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BRAND PREFERENCE OF MOBILE PHONES IN NEPAL: WITH SPECIAL REFERENCE TO KATHMANDU VALLEY

Achyut Gyawali*

Abstract

Advertising is a promotional activity for marketing a commodity. Advertising helps the manufacturer to increase his/her sales and maintain market. Nowadays advertising plays a significant role in today's highly competitive world. Today's world is characterized by more complex technology, and this can be extremely confusing to people who are not technology minded. Brands can play an important role here by providing simplicity and reassurance to the uninitiated; offering a quick, clear guide to a variety of competitive products and helping consumers reach better and quicker decisions. This study has tried to explore regarding the brand effects in buying decision of Mobile phones in Kathmandu Valley. In order to get information about brand preference, questionnaire survey has been used. Convenience sampling method is used while selecting the respondents. It is concluded that there is high competition among different brands. The factors price, quality, availability in the market, incentives, profit margin, etc. determine the portion occupied by the individual brand.

Key words: Marketing, brand preference, mobile advertising, branding.

Background of the study

Today, we are exposed to a larger number of commercial messages than at any time in the past. Newspapers and magazines are full of advertisements. Not only has the quantity increased, even the quality of advertisements has improved considerably over the past couple of years. Other means of advertising such as radio, television, cinema and billboards, and internet, etc have also amply contributed to the growth of this industry. The simplest definition of advertisement is that it is a ‘public announcement.’ In earlier times, to ‘advertise’ meant merely to announce or to inform. A brand is a name given by a manufacturer to one (or a number) of its products or services. Brands are used to differentiate products from their competitors. They facilitate recognition and where customers have built up favorable attitude towards the product, may speed the individual buyers through the purchase decision process. Individual purchasers will filter out less preferred or unknown brands and the continued purchase of the branded product will

*Mr. Gyawali is the Lecturer at Central Department of Management, TU and Global College of Management.
reinforce the brand loyalty. Without brands, consumer can’t tell one product from another and advertising then would be nearly impossible. The Marketing is most important part of the business. Marketing is very poor in a developing country like ours. To increase the economic state of developing country, marketing plays major role. According to Philip Kotler marketing is defined as “a human activity directed at satisfying needs and wants through exchange process.” For a managerial definition, marketing is described as “the art of selling”.

Consumers’ are the king in marketing; he/she is the decision maker to buy or not to buy the products or services. Consumers are people in families and other kind of household who buy and use products and services in order to satisfy. The major task of the marketers is to understand the willingness of the consumer. To find out willingness of the consumer, we must learn about their behavior.

Consumers’ behavior can be defined as the process where the individuals decide whether, what, when, where, how and from whom to purchase goods and services. Consumer behavior reflects the totality of consumer’s decision with respect to the acquisition of goods, consumption, and disposition of goods, services, time and ideas by human decision making units. To alert in consumer behavior it is much more important in underdeveloped countries because it helps to boost up the economic growth. Building brands requires a great deal of time, money, promotion and packaging. Brand suggests product difference to manufacturers. They convey attributes, image, value and benefits most of the products are branded.

**Cellular/Mobile phones**
The cellular telephone (commonly “mobile phone” or “cell phone” or “hand phone”) is a long-range, portable electronic device used for mobile communication. In addition to the standard voice function of telephone, current mobile phones can support many additional services such as SMS for text messaging, email, packet switching for access to the internet, and MMS for sending and receiving photos and videos. Most current mobile phones connect to a cellular network of base stations (cell sites), which is in turn interconnected to the public switched telephone network (PSTN) (the exception is satellite phone.) Cellular telephone is also defined as a type of short-wave analog or digital telecommunication in which a subscriber has a wireless connection from a mobile telephone to a relatively nearby transmitter. The transmitter’s span of coverage is called a cell. Generally, cellular telephone service is available in urban areas and along major highways. As the cellular telephone user moves from one cell or area of coverage to another, the telephone is effectively passed on to the local cell transmitter. A cellular telephone is not to be confused with cordless telephone (which is simply a phone with a very short wireless connection to a local phone outlet). A newer service similar to cellular phone is personal communications services (PCS).

**Introduction of telecommunication industry of Nepal**
A telecommunication system consists of three basic elements: a transmitter that takes information and converts it to a signal; a transmission medium that carries the signal; and
a receiver that receives the signal and converts it back into usable information. The world history of development of telecommunication is very long. But the history of telecommunication in Nepal is rather very young as compared to the history and culture of Nepalese people. Telecommunication was introduced with the installation of open wire trunk telephone line between Kathmandu and Birjung (a border town in southern Nepal) for the first time in Nepal in around 1914 beginning of the First World War. Until 2003, Nepal Telecom (NT) formerly known as Nepal Telecommunication Corporation (NTC) was the only state owned telecommunication company of Nepal. Using liberalization policy and involving the private sector in a competitive environment for the development and expansion of telecommunication sector in Nepal, then His Majesty’s Government of Nepal’s decision dated December 25, 1995 had initiated the involvement of the private sector in the development of the telecommunication services. Then, United Telecom Limited started providing services in 2003. NTC was converted into a Public Limited Company on April 14, 2004. Nepal telecommunications Authority as an autonomous regulatory body has been established on March 4, 1998 as stipulated within the framework of the Telecommunication Act 1997 A.D. and telecommunication Regulation 1977 A.D. Spice Nepal Private Ltd., popularly known under its brand name “NCELL”, is the first private GSM mobile operator in Nepal. The company was established in 2004.

Statement of the problem

Previously market was not so competitive. There was very few brands competing in the market and there were very few people using mobile phones, since they used to be very expensive. During a decade, many new brands of mobile phones have introduced in the market even in our country new telecommunication companies have been established making the service very cheaper so that the service can be utilized by every common people of the country. Today, mobile phones price starts from Rs. 1,000 to 1,00,000 because of which today people have lots of options regarding the mobile phones. You can get the various features, accessories and prices regarding the mobile phones. Mobile phones have become very common to the people and the life has become almost impossible without a mobile phones.

To compete in a market many cheaper mobile phones have been introduced in a market especially from India and China providing additional accessories and features to the customers. But the question is, “How customers purchase the mobile phones”? “what is the role of brand while purchasing mobile phones”? “which brands are performing well in the market”? , “consumer behavior while choosing the various brands of mobile phones” and the strategies various brands of mobile phone executed so as to increase their market share. Not only this, it is always important to know the role of advertisements and other promotional tools to increase the market share and the role of after sales service, additional accessories and quality to be market leader. So the brief study is important to know the answer regarding the problem.

Objectives of the study

The primary objective is to study the perception and buying behavior of people towards various mobile brands. The secondary objectives of the study are as follows:
To know about the brand preference with different mobile phones.

To assess the factors that influence decision making in purchasing a mobile phones.

Limitations of the study
i. Most of the data used in this study have been obtained through questionnaire.
ii. Data are based on the samples survey conducted in Kathmandu valley only.
iii. The data analysis has been done on the basis of simple statistical tools.
iv. The data has been collected by the researcher through questionnaires interview schedule from the respondents of mobile phone users during the period November 2013.

Review of literature
Brand is the name of the product. Branding differentiates the products from marketers, sellers and consumers. They convey attributes, image, values and benefits.

“A Brand is a name terms, signs, symbol, or design or a combination of the intended to identify the goods or service of one seller or group of seller and to differentiate from those competitors”. (Kotler, 1999, P. 404) It is clear from above definition that brand identifies the goods to market. It can be a name trade mark, logo or other symbol. It differs from other assets such as patents and copy rights; which have expiry date. Trademark is a legally protected brand which implies ownership of the users and exclusive right to use.

Organizations develop brands as a way to attract and keep customers by promoting value, image, prestige, and lifestyle. By using a particular brand, consumer develops positive image about the brand (Ginder, 1993). Branding is a technique to capture consumers psychologically. Organizations are taking advantage of psychology of human beings by developing attractive brands (Ginder, 1993). Kotler et. al., (1999) discuss four brand name strategies which include, (i) Individual names (every product/service has its own brand name), (ii) Blanket family names (all products/services have one brand name like corporate brand), (iii) Separate family names (firm offers different products/services having different characteristics so products/services with similar characteristics have a family brand name) and (iv) Company Trade name with individual product/service names. There are four general branding strategies available for any company to manage their brands at different stages of the business, these are line extension, brand extension, multi brands and new brands (Kotler et. al., 1999).

In today’s world, where competition is high and no company wants to loose its position in the market, companies are inconsistent in using branding strategies (Kotler et. al., 1996). This divergence is not unique to a single industry; it exists in every industry (Kotler et. al., 1996). Terms like umbrella branding, mixed branding, mixed endorsement and mono brands are quite common now days (Saunders & Guoqun, 1997). In some cases customer do get confused with co-branding techniques but this brand confusion accompanies an increased recognition of the value of the brands (Uncles et. al., 1995).
is hot discussion now a day that either the companies should follow a strategy in which the company name is used across whole range of brands or it is more feasible to keep its name off.

Lisa (2000), explains brand management through brand description, and brand strength, which creates brand value and also it creates market power. Outcome of brand strength is not brand value but implies market share and profit as outcome. Market description is not quantifiable as it is a marketing aspect whereas brand strength is quantifiable in accounting terms. Lisa (2000), also emphasize on managing the brand equity (brand equity is related to amount of power and value in market place. A brand’s equity is defined as loyalty, perceived quality, name awareness, strong associations, and other assets such as patents (Chu Me Liu, 2002).

Corporate brand management is a dynamic process which involves continuous adjustment of the values, culture and image of the brand (Laforet & Saunders, 1994). Multiplicity of names which appear on brands have meanings that could relate to brand history, structure, acquisitions or it could be an attempt to impress stakeholders including customers (Laforet & Saunders, 1994). Laforet & Saunders (1994), argue that for customers corporate name is a name like any other. One more thing is that names have different associations so it is very unlikely that all corporate names have the same value. Like many corporate names are advertised more prominently than some others and some are associated with smaller players in the market.

Uncles et. al., (1995) suggest that many western firms do not recognize the value of corporate brand. One reason for this could be that firms are afraid that their different brands may get mixed and customer may get confused by this. The presences of corporate names help products at the start up. Later in the product life cycle or product development stages dual association of corporate and brand names increases the value of the brand (Saunders & Guoqun, 1997). In all cases presence of corporate names to a brand increases the consumer’s perception of the brands and preference for it. And more interestingly customers feel happy to see a corporate name and brand names instead of brand name alone (Saunders & Guoqun, 1997).

Corporate branding in service sector is quite a difficult task. It is basically Branding constitutes an important part of product mix. The word brand is comprehensive encompassing others narrower terms. A brand name consists of words, letters or number that can be vocalized. A Trademark is the part of the brand that appears in the form of a symbol, design or distinctive color or letter. A brand mark is recognized by sign and differentiates its product from competing products.

“Building brands require a great deal of time money promotion and packaging. Brands suggest product difference to costumers. They convey attributes, image value and benefits most of the products are branded” (Agrawal, 2010 P.287). Now a days, market is being much more competitive is a subject of consideration. Every company should carry out a research before launching a new brand. But all Nepalese companies do not set
budget aside for research and development. It is always important to study the need, interest, taste, and purchasing power of the targeted costumers. As the customer is the king of the market in today’s liberal economy companies cannot afford to be only product oriented. There is no specific formula for success. Market is different from place to place, consumers need taste and interest may vary from one place to another. In many cases affordability, geographical location, culture and religion also determine people’s need. Therefore, success of brand largely depends on the different factors such as innovation, quality, attractive, packing reasonable price, availability, good publicity brand positioning, unique selling proposition, value addition relationship etc.

Research methodology
This study is an exploratory type of study. The main aim of this study is to find out the brand preference of mobile phones in Kathmandu Valley, Nepal. To fulfill this purpose raw data related with different aspects are collected through the questionnaire method. A structures questionnaire was prepared and distributed to the respondents. Thus, to evaluate and analyze the brand preference of mobile phone, descriptive type of survey research design has been followed throughout this study. The researcher has chosen convenience sampling system. The total numbers of respondents were 150 people as sample. The time taken to collect the data was almost 25 days in November. All the analysis is made on the basis of the data as presented in the master table. Data is analyzed both descriptively and statistically with the help of SPSS software. For statistical analysis, required tools such as percentage, chi-square etc are used.

Presentation of data analysis
Brand preference of mobile phones according to the gender:
The gender wise analysis of the mobile phone users determines the sales as well as the consumption of mobile phones. The table below shows the gender wise analysis of mobile phone users:

<table>
<thead>
<tr>
<th>Gender</th>
<th>Nokia</th>
<th>Samsung</th>
<th>Sony Ericson</th>
<th>LG</th>
<th>Motorola</th>
<th>Iphone</th>
<th>Blackberry</th>
<th>others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>21</td>
<td>15</td>
<td>2</td>
<td>0</td>
<td>3</td>
<td>20</td>
<td>13</td>
<td>4</td>
<td>78</td>
</tr>
<tr>
<td>Female</td>
<td>24</td>
<td>15</td>
<td>15</td>
<td>2</td>
<td>6</td>
<td>7</td>
<td>3</td>
<td>0</td>
<td>72</td>
</tr>
<tr>
<td>Total</td>
<td>45</td>
<td>30</td>
<td>17</td>
<td>2</td>
<td>9</td>
<td>27</td>
<td>16</td>
<td>4</td>
<td>150</td>
</tr>
</tbody>
</table>

Source: Field survey, 2013
According to the above table, 78 mobile users are male and 72 mobile users are female. To show the brand preference of mobile phones the figure above clears that most of the mobile phones users use Nokia phones i.e. 21 males and 24 females.
Age wise users of mobile phones
In this section, various types of mobile phones are given according to the age factor. The sales of mobile phones also depend upon the user’s age. The following table shows the age-wise mobile phones user:

Table 2: Age-wise users of mobile phones

<table>
<thead>
<tr>
<th>Age</th>
<th>Nokia</th>
<th>Samsung</th>
<th>Sony Ericson</th>
<th>LG</th>
<th>Motorola</th>
<th>Iphone</th>
<th>Blackberry</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-25</td>
<td></td>
<td></td>
<td></td>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>21</td>
<td>27</td>
<td>15</td>
<td>0</td>
<td>0</td>
<td>10</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Percentage</td>
<td>27</td>
<td>34</td>
<td>19</td>
<td>0</td>
<td>0</td>
<td>13</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>26-40</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>9</td>
<td>14</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Number</td>
<td>21</td>
<td>3</td>
<td>0</td>
<td>2</td>
<td>9</td>
<td>14</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Percentage</td>
<td>36</td>
<td>5</td>
<td>0</td>
<td>3</td>
<td>15</td>
<td>24</td>
<td>17</td>
<td>0</td>
</tr>
<tr>
<td>41 and above</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Number</td>
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<td>2</td>
<td>0</td>
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<td>Percentage</td>
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<td>0</td>
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<td></td>
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<td>45</td>
<td>30</td>
<td>17</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>Number</td>
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<td>27</td>
<td>16</td>
<td>4</td>
</tr>
<tr>
<td>Percentage</td>
<td>30</td>
<td>20</td>
<td>11</td>
<td>1</td>
<td>6</td>
<td>18</td>
<td>11</td>
<td>3</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2013

Above table shows the age wise user of mobile phones. From the above table, it shows the mobile users between ages 15-25 in which, 27% of respondents use Nokia, 34% of respondents use Samsung, 19% respondents use Sony Ericson, 13% of respondents use Iphone, 4% of respondents use black berry and 4% of respondents prefer other brands.

From the above table, it shows the mobile user between ages 26-49, 36% of respondents use Nokia, 5% of respondents use Samsung, 3% of respondents use LG, 15% of respondents use Motorola, 24% of respondents use Iphone and 17% of them use blackberry mobile phones.

Form the above table, it shows the mobile users between ages 41 and above in which, 25% of respondents use Nokia, 17% of them use Sony Ericson, 25% of them use Iphone, 25% of them use blackberry and 8% of them use other mobile phones.

<table>
<thead>
<tr>
<th>Chi-Square Tests</th>
<th>Value</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
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<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>60.003</td>
<td>0</td>
</tr>
</tbody>
</table>

In order to find out the significant relationship between the age of people and the brand of mobile phone they use, from the above table, it can be seen that P-value is 0.00 which is less than our significance level i.e. 0.05. Therefore it can be said that there is a significant relationship between the age of people and the brand of mobile phone they use.
Gender of the people and the time of the currently using
The brand of the mobile phone determines its time of use. The good mobile phones can be used for a long time. The following table shows the current status of mobile phones used by the respondents:

Table 3: Gender of the people and the time of using mobile phones

<table>
<thead>
<tr>
<th>Gender</th>
<th>Less than one year</th>
<th>1-2 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>Number 34</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>Percentage 44</td>
<td>56</td>
</tr>
<tr>
<td>Female</td>
<td>Number 31</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Percentage 43</td>
<td>57</td>
</tr>
<tr>
<td>Total</td>
<td>Number 65</td>
<td>85</td>
</tr>
<tr>
<td></td>
<td>Percentage 43</td>
<td>57</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2013

The above table shows, the gender of the respondents and the time of the currently using mobile phones. According to the table, 44% of the male respondents are using their current mobile phone for less than one year and 56% of the male respondents are using their current mobile phone for 1-2 years.

Similarly, 43% of the female respondents are using their current mobile phone for less than one year and 57% of the female respondents are using their current mobile phone for 1-2 years.

Chi-Square Tests

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>0.004</td>
<td>0.947</td>
</tr>
</tbody>
</table>

In order to find out the significant relationship between the gender of the people and the time of the currently using mobile phone, from the above table, it can be seen that P-value is 0.947 which is greater that our significance level i.e. 0.05. Therefore it can be said that there is no significant relationship between the gender of people and the time of the currently using mobile phone.

Reasons for purchasing the mobile phones
In purchasing different mobile phones there may be different reasons. Some people keep on changing mobile phones day by day some people purchase mobile only after one mobile is gone damaged and some want to use the new technologies that are increasing day by day in new models of mobile phones. Thus, the following table clearly shows the reasons for purchasing mobile phones. The table below shows the reasons for purchasing mobile phones.
Table 4: Reasons for purchasing mobile phones

<table>
<thead>
<tr>
<th>Reasons</th>
<th>Valid Number</th>
<th>Valid Percent</th>
<th>Missing Number</th>
<th>Missing Percent</th>
<th>Total Number</th>
<th>Total Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>WIFI</td>
<td>81</td>
<td>54</td>
<td>69</td>
<td>46</td>
<td>150</td>
<td>100</td>
</tr>
<tr>
<td>Just to talk it</td>
<td>150</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>150</td>
<td>100</td>
</tr>
<tr>
<td>Use GPRS</td>
<td>100</td>
<td>67</td>
<td>50</td>
<td>33</td>
<td>150</td>
<td>100</td>
</tr>
<tr>
<td>For SMS</td>
<td>150</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>150</td>
<td>100</td>
</tr>
<tr>
<td>For downloading files</td>
<td>75</td>
<td>50</td>
<td>75</td>
<td>50</td>
<td>150</td>
<td>100</td>
</tr>
<tr>
<td>Others</td>
<td>3</td>
<td>2</td>
<td>147</td>
<td>98</td>
<td>150</td>
<td>100</td>
</tr>
</tbody>
</table>

*Source: Field Survey, 2014*

The above mentioned table reveals the overall responses for reasons of purchasing mobile phones. It can be seen that 100% of the respondents said that they purchase mobile phones just to talk in it, 54% of them stated because of WIFI facilities, 67% of them said for using GPRS, 100% of them stated in order to have SMS facilities and 50% of the respondents have given reasons as for downloading files, they purchase mobile phones.

**Gender and the time of using mobile phones**

In this section, gender wise like male female and how often they use their mobile phones are being analyzed. The following table shows the gender wise analysis of the mobile phones currently using:

Table 5: Gender of the respondents and the time they use their mobile phones

<table>
<thead>
<tr>
<th>How often do you change your mobile</th>
<th>Gender</th>
<th>1-2 years</th>
<th>2-4 years</th>
<th>Above 4 years</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Number</td>
<td>Number</td>
<td>Number</td>
<td>78</td>
</tr>
<tr>
<td></td>
<td></td>
<td>40</td>
<td>32</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percentage</td>
<td>51</td>
<td>41</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>Number</td>
<td>Number</td>
<td>Number</td>
<td>72</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25</td>
<td>36</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percentage</td>
<td>35</td>
<td>50</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>Number</td>
<td>65</td>
<td>68</td>
<td>17</td>
<td>150</td>
</tr>
<tr>
<td></td>
<td>Percentage</td>
<td>43</td>
<td>45</td>
<td>11</td>
<td>100</td>
</tr>
</tbody>
</table>

*Source: Field Survey, 2014*
The above table shows the gender of the respondents and the time they use their mobile phones. According to the table above, 51% of the male respondents use their mobile phones for 1-2 years, 41% of the male respondents use their mobile phones for 2-4 years and 8% of the male respondents use their mobile phones for more than 4 years.

Similarly, 35% of the female respondents use their mobile phones for 1-2 years, 50% of the female respondents use their mobile phones for 2-4 years and 15% of the female respondents use their mobile phones for more than 4 years.

<table>
<thead>
<tr>
<th>Chi-Square Tests</th>
<th>Value</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>4.935</td>
<td>0.085</td>
</tr>
</tbody>
</table>

In order to find out the significant relationship between the gender of the people and the time they use their mobile phones, from the above table, it can be seen that P-value is 0.085 which is greater than our significance level i.e. 0.05. Therefore it can be said that there is no significant relationship between the gender of the people and the time they use their mobile phones.

**Discussion**

Marketing has gained new dimension in recent years and passed through different stages to reach at the present stage of societal marketing concept which aims at maximizing social welfare through delivering goods and services are produced to satisfy social wants and are produced according to consumer preferences.

Marketing is a system which can be compared with human system, as it has its input, output and process marketing environment is influenced by many factors and is broadly classify as external and internal factor. The firm should have thorough knowledge of these factors so that it can formulate plans and policies in order to achieve its objectives.

The importance of marketing is increasing day by day as the competition in the market has been increasing. The marketing concept seen in present world market has passed through different stage of development and finally involved as social concept of marketing. All the firms have to pass through various stages while delivering its product in market and it has to formulate its plans and policy and apply it with flexibility. The product passes through the various stages of life cycle like: development, introduction, growth, maturity and decline stage to the market.

In this study, an attempt is made to analyze the marketing strategy. Potential users, consumer preference (satisfaction level, price, quality and after sales services), popular mobile brands consumed in the market of Kathmandu valley based on the survey of the consumer, producers and dealers, opinion as well as the selected mobile dealers.

After analyzing the information collected from primary data, a conclusion is to be made on the study of market situation, satisfaction and brand preference of mobile phones. The
main objective of this study is to find out the consumers' behavior toward mobile phones with reference to different brands available in the market of Kathmandu valley. To find out these goals, the primary data was collected from consumers and shopkeepers with the help of questionnaire. These data were analyzed by mean, chi-square test with the help of simple statistical tools i.e. number and percentage.

Conclusion
On the basis of the study undertaken in the area, the following conclusions can be made regarding brand preference of mobile phones in Kathmandu Valley.

i. It has high demand in Kathmandu Valley.

ii. Mobile phone use is prevalent in Kathmandu Valley.

iii. Advertisement has high influence on the preference of the brand by consumers and Television advertisement seems to be most liked by the consumers.

iv. There are various brands of mobile phones available and the market is highly competitive in recent years.

v. There is high competition among different brands. The factors price, quality, availability in the market, incentives, profit margin, etc determine the portion occupied by the individual brand.

vi. Consumers give more preference to preference to performance, outlook, features and brand rather than price. Whereas many consumers today are conscious of the price because of the availability of various cheaper brands.

vii. The marketing mechanism, advertising and advertising activities have an important role in establishing a product in a market and sustaining it over time.

Further Research and managerial implications:
It is the era of globalization not only in manufacturing of products but also in service industry. Brands are also getting globalize. Fundamental are same in every market but some factors vary according to market situation. If a brand gets recognition in the international market then it is easy to go into new markets. This research is carried out in order to investigate the role of corporate branding in telecommunication. And this phenomenon is carried out from customer’s point view. It will be interesting to investigate this idea with two or more segments and involving people belonging to all age groups. This will be interesting because the segment involved in this research belongs to only one age group, so one can expect similar results. But when there will be people from all age segments and also from different fields of life then one can check and compare the results of this research with that one. And can better analyze the role of corporate branding in telecommunication.

This research will also be helpful for managers to know about the point of view of consumers about corporate brand. This will also help managers for better positioning of their brand to get target recognition for a better and longer relationship. Finally, this research will be supportive in marketing mix concepts, that how a firm can introduce service, price associated with the particular service and promotional activities to position the correct image of corporate brand as required by managers.
References:


ESTIMATION OF SIMULTANEOUS EQUATION: THE METHOD OF ILS AND TSLS

Bhola Nath Ghimire*

Abstract

Simultaneous equation models (SEM) have been used traditionally in econometrics but recently they have begun to be used in networks simulation, biological Microsystems, psychology, etc. This paper introduces the estimation of simultaneous equation for that the ILS and TSLS are the methods introduced. I have tried to bring into light assumption, property, stage and examples of ILS and TSLS and present an empirical case study of gross domestic product (GDP) and export with a finding on GDP as being endogenous.

Key words: Equilibrium price, endogenous, exogenous, econometric package, variances.

Introduction

Economic model frequently involves a set of relationships designated to explain the behavior of certain variables. For example, the model of market equilibrium of a commodity may involve a supply and a demand function and may explain the equilibrium price and quantity of the commodity bought and sold in the market. These models have special problems which are not present when the models involve a single equation. In such a case the ordinary least square estimates are not only biased but also inconsistent. Thus, methods have to be incorporated to estimate the estimates of such models (Bhusal, 2066).

The econometricians distinguish three approaches to estimating the simultaneous linear equation model: the naive approach (as example: ordinary least square method), indirect least square method and two-stage least squares method), and the full information approach (example: three-stage least squares method and full information maximum likelihood method).

The limited-information approach considers one equation at a time, estimating the structural form as does OLS\(^1\). It uses the information as to which variables, both endogenous and exogenous, is included in the other equations of the model but excluded from the equation being estimated. In this group there are, for example, the following

\(^1\) OLS approach ignores the information as to which of the predetermined variables in question are endogenous and which are exogenous, and the estimators are biased and inconsistent because of the inclusion of the endogenous variables into the set of the predetermined variables.

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methods: the indirect least squares method (ILS) and the two-stage least squares method (2-SLS).

Subject matter
Indirect least square (ILS) estimates of the coefficients of any structural form equation that are exactly identified can be derived algebraically from the OLS estimates of the reduced form equations. This will yield unique estimates of the coefficients of a structural form equation if any only if the equation is exactly identified. ILS is a special case of 2-SLS estimation procedure and will produce identical estimates of the coefficient of any structural form equation that is exactly identified.

The two-stage least square estimation procedure can be used to estimate any identified behavioral equation (whether exactly identified or over identified) within the structural system of simultaneous equations in the reduced form and these equations are estimated by least squares. The estimated equations are used to obtain fitted or predicted values of the endogenous variables on the right-hand side of the equation, and they are replaced by their predicted values and the resulting equation is estimated by least square.

The 2-SLS estimators (and hence the ILS estimator) are biased estimators, but they are consistent. The variances and covariance of the 2-SLS estimator are unknown in small samples but in large samples the 2-SLS estimators are approximately normally distributed and there are standard econometric package that can be applied to generate approximations of the large sample variances and co variances. This paper will show estimation of ILS and 2-SLS with their properties.

Methodology
The main objective of this study is to make estimation of simultaneous equation; the method of ILS and TSLS. The required assumption, property, stage and data to meet the objectives of this study are taken from secondary sources. The data in this study were collected by Nepal Rastra Bank in case study method in the Fiscal year 2011/12 and were published in 2012.

Estimation method
Indirect least square (ILS)
This method is appropriate for exactly identified equations.
1. Estimate the reduced form
2. Solve the structural coefficients from the reduced form coefficients.

Two stage least square (TSLS)
This method is appropriate for exactly or over identified equations. If the equation is exactly identified TSLS and ILS give identical results.
1. Each of the current endogenous variables in the equation is regressed estimating on all predetermined variables in the system.
2. Equation is estimated substituting the fitted values from Step 1 for the current endogenous variables in the equation.
Statistical Software ‘Eviews’ was used to analyze the data (case study) in this study.

**Analysis**

**Indirect least square estimate method**

This method is designated to estimate one equation at a time with limited reference to the rest of the system. It is called indirect lest squares since it estimates the parameters indirectly by estimating the reduced form equations, in which endogenous variables are expressed only as a function of the exogenous variables and error terms. This is suitable for the equation which is exactly identified, with no restriction on the variance-covariance of the disturbance terms, i.e. it satisfies all the OLS assumptions. This is also called reduced form method.

**Steps:**

i. Obtain reduced form equations of the structural model.

ii. Use OLS in reduced form equation provided that it satisfies all the OLS assumptions and estimate the reduced form coefficients (π’s).

iii. Then use π’s to estimate structural coefficients.

**Example:**

Let the structural model be

\[ C_t = \alpha + \beta Y_t + u_t \] .................. (1)

\[ Y_t = C_t + Z_t \] .......................... (2)

Where, \( C_t \) = consumption, \( Y_t \) = income, \( Z_t \) = investment

And, \( C_t, Y_t \) are endogenous variables and \( Z_t \) is exogenous variable.

**Reduced form model**

Putting the value of \( C_t \) in equation (2) we get,

\[ Y_t = \alpha + \beta \frac{1}{1-\beta} Z_t + \frac{1}{1-\beta} u_t, \]

\[ \text{Or, } Y_t = \alpha + \beta \frac{1}{1-\beta} Z_t + \frac{1}{1-\beta} u_t \] ........... (3)

Substituting the value of \( Y_t \) from (2) into (1) we get

\[ C_t = \alpha + \beta (C_t + Z_t) + u_t \]

\[ \text{Or, } C_t - \beta C_t = \alpha + \beta Z_t + u_t \]

\[ \text{Or, } C_t = \frac{\alpha}{1-\beta} + \frac{\beta}{1-\beta} Z_t + \frac{1}{1-\beta} u_t \] ............ (4)

Thus the reduced form equations can be written as

\[ C_t = \pi_{11} + \pi_{12} Z_t + v_1 \] .................. (5)

\[ Y_t = \pi_{21} + \pi_{22} Z_t + v_2 \] ........................ (6)

Where \( \pi_{11} = \frac{\alpha}{1-\beta} \) .............. (7)

\[ \pi_{12} = \frac{\beta}{1-\beta} \] .............. (8)
\[ \pi_{21} = \frac{\alpha}{1 - \beta} \quad \text{(9)} \]
\[ \pi_{22} = \frac{1}{1 - \beta} \quad \text{(10)} \]
\[ v_1 = \frac{1}{1 - \beta} = v_2 \quad \text{(11)} \]

From equations (8) and (10) we have, \[ \frac{\pi_{12}}{\pi_{22}} = \beta \]

Therefore, \[ \beta = \frac{\hat{\pi}_{12}}{\hat{\pi}_{22}} \quad \text{(12)} \]

From equation (5) we have
\[ \hat{\pi}_{12} = \frac{\sum zc}{\sum z^2} \]

Similarly from (6) we have
\[ \hat{\pi}_{22} = \frac{\sum yz}{\sum z^2} \]

Putting these values in equation (12)
\[ \hat{\beta} \quad \text{ILS} = \hat{\pi}_{22} = \frac{\sum zc}{\sum yz} \quad \text{(13)} \]

is the ILS estimator of population parameter.

Assumptions
i. The structural equations must be exactly identified.
ii. The random variables of reduced form equations must satisfy all the stochastic assumptions i.e.
iii. (vi- random, \( E(vi) = 0 \), \( E(vi^2) = \sigma_v^2 \), \( E(v_i,v_j) = 0 \), \( v_i \sim N(\sigma_v^2) \), \( E(v_i,xi) = 0 \))
iv. The exogenous variables of the model must not be perfectly collinear.
v. The macro variables must be properly aggregated.

Property:
ILS estimator of structural parameter is biased for small sample but it is consistent.

Proof: We have above
\[ \hat{\beta} \quad \text{ILS} = \frac{\sum zc}{\sum yz} \]

-----17-----
The reduced form equations [equations (5) and (6)] in deviation form can be written as:

c = \pi_{12}z + v_1

y = \pi_{22}z + v_2

The system further can be written as,

\[ \sum z_c = \frac{\beta}{1 - \beta} \sum z^2 + \frac{1}{1 - \beta} \sum uz \]

\[ \sum yz = \frac{\beta}{1 - \beta} \sum z^2 + \frac{1}{1 - \beta} \sum uz \]

Putting these values in equation \( \hat{\beta}_{ILS} = \frac{\sum z_c}{\sum yz} \)

\[ \hat{\beta}_{ILS} = \frac{\beta \sum z^2 + \sum uz}{\sum z^2 + \sum uz} \]

\[ = \frac{\beta \sum z^2 / n + \sum uz / n}{\sum z^2 / n + \sum uz / n} \]

Now, \( E(\hat{\beta}_{ILS}) \neq \beta \) [estimator is biased] But,

\[ P\lim(\hat{\beta}_{ILS}) = \frac{\beta p \lim \left( \sum z^2 / n \right) + p \lim \left( \sum uz / n \right)}{p \lim \left( \sum z^2 / n \right) + p \lim \left( \sum uz / n \right)} \]

As \( n \to \infty, \sum z^2 / n \to m \) (a finite number)

\[ \sum uz / n \to 0 \]

So,

\[ P\lim(\hat{\beta}_{ILS}) = \frac{\beta m + 0}{m + 0} \]

Therefore, \( P\lim(\hat{\beta}_{ILS}) = \beta \) [estimator is consistent] Hence proved.
Two stage least square estimate method

This method was developed by H Theil and independently by Basmann. It is single equation method, being applied to one equation of the system at a time. The theoretically it is an extension of ILS. This method aims at the elimination of the simultaneous equation bias and it is applicable for over identified equation.

