time on the simple safety measure of putting a wet cloth on their face to avoid inhalation of the lethal gas. It was a failure of public relations of the Union Carbide management.

Despite the fact that Coca-Cola is the world leader in beverages with professional expertise to manage a giant multinational corporation, their management had miserably failed and had to close down their operations in Plachimada, a village in Kerala, because of their poor public relations. They never could understand the feelings and expectations of the local community and respond to it appropriately to build up rapport with them.

The Nuclear Power Corporation of India who set up the Koodankulam



Atomic Power Plant in Tamil Nadu with an expected cost of nearly ₹16,000 crore is not in a position to commission the plant because of the objection from the local people. Neither NPCL nor the governments in power could yet convince the local people on the adequacy of the safety measures adopted in the plant. It is a failure of the credibility of the people in power and the failure of their public relations.

Change is the essence of growth. Without change no growth is possible. And, implementation of changes invariably attracts resistance because there can't be any change without some kind of a disturbance. Public relations is the right tool anyone can make use of for the purpose of removing friction and creating understanding for the smooth implementation of the process of change. Thus public relations can be the best tool any management or any government can rely on for accelerating change and achieving rapid growth.

Since business has become global and nations and economies are becoming more and more interdependent, possibilities for conflicts of opinion and resulting friction leading to strained relations are likely to be more and more in future. That means, there is going to be a lot more demand for good professional practitioners of public relations in future.

The secret of success of any business management boils down to creating and maintaining trustworthy relations with all the stakeholders or publics of the organisation like employees, investors, customers, dealers, suppliers, government, media, community and so on. Misunderstanding of any sort among even a small group of public can become a threat to the smooth functioning of the management. Stakeholders are today more educated, better informed and more demanding. And their interests are often conflicting in nature. Keeping everyone in good humour is a very tricky and specialised job to be handled by specially qualified and skilled people.

Unfortunately, not enough focus is given to this component in the management programmes of Indian universities in general.

Practically none of the books on public relations by Indian authors available in the market is written with a coverage of the discipline in a comprehensive manner and structured for the purpose of an academic programme of higher education.

It is in this background that the scholarly effort made by the authors Dan Lattimore, Otis Baskin, Suzette T. Heiman and Elizabeth L. Toth to bring out a book titled 'Public Relations –

The Process and the Practice' becomes noteworthy and laudable.

Dan Lattimore is dean and professor of journalism at University of Memphis and an accredited public relations practitioner. Otis Baskin is professor of management at Pepperdine University. Suzette T. Heiman is associate professor at Missouri School of Journalism at University of Missouri – Columbia and Elizabeth L. Toth is full professor and chair of the Department of Communication of University of Maryland-College Park.

The book is published by Tata McGraw Hill Education Private Limited. This is the third edition released in 2012.

The book has been written with the specific purpose of recommending it as a text book for higher studies. The book describes the profession of public relations, its nature, history and development, theoretical basis, legal aspects, strategy development, research, planning, implementation and evaluation, practice with different specific publics, practice in different types of organisations and so on along with a number of real-life cases.

The book is divided into four parts – the profession, the process, the publics, and the practice. Part 1 covers current public relations climate, its history, theories, and ethical as well as legal concerns. Part 2 deals with the core subject, that is, the process of public relations. Part 3 pertains to the various publics of an organisation to whom the programmes are to be targeted. Part 4 summarises the practice of public relations and discusses the emerging trends in the profession.

The four parts are further subdivided into 17 chapters. Each chapter begins with a preview that describes a real-life situation that introduces the reader to the topic discussed in the chapter. Each chapter ends with a summary and a case study apart from lists of key terms and references. These case studies will give an opportunity for the students to discuss and deliberate on it for deeper understanding of the concepts presented. Mini-cases have been incorporated in each chapter in order to provide a feel on the practice to the students.

Chapter 1 presents the nature, functions, and scope of the profession and the profile of a practitioner. Chapter 2 gives a historical walkthrough of the origin and evolution of the profession and also references to some of the pioneers who contributed to its development. The emergence of a new phase

in the context of a global information society is also discussed. The theories used in public relations like systems theory, situational theory, social exchange theory, diffusion theory, social learning theory, uses and gratification theory, agenda setting theory, etc. are explained in Chapter 3. Legal and ethical considerations are included in Chapter 4. The first step in public relations process, known as fact finding or research is discussed in Chapter 5. Planning and budgeting, the second step is included in Chapter 6. Chapter 7 is on communicating which is the tangible step in the process. Evaluation of effectiveness, the last step in the process, is the content of Chapter 8. Relations with important specific publics like media, employees, community, consumers, and investors are discussed in detail in Chapters 9, 10, 11, 12 and 13. Chapter 14 is on public affairs or relations with the government. Public relations in the government are also discussed here. Chapter 15 is on public relations in non-profit organisations. Corporate public relations and corporate social responsibility are dealt with in Chapter

16. Challenges to public relations in the changing global scenario, communication in times of crisis, social media etc. are the topics covered in the last chapter.