Stage I
Find the endogenous explanatory variable in the particular structural equation which we are going to estimate.

Regress (OLS) the explanatory variable in all exogenous variables (It is equivalent to reduced form equation). Estimate it by OLS method and obtain the new estimated variable \( \hat{y}_i \)

Stage II
Use \( \hat{y}_i \) (estimate from stage I) instead of \( y_i \) as explanatory variable.

Estimate this equation by OLS method.

Example
\[ C = \alpha + \beta Y + u \quad \text{...............}(1) \]
\[ Y = C + Z \quad \text{...............}(2) \]

Stage I
Endo explanatory variable in consumption function is \( Y \).

Let us regress the \( Y \) an exogenous variable \( Z \).

That is
\[ Y = \Pi_{11} + \Pi_{12} Z + V \quad \text{......................}(2.1) \]

Estimating it by OLS, we get
\[ Y = \pi_{11} + \hat{\pi}_{12} Z + e \]
Or, \( Y = \hat{y} + e \)

Therefore, \( \pi_{11} + \hat{\pi}_{12} Z = \hat{y} \quad \text{..............}(2.2) \)

Stage II
Now substituting the value of \( Y \) form (2.2) into (1) we get,
\[ C = \alpha + \beta (\hat{y} + e) + u \]

Or, \( C = \alpha + \beta \hat{y} + \beta e + u \quad \text{..............}(2.3) \)
(Where, \( \beta e + u \) is Composite disturbances)

Applying OLS to estimate it, we get
\[
\hat{\beta}_{2SLS} = \frac{\sum c\hat{y}}{\sum \hat{y}^2} = \frac{\sum c\hat{\pi}_{12} \hat{z}}{\sum (\hat{\pi}_{12} z)^2} = \frac{\sum cz}{\hat{\pi}_{12} \sum z^2}
\]
\[
\sum c_{yz} = \frac{\sum z^2}{\sum yz} \quad \text{[Where, } \hat{\pi}_{12} \sum z^2 = \frac{\sum yz \cdot \sum z^2}{\sum yz} \text{]}
\]

Therefore, \( \hat{\beta} \text{ 2SLS} = \frac{\sum c_{yz}}{\sum yz} \) is the required 2-SLS estimator of \( \beta \).

**Assumptions**

i. \( u_i \) must possesses usual stochastic assumptions of OLS.

ii. The error term of reduced form equation \( v_i \) must possess OLS assumptions.

iii. Explanatory variables are not perfectly multicollinear.

iv. There should be correct specification regarding exogenous variable.

v. Sample should be large enough number of observation is greater than the number of predetermined variables.

**Property:**

**2SLS estimators are consistent**

From equation (2.1) in deviation form can be written as

\[
y = \pi_{12}z + v \quad \text{............. (2*)}
\]

\[
\hat{y} = \hat{\pi}_{12}z = \left( \pi_{12} + \frac{\sum zv}{\sum z^2} \right)z
\]

\[
\hat{y} = \pi_{12}z + \frac{\sum zv}{\sum z^2} \cdot z
\]

Now multiplying by \('u'\) and taking summation both sides.

\[
\sum \hat{y}u = \pi_{12} \sum zu + \frac{\sum zv}{\sum z^2} \cdot \sum zu
\]

Or, \( \sum \hat{y}u/n = \pi_{12} \sum zu/n + \frac{\sum zv}{\sum z^2} \cdot \sum zu/n \)

\[
p \lim \sum(\hat{y}u/n) = \pi_{12}p \lim(\sum zu/n) + \frac{p \lim(\sum zv/n)}{p \lim(\sum z^2/n)} \cdot p \lim(\sum zu/n) \quad \text{........(3.1)}
\]

By assumption, \( p \lim(\sum zu/n) = 0 \)

\[
p \lim\left( \frac{\sum z^2}{n} \right) = m \quad \text{(say)}
\]

So equation (3.1) reduce to
\[ p \lim \sum \left( \hat{\nu} / n \right) = 0 + \frac{0}{m} = 0 \]

So in the limit \( \hat{y} \) is uncorrelated with ‘u’.

In 2SLS finally we estimate, \( C = \alpha + \beta \hat{y} + \beta e + u \)

We have already prove that, in the limit \( \hat{y} \) is uncorrelated with u. Again one special property of OLS estimation is that \( \hat{y} \) is uncorrelated with e. Thus in the limit \( \hat{y} \) is uncorrelated with composite disturbances (\( \beta e + u \))

Hence 2SLS estimators are consistent.

A case study
Study the impact of volume of export in GDP before (F\( \backslash Y \) 1974|75 to F\( \backslash Y \) 1991|92) and after (F\( \backslash Y \)1992|93 to F\( \backslash Y \)2009|10) emerged the trade liberalization policy 1992

### Table 1: Status of Foreign Trade

<table>
<thead>
<tr>
<th>Year</th>
<th>Export</th>
<th>Import</th>
<th>Trade Balance</th>
<th>India Export</th>
<th>Third Country export</th>
<th>India import</th>
<th>Third country Import</th>
<th>BOP</th>
<th>Nominal GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1974/75</td>
<td>889.6</td>
<td>1814.6</td>
<td>-925.0</td>
<td>746.7</td>
<td>142.9</td>
<td>1475.7</td>
<td>338.9</td>
<td>16571</td>
<td></td>
</tr>
<tr>
<td>1975/76</td>
<td>1185.8</td>
<td>1981.7</td>
<td>-795.9</td>
<td>893.7</td>
<td>292.1</td>
<td>1227.1</td>
<td>754.6</td>
<td>17394</td>
<td></td>
</tr>
<tr>
<td>1976/77</td>
<td>1164.7</td>
<td>2008.0</td>
<td>-843.3</td>
<td>779.6</td>
<td>385.1</td>
<td>1343.5</td>
<td>664.5</td>
<td>17280</td>
<td></td>
</tr>
<tr>
<td>1977/78</td>
<td>1046.2</td>
<td>2469.6</td>
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<td>24853.3</td>
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### Analysis of the above table by using statistical package (Eviews)

#### a. Study the impact of volume of export in GDP before emerged the trade liberalization policy in 1992.

Where GDP is the dependent function of export, can be written in Ordinary Least Square form as below,

$$\text{NGDP}_i = \beta_1 + \beta_2 \text{EX}_i + \text{U}_i$$  \hspace{1cm} (i)

Where,

- \(\text{NGDP}_i\) is Nominal GDP known as dependent variable
- \(\text{EX}_i\) is Volume of Export known as independent variable
- \(\beta_1\) & \(\beta_2\) are parameters and \(\text{U}_i\) is random variables.

#### Table A: Analysis of the relationship between export and GDP before 1992

<table>
<thead>
<tr>
<th>Dependent Variable: DLOG(NGDP)</th>
<th>Method: Least Squares</th>
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</thead>
<tbody>
<tr>
<td>Date: 08/19/12 Time: 23:15</td>
<td>Sample(adjusted): 1974 1991</td>
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<td>Included observations: 18 after adjusting endpoints</td>
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<table>
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<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
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<td>0.037967</td>
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</table>

- R-squared: 0.224060, Mean dependent var: 0.134443
- Adjusted R-squared: 0.168636, S.D. dependent var: 0.054043
- S.E. of regression: 0.049276, Akaike info criterion: -3.066298
- Sum squared resid: 0.033993, Schwarz criterion: -2.969725
- Log likelihood: 26.53039, F-statistic: 4.042632
- Durbin-Watson stat: 1.131239, Prob(F-statistic): 0.064034
b. Study the impact of volume of export in GDP after emerged the trade liberalization policy 1992.

Where GDP is the dependent function of export, can be written in Ordinary Least Square form as below,

\[ NGDP_i = \beta_3 + \beta_4 EX_i + U_{2i} \]  

Where,

- \( NGDP_i \) is Nominal GDP known as dependent variable
- \( EX_i \) is Volume of Export known as independent variable
- \( \beta_3 \) & \( \beta_4 \) are parameters and \( U_{2i} \) is random variables

**Table B: Analysis the relationship between export and GDP after 1992**

<table>
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<td>Method: Least Squares</td>
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<tr>
<td>Sample(adjusted): 1992 2010</td>
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<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
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<td>0.077704</td>
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</table>

- R-squared: 0.000431  [Mean dependent var: 0.111304]
- Adjusted R-squared: -0.070967  [S.D. dependent var: 0.039509]
- S.E. of regression: 0.040887  [Akaike info criterion: -3.439544]
- Sum squared resid: 0.023404  [Schwarz criterion: -3.342971]
- Log likelihood: 29.51635  [F-statistic: 0.006038]
- Durbin-Watson stat: 1.291864  [Prob(F-statistic): 0.939163]
**Fig B: Forecast on NGDPF after acting trade liberalization policy 1992**

<table>
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<td>.08</td>
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<td>.16</td>
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**Interpretation**

From table A, we can see that 22% of the variation in GDP is explained by the explanatory variable (Exports). In other way if 1 unit of export increases result to increase 0.076 units in GDP before Trade Liberalization Policy, 1992.

Similarly, from table B, we can see that only 0.043% of the variation in GDP is explained by the explanatory variable (Exports). In other way if 1 unit of export increases result to increase 0.0053 units in GDP after Trade Liberalization Policy, 1992.

The comparative studies between export and its contribution in Nominal GDP, before Trade Liberalization Policy 1992 and that of after 1992 clearly indicated that the contribution of export in GDP was better before acting the Trade Liberalization Policy 1992.

**Conclusion**

Indirect least squares (ILS) is a method of calculating consistent structural parameter values for the exactly identified equations in a system of simultaneous equations. ILS involves using OLS to estimate the reduced-form equations of the system and then using the estimated reduced-form parameters to calculate unique and consistent structural parameter estimates. One disadvantage of using ILS is that it does not give the standard error of the calculated structural parameters, and it is rather complicated to calculate them. Another disadvantage of ILS is that it cannot be used to calculate unique and consistent structural parameter estimates from the reduced-form coefficients for the over identified equations of a simultaneous-equations model.

Two –stage least squares (2SLS) is a method of estimating consistent structural-parameter values for the exactly identified or over identified equations of a simultaneous-equations system. For exactly identified equations, 2SLS gives the same result as...
ILS. 2SLS estimation involves the application of OLS in two stages. In the first stage, each endogenous variable is regressed on all the predetermined variables of the system. These are now the reduced form equations. In the second stage, the predicted rather than the actual values of the endogenous variables are used to estimate the structural equations of the model. The predicted values of the endogenous variables are obtained by substituting the observed values of the exogenous variables into the reduced form equations. The predicted values of the endogenous variables are uncorrelated with the error terms, leading to consistent 2SLS structural-parameter estimates.

One advantage of 2SLS over ILS is that 2SLS can be used to obtain consistent structural parameter estimates for the over identified as well as for the exactly identified equations in a system of simultaneous equations. Another important advantage is that 2SLS (but not ILS) gives the standard error of the estimated structural SLS is very useful. Indeed, 2SLS is the simplest and one of the best and most common of all simultaneous equations estimators. Meanwhile the paper used a case study to present the relationship between endogenous variable (GDP) and exogenous variable (exports) and it justified the model.
References:


BUSINESS COMMUNICATION IN ENGLISH: WILL NEPALESE BUSINESSES LEAD OR FOLLOW?: LITERATURE REVIEW

Dev Raj Paneru*

Abstract
The article investigates how business communication in English has been a determinant factor of success or failure for Nepalese sociolinguistic cultures in local and cross national businesses. In this connection the documents analyzed for the study reveal that English has been playing major role and is supposed to play more dominant role in influencing achievements through globalization and hence, it is advisable on these bases that the local socioeconomic and sociolinguistic cultures turn their attention to promoting the business communication capacity at par for which the academic institutions focusing on management studies can contribute extensively. The information derived from the secondary sources induce the facts that local cultures can have principal participatory position if their business endeavors focus on how to champion business communication part which is largely in English in the current and presumably future Nepalese business contexts.

Key words: Business communication, competence, globalization, liberalization, sociolinguistic culture, enculturation, empathy, leadership.

Background
Success and failure in whether national, regional or international trades, business concerns, corporate organizations, learning organizations or other possible numerous types to a large extend, depends on success or failure in communication skills, strategies and practices because every deal in business at length involves ‘communication – a lot of it – communication is a major and essential part of the work of business’ (Lesikar, Flatley, Rentz & Pande (2010). Rsuhdie & West (1997) draw, “And yes, English is the most powerful medium of communication in the world: should we not then rejoice at the artists’ mastery of it, and at their growing influence?” Our business culture is best represented in this quote ever since English entered in 1600AD, when the East India Company entered the Indian Shores (Ibid). The given remarks reveal that Non-Englishes perceive it as the most powerful medium of communication of the world just as do the Natives, though psycho-social linguistic barriers prevail in the non-English cultures.

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Due to emergence of the culture of free trades, liberalization in various kinds of business cultures and new expectations to join globalization taking India as a new powerhouse in the global economy, English has consolidated and penetrated deeper into the sociolinguistics of Nepal, a part of Asia that far more is marked to be escalating toward Indianization (Davies, 2006).

Sociolinguistic, the term is coined and made equivalent to denote socioeconomic cultures and classes newly emerging or privileged from their long historical ages (Labov, 2001).

Labov (2001) states, “Ethnicity, religion, status, gender, level education, age etc. determine language varieties and speech differences.” He demonstrates that creation and adherence to these rules is used to categorize individuals in social or socioeconomic classes.

Owing to the technological changes, shifts are taking place in sociolinguistic and socioeconomic groups through globalization (Greer, 1984 in Lohani et al., 2008). However, shifts as such are exacerbating homogeneity or heterogeneity in the form of elite or the haves classes and haves not or the poor and marginal classes, a paradoxical reality of globalized economy (Nepal, 2008), is a matter of further examination. The phenomena like acculturation, enculturation, assimilation and dissimilation are fast taking place and thus, if business communities in 21st century are not aware of the facts in today’s globalization context, they are likely to play a poor part and mess out as looser (Verma, 2014).

The present global era is being perceived as being dynamic in various areas and business area is one of them. In such dynamism, communication capacities are alleged to have divided business communities as more efficient and less efficient for business success depending on their communicative competence particularly in English as lingua-franca in these non-native English cultures (ibid). Globalization would demand leading communicative competence in its business participants that from sociolinguistic perspective is regarded to be a process of being a part of speech community or remain aloof (Chamber, 2010). Heading to a culture that heartens to remaining aloof is apparently against the requisites of business.

Trudgell (2000) elucidates:

Communities of practice allow sociolinguistics to examine relationship between socialization, competence, and identity. It surveys at the micro interactional level of practice activity. Class and language are very closely related. For instance; members of working class use less standard language. Lower, middle and upper class speak near to the standard language.

Perceptibly, sociolinguistic lenses on business communication can prove effective tools of investigation as class shifts; communication skills and the levels of competence in them gained by a community vividly indicate the process of economic stratifications of a society. Knowing about the future mobility being taken by a society, may direct the ways for types and volumes of business in future (Labov, 2001). The study furthers sheds light

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in the contexts and cultures of communication such as hierarchical relations in business organizations in the forms of binaries such as boss- subordinate, teachers- students, employees-customers etc., resulting into hierarchical relations based on their language performance (ibid). Likewise, business communication as a tool for sociolinguistic cultures and socioeconomic classes, a channel to business strategies for business goals, can be examined comprehensibly with the application of sociolinguistic theories in collectivistic cultures (Triandis, 2000, in Samovar, 2012 et al.).

**Intercultural communication for business communication**

Technological changes have brought about numerous and unprecedented changes in humans’ life styles and certainly changes can be observed in the ways we have begun to shift our past cultures into globalized cultures i.e. from folk to affluent and from non-technocratic to technocratic, and similarly from manual work to digital cultures and from humanistic to business and commercial cultures, from multicultural to globalized and thus monoculture ironically and so on (Greer, 2010). Along with the changes in our socio-cultural frames and thus, socioeconomic back standing, changes in principles and practices, values and objectives have been inevitable in the field of communication and thus, it is essential that we learn to communicate in intercultural contexts in this dynamic world(Samovar,; Porter,; & Mcdaniel, 2006).

Communication defined to be an act of sharing information by using signs, symbols, marks, gestures and language elements (Oxford Dictionary, 2008) is a vague and an immeasurable area of study and use. Communication from this definition is a purely a human activity due to the fact that language ability is solely a human quality. It is never a static phenomenon because change is inevitable in human nature and thus, changes of various types such as change in contents, knowledge, skills, attitudes, living circumstances and many more have as a rule invited positive and negative changes in communication principles and practices in all ages and changes are predictable for future too( Bajracharya, 2011). Sharing of cultures through acculturation or enculturation or submersion or emersion in the era of globalization defined to be an exchange and sharing of culture and trade by making it beyond national boundaries so that all participate in it without complications, is the key intent of globalization, though some complicacies are recorded due to change in expectations, overstated cross flow of technology, communications and cultures (Britannica, 2004).

It is widely posited that business communication in this globalization context, connotes with a jump into making as many as possible sociolinguistic diversities into global village or global society can never occur within the monoculture setting (Verma, 2013). This would at the same time mean in other ways that business communication has its embedded meaning with intercultural- communication practices it demands understanding of cultural differences and ability to communicate across cultural borders in exponential scope (Samover, ;Porter, ; &Mcdaniel 2006). In sum, Nepal’s sociolinguistic cultures have already gone too far along with English language as a key medium of business communication and thus, it would now seem too mandatory for all
the generations willing to participate in business of any prestige geared by global cross-cultures to have competence in English communication as a fundamental requisite.

**Statement of the problem**

Business is a vast area of study and communication is vaster because it is extensively a human activity that would mean a canvass of human related networks and results that encompasses sharing of information, emotions, plans, policies, intents and aspirations, hopes, anger, love, and many others. Hallowell as quoted in Verma (2014) has perceived the area of communication like this:

There are different kinds of connection. To thrive, indeed just to survive, we need warm hearted contact with other people … Like vitamin deficiency; a human contact deficiency weakens the body, the mind, and the spirit… Just as we need vitamin C each day, we also dose of the human moment- positive contact with other people (p. 2).

The quotation reveals that the business communication is a solution to human relations as business resembles the size cosmos and hence is known as being a gigantic canvas for every new character to explore and drive through globalization. It is too huge to capture in any form and so thus, certain aspects at any given time frame are required to be approached.

Among a innumerable business related issues irresolvable in one shot attempt, the study is concerned with communication issues of business from sociolinguistic perspectives to their impact on socioeconomic directions.

Hence, the envisaged issues to be addressed in the area of business communication in Nepal’s sociolinguistic contexts with special reference to place and role attributed to English in business are as follows:

1. Successful communications are planned and practiced with fixing goals by joint action between communicators and receivers to achieve business goals which need to be re-examined in context of Nepal’s business trends.

2. Dichotomies are problematic areas in business communication in the collectivistic and pluralistic cultures and Nepalese cultures demand an investigation on how they are being tackled in this sector.

3. Business communication is a regular phenomenon and a dynamic process which should be reviewed in the third country context like Nepal to view its implications.

4. Relevance or rationale of business communication in English from competence and consequence perspective has not been measurably internalized in the business fronts, though it has gained a key place over Nepalese lingual cultures.

5. English is now a leading language of communication for various types of development and business endeavors as it is expected to play the role of mediator and integration agent among diverse cultures however, how to make it play that role in this developing environment in which all sociolinguistic cultures can feel included and mutually benefitted is an issue in the changing contexts.
6. The negotiation capacity and trends differ in business world, and in context of diversified sociolinguistic cultures of Nepal role of English has hardly been assessed from the mutual benefit perspectives comprehensively.

7. Business communities and the state mechanism must update with sociolinguistic and socioeconomic shifts and their effects such as cultural escalation upward or downward to judiciously plan the business world but this issue is the most ignored issue at all levels and thus, dilemmas are present in the field.

More particularly, following seem to be crucial issues in the Nepalese business communication cultures to be explored in future through more comprehensive research study:

1. How are the business communities, particularly with communication trends in English attempting to gear their business goals in diversified and pluralistic sociolinguistic contexts in globalization contexts?

2. What are the trends in socially recognized business cultures?

3. How far are the business communicators successful in setting and achieving business goals in the context that Nepal’s business culture is English oriented?

4. How do the sociolinguistic cultures of Nepal perceive English business communication culture from Leadership competence perspectives?

5. What types of barriers or dichotomies are being faced in daily business interactions in relation with English being used as a medium of communication?

6. What in general have been the outcomes of communicating in English for business in Nepal? The question leads to more complex questions as given under:
   i. How far are the cultural shifts taking place?
   ii. Toward what kind of culture; business or non-business, winning or losing business cultures are the shifts taking place in Nepal’s linguistic cultures?
   iii. How to ensure equitable benefits to as far as possible most of the sociolinguistic cultures through English for business as it is accepted to have been a age along prevalent medium of communication for official and professional standards?
   iv. Whether English is catering the interests and needs of Native English sociolinguistic cultures only as it may be witnessed to have played more powerful role of being their cultural capital comparatively?

**Objectives of the study**
The basic objective of the study is to analyze how business communication in English has been a determinant factor of success or failure for Nepalese sociolinguistic cultures in local and cross national business.

**Review of literature**
This section incorporates review of relevant literature which triangulates the stated premises in hypothesis.
Kachru, B. B. (1965) has attempted a study factors responsible for emergence of Non-Native English varieties and their pragmatic implications. He asserts that English in South Asia came as a privilege due to existing cultural and linguistic plurality, due to expansion of Christianity and due to invasion of imperialism which in course of time got embedded in the local contexts and gone through notarization. Thus, the language developed as a distinct variety as Indianness in variety even after independence from colonization. The conclusions permit an insight that English is supposed to have influenced economic apart from education sector to become a top priority language of business world. But since all South Asian countries do not bear the legacy of colonized English, assuming the contexts, conditions and outcomes of nativization of English post colonized countries can’t be generalized for the ones that did not fall prey to it. In that Nepal is also one. The pragmatic roles of English in all sectors in the Indianized countries may not be applicable in Nepal due to its different sociolinguistic society and unEnglish environment. The anomalies thus need to be resolved by further investigation on how the other countries like Nepal that remained aloof from colonial intrusion are using English for business communication and how far their competence is worth accounting in comparison to Western communication fashions as new attractions and also emerging business communication trends in relatively larger economy like India.

Awasthi, (2004) has researched on monolingual school practices in which Nepali is the language of contact and instruction and similarly he has drawn on an escalation trend of this toward English that is receiving the status of medium of communication for standard studies, elites, business communities, foreign trades and several official and professional affairs. This makes it clear that business world is taking a rapid pace toward converting its past legacy of Nepali as main language of official and business communication to establishing English, despite various kinds of barriers and obstructs on gaining perfection in this move, as the chief change agent in business communication. The study is entirely dedicated for an analysis of school practices in terms of medium of instruction and lingual habits, its directions can be only used to have preview of Lingual practices and status of English among them in Nepal. The sociolinguistic aspects or economic social classes and their roles are not addressed in context of English being widely used as a language of business communication in SAARC as well as in Nepal.

Hofsted Greet has studied how cultures can be dimensionalized to make intercultural communication influential a tool to work in the intercultural situations. His is the research study in that he contrasts differences among five extensively used dimensions as mentioned here:

1. Small and large power distance cultures
2. Weak and strong uncertainty avoidance societies
3. Collectivistic and individualistic societies
4. Feminine and masculine societies
5. Short and long term oriented societies (p.19 in Samovar, et al. 2006)

Then Hofsted shows how his dimensional model can be used to study organizational culture.
Perceptibly, business communication being conceived equivalent to intercultural communication habit, his models are useful in giving insight to understand business cultures effectively and use communication skills to derive business goals in various sociolinguistic and socio-cultural contexts.

Though the study is useful in offering an idea of intercultural communication skills, its findings have more of the relevance with American contexts where English is the mother tongue of majority and thus, business is irrefutably supposed to be communicated in monolingual setting. Thus, the dimensions developed for intercultural communication need to be tested in a social context that tends to meet with conflicting pressures; one due to that of elites’ cultural inflation practices and the other due to conservative cultures attempting to deter from any acculturation or assimilation of alien’s culture. Cultural escalation is often regarded in SAARC cultures as one of the burning issues though it is supposed to be escalating and polarizing toward Americanized English cultures. For a study to be applied in any other situations, culture difference parameters have to be taken into account as human beings process information and communicate from and in the environment in accordance with their own culture (Traindis, 2000). He makes it clear by giving an example of western individualized cultures and eastern collectivist cultures and opines that individualists sample mostly the content of communication whereas the collectivists sample mostly the context of communication (p. 35). In this regard, a study that can investigate the cultural forms of Asian countries particularly in SAARC region would sufficiently allow real view of ground reality and locate the future of business communication in English.

Lather & Khatri (2011) have case studied upon business success story of TATA Gold Plus: Nano, the jewelry market. Apart from product innovations and more, the story pronounces the effect of communication in its business. The communication in which language is not mentioned there but it gives light on the psychological aspect of business and ability of TATA groups to intermingle with society. The role of communication is remarkable in the sense it is worth appreciation that TATA investigated on awareness activity a lot and in that context, without effective communication plan, practice and presentation, the story wouldn’t have come to us as document. With regard to relevance of this study, the research article can be of use to seeing that social awareness is one effective type of communication for business expansion and success but as the case TATA success is due to its interventions within the homogeneity of India and himself being Indian entrepreneur, the story may not come to use for over all generalizations for this study in the light of the fact that the study aims to investigate business outcomes in relation with business communication capability and trends in English.

**Conceptual frame**

*Communication is the most used skill in almost every job. How you communicate your accomplishments to others is a reflection of the quality of your work. Sure, you must know how to do your tasks to accomplish great results, but that is only a portion of profession of professional success. Good communication skills are required to report*
your results to others, persuade colleagues to take action, and (most importantly at review time) sell your success to management (p. 5).

Don Zatyko, Senior Program Manager
IT Asset Management, Intuit (cited in Lesikar et al. 2010)

Although there may exist a number of social, economical, cultural, attitudinal and psychological factors responsible for success and failure in a business, communication factor as indicated seems to play the super role over all. The above quoted remarks are allocated here with a purpose to appraise how in business pragmatics these theoretical assumptions are being met. The given remarks of Don Zatyko, IT Asset Manager best represent communication at its theoretical and doctrinal level. Undoubtedly, the extract stands for universal truth about what and how communication is significant for that in truth demands further examining of the matter in practice in the field of business as business communication must be observed from the barrier of communication points of view as well.

Figure 1: Communication theory
Communication as cycle
Message
Encoding
Channel
Output
1. Intrapersonal ideational stage: sender
2. Receiver
3. Decoding
4. Interpersonal Stage
5. Feedback

Source: Lesikar et al. (2010).

The chart represents how communication becomes possible from sender- communicator to the receiver- communicator. The figure illustrates the first stage to be ideational stage.
that implies the internal job of communicator in that he/ she composes the ideas in response to the situations which then passes through channels of several types in the form of message and reaches the receiver. At this point it receives the interpersonal form because communication is not confined to the sender. Then in the form of cycle, communication flows in a link of feedback and then to the sender and likewise.

**Figure 2: Business communication frame**

![Business communication frame diagram](image)

*Source: Lesikar et al. (2010).*

The figure shows that business communication is the combined whole of all communications; intra-personal to interpersonal, verbal to non-verbal, intra cultural to inter cultural and finally intra-organizational to inter-organizational levels. However, intra- and inter-organizational communication must be entitled business communication as it is the end goal of communication in business environment.
Figure 3: Communication competence and business leadership relation

The conceptual frame of business communication leadership looks as given in the figure:

1. Higher the level of communicative competence
2. Better the professional skills in business: supervisory, organizational and group performance and better outcomes
3. Higher the capacity of business leadership
4. Higher the business growth and expansion
5. Higher the chance of upward mobility in socioeconomic/sociolinguistic status

Source: Lesikar et al. (2010).

In the form of a cycle, the figure presents that higher the communicative competence broader the business competence, the higher the socioeconomic standing, better the communicative competence and finally, it ensures leadership in business in return. Thus, it shows that communicative competence is the first requisite to begin with.
Figure 4: Communicative competence and business leadership results in L1 situation.

The figure given here shows ideal sociolinguistic background for business communication: reciprocated sharing of leadership in business: empathy, assertiveness, perseverance and cultural sensitivity: motivation, equitable sharing and mutual benefit.

Figure 5: Communicative competence and business leadership results

The figure represents conceptualization on Nepal’s cultural contexts against English (L2) in business communication: lack of empathy, assertiveness, perseverance and cultural sensitivity: failure due to lack of motivation, lack of equity and complications in mutual benefits.
Review in nut-shell

The Kachru’s (1965) research vividly takes imperialism responsible for stipulating English on the top priority medium of communication in business world of SAARC; it doesn’t speak anything about the parts of SAARC such as Nepal where English did not come as a gift of imperialism but as a property of elites.

In this sociopolitical gap, how the non-imperialized sociolinguistic cultures like Nepal perform in business that has begun to fashion English as a language of symbolic significance. Though such sociolinguistic cultures exist, they have begun to be entrapped under the linguistic and socioeconomic domination of English language.

Second reviewed literature i.e. Awasthi’s (2004) Ph D dissertation confines its focus on how schools are shifting from Nepali to English in the multilingual contexts. Although communication in schools is one facet of business communication, his work does not detail on socioeconomic shifts in globalization contexts.

Hofstede’s five dimensional cultural model seems very helpful for knowing about organizational behaviors in diversified cultural sets but it may be better suiting for theoretical understanding and theoretical positions, whereas a crucial demand of the time in changing contexts in Nepal would claim practical study on it. The other research work that has pronounced the TATA’s success story above is also relevant to knowing about how communication has influenced the business into a successful business endeavor. However, the case does not speak anything about heterogeneous contexts in which English is claimed to be playing a gap bridging role.

Methodology

The methodology of any business is to communicate to a large extent in written format though oral communication and non-verbal communications too occupy important space. The surveys, researches and experiments of ages allow reiterating that business world demands successful written skills for operating business effectively, i.e. in a result oriented manner (Lesikar et al. 2010).

Keeping the patterns, contents, contexts and practices of business communication in view, the study is based on document analysis, review, and examination of communication patterns and contents which would obviously lead to practices. The analysis of the models and patterns are also taken into consideration to assume the trends and impacts of English in Nepalese business communication.

The analysis is designed to address the problems stated in the previous chapter. To reach the findings about implications of using English as the medium of business communication, theoretical interpretation is attempted in research contexts (Niglas, 1999).
Limitations of the study
Though enumerable factors are responsible in the business world behind its success or failure, competence in English communication makes differences at large in our context however, owing to its purpose, the study limits to examine theoretically influential trends English has shown in the business world as recorded in books and articles which have come in public in prints.
The study addresses both clientele cultures and business makers with major focus on skills such as competence, accuracy, negotiation and shared benevolence and cultural promotional aspects in comparisons to skills contended to be acceptable in business communication to best fit globalization.
The psycho-sociolinguistic aspects such as trauma and self inferiority and superiority principles are implicitly considered to be prevailing in the situation in which the agents have to communicate in second or foreign language as English in Nepal.

Outcome discussions
Prevalence of English in Nepalese business world
The dominance and expansion of English language uses in Nepal is explicable from the history of British regime in India even more than 200 years before Bangladesh and Pakistan separated as different sovereign nationalities in 1950s. The incident has been so much imprinted that English has remained no more as the British legacy only, instead, just as it had incorporated Anglo-Saxon as well as French-Norman cultures sometimes during and before 11th century, it took Indian patterns and properties to develop into what is known as provincial English in India after British Raj (regime) in 18th and 19th century (Baugh & Cable, 2002).

Besides, Macaulay’s decision of teaching English in India (so that Indians could have ready access to all that vast intellectual wealth available in that language) in 1835 is supposed to have had a purposeful and profound effect (Quirk, 1968 cited in Quirk & Kachru, 1981). Such measures leading to dominance of English over education, business and professional domains as a key medium of communication in South Asian countries like in several other parts of this globe are alleged to have been intentionally predesigned. The idea was generated in order to mobilize the colloquial and sociolinguistic communities toward globalization which has far well served the interest of the West or Native–English world due to the fact that inherited competence over English communication is sure to have served them as a cultural capital (Bourdieu, 1986) of English populace over the new economies or the traditional sociolinguistic communities who can best represent globalization as the consumers of English knowledge, ideas and English brands in business and development since development planning in the underdeveloped countries are perfunctory and dependent on external financial aid (Nepal, 2008).