Evidently, the book has been written as a study material for students in American universities. As such some of the information provided like the social, legal and ethical concerns, government relations, etc. are not fully applicable in Indian conditions. All the case studies and other illustrations are confined to American situations and experiences. These are the notable limitations of the book as far as the Indian students are concerned.

However, this updated third edition presents an exhaustive picture of the profession of public relations and its true nature, scope and importance in the globalised knowledge era. It will be an excellent tool for those who teach and learn management as well as mass communication.





Book Title : *International Financial Management*
Author : P. G. Apte
Edition : Sixth
ISBN 13 : 978-0-07-133344-3
ISBN 10 : 0-07-133344-4
Pages : 708
Publisher : Tata McGraw-Hill Education Private Limited, New Delhi.

*Reviewed by Jose A.V., Associate Professor, SSTM, Prathap Nagar, Muttom, Aluva-683106, Ernakulam, Kerala
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The phenomenal growth of international trade, cross-border investments and the current economic crisis have made it necessary for students of finance, academicians, and professionals in finance to understand the dynamics of financial decisions which demands a thorough understanding of foreign exchange and its related complexities along with a clear awareness of international markets and its various innovations .

At least some of us expected and believed that the 2008 crisis will slowly die down and there will be a new enthusiasm in the global economy. But what really happened has made all of us upset and skeptical.

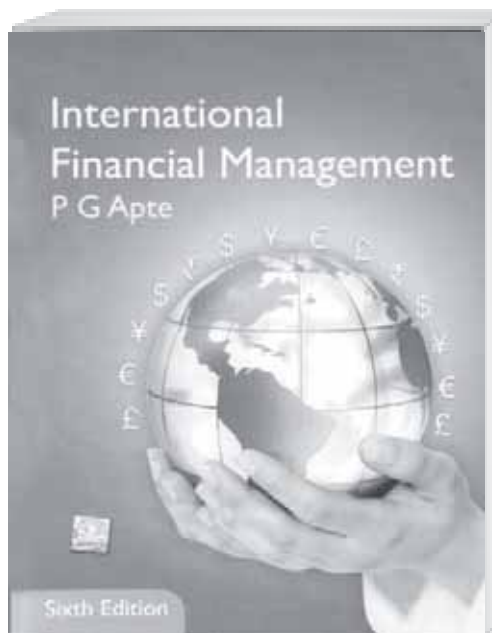
In this situation, economists and financial stalwarts around the globe are raising their eyebrows on witnessing the developments in the Euro Zone and which has started in other emerging economies also. At this juncture we need to be more aware of the RISKS around us, to get prepared

for more shocks that may come up at any point of time.

To add fuel to the fire, the latest LIBOR scam also has given a big shock to the policy makers all over the world. The pertinent question we have to ask ourselves now is what is happening in the financial system? Who is Trustworthy; who is not? How to assess the credibility of the system?

To answer many questions of this nature, we should know more about the complexities of the global financial system. The sixth edition of International Financial Management by Prof P. G. Apte, Professor, IIM-Bangalore will be a good book to depend in order to equip the users with a thorough understanding of the above mentioned areas.

The author has revised certain key chapters which deal in global monetary system and global financial markets considering the changes



happened and happening in the respective areas. He has taken pain to incorporate the regulatory changes that have taken place in the currency futures section.

The author has taken care to include the important policy initiatives taken by the Indian Government especially in the Indian Financial Markets and the Foreign Direct Investment.

The contents of the book are well structured in 22 chapters starting with an introduction on Financial Management in a Global Context. The chapters on Balance of Payments, International Monetary System and Global markets are rich in substance and are well supported by tables and graphs.

Where ever warranted, the author has given case studies at the end of respective chapters. The chapters on Forwards, Swaps and Foreign Exchange Market are well presented with a number of examples worked out systematically. A separate

chapter has been dedicated for International Equity Investment with a good illustration on International Capital Asset Pricing Model.

Long Term Borrowing in the Global Capital markets is discussed in depth in the book with focus on all categories viz. Bonds, Syndicated credits, MTNs, Money Market Instruments etc., with the due support of tables.

Tax implications of International Activities are also dealt with in detail along with the mention about Double Taxation Reliefs. The book is enriched with an Appendix on Interest Rate Mathematics also, which will be very useful for students and academicians.

The book is well written and professionally sequenced and presented. The target group will definitely find this book useful to them in their professional / academic journey.