Similarly, SAARC region represented by almost all under developed nations as Nepal, Pakistan, Bangladesh, Shreelanka, Bhutan, Afghanistan and among them the gigantic state India geographically, demographically and economically in all is marked to have
adopted a trend of expecting external aid for planning development in the era of globalization traceably from 1970s onwards and their over inclination toward Western science and technology and commercial cultures does signify a crucial position held by English linguistic cultures as the special sociolinguistic groups standing as distinguished classes in the region whether native or non-native against the local sociolinguistic varieties (Kachru & Quirk, 1981). Moreover, Mathew (1931: 42) referring to what John Adams on September 23, 1780 had prophesized about the future popularity of English adds that English more popular now than preconceived by Adams because he reasons American population and its contact and correspondence with world population is becoming more universal and thus, other languages are being reduced to general use. Clear enough, in Nepal English as an international language, the best and easiest medium of communication in globalized business cultures, has already received an official status and a status of a language of prestige, power, position and personality and the trend is ever speeding ahead because non-native users of English valued what it did for them socially, attitudinally, nationally and internationally (Fishman et al. 1977 in Smith, 1981 eds.). Reasons behind its widespread use and prevalence in numerous sectors as sorted here are that it has been adopted and imported into the whole business world in non-native English lingual groups and in sociolinguistic communities of various types. In today’s fast globalizing Asia, English is now a power symbolizing medium of business communication due to the fact that English has been developed for cross cultural communication (Smith, 1981 eds.). Thus, it is not very inconvenient to map out various socially recognized sectors where English is now a key official language of communicating business. They are as given here: corporate sectors, NGOs and INGOs, industrial sectors, academic sectors, finance sector such as banks and financial institutions, academic sector such as private schools, colleges and universities particularly for science, technology and management studies along with international disciplines and international relation sector such as foreign affairs ministries, media sector such as televisions, radios, and print medias and other digital sector such as internets and digital communication channels showing number of varieties of English use and cultural shifts from one sociolinguistic type to the other on one hand and upward or downward shifts in socioeconomic classes determined by the factors such as intelligible environment, access and competence gained by any sociolinguistic groups within the globalized markets. Kachru, ; Richards, ; & Tay (1981) shed light on challenges for native English communities for its expansion and rapid development in the professional, official and business sector in non-native countries which is sure to break the native English population’s hegemony over cultures, business and professional sectors that they could enjoy due to absence of competent communicators in the non-native countries participating in globalization whom they supplied their manpower and also conducted business through English as their cultural capital because non-native varieties of English in these halves of the world have been robustly getting established. It is warned that the Indian subcontinent is now an area of special interest for the native English language planners and authorities to look at critically where English has been a language of daily use and all types of business and cultural activities embedded with economic enterprises are now conducted in English language (p. xvi). Here, the Indian subcontinent is mentioned to be SAARC member countries, however, Nepal has been excluded from

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mentioning though it is also one of the SAARC members highly influenced by Indian sociolinguistic and socioeconomic cultures and gearing its new generations through education, national and international trade practices, public and private professional activities, corporate businesses, imported media and communication technology and national and international culture exchange activities. Nepal is as well on the front line toward cultural shifts from culture of non–alliance and culture of silence (Bista, 2008) to culture of international participation through SAARC that has its head quarter in Kathmandu, the capital of Nepal (Wikipedia, December 10, 2013).

It is as observed by Nepal (2008) that development planning in Nepal, like in SAARC region, has come under the influence of liberalization that in other ways would mean that globalization has entered the region through privatization of development notably business, education, government development projects, corporate and many more and thus, no country in the region can dare isolate from globalization which would further mean that the pace of globalization in these territories is now working as a catalyst to making English an indispensable medium of business communication among the existing sociolinguistic diversities. This should also be seen as a caustic agent in causing the cultural shifts from local cultural diversities to polarization toward English or Western sociolinguistic and socioeconomic cultures but unexpectedly the polarization is attracting the sociolinguistic cultures toward adoption of American business communication cultures as it is believed that the attempts have been made in English as International Language (EIL) that of simplification, facilitation to learning communities to keep up linguistically and culturally with American uses (Stern, 1981, in Smith, 1981 eds.).

**Prevalence of English in Academic and Business Sector**

With regard to Nepalese submissive perception toward foreign ideology or heritage as a consequence of its custom and inherited socialization psychic quality that obliges them to treat ‘Guests as the Gods,’ Sharma & Sharma (2009) allude that English gained symbolic significance in Nepal when it was imported by Jang Bahdour Rana from his visit to Britain. Since right from the very beginning, it came in the hands of elite class, power holding and educated class in Nepal. That means, the advent of English in the Nepal’s territory transpired right through the state ruling groups of people particularly Nepali linguistic classes comparatively known as elite class population and thus, English is alleged to have fast prevailed over its functionary sectors such as professional and business annals without obstructions (Awasthi, 2004). The dominance of Nepalese monolinguals over multilingual populace is further noted to have to some extent instigated them who through transiting Nepal are indiscreetly demanding for the identity of ethnic sociolinguistic groups by means of inclusion measures in the social and economic development by ensuring political, economical and cultural empowerment actions (Gurung, 2006).

This adequately indicates that in Nepal like in a few neighbouring nations except in various parts of China, India, Pakistan, Afghanistan, islands and so on, English has enjoyed a reputation due to symbolic significance ascribed to it (Kafle, 2004).
Identically, among other factors, state holders’ tendency of relying on foreign aid and international support for development planning of which education planning stands as an integral part (Nepal, 2006) is equally taken responsible for popularity and expansion of English influence over education, business, media, hospitality and almost all state functionary sectors. Nepal (2008) illuminates that development planning and modernization endeavors of Nepal have overwhelmingly been determined by the imported aids, expertise and ideals. This convincingly implies that a direct fascination toward English briskly endowed it through education to several other sectors with a status of compulsory course of study in education, even medium of teaching learning in further studies, a and a source of abridged development between locals and international communities as a whole. Kafle (2004) very affirmatively eulogizes globalization for being accountable in making English a very useful asset for Nepal to participate in globalization. Although Kafle’s (2004) remarks are understandably in favor of modernization, it would be misleading if a phenomenon major as this is not viewed critically. Marxist concept of alienation in that he concludes “alienated individual is a play thing of alien forces” and also Marx’s idea about bourgeois’ tricks of fulfilling their interest in which his comments, “Bourgeois can’t rest without revolutionizing the instrument of production” (McLellan, 2000) would allow one to see that Nepalese mind set from Rana regime and subsequent governments represented by elite state power encouraged alienation over majority out of power, due to their over fashioned infatuation toward English.

The result turned out to be that English gripped a status against Nepali state culture as a strong means to career building, modernization and development. It is even felt to have worked as a gratifier for psychic endowment due to the impression that capacity to communicate in English is synonymous to being civilized and more standard person than the ones who don’t bear this skill. In a sense it is often referred as being the conceptual poverty in Nepalese citizenry. The elite populace in Nepal eulogized liberalization and globalization, particularly after rehabilitation of multiparty democracy for that it is uncritically consented English as being a passport to substantiate participation in globalization and hence English has been a new fashion and a popular business communication culture among vary many linguistic diversities in Nepal too (CDC, 2007 cited in Baral, 2009). The fashion as such in SAARC region and in Nepal too can be encountered to have driven- if not all the sociolinguistic diversities- at least elite classes, business, and diplomatic classes to have adopted English for intercultural communication with a conviction that in the era of globalization intercultural understanding is a must. The business profitability is best ensured if shown a willingness to practice intercultural communication (Jacques, 2006 in Samovar,; Porter,; & McDaniel, 2006). For this magnified vision, English would serve as the best means and medium of communication in Nepal as a fast liberalizing and strong follower of globalization for its internal development goals (Nepal, 2008).

Conclusion
The above findings make room to conclude that English has grabbed the reputation of being an inevitable tool of communication in 21st century Nepalese sociolinguistic
contexts. The cultural shifts are too fast and irresistible due to dominance English has enjoyed for centuries. The decade-long political and social changes have made English for business communication too eminent a changing agent, a language of power, and a lingua franca of symbolic significance. Business sector; particularly national and international trade sector, NGO and INGO sector, and academic sector have all shown revolutionary move toward it. Thus, there seem to be no other convincing suggestions than learning to tap with power and speed required in en-culturing the locals toward globalized business communication that undoubtedly is in English today and in the days to come or as we are doing business in non-English contexts, we remain happy as followers in globally induced economy.
References:


HOTELIERS’ PERCEPTIONS ON TOURISM IMPACTS IN NAGARKOT

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Key words: Tourism infrastructure, employment, capital outlay, number of hotels, duration of stay, tourism impact, sanitation, solid waste management.

1. General background

Tourism supply is a complex phenomenon because of both the nature of the product and the process of delivery. Principally it cannot be stored, cannot be examined prior to purchase. It is necessary to travel to consume it. Heavy reliance is placed on both natural and human-made resources and a number of components are required, which may be separately or jointly purchased and which are consumed in sequence. It is a composite product involving transport, accommodation, catering, natural resources, entertainments and other facilities and services, such as shops and banks, travel agents and tour operators. Many businesses also serve other industrial sectors and consumer demands, thus raising the question of the extent to which suppliers can be considered as primarily suppliers of tourism. The many components of the product, supplied by a variety of businesses operating in a number of markets, create problems in analyzing tourism supply (Sinclair and Stabler 1997, 58).

The government can play a role in facilitating tourism development by improving the tourism infrastructure of a country. A major method by which the authorities can encourage tourism development lies in the provision of investment incentives (Wanhill 1994, Ward and Hall 1994). Typically tourist projects, such as the construction of hotels, have a relatively high level of fixed costs arising from the initial capital investment and relatively low operating costs, that is, a high operating leverage. In order to reduce the business risk, and encourage investment, the preferred type of financial help, therefore, is that which reduces capital costs. Investment incentives may be provided automatically for tourism industry projects, or be discretionary and biased to encourage developments in specific locations or of specific types. As tourist arrivals increase, the various supplies and services needed by hotels, catering and transport operators, and other facilities mean that tourism becomes a key element in the business environment for existing companies. The construction industry benefits from hotel and infrastructure projects, dairies, market gardeners and fruit farmers have new customers, garages are required to supply and service fleets of delivery vehicles and rental cars (Laws 1995, 85).

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Considering that tourism is a composite of activities, services, and industries that deliver a travel experience, it is important to identify and categorize its supply components. The quality and quantity of these determine tourism’s success in any area. Tourism supply components may be classified into four broad categories for discussion (Goeldner et al. 2000, 365).

Tourist activity results in different outcomes for the stakeholders in an area, its residents, investors and employees. Those entrepreneurs catering to tourists’ needs may prosper, new leisure amenities may be built to the benefit of residents as well as visitors, new jobs may be provided resulting in further increases in economic activity, and beauty areas or endangered species may gain from the increased protection which tourists’ interest causes. On the other hand, retail and residential property values may be forced up, to the detriment of existing businesses and residents, beaches and other areas may be fenced off, ‘improved’ and access limited to those able to pay for entry. In summary, introducing or expanding tourism in any destination results in changes (Laws 1995, 73/74).


With scenic natural beauties, climate and culture, Nepal can compete in the tourists’ list of destination. However, the exotic scenery, a mild climate, mountains, and a friendly, welcoming ambience are not enough to become a successful destination. Decisions had to be taken on how to develop the tourist destinations, infrastructure and tourism facilities. What is required is also formal tourism development.

In view of competitive situation brought about by increasing number of newer tourist destinations, quality tourism has become extremely important for Nepal. It has been high time to pay increased attention to the improvement of physical infrastructure and service quality of tourism products. Policy pertaining to physical infrastructure improvement, environment conservation, development of newer attractions, raising service quality and pricing mechanism need to be addressed immediately. Investment promotion – both domestic and international – need to be emphasized with a view to exploiting the potentials to the optimum level. On the other hand, tourism development and its expansion have been challenged by unmanaged urbanization, environmental degradation, and pollution. Yet, tourism is necessary or not is no longer a topic for discussion. What is discussed is how to develop it in a sustainable manner.
2. Overview of Nagarkot

Nagarkot is located 32 kilometers northeast of Kathmandu. Nagarkot is easily accessible by a black topped road, and is about an hour’s drive from Kathmandu. The place is a peaceful area in the hills. Nagarkot is a land of scenic beauties and diversities. The top of Nagarkot commands exhilarating views in all directions. The hills, mountains, Himalayan ranges, rivers, sunrise and sunset, forests, and compact valley settlement are the major attractions to the tourists. The important Himalayan peaks like Manaslu (8,156 m.), Ganesh Himal (7,406 m.), Langtang (7,246 m.), Cho-O-Yu (8153 m.), Gauri Shanker (7,145 m.), and Mt. Everest (8848 m.) are very close at sight from here. Nagarkot also offers some of the most unusual and delightful trekking in matchless Himalayas, meadows and forests. Taming, Brahmin, Chhetrias, and Newars are the main dwellers of Nagarkot. The diversified cultures, curious villages, and terraced farmlands are the sightseeing attractions to tourists.

Situated at an altitude of 2,175 m. above the sea level, Nagarkot is the second highest point in the valley rim, wherefrom the mesmerizing panoramic view of the Himalayan range can be viewed. The peaceful and cool atmosphere, unique hiking trails through Tamang villages, beautiful landscape and good tourist facilities including a five-star hotel are additional attractions.

3. Review of literature

In the past, many researchers, such as Kavallins and Pizam (1994), Caneday and Zeiger (1991), Lawson et al. (1998), Jurowski et al. (1997), Ryan et al. (1998), Allen et al. (1988), Jutla (2000) conducted a number of studies in the areas of perception and attitudes of hoteliers. These studies examined issues of tourism, recreational development and tourist destinations in terms of the social, economic and environmental impacts. Law (1993) and Gunn (1994) suggested that, in order to create successful economic development and tourism strategies, the perceptions and attitudes of tourists visiting urban tourist destinations must be addressed. This part of the study is, therefore, intended to explore the site specific perception and attitudes of hoteliers on social, economic and environmental impacts. There are no studies exploring the visual aspect of tourism in Nagarkot. This study attempts to fill this gap in the existing literature by dealing with issues of the site specific image: how the site is perceived by hoteliers. This study provides tourism planners and city planners with an insight into the way people perceive the built environment on which further improvement and management of townscape can be built upon.

The image of tourist destination is a powerful one through which the destination is known to people. It provides an identity for the destination and creates an everlasting memorable experience for tourists and a sense of civic pride for residents. There are basically three objectives that can be set for this kind of study: (i) to investigate the image of site specific tourism as perceived by tourist, residents, and hotels/lodges; (ii) to identify the prominent features of the site specific tourism; and (iii) to examine people’s response to the current physical development.
Viewed in this way, a study devoted to the hoteliers’ perception on tourism in Nagarkot is of greater significance.

4. **Research methodology**

This study is based on the field study which consists of survey of hoteliers in Nagarkot, which was conducted during October-November 2012, and is termed as ‘the 2012 survey’ throughout this study. The field survey research design consists of administering the questionnaires to all the 30 hotels and lodges, which were there at the time of undertaking the survey. The questionnaire for the hotels and lodges contained questions on their income, number of tourists visited, condition of their business, adequacy of tourists facilities in Nagarkot, and tourism impacts as viewed by hotels and lodges in Nagarkot.

Finally, the results of the 2012 survey were compared with the results of the similar survey carried out in 1995 (Pradhan: 1996a). The comparison is expected to provide an insight into how tourism impacts have changed over a period of 17 years.

The questionnaire for the hoteliers contained questions on the benefits of tourism, problems and difficulties due to tourism development, generation and disposal of their solid wastes and so on. The method of analysis employed in this study basically consists of tabulation and analysis of primary data collected through questionnaire. Hence the method of analysis employed in this study is qualitative in nature.

In this study, the comparison of the results was also made with the earlier study undertaken in 1995 (Pradhan 1997) to provide insight into tourism impact in Nagarkot over a period of about 17 years.

5. **Analysis of data**

This section presents the results of the survey of hoteliers undertaken in Nagarkot in 1995 and 2012. The results are based on questionnaires administered to all the hotels and lodges, which were there at the time of making the survey. Tourism in Nagarkot has brought both good as well as negative effects. It is implied that any tourism planning in Nagarkot should aim at maximizing the good effects and minimizing the negative effects. One of the objectives of this study is also to find out the extent to which positive impacts of tourism have increased and negative impacts declined over a period of 17 years. It is obvious that many changes have taken place in the hotel industry in Nagarkot over a period of 17 years with the growth of tourism in Nagarkot.

Nagarkot was not accessible by road until the completion of road from Bhaktapur to Nagarkot in 1969. When this road was completed, the number of tourists visiting Nagarkot increased continuously. With the increase in the number of tourists visiting Nagarkot, the number of hotels and lodges has also grown significantly. The total number of hotels and lodges in Nagarkot were 7 in 1984, 9 in 1988, 11 in 1990, and 14 in 1993. When the survey of hotels and lodges were carried out in 1995, there were 18 hotels and lodges, which increased to 52 in 2012. Thus the total number of hotels and lodges
increased by about 189 percent in 2012 as compared to 1995. The hotels and lodges had been coming up every year. However, the growth in hotels and lodges in Nagarkot had not been the result of deliberate planning efforts.

The survey of the local hotels and lodges were carried out in 1995 and 2012. The 1995 survey of hotels and lodges covered 17 out of 18 total hotels and lodges while the 2012 survey covered 30 out of 52 total hotels and lodges in Nagarkot. Though 52 hotels were reported in Nagarkot, it was found that only 42 hotels and lodges were in operation at the time of executing this survey. Of these, 30 hotels were selected for the study.

a) Respondents’ profile

The 1995 survey of hotels and lodges revealed that 11 out of 17 hotels and lodges were operated in respondents’ own premises while five were operated on rented premises. The 16 hotels and lodges were owned and operated in the private sector while one hotel was owned and operated in the public sector. The hotels and lodges, which were operated in rented premises were, on an average, paying the rent at the rate of US$400 per month.

Similarly the 2012 survey of hotels and lodges showed that 26 out of 30 hotels were operated in their own premises while only four were found to have operated on rented premises. There was one hotel being operated at the public sector. The rented hotels have been paying rent at the rate of US$470 per month, the increase being about 17 percent in 2012 over 1995.

b) Income, employment and capital outlay

Income: The growth and development of tourism industry may be seen in terms of growth and development of hotel industry too. The growth and development of hotel industry may be seen in terms of earnings generated by them over a period of time. Table 1 shows the income generated by the hotels and lodges in Nagarkot in 1995 and 2012.

<table>
<thead>
<tr>
<th>Annual Income US$</th>
<th>1995 survey</th>
<th>2012 survey</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Hotels</td>
<td>%</td>
</tr>
<tr>
<td>Below $73,000</td>
<td>12</td>
<td>71</td>
</tr>
<tr>
<td>$73,000 - $146,000</td>
<td>4</td>
<td>24</td>
</tr>
<tr>
<td>Above $146,000</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>17</td>
<td>100</td>
</tr>
</tbody>
</table>


The 1995 survey revealed that 71 percent of hotels had annual income of below $73,000, 24 percent had an annual income ranging from $73,000 to $146,000, and only 6 percent had an annual income of more than $146,000. The 2012 survey revealed that 37 percent of hotels had annual income of below $73,000, 43 percent had an annual income ranging from $73,000 to $146,000, and 20 percent had an annual income of more than $146,000.
The average annual income of hotels had increased from $62,265 in 1995 to $97,333 in 2012. Thus there were a marked increase in the income of the hotels in Nagarkot in 2012 over 1995. The increase in earnings of the hotels over time can be considered as a positive contribution towards the growth and development of tourism in Nagarkot.

c) Employment
The growth and development of tourism in Nagarkot can be seen from the employment opportunities generated by the hotels and lodges. Figure 6.1 shows the number of persons employed by the hotels.

**Figure 1: Employment provided by the hotels in Nagarkot as per 1995 survey**

![Pie chart showing employment distribution](image)


The 1995 survey revealed that there were 29 percent of hotels providing employment to four persons or less, an equal number of hotels providing employment to 5 to 8 persons, 18 percent providing employment to 9 to 12 persons, and 24 percent providing employment to more than 12 persons. It gives the impression that the hotels in Nagarkot were of small sizes in 1995. In order to determine whether there were any improvements in employment provided by the hotels over a period of time, the 2012 survey also included a survey of employment provided by the hotels in Nagarkot and the results are presented in Figure 2.
The 2012 survey indicated some important shifts in employment provided by the hotels in Nagarkot. The survey revealed that there were 10 percent of hotels providing employment to four persons or less, 27 percent of hotels providing employment to 5 to 8 persons, 33 percent providing employment to 9 to 12 persons, and 30 percent providing employment to more than 12 persons. Thus the number of hotels providing employment to ‘9 to 12 persons’ and ‘more than 12 persons’ increased over a period of 17 years time period.

The next aspect of the study was devoted to assessing the relation between the number of persons employed by the hotels and their salary bills. The salary bill of the hotels in Nagarkot as revealed by the 1995 survey and the 2012 survey is presented in Table 2.

**Table 2: Salary bill of hotels in Nagarkot**

<table>
<thead>
<tr>
<th>Annual salary bill</th>
<th>1995 survey Percentage</th>
<th>2012 survey Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below US$2400</td>
<td>53</td>
<td>40</td>
</tr>
<tr>
<td>$2400 - $4800</td>
<td>24</td>
<td>20</td>
</tr>
<tr>
<td>$4800 - $7200</td>
<td>18</td>
<td>27</td>
</tr>
<tr>
<td>Above $7200</td>
<td>6</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Clearly there were improvements in salary level of persons employed by hotels in Nagarkot in 2012. The percentage of hotels providing higher salaries increased in 2012 over 1995. As a result, the average annual salary, which was observed to be $3,106 in 1995 increased to $4,080 in 2012. The increase in employment provided by the hotels in Nagarkot led to an increase in salary bills of the hotels too. Though there were an increase in employment and salary bills of hotels, the discussion with hotel executives revealed that there was no manpower planning as such for the future.

d) Capital outlay

One of the important indicators of growth and development of tourism industry is the investment in hotels and lodges. In theory, with the increase in the number of tourists, the capital investment in hotels and lodges should increase leading to the growth and development of hotels and lodges. The idea about the growth of tourism in Nagarkot can be had from the increase in capital outlay in hotels and lodges in Nagarkot. This section intends to determine the following:

- What was the structure of initial capital outlay in hotels and lodges when they were first established?
- What was the structure of capital outlay at present (or at the time of making the survey)?
- Has there been any change in the structure of capital outlay by these hotels and lodges over a period of time?

The analysis of capital outlay also shows the size of the hotels and lodges. The increase in the capital outlay over a period of time shows that the size of hotels and lodges has increased. Table 3 shows the number of hotels showing their initial capital outlay, capital outlay at present, and change in capital over a period of time in Nagarkot.

<table>
<thead>
<tr>
<th>Capital</th>
<th>Initial capital outlay</th>
<th>Capital outlay at present</th>
<th>Change in capital outlay</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of hotels</td>
<td>%</td>
<td>No. of hotels</td>
</tr>
<tr>
<td>Below Rs. 2 million</td>
<td>8</td>
<td>27</td>
<td>5</td>
</tr>
<tr>
<td>Rs.2 million - Rs.4 million</td>
<td>6</td>
<td>20</td>
<td>2</td>
</tr>
<tr>
<td>Rs.4 million - Rs.6 million</td>
<td>7</td>
<td>23</td>
<td>3</td>
</tr>
<tr>
<td>Rs.6 million - Rs.8 million</td>
<td>4</td>
<td>13</td>
<td>3</td>
</tr>
<tr>
<td>Rs.8 million - Rs.10 million</td>
<td>3</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>Above Rs.10 million</td>
<td>2</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100</td>
<td>30</td>
</tr>
</tbody>
</table>

The 2012 survey revealed that the majority of hotels (27 percent) had initial capital outlay of less than Rs. 2 million, while 20 percent had initial capital outlay of Rs. 2 million to Rs. 4 million. Similarly, 23 percent of hotels had initial capital outlay of Rs. 4 million to Rs. 6 million, 13 percent had Rs. 6 million to Rs. 8 million, 10 percent had Rs. 6 million to Rs. 8 million, and 7 percent had more than Rs. 10 million. The average initial capital outlay turned out to be Rs. 2.6 million.

The structure of present capital outlay of hotels in Nagarkot changed dramatically over a period of time. The majority of hotels (33 percent) had capital outlay of more than Rs. 10 million while only 17 percent of them had capital outlay of less than Rs. 2 million. Similarly the number of hotels with a present capital outlay of Rs. 2 million to Rs. 4 million turned out to be only 7 percent. The ten percent of hotels had capital outlay of Rs. Rs. 4 million to Rs. 6 million, and equal percentage had Rs. 6 million to Rs. 8 million. Twenty three percent of hotels had present capital outlay of Rs. 8 million to Rs. 10 million. It shows that the majority of hotels increased their capital outlay in Nagarkot. The average capital outlay at present turned out to be Rs. 4.5 million, the increase being 74 percent. It reveals that the number of small sized hotels decreased while the number of large sized hotels increased over a period of time. Therefore, there had been a significant change in the structure of capital outlay over time. The increase in the number of big hotels indicated the growth and development of tourism in Nagarkot. If tourism were not a profitable business, there would not have been an increase in the number of big hotels.

e) Seasonal tourist flows in hotels/lodges

The growth and development of tourism industry requires a good deal of tourist flow in all the seasons. Generally, the seasonality is the important problem in tourism industry. In Nagarkot also, there is a good deal of seasonality in tourism flow in the local hotels/lodges as is evident from Table 4.

Table 4: Number of hotels showing the number of tourists received by them during peak, normal and off seasons in Nagarkot in 2012

<table>
<thead>
<tr>
<th>No. of tourists Per day</th>
<th>Peak season</th>
<th>Normal season</th>
<th>Off season</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of hotels/lodges</td>
<td>%</td>
<td>No. of hotels/lodges</td>
</tr>
<tr>
<td>&lt; 10 tourists</td>
<td>6</td>
<td>20</td>
<td>23</td>
</tr>
<tr>
<td>10 - 20 tourists</td>
<td>14</td>
<td>47</td>
<td>4</td>
</tr>
<tr>
<td>&gt; 20 tourists</td>
<td>10</td>
<td>33</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100</td>
<td>30</td>
</tr>
</tbody>
</table>


The 2012 survey revealed that during the peak season, 47 percent of hotels/lodges had, on an average, 10 to 20 tourists per day, 33 percent had more than 20 tourists per day, and 20 percent had less than 10 tourists per day. The distribution changes greatly during the normal and off-seasons. During the normal season, the majority of the hotels/lodges (77
percent) had less than 10 tourists per day, 13 percent had 10 to 20 tourists per day, and the rest 10 percent had more than 20 tourists per day. Similarly, during the off season, the majority of the hotels/lodges (87 percent) had less than 10 tourists per day, 10 percent had 10 to 20 tourists per day, and three percent had more than 20 tourists per day. Thus tourism flow in local hotels/lodges in Nagarkot is affected greatly by seasonality. The number of tourists in hotels and lodges varies widely from one season to another. However, this kind of seasonality was much more in 1995 as compared to 2012 as revealed by Table 5.

Table 5: Average number of tourists per day during peak, normal and off seasons during 1995 and 2012 surveys

<table>
<thead>
<tr>
<th>Season</th>
<th>1995 survey</th>
<th>2012 survey</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average number of tourists per day</td>
<td>Average number of tourists per day</td>
<td></td>
</tr>
<tr>
<td>Peak season</td>
<td>15</td>
<td>17</td>
<td>13</td>
</tr>
<tr>
<td>Normal season</td>
<td>6</td>
<td>9</td>
<td>50</td>
</tr>
<tr>
<td>Off season</td>
<td>4</td>
<td>7</td>
<td>75</td>
</tr>
</tbody>
</table>


The 1995 survey revealed that the average number of tourists received by the hotels were observed to be 15 persons per day during the peak season, which decreased to 6 persons per day during the normal season, and to 4 persons per day during the off season. This situation changed to some extent during 2012. The 2012 survey revealed that the average number of tourists received by the hotels were observed to be 17 persons per day during the peak season, nine persons per day during the normal season, and seven persons per day during the off season. Thus the average number of tourists per day received by hotels increased by 13 percent during the peak season, 50 percent during the normal season, and 75 percent during the off season in 2012 over 1995. Thus the seasonality in tourism in Nagarkot had decreased to some extent.

f) Duration of stay
The duration of stay by tourists is another important factor to be considered in tourism development. The average duration of stay as revealed by the 2012 survey can be seen from Table 6.

Table 6: Average duration of stay by tourists in Nagarkot

<table>
<thead>
<tr>
<th>Nights</th>
<th>No. of hotels</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>One night</td>
<td>17</td>
<td>57</td>
</tr>
<tr>
<td>Two nights</td>
<td>10</td>
<td>33</td>
</tr>
<tr>
<td>Three nights</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>&gt; Four nights</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100</td>
</tr>
</tbody>
</table>

The 2012 survey of hotels indicated that the majority of hotels/lodges (57 percent) had tourists staying one night, followed by 33 percent for two nights of stay, seven percent for three nights and only three percent for more than four nights of stay by tourists. The average duration of stay was 1.6 days in 2012, which was just one day in 1995. Though the average duration of stay by tourists increased in 2012 over 1995, it is still quite short. It may be attributed mainly to the lack of activities for the tourists in Nagarkot.

g) Room charges
The 2012 survey showed that 40 percent of hotels/lodges had single bed room charges of less than Rs.500, 20 percent had Rs.500 to Rs.1000, 10 percent had Rs.1000 to Rs.1500, 17 percent had Rs.1500 to Rs.2000, and 20 percent had more than Rs.2000. As regards the double bed room charges, 20 percent of hotels/lodges had double bed room charges of more than Rs.500, 10 percent had Rs.500 to Rs.1000, 20 percent had Rs.1000 to Rs.1500, 23 percent had Rs.1500 to Rs.2000, and 13 percent had above Rs.2000 charges (Table 7). The average room charges were Rs.967 and Rs.1384 respectively for single and double bed rooms. The maximum room charges were Rs. 4,615 or US$65 for single bedroom and Rs. 5,680 or $80 for double bedrooms.

<table>
<thead>
<tr>
<th>No. of tourists</th>
<th>Single bed room charge</th>
<th>Double bed room charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per day</td>
<td>No. of hotels</td>
<td>Percentage</td>
</tr>
<tr>
<td>&lt;Rs. 500</td>
<td>12</td>
<td>40</td>
</tr>
<tr>
<td>Rs.500 - Rs.1000</td>
<td>6</td>
<td>20</td>
</tr>
<tr>
<td>Rs.1000 - Rs.1500</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Rs.1500 - Rs.2000</td>
<td>5</td>
<td>17</td>
</tr>
<tr>
<td>&gt; Rs.2000</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100</td>
</tr>
</tbody>
</table>


The 1995 survey showed that the average room charges of the hotels were Rs. 1000 and Rs. 1500 respectively for single bed and double bed rooms. When compared these rates with the rates of 2012, there had been some decline in these rates in 2012 over 1995. The decline in room charges can be attributed to increased competition and disturbance to nationwide tourism industry due to insurgency problem in the country.

h) Number of rooms and beds
In Nagarkot, the 1995 survey of hotels/lodges showed that there were 183 rooms and 376 beds in total. Thus, average number of rooms per hotel/lodge was 11, while the average number of beds per hotel/lodge was 22. About 65 percent of the hotels were of the opinion that hotels were sufficient in Nagarkot while the rest, 35 percent opined that they were not sufficient.
The 2012 survey revealed that there were 482 rooms and 2008 beds, the percentage increase being 163 percent and 434 percent respectively in 2012 over 1995. As per the 2012 survey, the average number of rooms per hotel/lodge was observed to be 16 rooms while the average number of beds per hotel/lodge was observed to be 66 beds. Thus the average number of rooms increased by about 46 percent, while the average number of beds increased by about 200 percent in 2012 over 1995. The increase in the number of rooms and beds in hotels/lodges revealed increasing tourism in Nagarkot.

As regards the sufficiency of the hotels and lodges in Nagarkot, 93 percent of hotels were of the opinion that they were sufficient, and there were none, who opined that hotels were insufficient. Only seven percent of hotels could not decide whether they were sufficient or not.

As regards average spending of the tourists, the 1995 survey showed that tourists, on an average, spend $11 per night, which were noticed to be $26 as per 2012 survey, the increase being 136 percent. It is surprising to note that these figures were quite low when compared to the figures of tourist survey. This kind of understated figure can be attributed to reporting lower income by the hotels/lodges for the fear of paying higher taxes.

i) Procurement of daily necessities
The 1995 survey revealed that the daily necessities required for the hotels were procured mainly from the local market or from Bhaktapur, and Kathmandu. About 53 percent of their daily necessities were procured from Bhaktapur market, while about 29 percent of them were procured from Kathmandu. It means that only 18 percent of daily necessities were procured from the local market in Nagarkot. However the situation changed greatly in 2012. The 2012 survey showed that the percentage of local procurement in Nagarkot increased to 52 percent, while the daily necessities procured from Bhaktapur reduced to 12 percent. The daily necessities procured from Kathmandu turned out to be 36 percent. Thus the procurement of daily necessities from the local market by the hotels/lodges increased significantly in 2012 over 1995.

j) Business conditions
The 1995 survey of hotels/lodges revealed that the business condition of the majority of Nagarkot hotels/lodges were good, while the 2012 survey revealed that their business conditions were not very satisfactory due to frequent strikes, load shedding etc. However both the surveys showed that the great majority of hotels/lodges (over 90 percent) indicated that they were planning to increase their business in Nagarkot. Both surveys revealed that there were no hotels/lodges, which wanted to abandon the current hotel business. As regards the main reason for choosing Nagarkot for the hotel business according to the 1995 survey was that ‘many tourists visit Nagarkot’ (53 percent), followed by the ‘better prospect of tourism in Nagarkot’ (29 percent), and ‘because of their home town’ (18 percent). In other words, only 29 percent could see a better prospect of tourism in Nagarkot in 1995. However, the 2012 survey of hotels/lodges revealed an increase in this percentage to the extent of 60 percent indicating that a better prospect of tourism industry in Nagarkot increased over a period of time.
k) Tourism infrastructure

The hotels/lodges were also asked to evaluate the fifteen infrastructure facilities on a five-point scale where the value of ‘one’ is to be assigned for the most excellent facility and the value of ‘five’ is to be assigned for the very poor facility. Median values were computed in order to rank the condition of infrastructure facility in Nagarkot. Lower values of median indicate that the facility is excellent and higher values indicate that the facility is very poor. In the cases, where identical median values were obtained, quartile values were computed. Lower quartile values indicate lesser dispersal in the responses and hence the facility is good. On the other hand, higher quartile values indicate greater dispersal in the responses and hence the facility is bad. The 1995 and 2012 surveys produced the results as presented in Table 8. According to the 1995 survey, the eight infrastructure facilities that were considered poor by the hotels were sanitation, toilet facilities, security, street lighting, septage collection/disposal, drainage, road condition to Nagarkot, and cleanliness of the place. Similarly, the seven infrastructure facilities that were considered good were behavior of people, hotel facilities, electricity facilities, water supply, tourist guides, communication facilities, and trekking facilities.