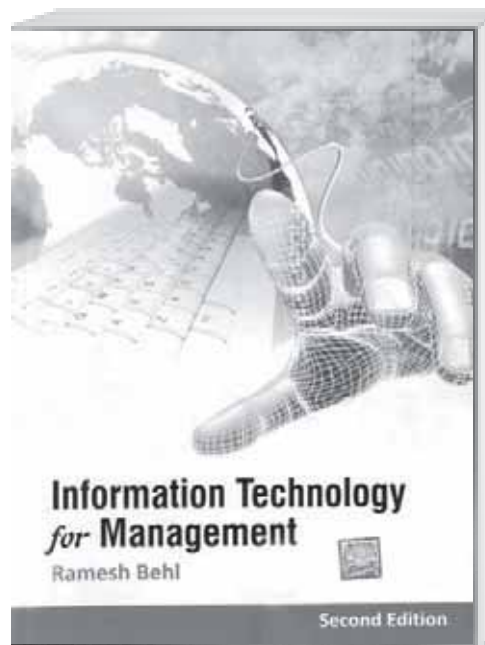
Book Title : *Information Technology for Management*
Authors : Ramesh Behl
Edition : Second
ISBN-13 : 978-1-25-900479-7
ISBN-10 : 1-25-900479-1
Pages : 722
Publisher : Tata McGraw-Hill Education Private Limited, New Delhi.

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The author, Ramesh Behl is a Professor of Information Technology and eBusiness at International Management Institute, New Delhi. His previous assignments have been with Indian Institute of Foreign Trade, New Delhi, Indian Institute of Management, Lucknow and Statesman New Delhi. He has engaged in a number of research and consulting assignments for government and private organisations in the areas of Information Systems and International Trade. His areas of interest include Information Technology based Decision Making, Systems Analysis and Design, Electronic Business, Information Systems Management, Business Intelligence and Decision Support Systems. The author is also an active researcher in the area of eBusiness and Information Systems Management. He is a United Nations fellow on Information Systems and International Operations and a SAP certified solution consultant. He has over twenty four years of teaching, research and consulting experience in the area of Information Technology and e-Business. Prof Behl has

authored fourteen books and a number of research papers. He is a consultant to number of international and Indian companies in the area of Information Systems and e-Business and also a member of the core group on electronic commerce set up by Ministry of Commerce, Government of India.



The second edition of this hugely popular book on Information Technology drastically improves upon the content presented in the first edition. It concentrates on various emerging technologies and concepts like virtualisation, cloud computing, business intelligence and enterprise solutions. There are two new chapters in this book; 'Computer Software' and 'SPSS – A Statistical Tool.' The addition of these two chapters greatly adds value to this edition. Over 60 latest real-world case-examples drawn from Indian and International organizations have also been provided to illustrate managerial issues pertaining to the use of Information Technology. A list of technologies/ concepts discussed in the book is given

at the beginning. This is useful to students and educators who want a snapshot of the various technologies that will be discussed in different sections of the book.

The book consists of six sections, each one focused on a separate aspect of Information Technology. Each section begins with a real-world case that puts into perspective the relevant concepts that will be discussed in the chapters comprising the section. The sections are structured quite logically and they introduce the concepts first before moving on to the main theme. All the chapters are peppered with key terms and their definitions on the side of the page where necessary. This useful feature provides the reader with instant reference without having to search for definitions within the main body of the text. At the end of each chapter one can find the summary followed by caselets.

Section I consists of chapters focusing on the role of Information Technology in Business Organizations and the strategic use of Information Systems. These chapters provide the reader with a thorough understanding of the basic Information Technology concepts that managers need to be aware of.

The basis for the second section of the book is Technology Infrastructure and the chapters that comprise it focus on Computer hardware, software, number systems and networks and telecommunication systems. These technical concepts are important for every manager to be conscious of so that they can better appreciate the complexities of Information Technology in organizations. The language used is very simple to understand which makes it a useful text for readers with a non-IT background.

Decision making is one of the most significant functions of a manager. The third section concentrates on how Information Technology is used in the decision making process. Software that assists in decision making like MS Excel, MS Access and SPSS are discussed in this section. The addition of the chapter on SPSS is very beneficial to business students. The need and methods of organization and analysis of data along with the management of databases is presented in this section.

The next section which is on Inter and Intra-organisational systems presents contemporary Information Technology concepts which are imperative to the survival of every organization. e-business models and Enterprise Applications are the foundation of Section IV. The author presents to the reader a very intimate look at the various business models in e-business and also Enterprise applications such as ERP, CRM and SCM. The promises and pitfalls of using these diverse technologies are also put into perspective by the author.

Advances in Information Technology have enabled organizational information systems to move from simple data processing to intelligent computing. Building intelligent systems for businesses is presented in Section V of the textbook. Decision support systems and Knowledge Management are the concepts discussed in chapters comprising this section. The various approaches to and types of decision making and the business applications of intelligent systems are presented by the author using relevant examples.

The last section of the book is devoted to the planning and implementation of Information Systems in addition to the management of Information Systems. Essential concepts in this area include different System Development Methodologies and Capability Maturity Model Integration. These concepts are explained peripherally but it is detailed enough to give students a basic awareness.

The author presents a wide array of concepts and also provides real-world examples to illustrate these concepts. The diversity of concepts discussed in this textbook makes it very valuable to students and instructors alike. This edition improves upon its previous edition by leaps and bounds and with the inclusion of new chapters especially the one on SPSS makes this text stand out among its contemporaries. The book focuses on Information Technology as an indispensable management tool and will be a good read for readers interested in multi-dimensional view of Information Technology especially those from a non-IT background.