### Table 8: Evaluation of tourism infrastructure by hotels/lodges in Nagarkot

<table>
<thead>
<tr>
<th>Items</th>
<th>1995 Survey</th>
<th>2012 Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean value</td>
<td>Overall rank</td>
</tr>
<tr>
<td>Cleanliness of the place</td>
<td>2.19</td>
<td>8</td>
</tr>
<tr>
<td>Road condition to Nagarkot</td>
<td>3.10</td>
<td>9</td>
</tr>
<tr>
<td>Behavior of local people</td>
<td>1.32</td>
<td>1</td>
</tr>
<tr>
<td>Electricity supply</td>
<td>1.50</td>
<td>3</td>
</tr>
<tr>
<td>Water supply</td>
<td>1.66</td>
<td>4</td>
</tr>
<tr>
<td>Sanitation</td>
<td>4.95</td>
<td>15</td>
</tr>
<tr>
<td>Septage collection/disposal</td>
<td>4.43</td>
<td>11</td>
</tr>
<tr>
<td>Drainage</td>
<td>3.40</td>
<td>10</td>
</tr>
<tr>
<td>Street lighting</td>
<td>4.50</td>
<td>12</td>
</tr>
<tr>
<td>Toilet facilities</td>
<td>4.92</td>
<td>14</td>
</tr>
<tr>
<td>Security</td>
<td>4.92</td>
<td>13</td>
</tr>
<tr>
<td>Tourist guides</td>
<td>1.70</td>
<td>5</td>
</tr>
<tr>
<td>Hotel facilities</td>
<td>1.47</td>
<td>2</td>
</tr>
<tr>
<td>Communication facilities</td>
<td>1.70</td>
<td>6</td>
</tr>
<tr>
<td>Trekking facilities</td>
<td>1.73</td>
<td>7</td>
</tr>
</tbody>
</table>


The 2012 survey of hotels/lodges conducted in a way similar to 1995 produced different results. As per the 2012 survey, the first eight infrastructure facilities that were considered poor were street lighting, security, septage collection/disposal, drainage, toilet facilities, water supply, cleanliness of the place, and sanitation. Even after the lapse of 17
years, there had been no significant improvement in seven out of eight poor tourism infrastructure facilities, such as, street lighting, security, septage collection/disposal, drainage, toilet facilities, cleanliness of the place, and sanitation. These facilities continued to be poor in 2012 as well. The facilities that were considered good during 2012 survey were: hotel facilities, communication facilities, trekking facilities, road condition to Nagarkot, tourist guides, behavior of the people and electricity supply. These results were not very different from the results of the 1995 survey.

I) Views of hotels/lodges on impact of tourism

During the survey, one of the questions asked to the respondents relates to the kind of change they noticed with the promotion of tourism in Nagarkot. The general impact of tourism in Nagarkot as revealed by 1995 and 2012 surveys can be seen from Table 9:

Table 9: General impact of tourism in Nagarkot as viewed by hoteliers

<table>
<thead>
<tr>
<th>Statement</th>
<th>1995 survey</th>
<th></th>
<th>2012 survey</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean value</td>
<td>Overall Rank</td>
<td>Mean value</td>
<td>Overall Rank</td>
</tr>
<tr>
<td>Nagarkot has gone more dirty.</td>
<td>1.18</td>
<td>1</td>
<td>2.89</td>
<td>3</td>
</tr>
<tr>
<td>Increased deforestation.</td>
<td>3.94</td>
<td>4</td>
<td>4.12</td>
<td>5</td>
</tr>
<tr>
<td>Adverse effect on the life of the people.</td>
<td>6.71</td>
<td>7</td>
<td>5.18</td>
<td>6</td>
</tr>
<tr>
<td>Price rise.</td>
<td>4.29</td>
<td>5</td>
<td>3.38</td>
<td>4</td>
</tr>
<tr>
<td>Local people have become more selfish.</td>
<td>6.24</td>
<td>6</td>
<td>6.72</td>
<td>7</td>
</tr>
<tr>
<td>Creation of the opportunity for the local people</td>
<td>2.41</td>
<td>3</td>
<td>2.56</td>
<td>2</td>
</tr>
<tr>
<td>Enlargement of market &amp; increase in production</td>
<td>1.88</td>
<td>2</td>
<td>1.46</td>
<td>1</td>
</tr>
</tbody>
</table>


As per the 1995 survey, the first and foremost impact as viewed by the hotels/lodges was that ‘Nagarkot has gone more dirty’ with the increase in tourists. The ‘enlargement of market and increase in production’ was the second in their overall rank. The third important impact of the tourism was the ‘creation of the opportunity for the local people’. The other impacts in order of their importance were deforestation, price rise, and adverse effect on the life of the people. In general, the 1995 survey revealed that tourism brought more good to the people of Nagarkot as viewed by the hotels/lodges.

The 2012 survey revealed that there had been some shifts as far as the general impact of tourism is concerned. According to this survey, the most important impact was ‘enlargement of the market and increase in local production’, followed by ‘creation of opportunity for the local people’, ‘Nagarkot has gone more dirty’, ‘price rise’, ‘increased deforestation’, ‘adverse effect on the life of the people’, and ‘local people have become more selfish’. The positive impacts of tourism in Nagarkot were ranked more important than negative impacts.
m) Sanitation
One of the important infrastructures for tourism industry relates to sanitation conditions in hotels/lodges. These hotels/lodges do not have that sanitation problem as with the local people. As regards toilet facilities, the 2012 survey showed marked improvement over the 1995 survey as revealed by Table 10.

Table 10: Responses of hoteliers on the toilet facilities in Nagarkot

<table>
<thead>
<tr>
<th>Types of Toilet</th>
<th>1995 survey</th>
<th>2012 survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cistern Flush Toilet</td>
<td>53</td>
<td>100</td>
</tr>
<tr>
<td>Pour Flush Toilet</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>None, Use Outdoors</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Latrine</td>
<td>35</td>
<td>0</td>
</tr>
<tr>
<td>None, Use Neighbors</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>


The 2012 survey of hotels/lodges indicated that all the hotels had septic tanks. About 10 percent of septic tanks still used to overflow as against 35 percent in 1995. About 90 percent of them had the overflow drain which were noticed to be about 67 percent in 1995. The 1995 survey showed that the average size of septic tank was measured to be 512 cubic feet while the 2012 survey revealed the same to be 960 cubic feet, leading to the increase in average size of the septic tank. Thus the toilet facility of the hotels/lodges had improved over a period of 17 years.

n) Solid waste collection and disposal
The 1995 survey indicated that a hotel/lodge, on an average, used to generate solid waste of 15 kg per day. The 2012 survey showed a marked difference in this regard with 58 kg per day. The difference in results can be seen more clearly from Figure 3.
Figure 3: Composition of solid waste generated by the hotels/lodges in Nagarkot in 1995 and 2012

The 1995 survey showed that solid waste in hotels and lodges in Nagarkot composed of about 36 percent of food waste, 27 percent of plastic wastes, 22 percent of paper wastes, and 15 percent of wastes. The situation has changed greatly in 2012 where plastic wastes increased to 36 percent leading to a decline in other types of wastes. The increase in plastic wastes cannot be regarded as a healthy sign for tourism development. Thus the solid waste generated by hotels/lodges in Nagarkot increased over time but there is no proper system yet for their efficient collection and disposal. The hotels were disposing the solid waste as indicated in Table 11:

Table 11: Solid waste disposal by hotels in Nagarkot

<table>
<thead>
<tr>
<th>Solid waste disposal methods</th>
<th>1995 survey</th>
<th>2012 survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bury in yard</td>
<td>46</td>
<td>65</td>
</tr>
<tr>
<td>Burn in yard</td>
<td>18</td>
<td>12</td>
</tr>
<tr>
<td>Dump in street or ally</td>
<td>18</td>
<td>8</td>
</tr>
<tr>
<td>Others</td>
<td>18</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

The 1995 survey showed that about 46 percent of the hotels used to bury in yard, 18 percent used to burn in yard, and the other 18 percent used to dump in the street or ally. Yet another 18 percent used different methods, such as, disposal of solid waste on the road, river, and forest. The 2012 survey showed an increase in the percentage of hotels burying the solid waste in yard to the extent of 65 percent, while the percentage of hotels using other methods declined. Almost all the hotels/lodges felt that there was a need for installing an efficient system of garbage pickup and control. The hotels/lodges were willing to pay on a monthly basis if a proper system for solid waste collection and disposal were established.
To sum up, most of the hotels/lodges in Nagarkot were smaller in size and there is still a need for improving tourism infrastructures, manpower planning, business plan, and solid waste collection and disposal.

6. Summing up

With the increase in the number of tourists visiting Nagarkot, the number of hotels and lodges had also grown significantly. The total number of hotels and lodges in Nagarkot increased from 18 in 1995 to 38 in 2012, the increase being about 111 percent in 2012 as compared to 1995.

The 2012 survey indicated some important shifts in employment provided by the hotels in Nagarkot. The survey revealed that there were 30 percent of hotels providing employment to more than 12 persons. The 1995 survey revealed that there were only 24 percent providing employment to more than 12 persons. Thus the number of hotels providing employment to more people increased in 2012 over 1995 in Nagarkot.

The structure of present capital outlay of hotels in Nagarkot changed dramatically over a period of time. The majority of hotels increased their capital outlay in Nagarkot. The average capital outlay at present turned out to be Rs. 4.5 million, the increase being 74 percent over 1995. The number of small sized hotels in terms of capital outlay decreased while the number of large sized hotels increased over a period of time. The increase in the number of big hotels indicated the growth and development of tourism in Nagarkot.

The 2012 survey of hotels indicated that the average duration of stay was increased to 1.6 days, which was just one day in 1995. Though the average duration of stay by tourists increased in 2012 over 1995, it is still short. It could be attributed mainly to the lack of activities for the tourists in Nagarkot.

The survey also revealed that the average number of rooms increased by about 46 percent, while the average number of beds increased by about 200 percent in 2012 over 1995. The increase in the number of rooms and beds in hotels/lodges revealed increasing tourism in Nagarkot.

According to hoteliers, even after the lapse of 17 years, there was no significant improvement in infrastructure facilities, such as street lighting, security, septage collection/disposal, drainage, toilet facilities, water supply, cleanliness of the place, and sanitation in 2012 over 1995.

The 1995 survey showed that the average size of septic tank was measured to be 512 cubic feet while the 2012 survey revealed the same to be 960 cubic feet, leading to the increase in average size of the septic tank. Thus the toilet facility of the hotels/lodges had improved over a period of 17 years.
The 2012 survey indicated that a hotel/lodge, on an average, used to generate solid waste of 58 kg per day, while it was much lower during the 1995 survey, that is, an average of 15 kg per day. Thus, the 2012 survey showed a marked increase in solid waste generation by the hotels and lodges.
References:


QUALITY CULTURE IN HIGHER EDUCATION IN NEPAL: A BURNING VIVE

*Quality is never an accident; it is an outcome of intelligent effort.*

John Ruskin

Kanhaiya B. Mathema, PhD*

Abstract

Higher education is all important for the all-round development of a country. It is the focal point of knowledge and accordingly it empowers the administrators, researchers, teachers and other intellectuals through the generation of skills. It cannot be circumvented from the quality diameter determined by 'fitness of purpose' reflected in the vision, mission and goal of the higher educational institutions. Obviously, a total quality management complimented by “quality audit” occupies the central place in the dissemination of quality education. Quality in higher education has always been a vive in academic arena. The paper explains the importance of quality culture in higher educational institutions that promotes knowledge economy with due consideration of the changing environment of higher education in the country and the challenges ahead.

Key words: Higher education, quality culture, vive, total quality management.

Introduction

Higher education plays a pivotal role for all-round development of a country setting even ecological footprint at a strong footing. It is the prime source of all important human development. It is the focal point of knowledge and accordingly it empowers the administrators, researchers, teachers and other intellectuals through the generation of skills. Notwithstanding higher education cannot be circumvented from the quality diameter determined by 'fitness of purpose' reflected in the vision, mission and goal of the higher educational institutions. Thus, quality is an issue that cannot be avoided in education at present and what institutions do to ascertain quality turns out to be most important and effective of all efforts and initiatives (Bunoti, 2011).

The paper explains the importance of quality culture in higher educational institutions that promotes knowledge economy with due consideration of the changing environment of higher education in the country and the challenges ahead.

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Quality in higher education has always been a vive in academic arena. The world over, ensuring the quality of higher education is gaining prominence in policy making due to the interplay between factors such as shrinking resource allocation for higher education and growing awareness about value for money among the stakeholders (NAAC, 2004). Nevertheless, there are fewer consensuses among the academia regarding the definition embedded in quality.

Such education is expected to be qualitative. It is generated through teaching, building knowledge base through research and knowledge development, and dissemination and use of knowledge by interacting with the knowledge users (Okwakol, 2009 in Bunoti, 2011).

Quality not an isolated phenomenon
The issue of quality cannot be taken in isolation. It is attached with the quest for excellence. Nevertheless, the academic standards and evaluation criteria should recognize the diversity of culture across the nations. Each nation and higher education system should aim to put in place quality assurance systems and procedures that meet the needs and the culture of the local society. Such an arrangement ought to be anchored firmly in culture and social traditions as has been rightly pointed by Harman (2000). He is of the opinion that quality assurance today is driven by a number of pressures, many of which produce tensions and conflicts. These include the tensions and conflicts between the explosion and fragmentation of demand for student places on the one hand, and unemployment which affects an ever growing number of graduates in a number of countries of the region on the other; between the provision of equal access and opportunity, and the financial constraints that follow the mass extension of higher education; between the pressures for increased institutional autonomy versus those for growing public accountability; and between ethical and moral obligations and the various pressures for the generation and communication of new knowledge and scientific discoveries. Faced with these pressures, higher education must develop new visions and new forms of cooperation across both institutions and nations.

Newton (2006) referring to the European context has said that quite a few debatable concepts brewed regarding the concept of quality and how it should be defined with respect to higher education.

In this regard, education for that matter, higher education, has become a primary focus all over the world. Its urgency has been felt in the developing parts of the world more so on the onset of global technological and economic competitiveness. Nepal is not immune in this context.

The commencement of higher education in Nepal was started in the early quarter of 20th century with the establishment of Trichandra College in 1918 AD. In the process, the first University, Tribhuvan University, was established in 1959 AD. It was a sole university up until 1986 AD. A multi-university concept was visualized only after the establishment of one other University, Mahendra Sanskrit University in 1986. Other Universities such as
Kathmandu University (KU 1991 AD), Purbanchal University (PU 1994 AD), Pokhara University (PokU 1997 AD), Lumbini Baudha University (LBU 2005 AD) and some autonomous medical academics such as BP Koirala Institute of Health and Science (BPKIHS 1993), National Academy of Medical Sciences (NAMS 2002 AD) and Patan Academy of Health Sciences (PAHS 2009) were established. Three more universities, namely, Mid Western University (MWU), Far Western University (FWU) and Agriculture and Forestry University were established in 2010 AD.

In terms of student strength and the number of campuses, TU is the largest that over 81.6 per cent of higher education strength. Up until 2012, there are 1134 higher education campuses that include 90 constituent (7.9 %), 701 private (61.8 %) and 343 community (38.2 %) campuses (EMIS, 2011/2012) indicating the dominance of private sector in the higher educational institutions.

Of the 444,994 student enrolment in HEIs, in 2012, TU holds the highest share (86.1 %) followed by PU (6.6%), PokU (4.5 %), and KU, (2.5 %) respectively. The rest of the Universities and Academies have less than one per cent share in the total enrolment (Table below).

It is evident that with the growth of the Universities, the enrolment in higher education is also increasing. Nevertheless, the pressure is basically at the Tribhuvan University. This dynamism has brought about a changed scenario in the higher education regime in the country.

Table 1: The current status of Universities

<table>
<thead>
<tr>
<th>Universities/Academies</th>
<th>No. of Higher Education Institutions only</th>
<th>Higher Education Enrolments</th>
<th>Graduate Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Constituent*</td>
<td>Community**</td>
<td>Private***</td>
</tr>
<tr>
<td>Tribhuvan University (TU, 1959)</td>
<td>60</td>
<td>336</td>
<td>520</td>
</tr>
<tr>
<td>Nepal Sanskrit University (NSU, 1986)</td>
<td>13</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Kathmandu University (KU, 1991)</td>
<td>6</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>Pokhara University (PokU, 1997)</td>
<td>4</td>
<td>0</td>
<td>49</td>
</tr>
<tr>
<td>Purbanchal University (PU, 1994)</td>
<td>3</td>
<td>5</td>
<td>106</td>
</tr>
<tr>
<td>Lumbini Baudha University (LBU, 2005)</td>
<td>1</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Mid Western University (MWU, 2010)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Far Western University (FWU, 2010)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture &amp; Forestry University, (AFU, 2010)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BP Koirala Institute of Health Sciences (BPKIHS, 1993)</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Newly Established Universities

---71---
More and more higher education institutions are making their headway in Nepal changing the landscape of higher education. Nepal is undergoing rapid changes in terms of higher education development, a welcome symptom. Nonetheless, this has given rise to major concerns of higher education development in the country towards ensuring quality and relevance of the higher education programs along with total quality culture that rekindles the notion of moral value that is inevitable to change the role of higher education which takes into consideration the organizational dynamics towards service delivery to the students with primary focus on teaching-learning. Moreover, it appears that the thread of effectiveness and efficiency in management of the institutions is missing whereby there is less visibility of expansion of access with equity in the sphere of higher education in the country.

The development of higher education institutions and enrolment expansion in the country has taken place without a system to ensuring quality norms and standards. The concerns are regarding whether the infrastructures are appropriate and adequate, whether the environment meets the academic essences, whether the governance and management are appropriate, whether the teaching learning activities meet universal academic standards, whether students get guidance and counseling support, and whether the institutions operate in a transparent way and that the information are circulated appropriately.

Moreover, there is a mushroom growth of colleges with affiliation from foreign universities running various but expensive courses. Sometimes the qualitative delivery of teaching-learning of such institutions becomes dubious. Such a growth has adversely affected the dual challenges that higher education institutions face in their contribution to economic growth of the country on the one hand and improvement of the quality of life of the people at large. Such challenges will have to be addressed by a proper instilling of quality culture in higher educational institutions.

Notwithstanding quality culture in the sphere of higher education is a "journey from control to culture". The last decade of the 20th century saw significant changes in the global environment that, in one way or another, bear heavily on the role, functions, shape and the mode of operation of tertiary education systems all over the world, including...
those in developing countries. Among the most influential changes are the increasing importance of knowledge as a driver of growth in the context of the global economy, the information and communication evolution, the emergence of a worldwide labor market, and global sociopolitical transformations. (World Bank 2002, in Peace, 2004). Over the course of the past few decades, quality has quickly become a ‘buzzword’ in the higher education community - a systematically pursued area of public significance…(Vettori et al., 2006).

Conceivably, quality higher education is a key to modernization and development of any country. Accordingly, its demand in the society is ever increasing despite the constraints in its mass accessibility. It has always been part of the academic tradition. It is the outside world that now emphasizes the need for attention to quality. By the end of the 1990s concern for quality and standards was global (Bollaer et al. 2007).

The higher education institutions have strived for the delivery of high quality academic excellence as their highest goals. At present, such a paradigm has been reflected into the outcome of internal quality assurance system coupled with quality culture in higher education where quality assurance though is not a novelty (Harvey and Stensaker, 2008). It has been a routine in almost all higher education institutions in America, Europe and many parts of Asia. In Nepal also since 2007 with the establishment of Quality Assurance and accreditation Division at UGC, institutional system for evaluation, assessment, audit and accreditation has become an integral part of quality assurance in higher education.

Development of quality culture is the focal point of quality education. Quality culture leads towards quality assurance in higher education. Thus, quality and quality assurance are embedded into the system of higher education. Notwithstanding, quality culture underpins its foundation. University Grants Commission is promoting this culture through quality assurance and accreditation of higher education institutions through external edit in Nepal.

Some of the key changes in higher education over recent times have been driven by what is sometimes termed ‘massification’ – i.e. the move from a system that served an elite only to one that every member of society might aspire to experience (Prondzynski, 2013). The demography of higher education discerned in its massification has considerably changed since then. Higher educational institutions are vying for the process of quality assurance and accreditation in the country. The private sector has shown its vibrant presence in this race despite the fact that these institutions are facing decreasing enrollments and revenues while costs and competition for students are increasing.

The vive for quality education among the institutions is ever growing since quality culture in higher education is not outside the institutional domain, the “primary responsibility for quality assurance in higher education lies with each institution itself” as has been acknowledged by the European Ministers in the Berlin Communiqué of 2003. Since the Berlin Communiqué, the focus has shifted to the role of higher education institutions and has emphasized a diversity of approaches and a move towards
improvement, according to European University Association, Belgium. The 1999 Bologna system engendered quality consciousness in higher education in Europe. It has become a wakeup call to many higher education institutions and changed the educational landscape in many parts of the world.

Embedding quality can be considered as requiring the development of a culture within an academic department, faculty or higher education institution where staff strive continually to improve the quality of provision and where it is a naturalistic process with a desire for excellence being routine and commonplace (Lomas 2003 in Bollaert et al 2007).

As knowledge becomes more important, so does higher education. The quality of knowledge generated within higher education institutions, and its availability to the wider economy, is becoming increasingly critical to national competitiveness. (Peril and Promise, 2000, in Peace 2004).

**Vive and need for quality enhancement**

Ehlers (2011) says that it is a move away from approaching quality in higher education as something mechanistic, towards a new understanding that quality development in higher education in essence demands for the development of an organisational culture which is based on shared values, necessary competencies and new professionalism. He argues that quality development in higher education needs to go beyond the implementation of rules and processes for quality management purposes in order to improve the educational quality and thus quality development rather has to focus on promoting a quality culture which is enabling individual actors (of educational enterprises) to continuously improve their profession. This calls for embedding quality culture in higher educational institutions. Lomas (2003) is of the opinion that a sure way forward to quality embedment is quality enhancement of the higher educational institutions.

Educational enterprises, higher educational institutions in particular, are going with a vive for quality culture within themselves since they are the source of skilled manpower needed for the development for the country. It is an offshoot of globalization of the service sector.

Quality culture underpins the foundation of higher education. Since quality culture in higher education is not outside the institutional domain, the “primary responsibility for quality assurance in higher education lies with each institution itself” as has been acknowledged by the European Ministers in the Berlin Communiqué of 2003. It calls for the harmonization of educational structures so as to develop comparable criteria among the educational institutions. These institutions are responsible for qualitative delivery in terms of teaching-learning to their immediate stakeholders who are no other than the students and the community at large.

Quality culture combines cultural elements, structural dimensions and competences into one holistic framework, supporting stakeholders to develop visions, shared values and
beliefs. Communication, participation and the combination of top-down and bottom-up interaction is of key importance to the success of a quality culture. It is focusing on change more than on control, development rather than assurance and innovation more than standards compliance (Ehlers 2011).

The lesson for the countries like Nepal is the promotion of quality assurance in line with the process that has been reflected in the 1999 Bologna Declaration of the European Ministers aimed at the evolution of global educational market in the hope of institutionalization of comparable criteria towards quality assurance of the higher educational institutions. Since quality culture in higher education is not outside the institutional domain, the “primary responsibility for quality assurance in higher education lies with each institution itself” as has been acknowledged by the European Ministers in the Berlin Communiqué of 2003. Since the Berlin Communiqué, the focus has shifted to the role of higher education institutions and has emphasized a diversity of approaches and a move towards improvement in teaching-learning process of the institutions and thus has engendered quality consciousness in higher education. It has become a wake up call to many higher education institutions and changed the educational landscape in many parts of the world.

In this way, the expectation is for the international mobility of students, faculties and non-teaching faculties of the country. In this regard, the challenge is to institutionalize the process of quality culture within the degree awarding institutions or the universities themselves.

**Expansion of knowledge economy: strategy of higher education institutions**

Rapid expansion of the WTO principles has even more necessitated the development of quality culture in higher education to expand the knowledge economy in many countries irrespective of their level of growth. The quality of knowledge generated within higher education institutions, and its availability to the wider economy, is becoming increasingly critical to national competitiveness” (Peril and Promise, 2000 in Lenn, 2004, p.2).

Since higher educational institutions are imbued with culture of inquiry, it is but natural that they always sought to exploit the available opportunities afloat in the prevailing environment that takes them beyond the national boundary to empower themselves with the contemporary improvement in the educational arena.

Quality education is generally judged by the outcomes of the institutions in terms of the number of successful graduates and their achievement levels followed by their easy marketability. At present, such a paradigm has been reflected into the outcome of internal quality assurance system coupled with quality culture in higher education where quality assurance though is not a novelty (Harvey and Stensaker, 2008).

Irrespective of the level of growth and development, imparting quality education has become the explicit objective of higher education institutions all over the world. Quality for that matter quality education is generally judged by the outcomes of the institutions in
terms of the number of successful graduates and their achievement levels followed by their easy marketability. At present, such a paradigm has been reflected into the outcome of internal quality assurance system coupled with quality culture in higher education where quality assurance though is not a novelty. It has been a routine in almost all higher education institutions in America, Europe and many parts of Asia (Harvey and Stensaker, 2008).

Development of quality culture (alien to our country) is the focal point of quality education. Quality culture leads towards quality assurance in higher education. Thus, quality and quality assurance are embedded into the system of higher education. Notwithstanding, quality culture underpins its foundation. University Grants Commission is promoting this culture through quality assurance and accreditation of higher education institutions through external audit in Nepal.

With the promotion of quality assurance and accreditation of higher educational institutions in the country since 2007, such institutions have appreciated the need for external audit for the promotion and maintenance of quality culture within themselves. It is generally perceived that quality assurance in teaching and learning engenders quality culture. Total quality culture rekindles the notion of moral value that is inevitable to change the role of higher education which takes into consideration the organizational dynamics towards service delivery to the first and foremost stakeholders, the students, with primary focus on teaching-learning. Obviously, a total quality management complimented by “quality audit” occupies the central place in the dissemination of quality education.

Management regime the root
Total quality management (TQM) is an all-inclusive quality management strategy that involves support staff as well as academic staff (Lomas, 2004). It focuses on all organizational activities including teaching, researching, managing, catering and housekeeping. As the name implies it is a total approach that encourages concentration on the core activity of universities when endeavouring to embed quality within a culture. Total quality management in higher education is adopted from the management regime. It is discerned in a collection of principles, methods and best practices that aimed at reducing waste and increasing the quality of the product. It is generally perceived that quality assurance in teaching and learning engenders quality culture. It has been rightly depicted by the generic criterion of evaluation of the higher education institutions under the quality assurance and accreditation process of University Grants Commission, Nepal where external monitoring forms an important part for the promotion of quality culture in higher education institutions.

In some countries external monitoring of final examinations has provided a measuring rod of institutional success; in others, other performance indicators have been used. In more recent years, however, significant focus has shifted internationally not just to evidence of institutional outcomes, but the internal processes by which quality is assured. Coupled with this has been an increased emphasis on the more formative elements of
achieving quality, not just in the academic arena, but in all areas of campus operation (Luxton, 2005).

Total quality culture rekindles the notion of moral value that is inevitable to change the role of higher education which takes into consideration the organizational dynamics towards service delivery to the students with primary focus on teaching-learning. After the advent of globalization and problem of resource crunch, higher education institutions have turned their dynamics towards business improvement modalities to survive in the global market. Nepalese educational institutions are not immune from this syndrome considering the widespread invasion of foreign affiliated colleges. However, the quality assurance process of such institutions has remained outside the quality assurance and accreditation system.

It is imperative for them to pursue the modality of quality improvement in their teaching-learning regime. It calls for the adoption of quality culture in rapidly changing higher education landscape to ensure academic quality as a means of quality assurance by the implementation of institutional audits within the institutions. Such a process embraced the idea of total quality management in higher education. It built inertia for quality education and good practices having impact upon the society and community at large.

Freed (1997) has appreciated the total quality management in higher education as an energetic activity having marked dimensions such as honesty and integrity, shared vision of all stakeholders, patience, and commitment and so on. The author opines that quality principles are embedded in vision, mission and strong leadership that could create and support quality culture in the field of higher education.

It is high time that the Nepalese higher education institutions adopt the total quality management principles as a culture to ensure the sustainability of higher education, thus responding to the rapidly changing landscape of the higher education institutions. These institutions do have dual responsibility. On the one hand, it has to impart education that builds up knowledge economy while on the other, has to build a cadre which contributes to the growth of the economy, not to talk about the improvement of living standards of the general populace.

Challenges
Despite the existence of internal quality cell in the participating institutions, their internal audit system has not been developed at an appreciable level. Thus, it does not reflect the true institutionalization of quality culture in the HEIs. In addition, most of the HEIs suffer from the highly qualified faculties and administrative personnel who could drive those institutions towards the path of sustainability of quality culture with them. Such a gap has debarred them to initiate their own international linkages for engendering quality in their teaching-learning process coupled with research and other quality outsourcing. It is paradoxical that the growing private HEIs are almost outside the regime quality culture restricting them from both regional and central level interactions.
Way forward

However, there is no universal cut piece that fills out the vacuum of quality improvements that could be achieved and appreciated in the context of developing countries like Nepal. This calls for a step forward on the part of the higher education institutions towards the creation of quality culture that could assure the stakeholders about the quality of the institution. This has all the more become important to raise the standard of education significantly to achieve the goals of competitiveness with international standards and to create the foundation of a knowledge economy and compatibility as has been perceived by (Batool and Qureshi, 2004).

The Nepalese institutions also need to embed product improvement methodologies to improve the quality of education vying for quality culture in higher education. The management approach is a highly appreciable approach in maintaining quality culture in education as well in this changing education landscape. In addition, participation in the quality assurance and accreditation system by the higher education institutions is the right approach for assimilation of quality culture with the promotion of external audit within themselves. And thus could materialize the John Ruskin quote, "Quality is never an accident; it is an outcome of intelligent effort".

UGC wishes to continue to assist the HEIs to develop their internal quality assurance systems and enhance their programs. National reference standards have been developed to inform institutions, reviewers and other stakeholders. The evaluation framework inscribes internal and external review processes. Evidence-based self-evaluation by institutions is central to the internal and external review processes. External peer review is employed to reach evidence-based judgments.

“The need for quality and management of quality in the delivery of academic programs has become a panacea to cure the ills of higher education”. The “proxy” that unsettles the education sector must not be accepted in the changed context of education landscape to maintain quality culture in higher education. In Nepal, this thought must constantly run in the vein and brain of the concerned authorities who take themselves as Messiah of economic development.
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FDI SCOPES AND PROSPECTS OF ECONOMIC DEVELOPMENT: THE DBI ANALYSIS FOR NEPAL

Karan Singh Thagunna, PhD*

Key words: Foreign direct investment, human development indicators, multinationals, bottlenecks, subsistence.

Introduction:
Until recently, South Asia was largely known among the international community as the region of internal and external strife and home to the world’s largest number of poor with low per capita income and poor social indicators. But in nearly two decades, the scenario in the region has changed significantly. During this period, there has been a substantial increase in the volume of the foreign direct investment (FDI) in the private and public sector in that region by the western multinational companies and countries. Because of the capital inflow in the south Asian region, the per capita income in this region jumped up sharply and that caused decline in poverty and improvement in human development indicators. In fact, South Asia’s rate of economic growth remained 6 per cent between 1998 and 2008, which is now projected to grow at 7.9 per cent in 2013. The entire region has emerged as one of world’s leading economies. It is second only to East Asian and the Pacific economies in terms of growth and even the gap is closing.

Foreign Direct Investment (FDI) is that investment which is performed in countries other than their homeland and is towards the framework of the government's objectives. According to Abzari & Teimouri (2007) in FDI, the investor purchases production unit’s shares and becomes a partner in its ownership and he could be the owner of his share for unlimited time. One of the key motives for FDI is to globalize production and competition. A second reason is to move some production to more profitable locations. Firms in advanced countries have moved much of their labor-intensive production to developing nations where wages are lower.

The microeconomic point of view tries to explain the motivations for investment across national boundaries from the point of view of the investor. It also examines the consequences to investors, the country of origin and to the host country, of the operations of the multinationals rather than investment flows and stock (Lipsey, 2002). The Key motive for FDI is to globalize production and competition and move the business to more profitable locations. A very important and integral part of a country’s financial system is the stock market and a strong financial system guarantees the financial development and growth of that country. Nowak &Thagunna (2013) find the mediating

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role of stock market development in the path of FDI and economic development. From a macroeconomic point of view, FDI is a particular form of capital flows across borders, from countries of origin to host countries, which are found in the balance of payments. The variables of interest are: capital flows and stocks and revenues obtained from investments.

**FDI inflow and growth**

Nepali economy has witnessed the foreign investment in various sectors of economy after the restoration of democracy in 1990. During the period of first elected government, there were some noticeable steps taken toward the formidable and subsistence economic policy for the multinational companies to invest in Nepal. Investments were made in the infrastructure and telecommunication sector at that time but it could not last due to the political unrest after the unexpected mid-term election call in 1994. Afterward, Nepal has also experienced a slowdown in activity, given ongoing political uncertainty as the post-conflict transition to a new government has extended well into its fourth year since the comprehensive peace agreement was reached in November 2006. Law and order problems, and persistent and extensive infrastructure bottlenecks (electrical shortages are reflected in widespread load-shedding and unreliable delivery), reduced real GDP growth to 3.5 percent in FY2010/2011 (ending June-2011) from 4.6 percent in FY2009/10. In the following table-1 and graph-1, the FDI inflow from 2009 to 2012 is presented in terms of real GDP. Over that period, FDI inflow has risen from 38 million dollar to 92 million dollar. The data indicates that the FDI remains constant (0.5 %) and very low with respect to the gross domestic product of the nation.