Two Books to empower Business Executives

Book Title	:	<i>Communication Skills</i>
Authors	:	Bretag, Crossman, and Bordia
Edition	:	Revised
ISBN-13	:	978-1-25-902571-6
ISBN-10	:	1-25-902571-3
Pages	:	255
Publisher	:	Tata McGraw-Hill Education Private Limited, New Delhi.

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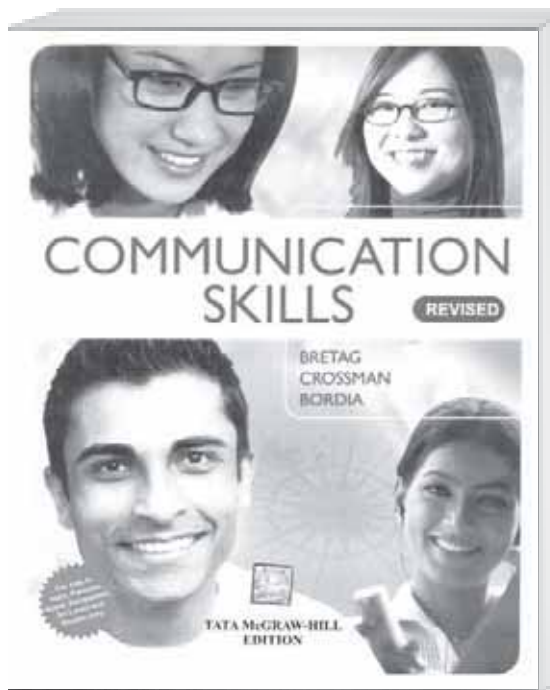


Communication Skills by Tracey Bretag, Joanna Crossman and Sarbari Bordia, is an authoritative book on the important aspects of communication skills (revised version of 2007 Communication Skills in International Business), for sale in a few Asian countries only. The authors by virtue of their teaching experience in the University of South Australia give us some valuable inputs in understanding the practical nuances of communication skills. This book brings together three different fields- Academic Communication, Professional Communication and English Grammar. The reader is given directions on the contents and the structure in a capsulated form at the outset. Usage instructions given help the learners understand the text better.

The book comprises two parts: Part I dealing with Academic Communication; and Part II with

Professional Communication. Part I initiates us into the vital aspects of required academic communication skills, namely the attributes to be developed for reading effectively, taking notes, paraphrasing, summarizing, essay writing, referencing

and improving grammar in five chapters. This part is a virtual template for academic progression in areas quite essential for a learner to be successful. Having gained insight into the academic aspects now we proceed to the important professional requirements to be a successful communicator. Part II is divided into six chapters dealing with different types of writing genres, report writing, business document writing, oral presentation skills, employment and intercultural communication. The few case studies included in the chapters further allow the reader to react to situations and practically apply the concepts he has learnt. Having gained insight into the academic aspect, the authors

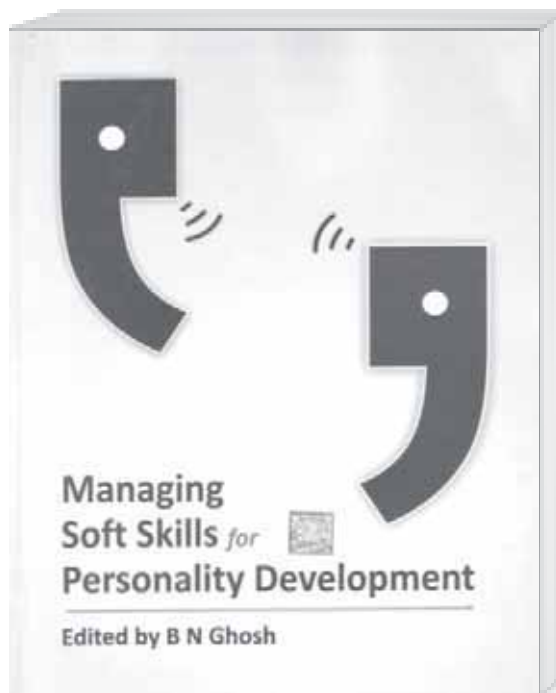


proceed to the important professional requirements to be a successful communicator. This book is comprehensive as it is well structured for easy understanding of terms for new learners: it contains an informative index to the subjects and a full text of the contents. As stated by the authors in their preface, the book is prepared in the lines of a 'workbook' catering to the needs of a learner.

The authors in this revised book have made many structural changes. The topic, "Intercultural Communication" has been

moved from Part III to Part II under Professional Communication. The other major change is the removal of Part III from the previous edition named "Communication Skills for International Students in Business." Shortcomings are: some of the topics deal with the Australian academic context.

On the whole, it is an effective self study workbook for the learners and scholars as it explains the concepts in a simple yet effective manner.



Book Title : *Managing Soft Skills for Personality Development*
Edited by : B.N. Ghosh
Edition : First
ISBN 13 : 978-0-07-107813-9
ISBN 10 : 0-07-107813-4
Pages : 286
Publisher : Tata McGraw-Hill Education Private Limited, New Delhi.

Managing Soft Skills for Personality Development is edited by B.N.Ghosh, a Visiting Professor at Leeds Institute of Management and Technology, Leeds (UK) and published by Tata McGraw Hill Limited. Having received his education from Australia, India, UK and USA and taught in many universities in India and abroad, he has provided short-term consultancy to various organizations including the UGC, Govt. of Malaysia and the UNDP. The recipient of the Emerald Award (UK) for academic excellence (2006), he is the Chief Editor of *Journal of Human Development*.

The editor in 'Prolegomena' has stated that the fundamental purpose of the book is to introduce the readers with different facets of personality development that are compatible with soft skill development. The editor has divided the book into twenty chapters on different aspects of Personality Development, each one prepared by expert in its respective field. These experts hail from India, Iran, Cyprus, Malaysia and the United Kingdom.

The twenty chapters have been arranged on the basis of three interrelated dimensions:- Self discovery and goal setting,

Instrumentalities, Motivation and Decision making. The book touches on various topics like Soft skill development, self-discovery and goal setting, positive thinking and attitude, motivation, interpersonal relations and communications, public speaking, group discussion, body language, teamwork and leadership quality, etiquette and manners, time management, personality development, decision making, conflict and stress management, and developing emotional intelligence.

The editor has followed a structured approach in writing a book, which makes it easy to understand and practice. Each topic uses many sub-headings to make the presentation attractive. The presentation is lucid and is effective. Every chapter begins with an interesting quote by famous

personalities and concludes with a summary note, key terms, and a detailed list of further readings. “Test your knowledge questions” at the end of each chapter provides in-class activities for the learners. The editor has highlighted the important points under each heading in boxes. This book designed to serve as a textbook, gives us a comprehensive understanding of the soft skills required for a successful career. It also provides an essential reading for the students of any discipline who are on the threshold of starting their careers or young managers who are already working in the corporate world.

These two books function as complementary in their function to serve the requirements of the grooming executives in b-schools.





Book Title : *International Marketing Text and Cases*
Author : Justin Paul and Ramneek Kapoor
Edition : Second
ISBN 13 : 978-1-25-900180-2
ISBN 10 : 1-25-900180-6
Pages : 503
Publisher : Tata McGraw-Hill Education Private Limited, New Delhi.

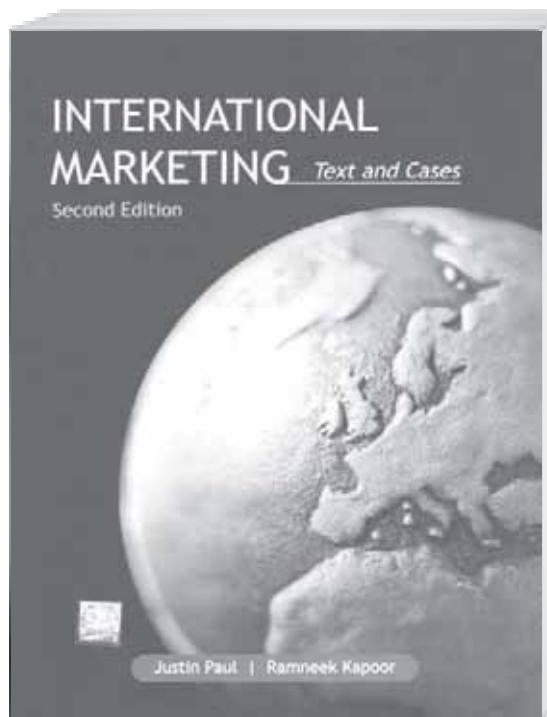
Reviewed by Dr. Andez George, Assistant Professor, SCMS School of Technology and Management (SSTM), Prathap Nagar, Muttom, Aluva-683106, Ernakulam, Kerala, Email: andezgeorge@scmsgroup.org



The book *International Marketing: Text and Cases* by Dr. Justin Paul and Prof. Ramneek Kapoor takes an effort to discuss various dimensions of international marketing in the global context. The strength of this book is in depth of discussion and content of the chapters. New emerging trends and growing internationalization of firms across boundaries with analysis have also been covered in this book. In order to gain more insight about the real world, case studies are taken from real life perspective at the end of each chapter and the examples are exhibited across the chapters. Another attraction of this book is suggested reading and useful weblinks which are helpful to the readers for the advancement of the topic. In addition to this at the end of each chapter the points to remember, objective type questions and review questions are highlighted. It is helpful for the learners to check their memory.

The book consists of 22 chapters.