**Table-1**

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP($)</td>
<td>12,854,834,975</td>
<td>16,010,389,262</td>
<td>19,123,129,346</td>
<td>18,962,962,963</td>
</tr>
<tr>
<td>FDI ($)</td>
<td>38176181.11</td>
<td>87799641.89</td>
<td>94022274.7</td>
<td>91996289.68</td>
</tr>
<tr>
<td>FDI (%) of GDP</td>
<td>0.3</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
</tr>
</tbody>
</table>

*Source: World Bank*
Doing business index (DBI)

DBI is considered one of the key instruments used by international investors to gauge the business environment before making their investment decisions in a country. ‘Doing Business-2013: Smarter Regulations for Small and Medium-Size Enterprises’ assesses regulations affecting domestic firms in 185 economies and ranks the economies in 10 areas of business regulation such as starting a business, resolving insolvency and trading across borders. It has evaluated the business friendly situation in different economies across the world on the basis government policies and domestic laws governing the private sector.

According to DBI-2013, Singapore topped the global ranking for the seventh straight year and most of other economies made improvements in the business climate. Poland led the top 10 economies registering the biggest improvements over the last year, followed by Sri Lanka, Ukraine, Uzbekistan, Burundi, Costa Rica, Mongolia, Greece, Serbia, and Kazakhstan. The table -1 and figure-1 shows the overall and individual parameter DB index for Nepal.
Table-2 (DBI index)

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- Starting a business</td>
<td>105</td>
</tr>
<tr>
<td>2- Dealing with construction permits</td>
<td>97</td>
</tr>
<tr>
<td>3- Getting Electricity</td>
<td>96</td>
</tr>
<tr>
<td>4- Registering property</td>
<td>21</td>
</tr>
<tr>
<td>5- Getting credits</td>
<td>70</td>
</tr>
<tr>
<td>6- Protecting investors</td>
<td>82</td>
</tr>
<tr>
<td>7- Paying taxes</td>
<td>114</td>
</tr>
<tr>
<td>8- Trading across borders</td>
<td>171</td>
</tr>
<tr>
<td>9- Enforcing contracts</td>
<td>137</td>
</tr>
<tr>
<td>10- Resolving Insolvency</td>
<td>121</td>
</tr>
</tbody>
</table>

Source: world bank report (2013)

Figure-2 (Bar plot of DBI index)

Nepal: (Moved down to 108 from 107)

Nepal has slipped to 108th position in the Doing Business Index (DBI)-2013 released by the World Bank and International Finance Corporation. In the DBI-2012, Nepal was ranked 107. Among the 10 indicators, under which 185 economies were ranked, Nepal’s position improved only in one indicator — registering property.

The DBI-2013 shows starting business in Nepal also worsened over the last year. DBI has ranked Nepal 105 in terms of starting a new business, whereas the country was ranked 102 in the DBI-2012. Nepal falls down by 9 point to reach at 97 while dealing with construction permits. Nepal improved in the indicator of registering property by 2 point to 21 from 23.

Nepali prospects for the development

Nepal lies on the southern slopes of the Himalayas between two of the world’s fastest growing economies – India in the south and China in the north. With a growth rate of merely 3.4 percent, Nepal so far missed the chance to align its own development with the economic dynamic of its neighbors and globe. This is all the more surprising because Nepal offers many possibilities for closer economic integration with the huge Indian and Chinese markets on its footstep, such as a big potential to produce hydropower, favorable laws regarding investment including FDI, diverse ecological belts suitable for different agricultural activities, an attractive tourism sector, and not least it’s very location as a prospective transit economy between India and China.

As many expert such as Jha(2012) believes that Nepal has huge potential of economic development by attracting foreign investments and connecting the immediate growth to the financial market development so that growth can be sustainable for the long run. The following prospects are the key factors for Nepal to catch up with the global economies.
1. Economic development through physical connection and investment opportunities:
Investments in infrastructural sectors such as in roads, rails, airports and more significantly power breed private investment. On the other hand, the telecommunications helps raise productivity for its role in disseminating price information to farmers and other producers. It brings out transparency and ensures delivery of government services in financial and trade related services. Roads and highways construction has been speeding up in Nepal and still an opportunity to attract Indian and Chinese investors. India is the Largest Investment Country in Nepal but lately China has tripled their Investment, hence Nepal can create the investment friendly environment for all countries by signing BIPPA agreements to protect their investment.

2. Use of labor surplus, human capital and technology:
Labour is key to different factors of production. In many poorer countries, there is surplus labour, which is a great asset to them. Proper utilization of the labour force in development activities increases the income and wealth of the country. Human capital denotes the skills of labour force. It represents the productive capacity of individuals. It creates the ability and efficiency to transform raw materials and capital into goods and services. It helps to improve labour productivity, facilitate technological innovations and bring higher returns to capital. Its role is also important in poverty reduction. Most importantly, human capital and the skills learnt are the outcome of educational attainment. Education helps the growth of a person’s labour productivity and earnings. It is well known that there is a positive relationship between the years of education and per capita GDP. Nepal is having a growing middle class and educated population. Roads and communication facilities have been developed in various parts of the country. There is a very vast growing number of people using telephone and internet service in Nepal. Hence Nepal can be a best human capital hub and research and technology center for both Indian and Chinese Scholar.

3. Public sector reform experience from India and China:
Before the introduction of public sector reforms (1978 China, 1991 India), both Indian and Chinese economies were largely state controlled and isolated from world economy. Their rate of economic growth was very low. However, in the process of integrating with the world economy, both India and China tried to liberalize and modernize their economies. All possible efforts were made to lower trade barriers, create congenial environment to attract foreign investment and ensure deregulation of industries. With the liberalization of the domestic economies, the banks were also liberalized. To boost the Nepalese economy, Nepal should introduce and implement the reforms and liberize its economy as soon as possible.

4. Potential energy sector
More than 6,000 rivers exist in Nepal with a combined run-off of about 200 billion cubic meters. All the river systems in the country finally end in the Ganges. Together, they contribute to over 40 per cent of the water of this river. They have the potential to generate 83 thousand MW of hydropower, but so far only 600 MW are harnessed. But
given the fact that both India and China have competent manpower and resources to develop hydropower and that India is a big market for the export of power, Nepal has big prospect for the harnessing the water of rivers for power production on a large scale, which is a short cut method to transfer quick growth to Nepal.

5. **Unique landscape for agriculture and tourism prospective**
Nepal is a unique country for having all the three regions – the plains (Terai), hills and the mountains. Therefore, many of the plants or crops grown in any part of the world could be produced in this land. This provides breeding ground to the domestic and foreign investors to make investment in agricultural sector and benefit from it. Nepal can attract a large number of Indian and Chinese Investor, Tourist, students, Agronomist due to its similarity of culture and life style. Hindu and Buddha temples are other tourist destinations for Indians and Chinese.

6. **Potential transit economy**
Each of India and China has comparative advantage over the other in the trade sector. Against India’s comparative advantage in IT software, China does have comparative advantage in IT hardware. While India does have comparative advantage in auto components, pharmaceuticals, chemicals and machine tools, China possesses strengths in areas like electronics, toy making and machinery. Therefore, the volume of trade between the two countries has increased phenomenally to $70 billion in 2011.

Since China is India’s largest trade partner, Nepal has a great potentiality to take advantage of the geographical proximity and emerge as transit country between the two. Nepal could help India and China to develop trilateral infrastructural facilities like roadways, railways and airways. If some of these facilities are developed, both India and China might benefit from the transit routes through Nepal as this would reduce the cost on transportation of goods and services. On the other hand, Nepal could emerge as an attractive centre for investment as it would have the opportunity to tap the vast markets of India and China.

**Conclusion**
Finally, Development and economic growth is on its footstep, Nepal has very good potential to exploit the FDI inflow and offer China- India experience and expertise due to its similar geo-ecology, culture and life style. After the second constitutional election, Nepalese people see a light for the peace and stability of the nation. A strong government can attract foreign investment in the country and stable economy is possible only from the stable political system.

But up to now, Nepal has been suffered by weak governance, inadequate infrastructure, power shortage, labour militancy, an expanding trade deficit, and a poor tourism policy. With politically strong government and united society, the speed of economic development will surpass its potential.
References:


THE NEXUS BETWEEN FINANCIAL DEVELOPMENT AND ECONOMIC GROWTH: THE NEPALESE EVIDENCE

Keshab Acharya*

Abstract

This paper examines the direction of causality between the financial development and economic growth of Nepal during the period of 1975-2013. The international context of this relationship has long been a subject of interest as the impact of one on another is critically important for policy makers. This research sheds light on this nexus by confirming the short-term dynamic relationship as well as long-run co-integrating relationship. The existence of co-integration implies that there is long-run, or equilibrium relationship between financial development and economic growth. Granger causality test provides the mixed result. The statistically significant F-statistic confirms the fact that there is the bidirectional causality between real GDP per capita and money defined broadly to GDP. Apart from this, bidirectional causality was found between real GDP per capita and domestic assets of commercial banks to the total domestic assets. However, real GDP per capita Granger causes private sector credit provided by commercial banks to GDP but causality in the opposite direction is not supported statistically.

Key words: Financial development, economic growth, unit root test, Correlogram, Johansen co-integration test, vector error correction model, Granger causality test.

1. Introduction

The direction of causality between financial development and economic growth is crucial for the policy makers of every country. As there are two different views in this connection, this causal relationship remains unclear. The first view was first proposed by Schumpeter (1911) who asserts that services provided by financial intermediaries are essential drivers of innovation and growth. Thus, well-developed financial systems channel financial resources to their most productive use. Schumpeter’s view was later formalized and supported by Goldsmith (1969); McKinnon (1973); Shaw (1973); King and Levine (1993 a,b); Fry (1995) and Pagano (1993), who all believed that financial development is a catalyst for economic growth. The second view suggests that the increase in the demand for financial services resulting from economic growth is the major

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driving force behind the development of the financial sector. Many well-known scholars, including Robinson (1952) and Ireland (1994), have long rejected this hypothesis on purely theoretical grounds. In their view, a lack of financial development is simply the manifestation of a lack of financial services. As the real sector of the economy expands, the various financial services increases, and will thus be met by the financial sector. Even though conclusions must be drawn with caution, the preponderance of theoretical reasoning and empirical evidence suggests a positive, first-order relationship between financial development and economic growth.

A large number of researchers agree that there is a significant relationship between finance and economic growth. Nevertheless, they disagree about the direction of causality. Some researchers stress that there is causal direction from financial development to economic growth. That is, policies that move toward the development of financial systems lead to economic growth. On the other hand, some researchers argue that the direction is from economic growth to financial development. If the direction is from economic growth to financial development, a correct representation of reality, then policy efforts to promote financial development will be premature. However, if this direction is not correct, policy-makers should focus attention on the creation and promotion of modern financial institutions, including banks, non-banks and stock markets, in order to promote genuine and enduring economic growth. (Hassan et al., 2011)

2. Literature review
A healthy financial sector is essential to facilitate sustainable economic growth. Theoretically, the channel by which financial development supports economic growth is via enhancing financial intermediation, for example, moving funds from savers to investors in a cost-effective manner which motivates individuals towards more efficient resource allocation decisions. [Greenwood and Jovanovic (1989), Levine and Zervos (1998)]. Jung (1986) studied the causal link between financial development and economic growth using Granger (1969) causality tests. He selected 56 countries with annual data over 1953-1980. He used the ratio of M1 and M2 to nominal GNP to measure the financial development. He found the direction of causality frequently runs both ways. He also found that developing countries have a supply-leading causality pattern so financial development proceeds economic growth and induces an expansion of financial system.

A new impulsion on relationship between financial development and growth has given by Greenwood and Jovanovic (1990) and Bencivenga and Smith (1992) as their models postulate that savings behavior directly influences not only equilibrium income levels but also growth rates. Thus, financial markets can have a strong impact on real economic activity. On the other hand, Luintel and Khan (1999) have used endogenous growth models to show a two-way relationship between financial development and economic growth. However, despite the emergence of new growth theories, the debate on the direction of causality between financial development and economic growth remains apparent yet. Greenwood and Jovanovic (1990) have addressed the context of financial
structure and economic development to show causal relationship between financial development and economic growth in Pareto-optimal competitive model. Economic growth provides the development of financial structure and, in turn, allows for higher growth through efficiency in investment. Assuming that many entrepreneurs solicit capital and that capital is scarce, financial intermediaries produce better information on firms, thereby fund firms to more promising and induce a more efficient allocation of capital.

King and Levine (1993a, 1993b) have found that besides identifying the best production technologies, financial intermediaries may also boost the rate of technological innovation by identifying those entrepreneurs with the best chances of successfully initiating new goods and production processes. King and Levine (1993a) have examined the capital accumulation and productivity growth channels of 77 countries over the period 1960-1989, by systematically controlling for other factors affecting long-run growth, they construct additional measures of the level of financial development, and analyze whether the level of financial development predicts long-run economic growth, capital accumulation, and productivity growth. They found very consistent results across the different financial development indicators. They however, simply found the potentially large long-term growth effects from changes in financial development.

Gibson and Tsakalotos (1994) have examined the empirical evidences and experiences of financial liberalization in Chile, Korea, and other countries, and suggest further the sequences of economic reforms. Liberalization of domestic financial system should follow the real sector reforms for setting up market price system, removal of both implicit and explicit taxes as well as subsidies on firms, lifting up the entry barriers for the private sector. Levine (1997) has assessed theoretical and empirical evidences on finance-growth nexus that the financial system plays active role in the economic growth. Development of financial institutions and markets are crucial for the long run growth process. The development in the non-financial (i.e. real) sector, information and technological changes, innovations of computer, financial and monetary and other economic policy, legal and political system and institutions etc have a direct influence in the development of the financial system. Calderon and Liu (2003) have examined pooled data of 109 countries to examine the direction of causality between financial development and economic growth by employing Gewke Decomposition test. They found the five distinct results as; financial development generally leads economic growth; bi-directional causality between financial development and economic growth; in developing countries, financial deepening causes more to growth than industrial countries (supply leading supportive);financial development has larger effect on economic growth in long run; financial deepening contributes economic growth through more rapid capital accumulation and productivity growth.

Christopoulos and Tsionas (2004) have examined the long run relationship between financial depth and economic development for 10 developing countries over the period 1970 to 2000 by using panel unit root test and dynamic panel co-integration analysis, threshold co-integration test and dynamic panel data estimation with fully modified OLS
to find that there is a single equilibrium relation between financial depth, growth and ancillary variables. There is only co-integrating relation implying unidirectional causality from financial depth to growth.

The impact on the financial development and economic growth studied by Jalil and Ma (2008) in case China and Pakistan found that a positive and significant relationship between financial development and economic growth exists in the case of Pakistan. But, in the case of China, their analysis showed that a positive and significant relationship for credit liability ratio and a positive, yet insignificant, relationship with credit to private sector. Fadare (2010) empirically identifies the effect of banking sector reforms on economic growth in Nigeria from 1999-2009 by using credit to the private sector and other variables as well. He found negative relationship however the result was insignificant. In a similar kind of study conducted by Eslamloveyan and Sakhaei(2011) in Middle East suggest that there is bidirectional causality between financial development and economic growth in both the short- and long run. Hassan, Sanchez and Suk Yu (2011) found a positive relationship between financial development and economic growth in developing countries. Moreover, they have shown a two-way causality relationship between finance and growth for most regions and one-way causality from growth to finance for the two poorest regions using short-term multivariate analysis. They argued that a well-functioning financial system is a necessary but not sufficient condition to reach steady economic growth in developing countries.

Nepalese perspective
The effects of banking sector policies on the process of financial development and economic growth of Nepal over the period of 1960-1992 was examined by Demetriades and Luintel (1996) by using unrestricted error correction model (UECM). The dynamics between financial development and economic growth are examined by exogeneity tests. They have also constructed the index of financial repression by using principal component method to quantify the influences of banking sector policies on financial development, independently of the interest rate. They could not find support for real interest rate as determinant of financial development. They have stressed that policies determining financial depth also influence economic growth and vice-versa.

Bhetuwal (2007) and Poudel (2005) found that financial development contributes positively to domestic economic growth. On the other hand, Shrestha (2005) did not find any significant relationship between economic growth and financial development. A study by Nepal Rastra Bank suggests that domestic economic growth is found to be somewhat supported by financial development; but the effect is noticeable with a one-year lag, but not at a contemporaneous level (NRB, 2009). Kharel and Pokhrel(2012) used Johansen's cointegrating vector error correction model based on aggregate annual data from 1993/9 to 2010/11 and suggest that banking sector plays a key role in promoting economic growth compared to capital market in Nepal. It may be either the size of capital market is too small to seek the relationship or it is weakly linked to real economic activities. They further argued that the policy should focus on banking sector
development by enhancing its quality and outreach as it promotes economic growth in Nepal.

A more recent research carried out by Vuong (2013) found that the deposit ratio has better influence in the economy of Nepal. Other variables credit ratio, investment ratio and term deposit ratio has not be found as driver of Nepalese economy. In contrast of other findings, it is found that current deposit ratio has negative influence on Nepalese economy. He also suggested that Nepal should promote economic growth in order to encourage and thus benefit from financial development. In this context of mixed results, the appropriate development of Nepalese financial sector is essential so that it can play a critical and positive role in the economic growth of the nation.

3. Data and methodology

3.1 Data

The data analyzed in this paper consists of economic and financial time series of Nepal. These include Ratio of Money Defined Broadly to Nominal GDP (M2Y), Ratio of Commercial banks’ Domestic Assets to Total Domestic Assets (CBDATOTDA) and Ratio of Credit to Private Sector to Nominal GDP (PRIVTOGDP) as different indicators of financial development and Per Capita Real GDP (PRGDP) as an indicator of economic growth. The sources of the data include Quarterly Economic Bulletin published by Nepal Rastra Bank and various issues of Economic Survey published by Ministry of Finance. The data set of the study consists of annual observations over the period of 1975 to 2013.

3.2 Test of stationarity

A meaningful econometric estimation of a model using time series data requires that the data series should be stationary. According to Granger and Newbold (1974), econometric estimation using non-stationary time series data often leads to spurious results. Hence, to avoid a spurious relationship, there is a need to perform a unit root test on variables. Augmented Dickey-Fuller (ADF) test is employed to determine whether there is a unit root in economic variables. By checking the existence of stationarity of each variable, the data series in term of levels and first difference has been tested. The null hypothesis tested that the variables under investigation have a unit root, where as the alternative hypothesis do not have a unit root.

The equation for ADF test is given below:

\[ \Delta Y_t = \beta_1 + \beta_2 t + \delta Y_{t-1} + \sum_{i=1}^{m} \alpha_i \Delta Y_{t-i} + \epsilon_t \quad \ldots (1) \]

If the variable is stationary at level, the variable is said to be integrated of order zero, I(0). If the variable is non-stationary at level, the ADF test can be utilized and the first difference of the variable can be used for testing a unit root. In that case, the variable is said to be co-integrated of order one, i.e, I(1). Besides unit root test, correlogram is used for the convincing conclusions regarding the stationarity of the data.
3.3 Co-integration test
The tests of stationarity as explained above validate that the non-stationarity problem of most of the macro-economic and financial time series variables of level form data results spurious relation but most of the first difference data are free from this drawbacks. The conclusions derived from differenced data may mislead the long-run relationship between the variables (Engle and Granger, 1987). Relationship between the variables computed under differenced data in different orders show short-term relationship which can be considered as disequilibrium relationship. The long-run relationship can be established by using level form data only when variables are co-integrated in same order. However, their linear relationship must be less than the co-integrating order. Now, \( \Delta u \) is subjected to unit root analysis and it is found to be stationary; that is, it is \( I(0) \). This is an interesting situation, for although two variables are individually \( I(1) \), that is, they have stochastic trends, their linear combination of them is \( I(0) \). In a manner of speaking, the linear combination cancels out the stochastic trends in the two series. As a result, a regression would be meaningful (i.e., not spurious). In this case, it is said that the two variables are co-integrated.

3.4 Vector error correction (VEC) model
The error correction mechanism (ECM) developed by Engle and Granger is a means of reconciling the short-run behavior of an economic variable with its long-run behavior. A vector error correction (VEC) model is a restricted VAR designed for use with non-stationary series that are known to be co-integrated. The VEC has co-integration relations built into the specification so that it restricts the long-run behavior of the endogenous variables to converge to their co-integrating relationships while allowing for short-run adjustment dynamics. The co-integration term is known as the error correction term since the deviation from long-run equilibrium is corrected gradually through a series of partial short-run adjustments. The relevant error correction term is included in the standard causality tests, if the variables are found to be cointegrated. The error correction model for these variables can be written as:

\[
\Delta Y_t = \alpha_1 + \rho_1 + z_{t-1} + \sum_{i=1}^{p} \beta_i \Delta Y_{t-i} + \sum_{j=1}^{a} \delta_j \Delta X_{t-j} \quad \text{......................... (ii)}
\]

\[
\Delta X_t = \alpha_2 + \rho_2 + z_{t-1} + \sum_{i=1}^{p} \beta_i \Delta Y_{t-i} + \sum_{j=1}^{a} \delta_j \Delta X_{t-j} \quad \text{.......................... (iii)}
\]

Where, \( z_{t-1} \) is an error correction term, representing the long-run relationship. If both coefficients (\( \rho_1 \) and \( \rho_2 \)) are significant, this will suggest the bi-directional causality. But, if only \( \rho_1 \) is significant, this will suggest a unidirectional causality from \( Y \) to \( X \). If only \( \rho_2 \) is significant, this will suggest a unidirectional causality from \( Y \) to \( X \).

3.5 Granger causality test
The existence of a relationship between variables obtained by regression analysis assumes the dependence of one variable on other variables. However, given various types of theoretical explanations, and other empirical evidences, it is necessary to examine the
direction of causality between macroeconomic variables and the indicators of financial development. Granger (1969) has argued that an event happens before another event, then it is possible that first event is causing later but not the other way round. According to the Engle and Granger (1987) representation theorem, if two variables are co-integrated and each is individually integrated of order 1 (i.e., each is individually non-stationary), then first variable may Granger-cause second variable, second variable may Granger-cause first variable or each other.

4. Results and discussion
4.1.1 Test of stationarity and order of integration
Augmented Dickey-Fuller Test is applied to test the presence of unit root in the data. The test is performed in level with lagged difference one. Even though the sample includes the data from 1975 to 2013; adjusted sample considered the data from 1977 to 2013 after adjusting endpoints i.e. 37 observations. The result of this test is summarized in the table below.

Table 4.1.1: Unit root test in level and first difference

<table>
<thead>
<tr>
<th>Variables</th>
<th>ADF test statistic at level</th>
<th>Mackinnon Critical Value</th>
<th>ADF test statistic at first difference</th>
<th>Mackinnon Critical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>1%</td>
<td>5%</td>
</tr>
<tr>
<td>LOG(M2Y)</td>
<td>-1.9547</td>
<td>-3.6171</td>
<td>-2.9422</td>
<td>-2.6092</td>
</tr>
</tbody>
</table>

Comparing these values in their absolute form, the computed values of ADF statistic of all the variables are less than the MacKinnon critical values at 1%, 5% and 10% level of significance. This implies that the null hypothesis of non-stationarity in log of PRGDP, log of M2Y, log of CBDATO TA and log of PRIVTOGDP cannot be rejected in level test.

Most of the time series data are expected to be found first difference stationary. In order to test the first difference in time series data, the null hypothesis of unit root problem in first difference in time series data is equal to zero, that is, there is unit root problem in first difference against the alternative hypothesis of zero, i.e., there is no unit root problem in such data. All the variables which are not stationary in level form data are shown stationary in their first difference. The ADF of four variables in their absolute form are greater than MacKinnon critical value at 1% level of significance. Therefore, the first difference data are stationary or they are integrated of order 1 or I (1).

4.1.2 Test of autocorrelation and partial autocorrelation function
The Augmented Dickey Fuller test does not have high power, and is sometimes sensitive to the number of lags in the estimation. Also, previous researches have shown that when
the sample size is small, as in the case of this study where yearly data ranges from 1975 to 2013, the ADF test is not very convincing (Hu et. al., 1992). Therefore, for convincing conclusions, the autocorrelation function and partial autocorrelation function has also been observed as follows:

**Per capita real GDP (PRGDP)**
The ADF test on the log of PRGDP fails to reject the null hypothesis of a unit root in level and same has been observed in the correlogram as well which describes the result from 1 to 16 lags [Figure 1(a)]. This suggests that the log of PRGDP is not stationary at level form. Slow decay in the autocorrelation pattern, shown in Figure 1(b), is an indication of stationarity of Log of PRGDP at first difference.

![Figure 1(a): ACF & PACF of LOG(PRGDP) at level](image1a)

![Figure 1(b): ACF & PACF of LOG(PRGDP) at first difference](image1b)

**Ratio of money defined broadly to GDP (M2Y)**
The ADF test on the log of M2Y fails to reject the null hypothesis of a unit root at level and same has been observed in the correlogram as well. This suggests that the log of M2Y is not stationary at level form. Slow decay in the autocorrelation pattern, shown in Figure 2(b), is indication of stationarity at first difference.

![Figure 2(a): ACF&PACF of LOG(M2Y) at level](image2a)

![Figure 2(b): ACF&PACF of LOG(M2Y) at first difference](image2b)
**Ratio of commercial banks’ domestic assets to total domestic assets (CBDATOTDA)**  
The ACFs are marked by the presence of spikes in some cases and in one of the cases PACF is also not free from spike at level. A quick scan of the partial autocorrelation function (PACF) and autocorrelation function (ACF) of log of CBDATOTDA, at first difference shown in Figure 3(b), reveals slow decay in the autocorrelation pattern is an indication of stationarity.

![Figure 3 (a): ACF & PACF of LOG(CBDATOTDA) at level](image1)

![Figure 3 (b): ACF & PACF of LOG(CBDATOTDA) at first difference](image2)

**Ratio of credit to private sector to GDP(PRIVTOGDP)**  
It has been observed from the correlograms that the ACFs are marked by the presence of spikes and the corresponding PACFs are also not free from spike in level as shown in figure 4(a). However, slow decay in the autocorrelation pattern, shown in Figure 4(b), is indication of stationarity. These observations testify the fact that Log of PRIVTOGDP is free from autocorrelations of any order in first difference.

![Figure 4 (a): ACF & PACF of LOG(PRIVTOGDP) at level](image3)

![Figure 4(b): ACF & PACF of LOG(PRIVTOGDP) at first difference](image4)
4.2 Co-integration test

The Johansen co-integration test has been performed on the indicators of financial development and economic growth series. The test assumed that there is intercept (no trend) in the co-integrating equation and test VAR. Furthermore, the assumed lag interval (pairs) in vector auto regression variables (VAR) is 1 to 1. The test results are given in the following tables:

4.2.1 Co-integration test between LOG(PRGDP) and LOG(M2Y)

The values of likelihood ratio between these two variables are 25.67423 and 0.956943 considering ‘no hypothesized co-integrating equations’ and ‘at most one co-integrating equation’. However, critical values for 1% and 5% level of significance in the first case are 20.04 and 15.41 respectively and that of second case are 6.65 and 3.76 respectively. As the likelihood ratio in the first case is greater than the critical value, there is the presence of one co-integrating equation at 1% level of significance. Furthermore, the co-integrating equation between LOG (PRGDP) and LOG(M2Y) with normalized co-integrating coefficients has also shown in the above table. The presence of co-integrating equation indicates that there exists the long run relationship between LOG (PRGDP) and LOG(M2Y).

<table>
<thead>
<tr>
<th>Eigen value</th>
<th>Likelihood ratio</th>
<th>5 % critical value</th>
<th>1 % critical value</th>
<th>Hypothesized no. of CE(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.487285</td>
<td>25.67423</td>
<td>15.41</td>
<td>20.04</td>
<td>None **</td>
</tr>
<tr>
<td>0.025532</td>
<td>0.956943</td>
<td>3.76</td>
<td>6.65</td>
<td>At most 1</td>
</tr>
</tbody>
</table>

*(**) denotes rejection of the 5% (1%) significance level

L.R. test indicates 1 co-integrating equation(s) at 1% significance level
Normalized co-integrating coefficients: 1 co-integrating equation(s)

<table>
<thead>
<tr>
<th>LOG(PRGDP)</th>
<th>LOG(M2Y)</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.000000</td>
<td>-0.716006</td>
<td>-10.32902</td>
</tr>
<tr>
<td></td>
<td>(0.05042)</td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td></td>
<td>148.4917</td>
</tr>
</tbody>
</table>

4.2.2 Co-integration Test between LOG(PRGDP) and LOG(CBDATOTDA)

The values of likelihood ratio between these two variables are 18.04285 and 1.924358 considering ‘no hypothesized co-integrating equations’ and ‘at most one co-integrating equation’. However, critical values for 1% and 5% level of significance in the first case are 20.04 and 15.41 respectively and that of second case are 6.65 and 3.76 respectively. As the likelihood ratio in the first case is greater than the critical value, there is the presence of one co-integrating equation at 5% level of significance. Furthermore, the co-integrating equation between LOG(PRGDP) and LOG(CBDATOTDA) with normalized
co-integrating coefficients has also shown in the above table. The presence of co-integrating equation indicates that there exists the long run relationship between LOG(PRGDP) and LOG(CBDATOTDA).

**Table 4.2.2:** Co-integration test between LOG(PRGDP) and LOG(CBDATOTDA)

<table>
<thead>
<tr>
<th>Eigen value</th>
<th>Likelihood ratio</th>
<th>5 % critical value</th>
<th>1 % critical value</th>
<th>Hypothesized no. of CE(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.389278</td>
<td>18.04285</td>
<td>15.41</td>
<td>20.04</td>
<td>None *</td>
</tr>
<tr>
<td>0.054087</td>
<td>1.924358</td>
<td>3.76</td>
<td>6.65</td>
<td>At most 1</td>
</tr>
</tbody>
</table>

*(**) denotes rejection of the 5% (1%) significance level
L.R. test indicates 1 co-integrating equation(s) at 5% significance level
Normalized co-integrating coefficients: 1 co-integrating equation(s)

<table>
<thead>
<tr>
<th>LOG(PRGDP)</th>
<th>LOG(CBDATOTDA)</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.000000</td>
<td>-1.723968</td>
<td>-10.00823</td>
</tr>
<tr>
<td>(0.19926)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Log likelihood 149.6939

4.2.3 Co-integration test between LOG(PRGDP) and LOG(PRIVTOGDP)

The values of likelihood ratio between these two variables are 20.30259 and 2.057367 considering ‘no hypothesized co-integrating equations’ and ‘at most one co-integrating equation’. However, critical values for 1% and 5% level of significance in the first case are 20.04 and 15.41 respectively and that of second case are 6.65 and 3.76 respectively. As the likelihood ratio in the first case is greater than the critical value, there is the presence of one co-integrating equation at 1% level of significance. Furthermore, the co-integrating equation between LOG(PRGDP) and LOG(PRIVTOGDP) with normalized co-integrating coefficients has also shown in the above table. The presence of co-integrating equation indicates that there exists the long run relationship between LOG(PRGDP) and LOG(PRIVTOGDP).

**Table 4.2.3:** Co-integration test between LOG(PRGDP) and LOG(PRIVTOGDP)

<table>
<thead>
<tr>
<th>Eigen value</th>
<th>Likelihood ratio</th>
<th>5 % critical value</th>
<th>1 % critical value</th>
<th>Hypothesized no. of CE(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.389278</td>
<td>20.30259</td>
<td>15.41</td>
<td>20.04</td>
<td>None **</td>
</tr>
<tr>
<td>0.054087</td>
<td>2.057367</td>
<td>3.76</td>
<td>6.65</td>
<td>At most 1</td>
</tr>
</tbody>
</table>

*(**) denotes rejection of the 5% (1%) significance level
L.R. test indicates 1 co-integrating equation(s) at 5% significance level
Normalized co-integrating coefficients: 1 co-integrating equation(s)
As Log of PRGDP is co-integrated with Log of M2Y, Log of CBDATOTDA and Log of PRIVTOGDP, the short-run “disequilibrium” relationship between the same can always be represented by an Error Correction Model (ECM). This model states that changes in y depend on changes in x and one period lag residual term which is derived from co-integrating equation as the disequilibrium error in the previous period, that is, \( \Delta y_t = \alpha_0 + \alpha_1 \Delta x_t + u_{t-1} + \epsilon_t \). If no equilibrium relationship exists, short-run behavior should not be represented by ECM. According to the ECM argument both the level form data (long-run relationship) and their first differences (short-run relationship) are required in a single regression equation. Among co-integrated variables both the short run as well as long-run relationship can be represented in Error Correction Model (ECM). Therefore, ECM reconciles the short-run behavior of these variables with its long-run behavior.

### 4.3.1 VECM in between LOG(PRGDP) and LOG(M2Y)

Vector Error Correction Model (VECM) has been applied in the co-integrating equation between LOG(PRGDP) and LOG(M2Y). VAR assumes intercept but no trend in co-integrating equations. The sample includes 36 observations from 1978 to 2013 after adjusting end points.

#### Table 4.3.1: VECM in between LOG(PRGDP) and LOG(M2Y)

<table>
<thead>
<tr>
<th>Error correction:</th>
<th>D(LOG(PRGDP))</th>
<th>D(LOG(M2Y))</th>
</tr>
</thead>
<tbody>
<tr>
<td>CointEq1</td>
<td>-0.122864</td>
<td>0.393735</td>
</tr>
<tr>
<td></td>
<td>(0.05180)</td>
<td>(0.13974)</td>
</tr>
<tr>
<td></td>
<td>(-2.37168)</td>
<td>(2.81756)</td>
</tr>
<tr>
<td>D(LOG(PRGDP(-1)))</td>
<td>-0.213626</td>
<td>0.030823</td>
</tr>
<tr>
<td></td>
<td>(0.16588)</td>
<td>(0.44747)</td>
</tr>
<tr>
<td></td>
<td>(-1.28780)</td>
<td>(0.06888)</td>
</tr>
<tr>
<td>D(LOG(PRGDP(-2)))</td>
<td>-0.123367</td>
<td>-0.092534</td>
</tr>
<tr>
<td></td>
<td>(0.17475)</td>
<td>(0.47140)</td>
</tr>
<tr>
<td></td>
<td>(-0.70595)</td>
<td>(0.19630)</td>
</tr>
<tr>
<td>D(LOG(M2Y(-1)))</td>
<td>-0.021874</td>
<td>-0.122871</td>
</tr>
<tr>
<td></td>
<td>(0.05383)</td>
<td>(0.14521)</td>
</tr>
<tr>
<td></td>
<td>(-0.40632)</td>
<td>(-0.84613)</td>
</tr>
<tr>
<td>D(LOG(M2Y(-2)))</td>
<td>-0.065249</td>
<td>-0.241580</td>
</tr>
<tr>
<td></td>
<td>(0.06252)</td>
<td>(0.16865)</td>
</tr>
<tr>
<td></td>
<td>(-1.04365)</td>
<td>(-1.43246)</td>
</tr>
<tr>
<td>C</td>
<td>0.032332</td>
<td>0.054624</td>
</tr>
<tr>
<td></td>
<td>(0.00821)</td>
<td>(0.02215)</td>
</tr>
<tr>
<td></td>
<td>(3.93753)</td>
<td>(2.46609)</td>
</tr>
</tbody>
</table>
The vector error correction model has shown that about -12.29% of disequilibrium is ‘corrected’ each year by changes in log of PRGDP. Similarly, about 39.37% of disequilibrium is ‘corrected’ each year by changes in one of the financial development indexes log of M2Y. All other error correction in the variables has been reported in the above table.

4.3.2 VECM in between LOG(PRGDP) and LOG(CBDATOTDA)
Vector Error Correction Model (VECM) has been applied in the co-integrating equation between LOG(PRGDP) and LOG(CBDATOTDA). VAR assumes intercept but no trend in co-integrating equations. The sample includes 36 observations from 1978 to 2013 after adjusting end points.

Table 4.3.2: VECM in between LOG(PRGDP) and LOG(CBDATOTDA)

<table>
<thead>
<tr>
<th>Error correction:</th>
<th>D( LOG(PRGDP))</th>
<th>D(LOG(CBDATOTDA))</th>
</tr>
</thead>
<tbody>
<tr>
<td>CointEq1</td>
<td>0.130564</td>
<td>0.367149</td>
</tr>
<tr>
<td></td>
<td>(0.03588)</td>
<td>(0.08320)</td>
</tr>
<tr>
<td></td>
<td>(3.63908)</td>
<td>(4.41284)</td>
</tr>
<tr>
<td>D(LOG(PRGDP(-1)))</td>
<td>-0.472016</td>
<td>-0.878349</td>
</tr>
<tr>
<td></td>
<td>(0.17939)</td>
<td>(0.41600)</td>
</tr>
<tr>
<td></td>
<td>(-2.63124)</td>
<td>(-2.11144)</td>
</tr>
<tr>
<td>D(LOG(PRGDP(-2)))</td>
<td>-0.293697</td>
<td>-1.049181</td>
</tr>
<tr>
<td></td>
<td>(0.17662)</td>
<td>(0.40957)</td>
</tr>
<tr>
<td></td>
<td>(-1.66289)</td>
<td>(-2.56167)</td>
</tr>
<tr>
<td>D(LOG(CBDATOTDA(-1)))</td>
<td>0.063108</td>
<td>0.221331</td>
</tr>
<tr>
<td></td>
<td>(0.06612)</td>
<td>(0.15332)</td>
</tr>
<tr>
<td></td>
<td>(0.95451)</td>
<td>(1.44360)</td>
</tr>
<tr>
<td>D(LOG(CBDATOTDA(-2)))</td>
<td>0.028309</td>
<td>0.269770</td>
</tr>
<tr>
<td></td>
<td>(0.06220)</td>
<td>(0.14423)</td>
</tr>
<tr>
<td></td>
<td>(0.45515)</td>
<td>(1.87039)</td>
</tr>
<tr>
<td>C</td>
<td>0.036258</td>
<td>0.038735</td>
</tr>
<tr>
<td></td>
<td>(0.00637)</td>
<td>(0.01477)</td>
</tr>
<tr>
<td></td>
<td>(5.69342)</td>
<td>(2.62287)</td>
</tr>
</tbody>
</table>

The vector error correction model has shown that about 13.06% of disequilibrium is ‘corrected’ each year by changes in log of PRGDP. Similarly, about 36.71% of disequilibrium is ‘corrected’ each year by changes in one of the financial development indexes log of CBDATOTDA. All other error correction in the variables has been reported in the above table.

4.3.3 VECM in between LOG(PRGDP) and LOG(PRIVTOGDP)
Vector Error Correction Model (VECM) has been applied in the co-integrating equation between LOG(PRGDP) and LOG(PRIVTOGDP). VAR assumes intercept but no trend in
co-integrating equations. The sample includes 36 observations from 1978 to 2013 after adjusting end points.

Table 4.3.3: VECM in between LOG(PRGDP) and LOG(PRIVTOGDP)

<table>
<thead>
<tr>
<th>Error correction:</th>
<th>D( LOG(PRGDP))</th>
<th>D(LOG(PRIVTOGDP))</th>
</tr>
</thead>
<tbody>
<tr>
<td>CointEq1</td>
<td>-0.092729</td>
<td>0.984224</td>
</tr>
<tr>
<td></td>
<td>(0.07586)</td>
<td>(0.30474)</td>
</tr>
<tr>
<td></td>
<td>(-1.22236)</td>
<td>(3.22974)</td>
</tr>
<tr>
<td>D(LOG(PRGDP(-1)))</td>
<td>-0.070254</td>
<td>0.284487</td>
</tr>
<tr>
<td></td>
<td>(0.17482)</td>
<td>(0.70228)</td>
</tr>
<tr>
<td></td>
<td>(-0.40186)</td>
<td>(0.40509)</td>
</tr>
<tr>
<td>D(LOG(PRGDP(-2)))</td>
<td>0.017923</td>
<td>-0.585588</td>
</tr>
<tr>
<td></td>
<td>(0.17448)</td>
<td>(0.70092)</td>
</tr>
<tr>
<td></td>
<td>(0.10272)</td>
<td>(-0.83546)</td>
</tr>
<tr>
<td>D(LOG(PRIVTOGDP(-1)))</td>
<td>-0.017090</td>
<td>0.409873</td>
</tr>
<tr>
<td></td>
<td>(0.03693)</td>
<td>(0.14835)</td>
</tr>
<tr>
<td></td>
<td>(-0.46280)</td>
<td>(2.76295)</td>
</tr>
<tr>
<td>D(LOG(PRIVTOGDP(-2)))</td>
<td>-0.037407</td>
<td>-0.001681</td>
</tr>
<tr>
<td></td>
<td>(0.04049)</td>
<td>(0.16265)</td>
</tr>
<tr>
<td></td>
<td>(-0.92389)</td>
<td>(-0.01033)</td>
</tr>
<tr>
<td>C</td>
<td>0.026163</td>
<td>0.039486</td>
</tr>
<tr>
<td></td>
<td>(0.00718)</td>
<td>(0.02886)</td>
</tr>
<tr>
<td></td>
<td>(3.64156)</td>
<td>(1.36813)</td>
</tr>
</tbody>
</table>

The vector error correction model has shown that about -9.27% of disequilibrium is ‘corrected’ each year by changes in log of PRGDP. Similarly, about 98.42% of disequilibrium is ‘corrected’ each year by changes in one of the financial development indexes log of PRIVTOGDP. All other error correction in the variables has been reported in the above table.

4.4 Granger causality test
From the above Johansen co-integration test, it has been found that there exists the long term relationship between economic growth and financial development. According to the Engle and Granger (1987) representation theorem, if two variables are co-integrated and each is individually I (1), that is, integrated of order 1 (i.e., each is individually non-stationary), then first variable may Granger-cause second variable, second variable may Granger-cause first variable or each other. Granger causality test has been performed as follows:

4.4.1 Granger causality test between LOG(PRGDP) and LOG(M2Y)
Granger causality test has been performed to test the robustness of the result considering different lag length. In case of null hypothesis ‘LOG(PRGDP) does not Granger Cause LOG(M2Y)’ the F-statistics are statistically significant for the lag length 1 and 2

-----101-----
indicating the rejection of null hypothesis. However, opposite result has been found in case of lag length 3 and 4. Similarly, in case of null hypothesis ‘LOG(M2Y) does not Granger Cause LOG(PRGDP) ’ the F-statistics are significant for the lag length 1 and 2 indicating the rejection of null hypothesis. However, opposite result has been found in case of lag length 3 and 4. Analyzing the value of F-statistics and probability, it can be concluded that there exists the bidirectional relationship between Log of PRGDP and Log of M2Y considering the lag length 1 and 2. However, result shows no relationship between these variables in case of lag length 3 and 4.

Table 4.4.1: Granger causality test between LOG(PRGDP) and LOG(M2Y)

<table>
<thead>
<tr>
<th>Null hypothesis</th>
<th>Obs</th>
<th>Lags</th>
<th>F-statistic</th>
<th>Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOG(PRGDP) does not Granger Cause LOG(M2Y)</td>
<td>38</td>
<td>1</td>
<td>13.6572</td>
<td>0.000750.04485</td>
</tr>
<tr>
<td>LOG(M2Y) does not Granger Cause LOG(PRGDP)</td>
<td></td>
<td></td>
<td>4.32925</td>
<td></td>
</tr>
<tr>
<td>LOG(PRGDP) does not Granger Cause LOG(M2Y)</td>
<td>37</td>
<td>2</td>
<td>7.57410</td>
<td>0.002030.02596</td>
</tr>
<tr>
<td>LOG(M2Y) does not Granger Cause LOG(PRGDP)</td>
<td></td>
<td></td>
<td>4.10124</td>
<td></td>
</tr>
<tr>
<td>LOG(PRGDP) does not Granger Cause LOG(M2Y)</td>
<td>36</td>
<td>3</td>
<td>2.03384</td>
<td>0.131060.16371</td>
</tr>
<tr>
<td>LOG(M2Y) does not Granger Cause LOG(PRGDP)</td>
<td></td>
<td></td>
<td>1.83036</td>
<td></td>
</tr>
<tr>
<td>LOG(PRGDP) does not Granger Cause LOG(M2Y)</td>
<td>35</td>
<td>4</td>
<td>1.95167</td>
<td>0.131790.35461</td>
</tr>
<tr>
<td>LOG(M2Y) does not Granger Cause LOG(PRGDP)</td>
<td></td>
<td></td>
<td>1.15184</td>
<td></td>
</tr>
</tbody>
</table>

4.4.2 Granger causality test between LOG(PRGDP) and LOG(CBDATOTDA)

In case of null hypothesis ‘LOG(PRGDP) does not Granger Cause LOG(CBDATOTDA)’ the F-statistics are statistically significant for all of the lag lengths under consideration indicating the rejection of null hypothesis. In the meantime, the null hypothesis ‘LOG(CBDATOTDA) does not Granger Cause LOG(PRGDP)’ the F-statistics are significant for all of the lag length under consideration indicating the rejection of null hypothesis. Analyzing the value of F-statistics and probability, it can be concluded that there is a bidirectional relationship between Log of CBDATOTDA and Log of PRGDP.
Table 4.4.2: Granger causality test between LOG(PRGDP) and LOG(CBDATOTDA)

<table>
<thead>
<tr>
<th>Null hypothesis</th>
<th>Obs</th>
<th>Lags</th>
<th>F-statistic</th>
<th>Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOG(PRGDP) does not Granger Cause LOG(CBDATOTDA)</td>
<td>38</td>
<td>1</td>
<td>6.94874 5.06995</td>
<td>0.012420 0.03072</td>
</tr>
<tr>
<td>LOG(CBDATOTDA) does not Granger Cause LOG(PRGDP)</td>
<td>37</td>
<td>2</td>
<td>3.86982 3.96066</td>
<td>0.031250 0.02905</td>
</tr>
<tr>
<td>LOG(PRGDP) does not Granger Cause LOG(CBDATOTDA)</td>
<td>36</td>
<td>3</td>
<td>6.23811 4.31608</td>
<td>0.002120 0.01238</td>
</tr>
<tr>
<td>LOG(CBDATOTDA) does not Granger Cause LOG(PRGDP)</td>
<td>35</td>
<td>4</td>
<td>4.85631 2.65642</td>
<td>0.004640 0.05547</td>
</tr>
</tbody>
</table>

4.4.3 Granger causality test between LOG(PRGDP) and LOG(PRIVTOGDP)

Granger causality test has also been performed between LOG(PRGDP) and LOG(PRIVTOGDP). In case of null hypothesis ‘LOG(PRGDP) does not Granger Cause LOG(PRIVTOGDP)’ the F-statistics are statistically significant for all the lag lengths under consideration indicating the rejection of null hypothesis. However, in case of null hypothesis ‘LOG(PRIVTOGDP) does not Granger Cause LOG(PRGDP)’ the F-statistics are statistically insignificant for all the lag lengths under consideration. This indicates that the null hypothesis ‘LOG(PRIVTOGDP) does not Granger Cause LOG(PRGDP)’ can’t be rejected at 5% level of significance.

Table 4.4.3: Granger causality test LOG(PRGDP) and LOG(PRIVTOGDP)

<table>
<thead>
<tr>
<th>Null hypothesis</th>
<th>Obs</th>
<th>Lags</th>
<th>F-statistic</th>
<th>Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOG(PRGDP) does not Granger Cause LOG(PRIVTOGDP)</td>
<td>38</td>
<td>1</td>
<td>4.76782 2.16480</td>
<td>0.035790 0.15014</td>
</tr>
<tr>
<td>LOG(PRIVTOGDP) does not Granger Cause LOG(PRGDP)</td>
<td>37</td>
<td>2</td>
<td>8.02204 0.92653</td>
<td>0.001500 0.40629</td>
</tr>
</tbody>
</table>
**Conclusion**

This research sheds light on the nexus between financial development and economic growth in the context of Nepal. Using the concepts and methods of the unit root test, correlogram, co-integration, vector error correction method and Granger causality test, the study confirms that there exists short-term dynamic relationship as well as long-run co-integrating relationship between financial development and economic growth. Granger causality test provides the mixed result. The statistically significant F-statistic confirms the fact that there is a bidirectional causality between real GDP per capita and money defined broadly to GDP. Apart from this, bidirectional causality was found between real GDP per capita and domestic assets of commercial banks to the total domestic assets. However, real GDP per capita Granger causes private sector credit provided by commercial banks to GDP but causality in the opposite direction is not supported statistically.

Along these lines, the evidence seems to verify the notion that financial development granger causes economic growth and vice versa indicating the bi-directional causality between economic growth and financial development. Nepal should expand and improve its credit and investment system through appropriate regulatory and policy reforms in order to support higher economic growth and to link up financial development and economic growth. The findings of this study have been constrained by the limited number of observations of time series due to unavailability of quarterly data of Nepalese financial development indicators and GDP. In addition, the causality used in the study is "Granger causality". Thus, the need of further research is obvious in order to get more evidence about the impact of financial development on economic growth and vice versa.
References:


ECONOMIC DEVELOPMENT MODELS OF INDIA: LESSONS FOR NEPAL

Khagendra P. Ojha, PhD*

Abstract

The study examines how economic development models of India can be used as appropriate samples for Nepal to craft efficient development plans. The World Bank had estimated that India would become the fourth largest economy in the world by 2020. But, 10 years earlier than the World Bank prediction, since 2010, India has become the third largest economy after USA and China. Therefore, India has achieved more than the target what she has been expected to reach. India had marked stepping up of economic development miracle after 1991 followed by the essential reforms starting in the mid-1980s, while after 1992 there was a sharp rise in the rate of economic growth. But still, eradicating extreme poverty has become the development priority in the Eleventh Five Year Plan (2007 – 2012) of India. India Vision 2020 (Government of India 2002) is predicated in the belief that human resources are the most important determinant of overall development. The knowledge and skill of Indian workforce will be a major determinant of India’s future rate of economic growth as well as the type and number of jobs to be created. This shift from material to knowledge-based human resources opens up vast opportunities for the developing countries to accelerate the pace of development. India’s rate of economic growth can be substantially increased if the country becomes a superpower in knowledge and if the potentials of information technology are fully understood and exploited.

It is widely accepted that India’s development model after 1990 has become tremendously successful to reach the country to the position of world’s third largest economy since 2010. Even though, India has achieved a high economic growth, many social indicators including poverty, unemployment, illiteracy, and health conditions in India are yet not much different from that of other developing countries like Nepal. India’s border from three sides, vis-à-vis east, west and south, obviously creates a high influence over Nepal in different aspects. India and Nepal are comparable in terms of socio-economic and cultural values of the people. India, being an open border neighbour, can be the prospective development partner and a potential big market for Nepal.

* Dr. Ojha is the Associate Professor, Principal, Global College of Management, Kathmandu, Nepal.
Therefore, the study of development history and models of India can give a relative outlook for development planning in Nepal. This article aims to analyze the 1990’s economic reforms and the models of economic growth followed by India.

**Key words:** economic development, development models, India’s economic model, Nehruvian model, financial crisis, economic reforms, Mahalanobis model, Fordist growth model, virtuous circle, India Vision 2020, planned economy, market economy, economic liberalization, social development.

**India’s economic development models**

Till 1990, India was extremely a slow-growth termed as a *Hindu-rate of growth* South Asian developing country with federal democratic political values and diversified geo-social structure. After the 1990’s economic reforms in India, she has experienced very rapid economic growth. India, of course, has experienced some advantages of relative economic backwardness, large-size population and some aspects of the “Fordist growth model”. To make the literature logically simple it can be put forward that, after Independence in 1947, India has experienced Nehruvian model of economic development, Manmohan’s 1990 economic reforms, Mahalanobis model of economic development and the Fordist model of economic growth.

India has reached extremely well position becoming the third largest economy country since 2010. This achievement is even higher than that the Planning Commission of India has targeted in India Vision 2020, which is, “India's rank would be to fourth from the top in 2020”. Till 1990, India was extremely slow-growth economy, termed as a *Hindu-rate of growth*, South Asian developing country with federal democratic political values and diversified geo-social structure. After the 1990’s economic reforms in India, she has experienced a rapid phenomenon economic growth. In the 1992-2008 periods, the rate of growth of real GDP obviously increased surpassing 7%. Although the rapid GDP growth in the last 20 years made India possible for an increasing proportion of medium and high income class people, mainly concentrated in urban areas, a large mass of the population remains still very poor, even unable to buy almost any durable consumption goods. Therefore, eradicating extreme poverty has still become the development priority in the Eleventh Five Year Plan (2007 - 2012) of India. India has capitalized on its large educated English-speaking population to become a major exporter of information technology services and software workers. The Indian Government seeks to reduce its deficit to 5.5% of GDP in FY 2010-11 down from 6.8% in the previous fiscal year. India's long term challenges include widespread poverty, inadequate physical and social infrastructure, limited non-agricultural employment opportunities, insufficient access to quality basic and higher education, and accommodating rural-to-urban migration (CIA World Fact Book 2010).

**Nehruvian model of economic development**

India, after independence in 1947, began with an inward-looking heavy industry based industrialization strategy. The Indian development model began with a compromise
between Gandhi’s Enlightenment stand promoting modernization and Nehru’s Romantic revolt against the Enlightenment, represented by younger Marx and the English socialists like William Morris (Lal 2008). After Gandhi’s death, Nehru’s ideas determined the India’s economic policies with massive interventions in the form of centralized planning and a draconian set of economic controls on foreign trade, capital flows and prices. In the first decade after Indian independence, her economy gained a higher growth rate than before. However, this Nehruvian economic model did not sustain for a longer period. Indian economy led to a “quiet crisis” in mid-1960s, with a Hindu rate of growth of 3.5 percent and population growth at 2.2 percent until the early 1980s, yielding meager annual rises in per capita income of just over 1.3 percent (Lal 2008).

**India’s 1990 financial crisis and rescue**

The story of Indian reforms starts in the nineties, following the Balance of Payments (BOP) crisis of 1990-91. A BOP crisis results from a combination of underlying weakness and policy inconsistencies and a shock that triggers the crisis. The role of the fiscal deficit in the macroeconomic problem and its solution was recognized in 1991 (Virmani 2001). The partial liberalization followed by India till 1990 did not produce any sustainable economic growth. In 1990, the country was essentially bankrupt, with foreign exchange reserve barely sufficient to finance 10 days of imports, galloping inflation of 14 percent and an impending growth collapse (Lal 2008). The conventional wisdom among the prominent resident Indian economists at the time of the BOP crisis was that it was caused by a rising trade deficit. The BOP crisis hit India in 1990, but it had been building for at least a half a decade proceeding that year. The rising fiscal deficit and gradually increasing overvaluation contributed to the rising imbalance. Inadequate exchange rate adjustment in response to the external and domestic shocks during 1990 triggered the crisis (Virmani 2001).

Rupee trade with the Soviet bloc was an important element of India’s total trade in the eighties. Exports to Eastern Europe constituted 22.1% of total exports in 1980 and 19.3% in 1989. A significant proportion of trade constituting imports of capital goods and defence equipment was financed by long-term trade credits. With the introduction of Glasnost and the breaking away of the Eastern European countries several rupee payment arrangements were terminated in 1990-91. As a consequence of these and other political developments in Eastern Europe including the USSR, the flow of new rupee trade credits declined abruptly in 1990-91 (Virmani 2001).

What was for most countries a temporary shock (from Iraq-Kuwait War) was much more lasting for India, because of its dependence on Kuwaiti and Iraqi crude supplies including long-term supply contracts with the latter. The effect of the oil price increase was therefore multiplied for India by a more permanent disruption of oil supplies from Iraq. Short-term purchases from the spot market had to follow up by new long term contracts at higher prices. As a result the oil import bill increased by about 60 per cent in 1990 above the 1989 level (Virmani 2001). The next, because of the substantial presence of Indian migrants in these two countries there was also an effect on workers’ remittances from these two countries.
Virmani (2001) analyzes that the higher growth rate in the eighties (relative to the seventies) was accompanied by higher fiscal deficits, rising current account deficits and larger external debt. The worsening fiscal situation, in the presence of inadequate flexibility of the exchange rate led to a rising current account deficit. Given the highly controlled and restrictive FDI and foreign portfolio equity policy, the higher current account deficit translated into rising levels of external debt. The low productivity of government expenditure also directly contributed to external vulnerability, by lowering the rate of return on the borrowed funds. Similarly the declining trend in concessional aid and the consequential recourse to private sources of external borrowing contributed to the rise in the interest costs. The cost of servicing external debt was therefore rising faster than the return from its use. The highly controlled external payments regime and the public banking oligopoly meant that the transactions costs of remitting money through the official markets were high. This in turn meant a demand for foreign exchange in the underground market for foreign exchange.

**Man Mohan’s economic reforms in India**

One result of the BOP crisis of 1990 was to create the conditions under which a retired professional economist, Man Mohan Singh (now the Prime Minister of India), with wide experience in government and universally well regarded for his sincerity and integrity could become the Finance Minister of India. The new finance minister, having been the government’s top economic bureaucrat during the previous decade, had been instrumental in raising economic expertise within the government, by bringing a number of market-savy economists into the government. He was, therefore, relatively well positioned to make the move from a socialist inspired approach to economic development to a market oriented approach (Virmani 2001).

In the mid-1980s a series of hesitant and piecemeal reforms of some of the elements of the basic development strategy were introduced. However, only when India adopted full liberalization since 1991, the economic growth rate accelerated than ever before and this remained not only sustainable but also made India successful to be an economic power of the world today. The change in economic policy following the 1991 macroeconomic crisis was a crucial turning point in economic policy history of India (Lal 2008). The new policy and programs announced in 1991 included: significant reduction in import tariffs and elimination of import quotas except for consumer goods, elimination or reduction of restrictions on foreign ownership, currency convertibility on trade account, reduction in licensing requirements, regulations on red tape, opening all industries except six to private ownership, and reduction in domestic excise taxes among others. As a result of these reforms foreign direct investment poured in form of multinational companies (Kaushik 1997).

Dutta (2006) points out that over the past decade of comprehensive liberalization, almost all areas of the economy have been gradually opened to both domestic and foreign private investment, import licensing restrictions on intermediates and capital goods have been virtually eliminated, tariffs have been significantly reduced, and full convertibility of foreign exchange earnings has been established for current account transactions.
Financial markets have been liberalized to a greater extent, international standards of regulation have been introduced in the financial sector, and decontrol of the banking system has been followed. Chakraborty and Nunnenkamp (2006) mention that resulting from the reforms foreign direct investment (FDI) boomed in post-reform India. Moreover, the composition and type of FDI has changed considerably since India has opened up to world markets. This has fuelled high expectations that FDI may serve as a catalyst to higher economic growth.

The increase in total factor productivity shows the effects of improved efficiency that followed the movements from the plan to the market and the gradual easing of the economic repression of Indian economy. That efficiency gains from economic liberalization, which have become most marked since the 1991 Man Mohan Singh reforms, are brought out in the reallocation effects caused by shifts in employment from low productivity uses in agriculture to higher productivity uses in industry (Bosworth, Collins and Virmani 2006). As a federal republic, India’s political structure depends on what happens in its constituents states. There is a sense that there would some resistance to change at the state level. This might be true, but not sufficient to stop the reforms (Kaushik 1997). Agrawal (2005) finds that the indications of studies provide evidence as of FDI effects in India have become more favorable in the post-reform period.

The Indian software industry, which was almost non-existent till late 1980s, grew at tremendous pace after early 1990s (Valli and Saccone 2009). The most surprising feature of the sectoral Indian growth accounts is that services, including IT and communications sectors, have been the main growth agent since the 1980s, growing faster than both industry and manufacturing, while having comparable rates of growth in employment. The major source of surge in services growth is due to total factor productivity (TFP) growth rates of about 3 percent per year. Also there is a large improvement in the quality of labor force in this sector as compared with the other sectors (Bosworth, Collins and Virmani 2006). Though agricultural growth based on the Green Revolution has been a major source of India’s acceleration of growth from its pre-Independence levels, this sector has also absorbed much of the increase in the labor force, but it is now reaching its limits, with diminishing returns setting. Industrial and manufacturing growth rates have risen, but industrial employment has been anemic. The fastest growth rate has been in services, which accounts for a large part of the recent growth acceleration (Lal 2008).

**The outcomes of 1990s economic reforms in India**

Lal and Clement (2005) evaluate that due to government intervention, particularly the high levels of government subsidies; it was clear by 1990 that India was living beyond its means. The result was a severe payments crisis in which, for the first time, the government physically transported gold overseas to prevent defaulting on foreign commitments. To meet its immediate Balance of Payments crisis, India also entered into a structural loan adjustment agreement with the International Monetary Fund (IMF). As one might expect, macroeconomic policy played a major role in India’s economic progress in the 1990s. India’s devaluation of the rupee and its decision to increase the level of allowable foreign investment helped it to make considerable economic progress.
Policy of selective capital account liberalization helped it to achieve important economic objectives and so was the important role played by India’s prudent management of exchange rate policy and its tight monetary policy. Both the privatization of the public sector enterprises and the gradual dismantling of the government planning process favored market forces.

Overall, there can be no doubt that the reforms implemented since 1991 have led to considerable economic progress in India. For example, from 1992-1993 through 2000-2001, economic growth averaged an unprecedented 6.3 per cent per year keeping the rate of inflation and the fiscal deficit both in decreased figure. India’s improved exchange rate management has restored the confidence of foreign investors, which in turn has led to improve financing of the current account deficit and higher levels of foreign exchange reserves (Lal and Clement 2005). Indeed, one of the more recent microeconomic approaches to economic growth in India is the promotion of entrepreneurial activities. Entrepreneurial efforts have been found to generate a wide range of economic benefits, including new businesses, new jobs, innovative products and services, and increased wealth for future community investment (Kayne 1999). Indian experience also suggests that the opening of the equity market to foreign investors has been relatively more successful than the opening of FDI.

Virmani’s (2001) analysis confirms that in India the exchange rate is a powerful instrument of adjustment in the current account deficit. It also confirms that equity outflows are very unlikely to be major cause of BOP problems unlike short term debt. Virmani concludes, the liberalization of India’s external sector during the past decade was extremely successful in meeting the BOP crisis of 1990 and putting the Balance of Payments on a sustainable path. These reforms improved the openness of the Indian economy vis-à-vis other emerging economies. The main lesson of the nineties is that liberalization of the current and capital account increases the flexibility and resilience of the Balance of Payments. This applies to trade, invisibles, equity capital, medium-long term debt flows and the exchange market.

**Mahalanobis model of India’s economic development**

India’s economic development strategy immediately after Independence was based primarily on the Mahalanobis model, which gave preference to the investment in industrial goods sector, with secondary importance accorded to the services and household goods sector (Nayar 2001). Among other things, this strategy involved canalization of resources into their most productive uses. Investments were carried out both by the government and the private sector, with the government investing in strategic sectors (such as national defense) and also those sectors in which private capital would not be forthcoming because of lags or the size of investment required (such as infrastructure). The private sector was required to contribute to India’s economic growth in ways envisaged by the government planners. Not only did the government determine where businesses could invest in terms of location, but it also identified what businesses could produce, what they could sell, and what prices they could charge (Lal and Clement 2005).
To get rid from 1990’s high crisis of savings and foreign exchange, and to surpass from the low Hindu rate of growth, India has followed the Mahalanobis model of development through the inward-looking heavy industry biased industrialization strategy (Lal 2008). Lal and Cement (2005) find that the Mahalanobis model placed strong emphasis on mining and manufacturing for the production of capital goods and infrastructural development including electricity generation and transportation. The model downplayed the role of the factory goods sector because it was more capital intensive and therefore would not address the problem of high unemployment in India.

**Fordist growth model of India’s economic development**

The Fordist growth model has played a stimulating role in the Indian economic development miracle to lead the country from backward economy to the World’s third largest to 2010. The three concepts of this growth model are: the existence of relative economic backwardness, the role played by the Fordist model of growth, and the virtuous circles of the effect on productivity, investment and employment.

The first concept highlights the fact that an emerging backward economy may benefit from some advantages, such as the adoption of modern technologies coming from more advanced countries and the possibility of transferring large masses of the labor force from low productivity sectors to sectors with higher productivity. The second concept is mainly associated to a phase of strong growth of some interlinked industrial and service sectors where scale economy and network economies are of crucial importance. The third concept is a useful device to decompose productivity growth and comes from a long and important tradition of studies on structural change and development carried on by authors such as Kuznets (Valli and Saccone 2009)

**The virtuous circle of the fordist growth model**

![Diagram of the virtuous circle of the Fordist growth model]

Source: Valli and Saccone (2009)

1. The “first virtuous circle” consists in the fact that the rapid growth of production may generate economies of scale or network economies, higher productivity,
higher profits, higher investment, and further increase in productivity and production.

2. The “second virtuous circle” operates through aggregate demand. The rapid increase in productivity leads to a rapid increase in wages without reducing profit margins. This trend, if accompanied by a rise in employment, determines a fast increase in total wages and thus in consumption, which can favour, together with the increase in total profits, a substantial increase in investment. The rise in consumption and investment leads to a rapid increase in internal demand. After some years, the improvement in productivity also leads to an increase in external competitiveness and exports and in the attractiveness of foreign direct investment.

3. The “third virtuous circle” occurs as the rapid increase in labor productivity permits a substantial rise in total sales and then in total profits, provided that profit margins remain relatively stable. This leads to a rapid rise in both intensive and extensive investment. The former improves labor productivity, while the latter leads to an increase in employment and thus to a rise in total wages, consumption and aggregate demand, communication facilities, etc.

4. The “fourth virtuous circle” occurs as the very rapid increase in productivity in industrial sectors with economies of scale or network-economy service sectors can contribute to reduce the prices of their goods or services relative to the average level of prices. The fall in relative prices of these goods or services may boost their demand. The rapid increase in demand favors a rapid rise in profits and investment, contributing to the overall growth of the economy.

5. The “fifth virtuous circle” relies on the increase of taxation which accrues to the state and local authorities due to the rapid rise in production and in sales. It facilitates the financing of schools, research and development investment, transport and communication facilities, etc.

The positive effects of these “virtuous circles” are accompanied by negative effects such as the greater division and fragmentation of labor and the increase in labor intensity and hostility in big factories. There is, moreover, a rapid increase in urban congestion and pollution, due to the rapid rise of the circulation of automobiles and other vehicles. Finally, there is a strong increase in energy consumption associated to the rapid economic growth and the greater diffusion of vehicles, PCs and domestic electrical appliances (Valli and Saccone 2009).

India vision 2020

The Government of India (2002) defines the vision statement as a statement of what is to be believed is possible for the country to achieve, provided to be able to fully mobilize all the available resources – human, organizational, technological and financial – generate the requisite will and make the required effort. An essential requirement for envisioning India’s future in the new century is to recognize that the parameters which determine national development have changed in recent years and will change further in future. The growing influence of these factors, acting on the foundation of India’s increasingly dynamic and vibrant economic base, lend credence to the view that India can achieve and
sustain higher than historical rates of economic growth in the coming decades. The compounded effect of achieving the targeted annual GDP growth rate of 8.5 to 9 per cent over the next 20 years would result in a quadrupling of the real per capita income and almost eliminating the percentage of Indians living below the poverty line. This will raise India's rank from around 11th today to 4th from the top in 2020 among 207 countries given in the World Development Report in terms of GDP. Further, in terms of per capita GDP measured in PPP India's rank will rise by a minimum of 53 ranks from the present 153 to 100. This will mean, India will move from a low income country to an upper middle income country.