Each chapter has covered different themes and it provides more insight in the subject. The first chapter gives a brief description about international marketing followed by the second chapter which concentrates on the role of WTO in the world economy. Chapter three discusses on internationalization of a firm and highlighted market entry strategies of some Indian companies like Ranbaxy, Dr. Reddy's Laboratories, Aurobindo Pharma and Tata Group. Chapter four describes the analysis of gap diagrammatically and explains the competitive gap, product line gap and distribution gap. Fifth chapter tells us the different stages of the international marketing research process. It is helpful to get the knowledge in depth about the marketing research. Chapter six and seven explain culture and Political environment respectively. Chapter nine discusses the problems and challenges in market entry modes in global market. Chapter ten describes the global ventures, global mergers,



acquisitions and an International strategic alliance with various examples. Chapter eleven explains product life cycle from innovation to maturity to decline. Various strategies in product development are also included in this chapter. It is very useful in the competitive environment. Chapter twelve focuses on all aspects of international pricing strategy an international firm takes into account while reaching decisions on pricing in international market. Challenges, factors influencing pricing decision explained in this chapter. Chapter thirteen tells us how to manage the channel of distribution on international level. Distributor and middlemen selection qualification criteria are also covered in this chapter. Chapter fourteen gives us how a multinational company responds to the challenges in a foreign market. Chapter fifteen tells us personal selling and multinational sales management and also discusses issues related to expatriate employees and organization of sales management by international marketing firm.

Chapter sixteen covers the measuring of the economic, political and social risk in a country. It explains the Market Potential Index (MPI), Global Competitive Index (GCI), Foreign Direct Investment Confidence Index (FDICI) and Global Political Risk Index (GPRI). Next two chapters cover negotiation and export documentation with procedures. Chapter nineteen tells us meaning and scope of incoterms

and incorporation of incoterms into the contract of sale. Chapter twenty gives us the best practices in e-tailing and the differences between e-tailing and retailing. Chapter twenty gives a detailed description about the e-commerce and internet in the new international marketing scenario of business to business, BC, C2B, C2C flow of knowledge and commerce. The last chapter explains the economy of gulf countries and has projected the India-Canada trade relationship.

Appendix at the end of the book has explained the promotion of international trade in India. Certainly, this chapter gives us a broad idea about the various departments and activities in India.

All 22 chapters in this book are organized clearly and neatly. It offers the learners to get more insight about the real situation. Undoubtedly, this book is very valuable in its depth of discussion and focus on current development in areas of international marketing. With the reading of this book, learners can develop a wider and deeper insight into the strategies of the multinational firms developing their global market around the world.

This book is useful for students, teachers, professionals and those who want to explore their knowledge in this particular field.





A Book and a Case Book on Strategic Management

Book Title : *Strategic Management Formulation, Implementation, and Control*
Author : John A. Pearce II, Richard B. Robinson, and Amita Mital
Edition : Twelfth
ISBN 13 : 978-1-25-900164-2
ISBN 10 : 1-25-900164-4
Pages : 834
Publisher : Tata McGraw-Hill Education Private Limited, New Delhi.

*Reviewed by Dr. C. Sengottuvelu
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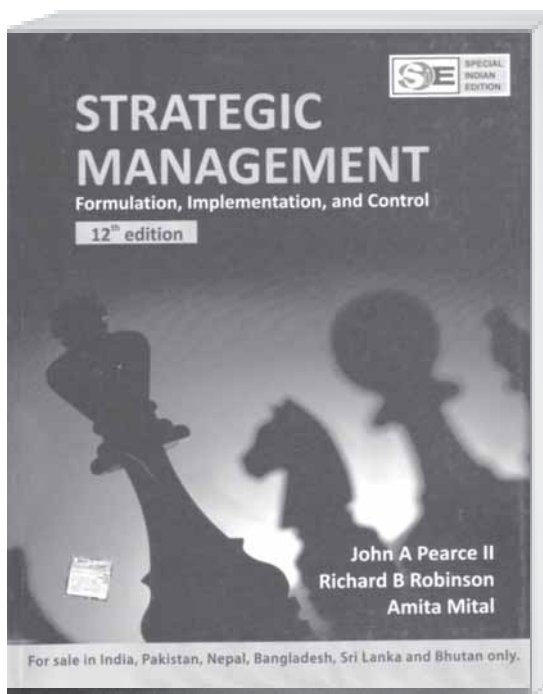
The authors of *Strategic Management Formulation, Implementation and Control*, John A. Pearce II, Richard B. Robinson and Amita Mital have retained high level of academic credibility and market-leading emphasis on strategic practices. This book is considered and prescribed as one of the text books on Strategic Management. It is unique as it uses a model of the strategic management process and as it has a logical flow in all the chapters, which in turn make the material more easily organized by the instructor and learned by the student.