Government of India Report (2002) explains that the vision of India 2020 is predicated on the belief that human resources are the most important determinant of overall development. The knowledge and skill of workforce will be a major determinant of India’s future rate of economic growth as well as the type and number of jobs to be created. This shift from material to knowledge-based resources opens up vast opportunities for the developing countries to accelerate the pace of development. India’s rate of economic growth can be substantially increased if the country becomes a superpower in knowledge and if the potentials of information and information technology are fully understood and exploited. Export of services is a field in which India can excel. India’s recent boom in outsourcing of IT services is only the tip of a rich vein of economic opportunity that could extend to a wide range of manufacturing and service businesses. India’s progress over the next 20 years will be intimately linked to events within the region and around the world.

Conclusions
Nonviolent resistance to British rule, led by Mohandas Gandhi and Jawaharlal Nehru, eventually brought Independence in 1947 and developed India as a great democratic country of the world. India’s 1990 economic reforms towards open-market and globalization got unparalleled success to be the third economic world power after USA and China. Therefore, India has experienced positive results from her consequential economic reforms in the late 20th century. India has travelled through widespread characteristics of large-size population, mass poverty, unemployment and initial agriculture base. Man Mohan Sing’s economic model in India has shown the direction towards market based liberal economy, shifting to more productive nonagricultural sectors, high priority to foreign investment, and open to the world.

The major challenges for India, at the present, are: a targeted approach to bring millions of families above the poverty line; generating new employment opportunities for millions of people; eradicating illiteracy; improving public health; massive investment in power generation, telecommunications and other infrastructure; accelerating acquisition of technology to raise productivity; promoting research and innovation; and becoming a more important player in the world economic order in terms of both trade and investments. For a long time to until now, removal of poverty has remained the foremost objective for the economic policy of the Government of India. However, Virmani (2006) argues that there is widespread impression among the Indian intelligentsia, foreign
scholars and residents of developed countries that India’s economic growth has not reduced poverty, that globalization has worsened poverty and income distribution in India. These arguments are also supported by recourse to India’s ranking on several social indicators.

Mahanti (2000) points out; Indian economists are concerned that the economy is experiencing a distorted development process as the service sector has bypassed the industry sector in the order. What is significant, for India, is that the distortion in the development process is not because the industry sector lagged behind but because the service sector grew at a higher rate. There is a positive side though—a buoyant service sector will add to industry’s growth potential. Therefore, the Indian economic planners are worried about the fact that if industry fails to grow at the required rate, not only will the growth of the service sector suffer, but it will drag down the GDP growth too.

Even though, the development models in the world are not universal or unique but, from the Indian experience it is necessary to learn the lesson that today’s world is basically a global market and any country should consciously join in the world market system if they want to become a member of international society rather than being isolated. This is the same with Nepal as well. Nepal can learn many patterns from Indian development model which has been proved for the successful transformation from a meager economic performance (*Hindu rate*) to a miracle economic growth.
References:


MACROECONOMIC IMPLICATIONS OF FISCAL DEFICIT IN NEPAL

Hab. Alojzy Z. Nowak, PhD*
Nar Bahadur Bista, PhD

Abstract

Fiscal deficit is a gap between government receipts and government expenditure and public debt is an accumulation of yearly deficits. Nepal has been adopting budget deficit since 1952 when first formal budget was announced. The fiscal deficit/GDP was 4.48 percent and public debt/GDP was 35.60 percent in 2011 in Nepal. This study is focused to investigate the various macroeconomic implications of fiscal deficit and public debt in Nepal by analyzing the annual time series data from 1975 to 2011. The econometric instruments used to analyze the empirical results are unit root test, ARDL approach to cointegration, Granger causality test and other OLS diagnostic tests.

The empirical results show that GDP growth rate, fiscal deficit, investment and consumption are cointegrated. The impact of investment and fiscal deficit on GDP growth rate is positive and significant whereas consumption is negatively related to GDP growth rate which is not significant in long run but significant in short run. Consumption has negative impact on GDP growth rate while taking it as an explanatory variable with fiscal deficit. The policy implication of the study is that fiscal deficit is useful to increase growth rate but fiscal deficit should not be utilized for consumption expenditure which causes negative impact on economic growth rate of Nepal.

Key words: Fiscal deficit, government expenditure, economic growth, consumption, investment, ARDL and ECM models.

JEL Classification: E62, F62, H62, C32

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1. Introduction and justification of the study

Fiscal deficit is a gap between government receipts and government expenditure and public debt is an accumulation of yearly deficits. Fiscal deficit and public debts have gathered substantial attention in both theoretical and empirical literatures in developed and developing countries. These factors raise a number of issues on government budgetary policies because they have multidimensional implications in macroeconomics (Mahmmod & Rauf, 2012). In theoretical issues of deficit financing of government budget there are varied opinions from classical economists to Keynesians.

In the views of classical economists, standard views of budget deficit and neoclassical economists, the budget deficit is explained not being beneficial for economic development and social welfare. It makes the waste of resources and shifts the unnecessary burden of debt for the future generations (Campeanu, 2010). The Ricardian Equivalence Theorem explains that government spending must be paid now or later because the final consequence of the debt remains neutral in the economy (Barro, 1989). The Keynesian arguments are different from others and they are in favor of budget deficit. They assume that some economic resources remain unemployed and deficit financing is an expansionary fiscal policy to utilize these resources. Increase in government expenditure causes multiplier effect in the economy and economy expands faster than the rate of government investment through budget deficit (Campeanu, 2010).

Nepal is a developing country and it falls under the low income countries according to the World Bank classification of countries on the basis of GNI per capita. The average economic growth rate is 4.20 percent from 1975 to 2011 in Nepal and GNI per capita is only US$ 716 which is the lowest in the SAARC countries (WB, 2012). Nepal started formal budgeting system since 1952. It has been continuously formulating deficit budgeting since 1952. Nepal has been utilizing domestic as well as foreign sources of deficit financing (Pant, 2012). The average fiscal deficit is 5.41 percent whereas domestic loan is 1.83 percent, foreign loan is 2.94 and cash balance is 0.64 percent of GDP from 1975 to 2011. The trend of domestic loan has been increasing in comparison to foreign loan as a percentage of total fiscal deficits in recent years. The outstanding total public debt is 35.60 percent which is composed of 20.82 percent foreign public debt and 14.78 percent domestic public debt as a percentage of GDP in 2011 in Nepal (MOF, 2012).

The research question is, “What are the macroeconomic implications of fiscal deficit and public debt in Nepal?” A comprehensive study is required to investigate this issue. Therefore, the study is focused to examine the effect of fiscal deficit on economic growth, consumption, investment, and other related macroeconomic variables. Therefore, the study aims to establish the relationship between fiscal deficit, economic growth, consumption and investment.

2. Review of literatures

Empirical literatures on the issue of fiscal deficit have shown different results. The impact of fiscal deficit on GDP growth, consumption, and investment is found both negative and positive. The budgetary implications of fiscal deficits are also not similar.
The implications of fiscal deficit vary from one country to another, one time period to another and it also depends on the methodology used to analyze it. Thus, the theoretical arguments and empirical findings cannot be concluded at a logical end.

Many researchers empirically investigated the effect of fiscal deficit on various macroeconomic variables in many countries. Some relevant to the study are reviewed in this part of the study. Islam and Rahimian (2005) analysed the annual data of USA and found that there is unidirectional long run relationship between budget deficit and trade deficit and trade deficit Granger cause budget deficit. Chaudhary and Shabbir (2005) conducted research in Pakistan taking the annual data and the results show that Money supply has positive relationship with foreign reserve, bank credit and fiscal deficit. Kannan and Singh (2009) in India found that Fiscal deficit and debt has adverse impact on interest rate, output, inflation and trade balance in the medium to long run. In Indonesia, Muhdi and Sasaki (2009) came to the conclusion that external debt has generated positive effects on investment, economic growth and currency depreciation. Afonso and Sousa (2009) analysed the data of US, UK, Germany and Italy and found that Government spending shocks have small effect on GDP and crowding out effect which leads to fall in stock prices and depreciation of real exchange rate. In India, Bhatta (2010) analyzed the annual data and indentified that public debt and government capital expenditure are negatively related. Ali and Ahmad (2010) in Pakistan established the negative relationship between fiscal deficit and economic growth rate. Fiscal deficit exerts negative effect on economic growth in the long run. Inflation rate, consumption and investment channels are not crucial in transmitting the fiscal stimulates into the economy. Siddiqi and Ilyas (2011) also analysed the annual data of Pakistan and found the same result as previous that there is negative relationship between budget deficit and economic growth rate. Rahman (2012) analysed the quarterly data of Malaysia and found that there is negative effect of debt on economic growth rate whereas there is positive impact of productive expenditures and insignificant impact of unproductive expenditures on the economic growth in long run. Mali and Acheboglu (2012) found the positive relationship between fiscal deficit and economic growth rate in Nigeria. Again in Nigeria, another research conducted by Ezeabasili, Tsegba, and Ezi-Herbert (2012) found that fiscal deficit has negative association between government consumption expenditure and economic growth, positive impact of investment and trade balance on economic growth. Sharma (2012) found there is weak association between GDP growth rate with capital and recurrent expenditure in Nepal.

3. Data and methodology
In this study time series data from 1975 to 2011 have been analyzed. Economic growth rate (Y) is annual percentage change in real GDP, consumption expenditure (CONS), investment expenditure (INV) and fiscal deficit (FD) have been measured as a percentage of nominal GDP.

The objective of the study is to establish the long run and short run relationship among the variables. The econometric technique applied to analyze data is Autoregressive Distributed Lag (ARDL) model for cointegration test. Though, the order of integration is...
not necessarily to be same for the coitegartion in ARDL approach, but generally the data should be stationary maximum of two time differences i.e. second difference (Pesaran et al., 2001). In order to test the unit root, Augmented Dickey-Fuller (ADF) test has been employed which is most common and widely used test in literatures.

The short-run and long-run parameters with appropriate asymptotic inferences can be obtained by applying OLS to ARDL with an appropriate lag length. The ARDL with Alkaike Information Criterian (AIC) and Schwarz Bayesian Criterion (SBC) estimators have very similar small-sample performances. ARDL-SBC has performed slightly better than ARDL-AIC in the majority of the experiments (Pesaran & Shin, 1997). Therefore, in this study SBC is used for lag selection while applying ARDL approach for small samples in this case. Following Pesaran et al. (2001), an ARDL (p,q,r,...,m) representation can be written as:

\[
\Delta Y_t = \kappa_0 + \sum_{i=1}^{p} \alpha_{0i} Y_{t-i} + \sum_{j=0}^{q} \alpha_{1j} X_{1t-j} + \sum_{k=0}^{r} \alpha_{2k} X_{2t-k} + \ldots + \sum_{l=0}^{m} \alpha_{nt} X_{nt-l} + \sum_{i=1}^{p} \beta_{0i} \Delta Y_{t-i} + \sum_{j=0}^{q} \beta_{1j} \Delta X_{1t-j} + \sum_{k=0}^{r} \beta_{2j} \Delta X_{2t-k} + \ldots + \sum_{l=0}^{m} \beta_{nl} \Delta X_{nt-l} + \ldots + u_t \quad \ldots \quad (1)
\]

Where, \( Y \) is dependent variable, \( X_i \) are independent variables and \( i=1,2, \ldots, n \), \( \Delta \) is the first difference operator and \( u_t \) is the usual white noise residuals. The coefficients \((\alpha_0-\alpha_n)\) represent the long-run relationship whereas the remaining expressions with summation sign \((\beta_0-\beta_n)\) represent the short-run dynamics of the model. The values \((p,q,r,\ldots,m)\) show the number of lags of the corresponding variables. The F-statistics is used for testing the existence of long run relationships. The ARDL level relationship is tested by Wald-test of coefficient restrictions setting hypothesis as:

\[
H_0 : \alpha_0 = \alpha_1 = \alpha_2 = \ldots = \alpha_n = 0 , \text{ i.e. there is no level effect.}
\]

\[
H_1 : \alpha_0 \neq \alpha_1 \neq \alpha_2 \neq \ldots \neq \alpha_n \neq 0 , \text{ i.e. there is significant level effect.}
\]

The calculated F-statistic is compared with lower bound and upper bound critical values to take the decision. If the calculated F-statistic lies between the bounds, the test is inconclusive. If it is above the upper bound, the null hypothesis of no level effect is rejected. If it is below the lower bound, the null hypothesis of no level effect can't be rejected. In this study, the data are processed by using Microfit 5.0 software which has an in-build facility to calculate the critical values on the basis of sample size (Pesaran & Pesaram, 2009).

After confirming the cointegration relationship among the variables, the estimated long run model using the ARDL approach of above model (1) can be expressed as:

\[
Y_t = \kappa_1 + \alpha_1 X_{1t} + \alpha_2 X_{2t} + \ldots + \alpha_n X_{nt} + (ect)_t \quad \ldots \quad (2)
\]

The error correction representation based on the assumptions made by Pesaran et al. (2001) of the ARDL model (1) can be expressed as:
\[ \Delta Y_t = \kappa_2 + \sum_{i=1}^{p} \beta_{0i} \Delta Y_{t-i} + \sum_{j=0}^{q} \beta_{1j} \Delta X_{1t-j} + \sum_{k=0}^{r} \beta_{2j} \Delta X_{2t-k} + \ldots + \sum_{l=0}^{m} \beta_{nt} \Delta X_{nt-l} + \lambda \text{ect}_{t-1} + \omega_t \quad \ldots \quad (3) \]

The error correction term (ect)\_t is calculated from equation (2) and the coefficient of (ect)\_{t-1} i.e. \( \lambda \) indicates the long run dynamics. The coefficient \( \lambda \) also measures the speed of adjustment towards equilibrium if disequilibrium exists in long run. The \( \lambda \) should possess negative sign and it should be statistically significant to confirm the long run relationship between the variables. The coefficients (\( \beta_0 - \beta_n \)) in the model (3) show the short run impact of corresponding independent variables on dependent variable (Narayan, 2004).

The regression estimations are tested for goodness of fit and overall significance by R-squared/R-bar squared and F-test, statistical significance of the coefficients are tested by t-test. Other residuals diagnostic tests are the Lagrange multiplier test of residual serial correlation, the Ramsey's RESET test for functional form using the square of the fitted values, the normality test based on a test of skewness and kurtosis of residuals and the heteroscedasticity test based on the regression of squared residuals on squared fitted values. All the data are processed in Microfit 5.2 and Eviews-7 software. The paper has used APA referencing style for citation and referencing.

4. Empirical results and findings

4.1. Unit root test

Augmented Dickey-Fuller (ADF) test is employed to test the unit root. The results of ADF-test are presented in table 4.1. The lag length is automatically selected upto maximum 9 by using Eviews-7.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Levels</th>
<th>First Difference</th>
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<tbody>
<tr>
<td>CONS</td>
<td>t-Statistics</td>
<td>p-Value</td>
</tr>
<tr>
<td>CONS</td>
<td>-2.849215</td>
<td>0.0615</td>
</tr>
<tr>
<td>FD</td>
<td>-2.415445</td>
<td>0.1447</td>
</tr>
<tr>
<td>INV</td>
<td>0.127315</td>
<td>0.9634</td>
</tr>
<tr>
<td>Y</td>
<td>-6.141317</td>
<td>0.0000*</td>
</tr>
</tbody>
</table>

Table 4.1: ADF-Test Results for Unit Root Test

ADF Test Critical Values

<table>
<thead>
<tr>
<th>Sign. Level</th>
<th>Levels</th>
<th>First Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1% level</td>
<td>-3.626784</td>
<td>-3.632900</td>
</tr>
<tr>
<td>5% level</td>
<td>-2.945842</td>
<td>-2.948404</td>
</tr>
<tr>
<td>10% level</td>
<td>-2.611531</td>
<td>-2.612874</td>
</tr>
</tbody>
</table>
We can test unit root with intercept, without intercept, with trend and none. In this analysis all ADF test results are checked with intercept which is common in use and it has given the best result. We can observe from the table 4.1 that the variables CONS, INV and FD are non-stationary at levels and they all are stationary at first difference. The variable Y is stationary at levels.

### 4.2. Fiscal deficit, economic growth, investment and consumption

The above model is extended by adding two independent variables investment (INV) and consumption (CONS) along with fiscal deficit (FD) to explain the economic growth rate (Y). The ARDL (2,1,0,2) model of Y on FD, INV and CONS where the figures in the parenthesis indicate the lag length automatically selected by SBC.

#### Table 4.2: ARDL (2,1,0,2), Bound testing for existence of a level relationship: Y on FD, INV and CONS

<table>
<thead>
<tr>
<th>Regressors: FD, INV and CONS</th>
<th>F-statistic</th>
<th>95% Lower Bound</th>
<th>95% Upper Bound</th>
<th>90% Lower Bound</th>
<th>90% Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12.8548</td>
<td>3.6362</td>
<td>4.8636</td>
<td>2.9686</td>
<td>4.0734</td>
</tr>
</tbody>
</table>

In table 4.2, the calculated F-statistics is 12.8548 which is higher than the upper bound critical value at 5 percent level of significance exhibiting that the null hypothesis of no cointegration is rejected and there is indeed cointegration among the variables in the models. Having found a long run relationship the same ARDL approach is applied to estimate the long run and short run coefficients. Long run results are shown in table 4.3.

#### Table 4.3: Estimated Long Run Coefficients: Y on FD, INV and CONS

<table>
<thead>
<tr>
<th>Regressor</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>t-Ratio[Prob]</th>
</tr>
</thead>
<tbody>
<tr>
<td>FD</td>
<td>0.53011</td>
<td>0.068660</td>
<td>7.7208 [0.000]</td>
</tr>
<tr>
<td>INV</td>
<td>0.057287</td>
<td>0.024872</td>
<td>2.3033 [0.030]</td>
</tr>
<tr>
<td>CONS</td>
<td>-0.08629</td>
<td>0.078595</td>
<td>-1.098 [0.282]</td>
</tr>
<tr>
<td>C</td>
<td>7.6337</td>
<td>6.7818</td>
<td>1.1256 [0.271]</td>
</tr>
</tbody>
</table>

R-Squared = 0.54819  
R-Bar-Squared = 0.40917  
F-Stat. F(7,28) = 3.9433[0.004]  
DW-statistic = 1.8433

#### Diagnostic Tests

<table>
<thead>
<tr>
<th>Test Statistics</th>
<th>LM-Version</th>
<th>F-Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serial Correlation</td>
<td>CHSQ(1) = 0.207 [0.649]</td>
<td>F(1.27) = 0.149 [0.703]</td>
</tr>
<tr>
<td>Functional Form</td>
<td>CHSQ(1) = 0.260 [0.610]</td>
<td>F(1.27) = 0.187 [0.0.669]</td>
</tr>
<tr>
<td>Normality</td>
<td>CHSQ(2) = 5.311 [0.070]</td>
<td>............</td>
</tr>
<tr>
<td>Heteroscedasticity</td>
<td>CHSQ(1) = 1.132 [0.287]</td>
<td>F(1,34) = 1.10372 [0.301]</td>
</tr>
</tbody>
</table>

### Note:

- MacKinnon one-sided p-values.
- *Significant at 1% level
- **Significant at 5% level
In table 4.3, the long run coefficients of explanatory variables are estimated in growth equation. The coefficient of fiscal deficit is positive and its corresponding t-ratio is significant at 1 percent level of significance. It shows that there is positive impact of fiscal deficit on economic growth and 1 percent increase in fiscal deficit as a percentage ratio of GDP causes 0.530 percent increase in GDP growth rate in long run. Likewise, the coefficient of investment (INV) is also positive and statistically significant at 5 percent level indicating that higher the investment higher will be the economic growth rate. More specifically, 1 percent increases in INV causes 0.057 percent increase in Y and vice versa in long run. Consumption spending has shown inverse impact on the economic growth rate of Nepal in long run. But the coefficient of CONS is statistically not significant even at 10 percent level. Increase in consumption expenditure causes decrease in growth rate. It is because higher consumption lowers the savings and consequently lowers the investment and it causes economic growth rate slow down in long run. The coefficient of determination i.e. R-squared is 0.55 which shows that 55 percent of variation due to explanatory variables is explained by the regression equation which is satisfactory. The overall significance of the model tested by F-test is statistically significant at 1 percent level.

The diagnostic tests for serial correlation, functional form, normality test and heteroscedasticity show that there is no evidence of autocorrelation, residuals are normally distributed, the variance of the residuals are homoscedastic and functional form Chi-square value indicates the model is correctly specified. Error correction representation for the ARDL model is also carried out to observe the short run relationship between the variables. The results are presented in table 4.4.

Table 4.4: Error Correction Representation: dY on dFD, dINV, dCONS and ect(-1)

<table>
<thead>
<tr>
<th>Regressor</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>T-Ratio[Prob]</th>
</tr>
</thead>
<tbody>
<tr>
<td>dY1</td>
<td>0.74675</td>
<td>0.21031</td>
<td>3.5508 [0.001]</td>
</tr>
<tr>
<td>dFD</td>
<td>0.77817</td>
<td>0.34962</td>
<td>2.2258 [0.034]</td>
</tr>
<tr>
<td>dINV</td>
<td>0.13873</td>
<td>0.067206</td>
<td>2.0643 [0.048]</td>
</tr>
<tr>
<td>dCONS</td>
<td>-0.12702</td>
<td>0.19616</td>
<td>-0.64751 [0.523]</td>
</tr>
<tr>
<td>dCONS1</td>
<td>-0.44713</td>
<td>0.19631</td>
<td>-2.2777 [0.031]</td>
</tr>
<tr>
<td>ecm(-1)</td>
<td>-2.4217</td>
<td>0.35589</td>
<td>-6.8047 [0.000]</td>
</tr>
</tbody>
</table>

R-Squared = 0.78076 R-Bar-Squared = 0.71330
F-Stat. F(4,31) = 15.431[0.000] DW-statistic = 1.8433

The first differenced coefficient of FD is positive and statistically significant at 5 percent level showing that there is positive impact of FD on Y in short run. The sign of short run coefficients for investment (INV) is also positive and statistically significant at 5 percent level showing that investment has the positive impact on economic growth in short run. The coefficient of consumption is negative and statistically not significant. The estimated lagged error correction term ect(-1) is negative and highly significant. The negative and
significant error correction term also indicates that there is a long run relationship among the variables Y, FD, INV, and CONS.

The goodness of fit of the regression equation observed by R-squared and R-bar squared give satisfactory result. The value of R-squared is 0.78 indicates that about 78 percent of variation is explained out of total variation by the regression equation. It is quite higher in comparison to the value of R squared in the model presented in table 4.3. The overall statistical significance of the regression equation is observed by the F-statistic which is also significant at 1 percent level. Thus, the short run model is correctly specified.

It can be concluded that the fiscal deficit and investment have positive and statistically significant impact on economic growth rate in long run and short run. But the impact of consumption expenditures is not significant in long run and short run.

5. **Summary, conclusions and policy implications**

The implications of fiscal deficit vary from one country to another, one time period to another and it also depends on the methodology used to analyze it. Thus, the theoretical arguments and empirical findings cannot be concluded at a logical end. The empirical results of the researchers reviewed in various literatures are also found mixed in the studies.

In this study, annual time series data from various issues of Economic Survey Reports of Nepal are analyzed covering the period 1975 to 2011. The econometric techniques employed in the study are Augmented Dickey-Fuller (ADF) test for unit root, Autoregressive Distributed Lag (ARDL) approach to cointegration and its error correction representations.

The empirical results show that GDP growth rate, fiscal deficit, investment and consumption are cointegrated. The impact of investment and fiscal deficit on GDP growth rate is positive and significant whereas consumption is negatively related to GDP growth rate which is not significant in long run but significant in short run. Consumption has negative impact on GDP growth rate while taking it as an explanatory variable with fiscal deficit. It means increase in consumption expenditure causes decrease in saving and then decrease in investment expenditure which causes negative impact on economic growth rate. The policy implication of the study is that fiscal deficit is useful to increase growth rate but fiscal deficit should not be utilized for consumption expenditure which causes negative impact on economic growth rate of Nepal.
References:


MYTHS OF ECONOMIC CONSEQUENCES OF MAOISTS CIVIL WAR IN NEPAL

Niraj Poudyal, PhD*

Abstract

It has been widely accepted that armed conflicts have severe negative impact on the economic performance of a country. The same kind of generalization has been made in the Nepalese context with regard to decade long Maoists insurgency (1996-2006). In this paper, an attempt has been made to debunk this idea through empirical evidence. It has been argued that an idea, however sophisticated or plausible, cannot be deemed true unless supported by observation or experimentation. There is no evidence for significant effect of the Maoist conflict on economic parameters.

Key words: Maoist insurgency, structural break, economic trend.

1. Introduction

Nepal went through a historically difficult political and social upheaval because of the Maoist insurgency that lasted for a decade. The insurgency had two sides: Communist Party of Nepal (Maoist) as rebels (the party at present has been broken into two major factions) and the then Government of Nepal as establishment. The conflict took a formal rest after the signing of the peace treaty in 2006. The effect of this insurgency on social fabric of Nepal (particularly rural Nepal) cannot be underestimated. Around 14000 people were killed during the conflict. Many thousands became internal refugees and youths were forced out of the country for employment and safety (Thapa, 2008). Apart from newspaper articles and workshop papers, very few researches have been done on its impact on macroeconomic trajectory of the country. In this paper, I would like to test whether there was a structural break in this trajectory during the Maoist insurgency.

Empirical analysis has shown that there are political, developmental, geographic, economic and social factors contributing the spread of civil wars in Nepal over the ten years period (1996-2006) (Do & Iyer, 2010; Deraniyagala, 2005). Similar studies have been done to show the economic effect of armed conflict in Nepal. Bhattarai, Conway & Shrestha (2005) show the impact of conflict in Nepal on tourism. Most of the researches agree on the negative impact of conflict on economic variables. But is this

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type of conclusion just introspection and opinion or a well substantiated theory? In this paper I will try to falsify this conclusion. I will make an argument that this type of analysis is not supported by the economic data we have. I will argue that the data does not support any such conclusion.

2. **What does data tell us?**
The methodology of the analysis in this paper is Exploratory Data Analysis (EDA), which is a very powerful analytical tool (see chapter 5 in Spanos (1999)). Formal econometric modeling can be done to test the hypothesis proposed in this paper using dummy variables, which is left for future research endeavors.
Nothing can emphasize the role of data than the following quote by John Maynard Keynes.

“*When the facts change, I change my mind – what do you do, sir?”*  
Opinions do not matter once we have the data at hand. If opinions conflict with observations, it is the opinions that have to be changed. Blaming data does not take us far enough in our quest for truth. Following this line of methodology I use various macroeconomic time series data to argue that there is not enough evidence against the following hypothesis

_Hypothesis:_ the Maoist insurgency from 1996-2006 had insignificant macroeconomic impact in Nepal.
If any structural break in the trend of the major economic variables are observed in the data, the hypothesis is rejected, otherwise accepted. I consider GDP, gross investment spending, inflation, export and private sector loan for diagnosing the economy.

3. **Gross domestic product (GDP)**
Real GDP per capita being the most important macroeconomic indicator used to track the performance of the economy, it is imperative to see if the Maoist insurgency had significant impact on its growth rate (see Figure 1).
The data is quite clear that the insurgency did not have any significant (especially negative) impact on the growth rate of GDP per capita. The data indicates that the average growth rate had been anemically close to zero until around 1984. The growth rate has since then has been significantly above zero. There is no statistically significant downturn of the growth rate during the insurgency period (as shown by the shaded region). Only one year during the ten years of insurgency the growth rate was slightly negative.

4. **Investment**

Aggregate investment spending (gross capital formation) affects the level of employment and economic growth directly. If investment does not suffer as a result of the insurgency, then we can make a fair claim that the economy was not affected much during the period (see Figure 2).
This shows that the Maoist insurgency have very little impact on the trajectory of investment spending in Nepal. It has been growing at almost a constant rate of 3.6% annually (beginning from 6.4% in 1966 to 34.8% in 2012). Ups and downs in the insurgency period are not statistically unusual when compared with non insurgency period.

5. Export
Similarly, it is very plausible to make the argument that Maoist insurgency had a severe negative impact on the growth of export in Nepal (see the shaded region in Figure 4). The continuing widening of the trade deficit in last decade also seems to support the idea. But when we allow data to be the witness, the insurgency does not seem to have any real impact on the growth rate of the export in Nepal. We cannot detect any such structural break in the growth rate of export during the insurgency. The pattern of growth rate seems to be a regular phenomenon of history rather than a unique one.
6. **Inflation**
Similar lack of structural break can be noticed in the inflation rate in during the (Paneru, deconstructioning English language teaching , 2009) insurgency period (see Figure 3). The most important structural break in the inflation seems to have occurred in the late 70s or early 80s. Moreover, the inflation has taking its pace after the insurgency period more significantly.
7. **Private sector loan**
Similarly, growth rate of private sector loan also lacks any structural break in the insurgency period (see Figure 5). Although the growth rate has plunged below zero few times in the period, similar patterns are observed few other times in the history as well making it a regular feature of investment dynamics in Nepal. Recent years have also observed similar negative growth rate without any serious armed conflict.

![Figure 5: Growth rate of private sector loan](image)

8. **Conclusion**
From this analysis, we can conclude that evaluating an economic trend and the effect of major historical events like Maoist insurgency cannot be done by cherry-picking the historical facts out of the context. The analysis must be based on broader historical context. Without looking at the overall historical pattern, one negative number cannot be used as evidence for or against ones hypothesis. This paper leaves the debate open for making substantive (theoretical) reasons for the observations made in this paper. Observations cannot be changed and history has already shown its face. Now it is high time to change/adjust our biases, opinions and theories according to the facts of history. Rather than blaming Maoist insurgency for the economic malaise we have, the policy makers should focus on the structural problems hindering the rapid economic progress for such a long time.
References:


CORPORATE GOVERNANCE AND BANK PERFORMANCE IN NEPAL

Radhe S. Pradhan, Ph.D.*

Key words: Corporate governance, board size, board independence, leverage, return on assets, return on equity, non-performing loans, number of board meetings.

1. Introduction
In the beginning of the new millennium, several companies in the USA (XEROX, Worldcom, Enron etc.) and elsewhere faced collapse because of corporate governance problems and unethical practices. The problems of corporate world have a lot to do with the failure to safeguard the interests of shareholders. In the past few years, corporate lootings have become so frequent. The existing regulatory framework seemed to be inadequate to deal with the corporate fraud. A need has been felt for taking measures on erring corporations and for initiating preventive steps to avoid corporate frauds in future. Due to this, corporate governance assumed a greater significance in recent years. It is more so with the publication of Cadbury Report in 1992. The report has defined corporate governance as the system by which companies are directed and controlled (Smerdon, 1998). If the corporate governance is not sound, the companies may suffer. Shleifer and Vishny (1997) argued that corporate governance is the way in which suppliers of finance to corporation ensure themselves of getting a return on their investments.

Corporate governance has been defined as the relationship among shareholders, board of directors and the top management in determining the direction and performance of the corporation (Wheelen and Hunger 2006). It also includes the relationship among many players involved (the stakeholders) and the goals for which the corporation is governed. The principal players are the shareholders, management and the board of directors. Other stakeholders include employees, suppliers, customers, banks and other lenders, regulators, the environment and the community at large. Ruin (2001) stated corporate governance as a group of people getting together as one united body with task and responsibility to direct, control and rule with authority. Hence, Thomas (2002) described corporate governance as the ways and means by which the government of a company (the directors) is made responsible to its electorate (the shareholders). On the other hand, Low (2003) defined corporate governance as dealing with mechanisms by which stakeholders of a corporate exercise control over corporate insiders and management in such a way that their interests are protected. Corporate governance is

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described as the set of processes, customs, policies, laws and institutions affecting the way a corporation is directed, administered or controlled (http://en.wikipedia.org). Nevertheless, corporate governance comprises a country’s private and public institutions, both formal and informal, which together govern the relationship between the people who manage corporations (corporate insiders) and all others who invest resources in corporations in the country (Oman et al. 2003).

Setting a good corporate governance policy will lead to a lot of benefits to different levels of management and helps the organization to avoid management level corruption and helps in enhancing the firm values, shareholders’ value creation and reducing the investment and financial risks. Therefore a good, sound and healthy corporate governance policy is a very important criterion while investing in a company (Shen, Shu, and Chen, 2006). Nonetheless, Melvin et al (2005) described the concept of corporate governance as referring to corporate decision-making and control, particularly the structure of the board and its working procedures. It is also sometimes used very widely, embracing a company’s relations with a wide range of stakeholders or very narrowly referring to a company’s compliance with the provisions of best practice codes.

The corporate governance structure specifies the distribution of rights and responsibilities among different participants in the corporation such as boards, managers, shareholders, and other stakeholders and spells out the rules and procedures so that corporation is operated on sound basis. The concept of corporate governance is popular with the emergence of agency problem when the ownership of companies is separated from the control there of. Mahmood and Mahfuja (2007) stated that the need for corporate governance arises from the potential conflicts of interest among participants (stakeholders) in the corporate structure. These conflicts of interest often arise because different participants have different goals and preferences. Corporate governance was consequently introduced to ensure that the agents of the owners of companies control companies in ways that will serve the interests of the shareholders of the company. Tosi and Gomez-Mejia (1989) stated that the challenge of corporate governance is to set up supervisory and incentive alignment mechanisms that alter the risk and effort orientation of agents to align them with the interests of principals.

Blair (1995) argued that corporate governance implicates the whole set of legal, cultural, and institutional arrangements that determine what publicly traded corporations can do, who controls them, how that control is exercised, and how the risks and returns from the activities they undertake are allocated. Jensen and Meckling (1976) addressed the conflicts among different stakeholders by examining the separation of corporate ownership from corporate management. As a result, a large proportion of the regulatory changes have focused on boards of directors.