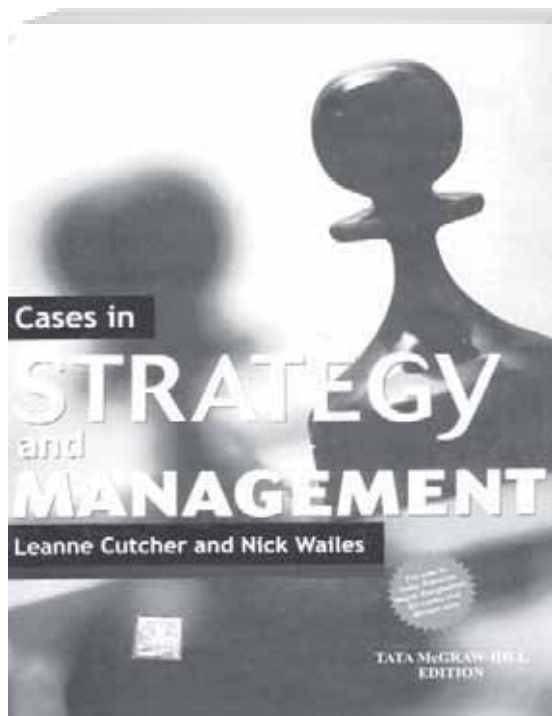
This Edition is divided into 4 parts: Parts 1-3 cover with 14 chapters and part 4 exclusively deals with 26 cases including 20 comprehensive and 6 short cases. The cases are drawn from globally and domestically focused companies and services including,

retails, manufacturing, technology and diversified activities. This edition includes several upgrades designed to incorporate major development from both academic and business press. This edition also includes the cutting edge

concepts, more than 70 new Strategy in Action modules with short, hard-hitting current illustrations on key chapter topics. In addition, more Top Strategist boxes in each chapter have been included to illustrate a key concept in the Strategic Management. This edition includes website details as aid for effective use of this book. Case teaching notes are available in the website to obtain information quickly. Additionally, the website has a good number of comprehensive cases with teaching notes to the teachers.

This book (12-Edition) will certainly meet the changing needs to its readers considering the global scenario on Strategic Management.





Book Title : *Cases in Strategy and Management*
Author : Leanne Cutcher and Nick Wailes
Edition : 2012
ISBN 13 : 978-1-25-902565-5
ISBN 10 : 1-25-902565-9
Pages : 138
Publisher : Tata McGraw-Hill Education Private Limited, New Delhi.

Leanne Cutcher and Nick Wailes teach strategic management in University of Sydney. Most of the cases are authored/co-authored by both of them, Signe Brandt, Kristine Dery, Mellisa Kerr and Troy Sarina, Chris F. Wright, David Grant and Richard Hall have also contributed a couple of case studies, from the same University.

This book is divided into 2 parts. Part 1 deals with Introduction with some background on Strategic Management and Part 2 with 8 case studies. Each case includes detailed information about the case study organization as well as discussion of the relevant literature and discussion questions.

Case 1, “*Back to the Future*”: *Bendigo Bank’s Community Bank Model* is pertaining to a bank in Australia, which has adopted a strategy to differentiate themselves from their competitors. This case study can be used to illustrate a number of key issues, including market entry and competition in a mature and consolidated market, the effect management of intangible resources and the relationship between business-level strategy, customer relations strategy, and human resource policies and practices.

Case 2: *A Meeting of Minds: A US-Australian Joint Venture - Plum Financial Services*, is pertaining to Joint Venture

Company, which has operated and entered successfully in the new market by adopting first mover strategy. This case study highlights the strategic decisions made by organizations entering a new market. By leveraging the core competencies of each partner Plum has been able to capitalize on the strategic advantage of a first mover strategy.

Case 3: *The Road Less Travelled: Country Road’s Venture into Global Markets* deals with leading retailers of high-quality apparel and home wares in Australia. The case mainly, illustrates the interconnection between planned and emergent strategy and the challenges faced by firms pursuing diversification strategies in both domestic and global markets.

Case 4: *Not for Profit, Not for Charity, But for Service’- Credit Unions* deals with “Credit Unions or the third sector”. The third sector is made up of not-for-profit organizations and activities the sit next to the institutional premises of government, state, or public sector on one hand and the “for profit or business sector on the other hand. This case examines the strategic management concepts centred on notions of profit and

competition in the not-for-profit sector facilitates critical analysis of the various frameworks of strategic management theory.

Case 5: *Stuck in Neutral? The Impact of Global Production on Local Strategy in the Australian Automotive Industry* is pertaining to Automobile giants such as Toyota and Mitsubishi and their strategies gain export focus and global integration in Australia. This case study also highlights the need to look inside to the internal workings of the firm in order to explain differences between firms in the same industry – Automobile Industry.

Case 6: *Knowledge Management at Accenture Australia* is pertaining to Accenture, one of the leading professional service firms in management consulting, technology services and outsourcing services. This case study describes the evolution and the way in which Accenture has successfully pursued both “Codification” and “personalization” strategies as a means of maximizing its

effective use of both the explicit and the tacit knowledge critical to its success.

Case 7: *The Sydney Real Estate Market* deals with two different types of real estate agencies in Sydney and their efforts to gain greater insights into the nature of dynamic capabilities, and their relationship to the resources during the property boom in early 2004. This case study also examines the application Porter’s five forces model to the analysis of industry environment.

Case 8: *ATP Innovations* deals with Australian Technology Park (ATP) innovations, an innovation hub owned by four Australian research-intensive universities, based in the ATP in Sydney. This also provides a link in respect of the role of technology parks in encouraging entrepreneurship and the pressure on Australian Universities to improve the commercialization of the IPR.

This book is useful and an excellent case book on Strategic Management. This book will certainly fill up the gap in respect of case studies already available.



SCMS JOURNAL OF INDIAN MANAGEMENT

Aims and Scope

The *SCMS Journal of Indian Management* is a **blind peer-reviewed Journal**. The Journal deems it its mission to submit to the readers fresh fruit of management thoughts and rich cream of current innovative research. The format of the Journal is designed reader-friendly. The academia and the corporates have an easy access to the Journal.

The Journal looks for articles conceptually sound, at once methodologically rigorous. The Journal loves to deal knowledge in management theory and practice individually and in unison. We wish our effort would bear fruit. We hope the Journal will have a long life in the shelves catering to the needs of b-students and b-faculty.

- § Proposals for articles that demonstrate clear and bold thinking, fresh and useful ideas, accessible and jargon-free expression, and unambiguous authority are invited. The following may be noted while articles are prepared.
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- § What are the real-world implications of the proposed article? Can the central message be applied in businesses today, and if so, how?
- § Who is the audience for your article? Why should a busy manager stop and read it?
- § What kind of research have you conducted to support the argument or logic in your article?
- § What academic, professional, or personal experience will you draw on to make the argument convincing? In other words, what is the source of your authority?
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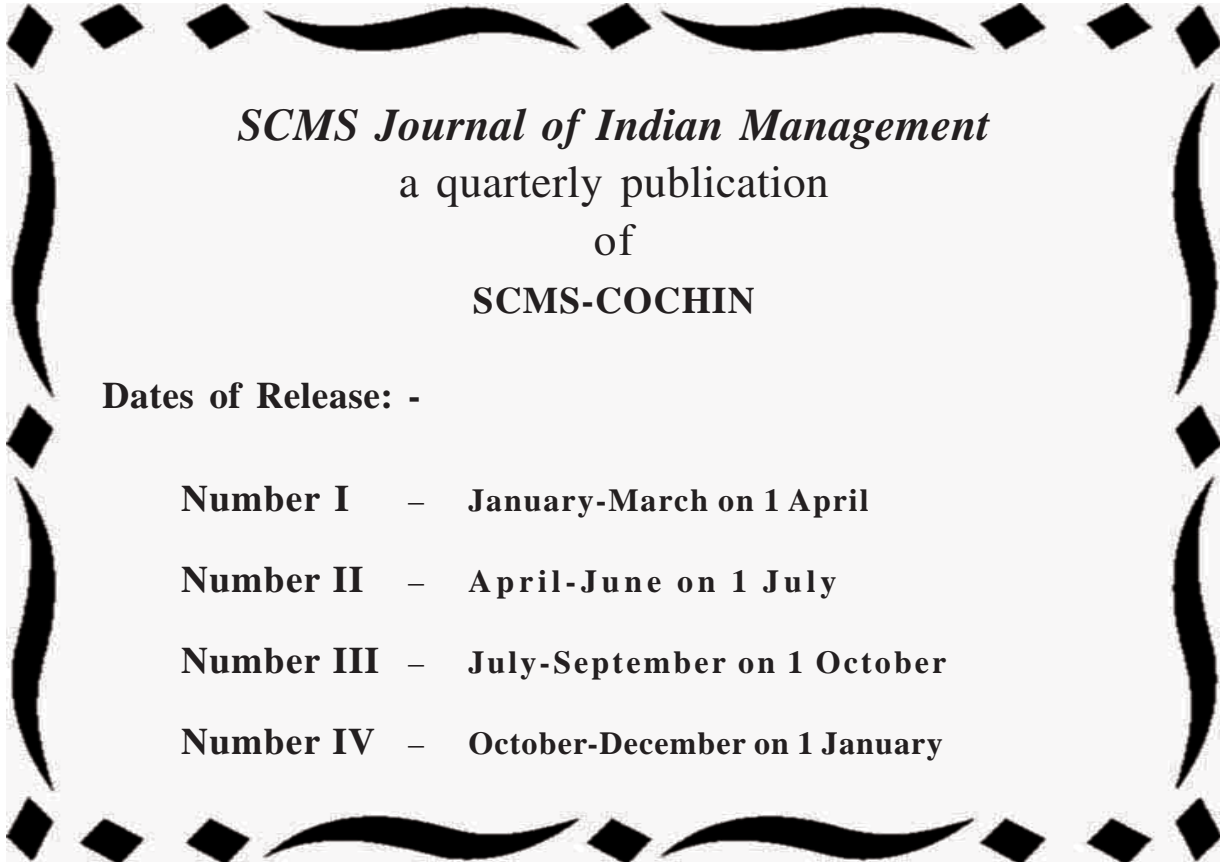
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