Currently, directors are often more loyal to corporate officers than to the shareholders whom the directors nominally serve. Mace (1971) reported case-study evidence suggesting that nonexecutive directors will oppose exceedingly poor performance or obviously bad proposals. Weisbach (1988) finds that non-executive dominated boards are
significantly more likely to respond to poor performance by dismissing the CEO. Koke (2001) found that German firms under concentrated ownership have higher productivity growth. Shleifer and Vishny (1997) observe that strong legal protection of investors and some form of concentrated ownership are essential elements of a good corporate governance system.

The purpose of this study is to investigate the relationship between corporate governance and firm performance in Nepal’s banking sector. Specifically, it examines the impact of board size, board composition, number of board of directors’ meetings, and leverage on bank performance.

The remainder of this paper is organized as follows. Section two describes the sample, data, and methodology. Section three presents the empirical results and the final section draws conclusions and discusses the implications of the study findings.

2. Methodological aspects

The study is based on the secondary data which were gathered for 25 banks in Nepal. The main source of data are Banking and Financial Statistics published by Nepal Rastra Bank which is supplemented by NRB directives, legal provisions incorporated in Companies Act, 2063 and concerned by-laws regarding corporate governance, the provisions on Bank and Financial Institutions Act, 2063; supervision reports of Nepal Rastra Bank and so on. The data were collected on return on assets, return on equity, non-performing loans to total loans, board size, number of executive directors in the board, number of independent directors in the board, number of board meetings held in the last fiscal year at the time of gathering data, and leverage i.e., total debt to total assets.

The pooled cross-sectional data analysis has been undertaken in the study. The research design adopted in this study is causal comparative type as it deals with relationship of corporate governance and control variables with bank performance. More specifically, the study examines the effect of board size, number of executive directors in the board, number of independent directors in the board, number of board meetings held in the last fiscal year at the time of gathering data, and leverage i.e., total debt to total assets on bank performance. These data were collected for the period 2006/07-2010/11. Table 1 shows the number of commercial banks selected for the study along with the study period and number of observations.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Name of the commercial banks</th>
<th>Study period</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>RatriyaBanijya Bank</td>
<td>2006/07-2010/11</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>Nepal SBI Bank</td>
<td>2006/07-2010/11</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>Bank of Kathmandu</td>
<td>2006/07-2010/11</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>Citizens’ Bank International</td>
<td>2006/07-2010/11</td>
<td>5</td>
</tr>
</tbody>
</table>
The model
As a first approximation, the model estimated in this study assumes that the bank performance depends on several corporate governance and control variables. The corporate governance variables considered are board size, number of executive directors, number of independent directors, and number of board meetings. The control variable considered is the i.e., total debt to total assets. Therefore the model takes the following form:

Bank Performance = f (CG variables, Control variables)
More specifically,
Bank Performance = \beta_0 + \beta_1 BS + \beta_2 NED + \beta_3 NID + \beta_4 NOM + \beta_5 LEV + e

Where,
The bank performance is used as a dependent variable and is measured in terms of the following:
ROA = Return on Assets
ROE = Return on Equity
NPL = Non-performing loans
There are various measures of bank performance. According to Jeon and Miller (2006), bank performance is measured as the bank profitability and productivity in banking. Melvin et al (2005) indicated that performance may also refer to the development of the share price, profitability or the present valuation of a company. In this study, bank performance has been measured as bank profitability in terms of return on assets and return on equity and non-performing loans which is defined as the ratio of non-performing loans to total loans.

The independent variables consists of corporate governance variables and control variable as under:

**Corporate governance variables**
- Board size = BS
- NED = number of executive director,
- NID = number of independent director
- NOM = Number of board meetings in the last fiscal year

**Board of directors**

Boards of directors may have a difficulty communicating with each other in a largesized board, which causes great detriment to firm performance. Yermack (1996), Eisenberg et al (1998) and Singh and Davidson (2003) proved that board size has a negative relation with firm performance. Based on it, this study develops the following hypotheses:

**H1**: Board size is negatively related to bank performance.

**Board independence**

Empirical evidence suggests more active and independent directors make better monitors. As for the relation between board independence and firm performance, if outside directors are independent and have professional ability, they could be more objective to make decisions and monitor managers. Empirical research by Weisbach (1988), Rosenstein and Wyatt (1997) and Huson et al. (2001) corroborated that the higher ratio of independent directors accounts for boards, the better firm performance could be. It also means that if the board contains more of the executive directors, who lacks professional ability and could not make objective decisions and monitor managers. Based on it, this study develops the following hypothesis:

**H2**: Board independence is positively related to bank performance.
**H3**: Board dependence on executive directors is negatively related to bank performance.

**Number of board meetings**

It is assumed that regular board meetings have a positive impact on bank performance. If board meetings are held frequently, more discussions will be held on problems and prospects of business and business can be expected to run more efficiently. Based on it, this study develops the following hypothesis:

**H4**: Number of Board meetings is positively related to bank performance.
Control variables

**Leverage**

It is assumed that leverage, that is, total debt to total assets play a significant role in determining the bank performance. Debt is a cheaper type of funds and if the firm makes use of it, interest payment is tax deductible. Based on it, this study develops the following hypothesis:

\[ H5 \colon If \ leverage\ of\ a\ firm\ increases,\ it\ would\ improve\ the\ firm\ performance. \]

Therefore, the model assumes the following priori hypothesis for return on assets and return on equity models:

\[ \beta_3, \beta_4, \beta_5 > 0 \quad \text{and} \quad \beta_1, \beta_2 < 0 \]

The model assumes the following priori hypothesis for non-performing loans:

\[ \beta_2 \text{and} \beta_5 > 0 \quad \text{and} \quad \beta_1, \beta_3, \text{and} \beta_4 < 0 \]

3. Presentation and analysis of data

**Descriptive statistics**

Table 2 shows the descriptive statistics. Clearly, return on equity ranges from zero to 93.1 percent, leading the average return on equity to 15.8 percent while the return on assets ranges from zero to 19.2 percent, leading to the average return on assets of 14.1 percent.

<table>
<thead>
<tr>
<th>Ratio</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Stdd. deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROE</td>
<td>.000</td>
<td>0.931</td>
<td>.158</td>
<td>.198</td>
</tr>
<tr>
<td>ROA</td>
<td>.000</td>
<td>0.192</td>
<td>.0141</td>
<td>.021</td>
</tr>
<tr>
<td>NPL</td>
<td>.000</td>
<td>0.102</td>
<td>.0325</td>
<td>.156</td>
</tr>
<tr>
<td>BS</td>
<td>5.000</td>
<td>9.001</td>
<td>7.431</td>
<td>1.456</td>
</tr>
<tr>
<td>LEV</td>
<td>0.651</td>
<td>0.924</td>
<td>0.824</td>
<td>0.105</td>
</tr>
<tr>
<td>NED</td>
<td>0.000</td>
<td>8.150</td>
<td>6.235</td>
<td>1.251</td>
</tr>
<tr>
<td>NID</td>
<td>0.000</td>
<td>2.000</td>
<td>1.0000</td>
<td>0.001</td>
</tr>
<tr>
<td>NOM</td>
<td>2.000</td>
<td>26.000</td>
<td>12.975</td>
<td>2.356</td>
</tr>
</tbody>
</table>

The ratio of non-performing loan to total loans varies from zero to 10.2 percent, leading to the average of 3.25 percent. Likewise, the board size ranges from 5 to 9 persons, leverage ranges from 65.1 percent to 92.4 percent, the number of executive directors ranges from zero to 8.15 directors, the number of independent directors ranges from zero to two persons, and the number of board of directors’ meetings ranges from 2 to 26. The
average board size has been observed to 7.43 persons while the average leverage is 82.4 percent. Similarly, the average number of executive and independent directors are 6.23 persons and 1 person respectively. And the average number of meetings has been observed to be 26.

**Correlation analysis**

Having indicated the descriptive statistics, the Pearson Correlation Coefficients have been computed and the results are presented in Table 3. All the correlations can be considered as low since the highest correlation has been observed to be 0.423 between BS and NED. The return on equity and return on assets are negatively related to board size and number of executive directors. However there is a negative relation of non-performing loans to total loans with board size, number of independent directors and number of board meetings. It is also important to note a negative relationship between the number of independent directors and the number of executive directors. The results also indicate that return on equity is positively related to return on assets, leverage, number of independent directors, and number of board meetings. There is a positive relation of return on assets with leverage, number of independent directors, and number of board meetings. The results also indicate that non-performing loans to total loans is positively related to leverage, and number of executive directors. However, return on assets and return on equity are negatively related to non-performing loans to total loans. The larger number of executive directors, higher would be the non-performing loans to total loans. The negative correlation between non-performing loans and the number of independent directors indicate that larger the number of independent directors, lower would be the non-performing loans.

**Table 3: Correlation matrix for the dependent and independent variables**

<table>
<thead>
<tr>
<th>Ratios</th>
<th>ROE</th>
<th>ROA</th>
<th>NPL</th>
<th>BS</th>
<th>LEV</th>
<th>NED</th>
<th>NID</th>
<th>NOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROE</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROA</td>
<td>0.281</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NPL</td>
<td>-0.183</td>
<td>-0.325</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BS</td>
<td>-0.056</td>
<td>-0.172</td>
<td>-0.361</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEV</td>
<td>0.101</td>
<td>0.095</td>
<td>0.412</td>
<td>0.213</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NED</td>
<td>-0.054</td>
<td>-0.142</td>
<td>0.235</td>
<td>0.432</td>
<td>0.201</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NID</td>
<td>0.029</td>
<td>0.116</td>
<td>-0.258</td>
<td>0.423</td>
<td>0.092</td>
<td>-0.079</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>NOM</td>
<td>0.134</td>
<td>0.145</td>
<td>-0.015</td>
<td>0.067</td>
<td>0.087</td>
<td>0.047</td>
<td>0.068</td>
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</tr>
</tbody>
</table>

**Regression analysis**

The regression of corporate governance and control variables on bank performance has been analysed by defining bank performance in terms of return on equity, return on assets and non-performing loans to total loans. The regression of corporate governance and control variables on return on equity produced the results as indicated in Table 4. The table indicates that beta coefficients are negative for board size and number of executive
directors. Thus larger the board size, lower would be the return on equity. However, the beta coefficient is not significant at 5 percent level of significance. The results also indicate that larger the number of executive directors, lower would be the return on equity where beta coefficient is also significant.

The beta coefficients are positive for leverage, number of independent directors and number of board meetings held. The result shows that higher the leverage, higher would be the return on equity where beta coefficients are significant at 5 percent level of significance. Similarly, larger the number of independent directors in the board, higher would be the return on equity where beta coefficients are also significant at 5 percent level of significance. The results also show that larger the number of board meetings, higher would be the return on equity but beta coefficients are not significant in any of the equations.

Table 4: Regression of corporate governance and control variables on return on equity

The results are based on pooled cross-sectional data of 23 banks with 115 observations for the period 2006/07-2010/11 by using linear regression model. The model is, \( \text{ROE} = a + b_1(\text{BS}) + b_2(\text{LEV}) + b_3(\text{NED}) + b_4(\text{NID}) + \text{NOM} + U_i \).

<table>
<thead>
<tr>
<th>Models</th>
<th>Intercept</th>
<th>BS</th>
<th>LEV</th>
<th>NED</th>
<th>NID</th>
<th>NOM</th>
<th>Adj. R-bar²</th>
<th>SEE</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
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<td></td>
<td></td>
<td>0.18</td>
<td>10.12</td>
<td>15.12</td>
</tr>
<tr>
<td></td>
<td>(10.13)</td>
<td>(0.89)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>(2)</td>
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<td></td>
<td></td>
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<td>0.23</td>
<td>9.89</td>
<td>14.32</td>
</tr>
<tr>
<td></td>
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<td>(2.45*)</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3)</td>
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<td>-1.17</td>
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<td>0.15</td>
<td>23.57</td>
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</tr>
<tr>
<td></td>
<td>(7.26)</td>
<td>(2.63*)</td>
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</tr>
<tr>
<td>(4)</td>
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<td></td>
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<td>1.12</td>
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<td></td>
<td>0.19</td>
<td>27.65</td>
<td>14.46</td>
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<tr>
<td>(6)</td>
<td>12.67</td>
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<td>-2.14</td>
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<td>0.28</td>
<td>32.59</td>
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<tr>
<td></td>
<td>(3.35)</td>
<td>(1.12)</td>
<td>(3.58*)</td>
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<td>(3.18*)</td>
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<tr>
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<td>-0.15</td>
<td>0.68</td>
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<td>-1.05</td>
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<td>0.37</td>
<td>45.26</td>
<td>36.49</td>
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<td>(3.12*)</td>
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<td>(2.92*)</td>
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<tr>
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<td>0.69</td>
<td></td>
<td>0.46</td>
<td>56.38</td>
<td>43.36</td>
</tr>
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<td>(0.95)</td>
<td>(2.82*)</td>
<td></td>
<td>(2.25*)</td>
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<tr>
<td>(9)</td>
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<td>1.19</td>
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<td>0.54</td>
<td>53.28</td>
<td>53.23</td>
</tr>
<tr>
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<td>(3.86)</td>
<td>(1.23)</td>
<td>(2.51*)</td>
<td></td>
<td>(2.37*)</td>
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</tr>
</tbody>
</table>
Notes: 1. Figures in parentheses are t-values.
2. The asterisk (*) sign indicates that the results are significant at 5 percent level of significance.
3. Dependent variable is return on equity.

The regression of corporate governance and control variables on return on assets shows that beta coefficients for the board size and number of executive directors are negative in all the equations as indicated in Table 5. However, coefficients are not significant for board size but coefficients for number of executive directors are significant. The positive coefficients have been observed for leverage, number of independent directors and number of board meetings. The coefficients are significant for leverage, number of executive directors and number of independent directors. The coefficients are not significant for number of board meetings. The results hence indicate that larger the leverage, higher would be the return on assets. Similarly, larger the number of executive directors in the board, lower would be the return on assets. The higher return on assets is associated with larger number of independent directors.

Table 5: Regression of corporate governance and control variables on return on assets

The results are based on pooled cross-sectional data of 23 banks with 115 observations for the period 2006/07-2010/11 by using linear regression model. The model is, ROA = a + b1(BS) + b2(LEV) + b3(NED) + b4(NID) + NOM + U_i.

<table>
<thead>
<tr>
<th>Models</th>
<th>Intercept</th>
<th>Regression Coefficients of</th>
<th>Adj. R-bar^2</th>
<th>SEE</th>
<th>F</th>
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</thead>
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<tr>
<td></td>
<td></td>
<td>BS</td>
<td>LEV</td>
<td>NED</td>
<td>NID</td>
</tr>
<tr>
<td>(1)</td>
<td>2.02</td>
<td>-0.25</td>
<td>-0.25</td>
<td>(1.43)</td>
<td>0.23</td>
</tr>
<tr>
<td>(2)</td>
<td>21.05</td>
<td>2.56</td>
<td>(3.02*)</td>
<td>0.15</td>
<td>5.89</td>
</tr>
<tr>
<td>(3)</td>
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<td>-4.08</td>
<td>(2.23*)</td>
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<tr>
<td>(4)</td>
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<td>0.38</td>
<td>(2.23*)</td>
<td>0.28</td>
<td>8.32</td>
</tr>
<tr>
<td>(5)</td>
<td>18.59</td>
<td>1.27</td>
<td>(1.59)</td>
<td>0.32</td>
<td>6.67</td>
</tr>
<tr>
<td>(6)</td>
<td>10.26</td>
<td>3.37</td>
<td>(4.02*)</td>
<td>0.34</td>
<td>10.34</td>
</tr>
</tbody>
</table>
The next aspect of the study is concerned with the regression of corporate governance and control variables on the ratio of non-performing loans to total loans. The regression results are presented in Table 6. The table indicates that regression coefficients are negative for board size indicating that smaller the board size, higher would the ratio of non-performing loans to total loans. The coefficients are positive for leverage and number of executive directors where coefficients are significant for number of executive directors though they are not significant for board size. It shows that larger the number of executive directors, higher would be the non-performing loans.

The estimated regression results show that coefficients are positive and significant for leverage. The results thus indicate that larger the leverage, higher would be the non-performing loans. The coefficients for number of independent directors are negative and significant indicating that larger the number of independent directors, lower would be the non-performing loans. The coefficients for number of executive directors are positive which shows that larger the number of executive directors in the board, higher would be the non-performing loans.

Table 6: Regression of corporate governance and control variables on non-performing loans to total loans

The results are based on pooled cross-sectional data of 23 banks with 115 observations for the period 2006/07-2010/11 by using linear regression model. The model is, \( NPL = a + b_1(\text{BS}) + b_2(\text{LEV}) + b_3(\text{NED}) + b_4(\text{NID}) + \text{NOM} + U_i \).
### Models

<table>
<thead>
<tr>
<th>Models</th>
<th>Intercept</th>
<th>BS</th>
<th>LEV</th>
<th>NED</th>
<th>NID</th>
<th>NOM</th>
<th>Adj. R-bar²</th>
<th>SEE</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>12.36 (5.68)</td>
<td></td>
<td>-1.15 (1.12)</td>
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<td></td>
<td>0.20</td>
<td>8.86</td>
<td>12.14</td>
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<td>(2)</td>
<td>9.78 (3.45)</td>
<td>0.25 (3.18*)</td>
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<td>10.13</td>
</tr>
<tr>
<td>(3)</td>
<td>13.15 (6.38)</td>
<td>2.25 (3.15*)</td>
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<td>0.16</td>
<td>9.17</td>
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<td>(4)</td>
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<td>-0.79 (2.57*)</td>
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<td></td>
<td>0.26</td>
<td>15.16</td>
<td>27.68</td>
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<td>(6)</td>
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<td>-2.01 (0.92)</td>
<td>0.26 (2.67*)</td>
<td>1.10 (2.13*)</td>
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<td></td>
<td>0.18</td>
<td>21.15</td>
<td>32.65</td>
</tr>
<tr>
<td>(7)</td>
<td>12.37 (5.36)</td>
<td>-0.56 (1.16)</td>
<td>1.26 (2.82*)</td>
<td>2.12 (3.61*)</td>
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<td>0.24</td>
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</tr>
<tr>
<td>(8)</td>
<td>6.79 (4.47)</td>
<td>-1.61 (1.12)</td>
<td>1.45 (3.38*)</td>
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<td>-0.72 (0.89)</td>
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</tr>
<tr>
<td>(9)</td>
<td>12.13 (5.52)</td>
<td>-0.72 (0.86)</td>
<td>2.23 (4.12*)</td>
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<td>-2.21 (3.12*)</td>
<td>-0.92 (1.04)</td>
<td>0.43</td>
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</tbody>
</table>

**Notes:**
1. Figures in parentheses are t-values.
2. The asterisk (*) sign indicates that the results are significant at 5 percent level of significance.
3. Dependent variable is non-performing loans to total loans.

### Discussion and conclusion

In recent years, several companies in the USA and elsewhere collapsed because of corporate governance problems and unethical practices. The objective behind corporate governance is to safeguard the interests of shareholders. Many companies have failed because of increasing corporate lootings. There is a doubt whether existing regulatory framework is adequate to deal with the corporate fraud. Thus, in recent years, corporate governance has assumed a greater significance and Nepal is no exception. In Nepal also, many companies failed in recent years which increased the importance of corporate governance. This study on corporate governance and bank performance has been
undertaken for Nepalese banks because Nepalese banking sector has gone sweeping changes and is emerging as a major sector of the economy.

The study reveals that average return on equity is 15.8 percent while the average return on assets is 14.1 percent. The average ratio of non-performing loan to total loans is observed to be 3.25 percent. Likewise, average board size has been observed to 7.43 persons while the average leverage is 82.4 percent. The average number of executive and independent directors are 6.23 persons and 1 person respectively. And the average number of meetings has been observed to be 26.

The results indicate that larger the number of executive directors, lower would be the return on equity however there is no clear indication that small sized board would increase return on equity. There is an evidence that return on equity can be increased by employing higher leverage and by appointing larger the number of independent directors in the board. There is however no clear indication that larger number of board meetings would bring higher return on equity.

The study reveals further facts. It shows that larger the number of executive directors, lower would be the return on assets. However, larger number of independent directors is associated with higher return on assets. And there is a clear indication that higher leverage is associated with higher return on assets.

On non-performing loans, larger number of executive directors tend to increase non-performing loans but larger number of independent directors tend to decrease non-performing loans. However, there is no clear indication that larger sized board and increased board meetings would lower non-performing loans. However, the study reveals that higher leverage is associated with higher non-performing loans.
References:


REVIEW OF COMPLIANCE OF NRB DIRECTIVES BY NEPALESE COMMERCIAL BANKS

Ram Krishna Chapagain*

Abstract

This paper examines the implementation of the NRB directives of selected commercial banks of Nepal. NRB plays an important role to enhance the financial stability and sound financial system in the country through directives. The study finds that almost the sampled commercial banks have followed NRB directives, but still there is a need of effective monitoring and supervision.

Key words: Commercial banks, financial institutions, financial stability and supervision.

Background

Nepal is a least developed country having low human development index. Nepalese economy is largely based on agriculture and the agricultural production could not be increased as expected despite the fact that this sector occupies one third space in country's GDP and provides employment opportunities to two third of its population (Economic Survey, 2011/12). In recent years, the country's efforts to expand into manufacturing industries and other technological sectors are in progress. After the restoration of multiparty democracy, openness and liberalization policy in the financial system, several commercial banks started their business and at present commercial banks hold a large share of economic activities of the country. Not only in the numbers of financial institutions, have the significant improvements been seen in the quality of services and technologies of the Nepalese financial system, most of the financial institutions have been automated. Advanced technologies such as Internet banking, mobile banking, ATM cards facility, Credit cards, Visa cards, Master cards have been started to be adopted. The products or services offered are not limited up to deposits and credits only but have also been extended up to safe deposit lockers, door-step facilities etc. Commercial banks offer many products and facilities to their customers. Nepalese people have also started feeling the need of banking and banking facilities. But as most of the Nepalese are living under the poverty line and more that 30% of Nepalese are illiterate (CBS, 2011), developing banking habit among these people has become a challenging job. Banking facilities are accessible only to urban areas and its accessibility to rural areas is nominal.

* Mr. Chapagain is the Lecturer of School of Business, Pokhara Universit, Nepal
The size of the total assets of the financial sector has been increased significantly over the last six and half years. But the market share of banks and non banking financial institutions has not changed in a huge range. Still, commercial banking sector is holding a dominant position in financial market. Of the total deposit of financial sector, 80.62% has been held by commercial banks till mid-July 2012. Commercial Banks and development banks altogether held 92.45% of total deposit of the financial system. The share to the total assets and liabilities of financial system owned by commercial banks development banks, finance companies and microfinance developments are 77.3%, 12%, 10.9%, and 1.8% respectively (Banking and financial statistics, 2012).

The high NPL in fiscal year 2006/07 and 2007/08 was mainly due to the huge loss and bad debts suffered by two giant banks, Nepal Bank Ltd. and Rastriya Banijya Bank. However the successful restructuring of these banks in later periods resulted in better performance of whole commercial banking system. Till mid-July 2003, the banking system was facing a continuous losses trend. But it turned to post a net profit of Rs. 28167 million in fiscal year 2006/07 and it had reached to 95.51 billion on 2011/12 (Bank Supervision Report, 2012).

Still there is a mushrooming growth of commercial banks in private sector as well as in joint venture. The number of competitors is large and area to serve is limited. Under such circumstances a fierce competition has been raised among the financial institutions with regular increase in number of financial institutions. Despite the competition and increase in the number of players for the same market, most of the commercial banks are generating higher profits than that in previous years. This indicates that there may be offering of uneconomic rate of interest, indulging in risky enterprises, unhealthy competition etc. Such situation may endanger the deposits of general public. Hence it is imperative to scrutinize the performance of these commercial banks. In order to safeguard the public deposits and ensure the economic stability in the country, NRB issues Directives time to time. The directives are related to various performances of the banks and the banks are required to follow the directives.

The directives thus issued by NRB, if not addressed properly, have potential to wreck the financial system of the country, as they are only the tools of NRB to supervise and monitor the activities of the financial institutions. It must be formulated taking into consideration, the positive as well as negative impact on the commercial banks. Issue of wrong or unsuitable directives may ruin the conditions of commercial banks instead of enhancing its situation.

NRB takes necessary actions to ensure that its recent directives have been compelled by all commercial banks equally. Any activities operated by the financial institutions deviating from these guidelines will be penalized by the central bank (NRB) that may range from reprimanding to snatching the license of the institutions. Because of the strict policy of NRB, the financial system has gained momentum not only in the number of institutions but also has helped them to improvise their quality by reducing the unnecessary risks and unfair market competition.
In the beginning due to lack of proper regulations Nepalese Commercial Banks could not recognize the importance of the quality credit and banking sector failed to witness the expected developments. Subsequently, the banking sector faced the problem of bad debts, overdue loans, accrued interest, accumulation of non-banking assets and excess liquidity in the banking system. Viewing the need of structural reform amidst these adverse implications, NRB felt it must to issue suitable directives to run commercial banks in a healthy competitive environment to ensure the sustainable developments of the overall banking system.

In the year 2001, NRB issued a set of directives to commercial banks consisting of nine parts; claiming that these directives are based on internationally accepted banking norms of Basel Committee. NRB ordered the commercial banks to increase its authorized capital to Rs. 1 billion which was almost impossible for Nepalese commercial banks. Such regulation may have negative impact on commercial banks and may ruin the conditions of commercial banks. After fiscal year 2010/11 Commercial banks are provisioned to maintain its authorized capital to Rs. 2 billion and commercial banks were allowed to comply with the norms, stage by stage within specific time period. So the impact of NRB Directives must be regularly studied and examined so that the shortcoming in the directives can be eliminated and healthy directives are ruled. However there is no specific period when NRB may change their directives. They introduce new directives, amend the necessary ones and remove the existing directives any time as deemed necessary by them. Because of this, the commercial banks are facing difficulty in implementing the directives in a proper manner.

The overall health of the economy is based on the stability of the financial system. Commercial banks are the back bone of the financial system. The stability and growth of the economy is based on how effectively commercial banks are functioning on the economy. Current monetary policy is targeting to achieve economic growth of 5.5 percent by maintaining inflation level at 7.5 percent. Similarly monetary policy focused on the enhancing the credit flow to the remote sector and especial provision is made for commercial banks to invest certain percent fund on the productive sector to enhance the level of economic growth and increase employment level on the country. To achieve these objectives NRB issued various directives to the financial institution of the country. The policy and directives are good but the success of the policy depends on the implementation of the policy and directives by the financial institution. NRB should made strong onsite, offsite supervision and special supervision to achieve that target.

The objectives of this study is to find out whether Nepalese domestic commercial bank and joint venture bank following the directives of NRB or not. Further, this paper aims to understand the comparative position of banks while following the directives issued by Nepal Rastra Bank. Moreover, capital adequacy ratio, core capital adequacy ratio, credit to deposit ratio, cash reserve ratio and non performing loan to total loan ratio will be assessed and compared with the ratio that NRB directs to maintain for the commercial banks.
Review of literature

Khatiwada (2003) states that, Recent financial crisis have revealed a number of data deficiencies, notably in pledged assets deposits held in financially weak domestic banks and their foreign affiliates, valuation practices leading to bank valuation of assets being significantly different from market value and complicating assessment of the realizable value of reserve assets. Similarly, public information is lacking in many countries on the off-balance sheet activities of the authorities that can affect foreign currency resources. There was lack of information on the authorities' financial derivatives activities. Also observed was the inadequate information of actual and potential foreign liabilities of the monetary authorities and central government.

Shrestha (2007) finds from his study on Impact and Implementation of NRB Guidelines by Commercial Banks concluded that all the changes in NRB Directive have made both positive and the negative impacts on the commercial banks. The research concluded that the new directives of NRB have more good output than the negative on various aspects of the banks. Study finally recommends the NRB to do homework before changing directives, to strengthen the Credit Information Bureau and while making rules for the commercial banks of Nepal, NRB shall not focus heavily towards meeting the International Standards but it should be applied in the context of Nepal.

Khanal (2011) concluded that Supervision of banks and financial institutions is one of the prime responsibility of the supervisory authority. Effective supervision of these institutions is an essential component of a strong economic environment. The task of supervision is to ensure that banks operate in a safe and sound manner and that they hold capital and reserve sufficient to support the risks that arise in their business. Strong and effective banking supervision contributes in enhancing effective macroeconomics policy along with financial stability in any country.

Gautam (2010) concluded that Adequate capital reserve is necessary for financial institutions to minimize risks. To maintain financial stability, inspection & supervision system has been made more effective in addition to the updated regulatory works. The time-to-time different directives to the financial institutions by the NRB have been also an effective tool. A separate monitoring committee has been established to cater for the banks in problem & in-depth supervision & monitoring of such banks has been started. As per the policy of preparing annual reports timely inspection & supervision should done timely by NRB. To improve the weaknesses & shortcomings observed in the course of supervision, timely directives based on the inspection reports are being issued to the concerned banks & financial institutions.

Bhattarai (2011) concluded that as a central bank of Nepal NRB’s major objectives are concentrated in Price and financial sector stability in the country. To keep financial system stable some laws, regulations, directives and provision to be imposed to financial institutions by government and regulatory body. Financial institution should have to comply such laws, regulations, directives and provisions. If regulation system is loose
and flexible, then unsound, trackless financial situation will arise in the financial system as well as in the countries economy.

**Research methodology**

To conduct the study, commercial banks of Nepal have been divided into 2 groups i.e. Domestic commercial bank and Joint venture bank. Then four banks from joint venture commercial banks and two banks from domestic commercial bank are selected. The study depends on the secondary data obtained from the annual reports of each banks. Similarly data published by the NRB also have been used. Descriptive research design and financial ratios have been used to conduct the research.

To analyze the performance of the bank capital adequacy ratio, core capital adequacy ratio, credit to deposit ratio, cash reserve ratio and non performing loan to total loan ratio has been calculated and it has been compared with the ratio that NRB directs to maintain to commercial banks.

**Results and discussion**

**Capital adequacy ratio**

Capital adequacy is the portion of capital fund in regard of risk-weighted assets that a commercial bank holds. Capital adequacy is required to safeguard the money of the depositors as the banks are playing with the money they collected from the depositors (Shrestha, 2003). Capital Adequacy is an ability of bank to provide cushion to the risk weighted assets and meet these obligations in case they arise (Thapa and Rawal, 2010).

**Table 1: Capital adequacy ratio of banks**

<table>
<thead>
<tr>
<th>Banks</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>NABIL</td>
<td>12.04</td>
</tr>
<tr>
<td>Everest Bank</td>
<td>11.19</td>
</tr>
<tr>
<td>Himalayan Bank Ltd</td>
<td>12.11</td>
</tr>
<tr>
<td>Bank of Kathmandu Ltd</td>
<td>7.44</td>
</tr>
<tr>
<td>Laxmi Bank Ltd</td>
<td>12.43</td>
</tr>
<tr>
<td>Siddhartha Bank Ltd</td>
<td>11.84</td>
</tr>
<tr>
<td>Required ratio</td>
<td>11.00</td>
</tr>
</tbody>
</table>

*Sources: NRB annual bank supervision report, 2012 and annual reports of sampled banks*
Capital adequacy ratio of each bank on over the sample period has been shown on the table. As per unified directives of NRB bank had to maintained capital adequacy ratio of 10 percent. But before 2008, it was 11 percent. From the above table it is clear that almost all sampled banks have maintained the capital adequacy ratio.

**Core capital adequacy ratio**
Core Capital adequacy is the portion of Tier 1 capital in regard of risk-weighted assets that a commercial bank holds. Tier 1 capital is core capital of the financial institution. This is the figure that is shown as equity on the balance sheet of the financial institution. It consists mainly of owner’s equity and retained earnings. Owner’s equity consists of fully paid ordinary shares and noncumulative perpetual preferred stock. Retained earning is the part of the net income that is not paid back to the owners of a company as dividend (Ghisaidoobe, 2010).

<table>
<thead>
<tr>
<th>Banks</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>NABIL</td>
<td>10.40</td>
</tr>
<tr>
<td>Everest Bank</td>
<td>7.82</td>
</tr>
<tr>
<td>Himalayan Bank Ltd</td>
<td>9.61</td>
</tr>
<tr>
<td>Bank of Kathmandu Ltd</td>
<td>5.60</td>
</tr>
<tr>
<td>Siddhartha Bank Ltd</td>
<td>10.78</td>
</tr>
<tr>
<td>Required ratio</td>
<td>5.5</td>
</tr>
</tbody>
</table>

*Table 2: Core capital adequacy ratio of banks*

Sources: NRB annual bank supervision report, 2012 and annual reports of sampled banks

Core capital adequacy ratio of each bank on each sample period is shown on the table. From the able it is clear that all banks have maintained core capital adequacy ratio as per Unified directives. Laxmi bank had higher ratio than other sampled bank. This might be because of higher tier 1 capital.

**Loan classification with NRB provision**
Loan loss provisions are required to be sufficient to cover the estimated inherent loss (Handbook of Comptroller of the Currency Administrator of National Banks, 1998). Loan loss provisions are expenses on the income statement which reduce the earnings. Managers would like to decrease loan loss provisions to pump up the reported earnings (Yunxia, 2007). Loan and advances are the most profitable of all the assets of a
commercial bank. This is the primary source of income and the most profitable of all the assets of the bank. Loan and advances account for the largest part of the revenue of the bank. But bank needs to be careful about the safety of such loan and advances because bank may be influenced by bad debts and since loan and advances are least liquid of the entire banker’s assets it may feel difficult to realize them on short notice.

**Good loan loss provision**
Loans and advances not past due and past due up to 3 months shall be included in this category. These are classified and defined as performing loan or good loan. As per unified directives banks have to maintain 1 percent provision for the good loan.

### Table 3: Good loan loss provision

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NABIL</td>
<td>1.12</td>
<td>1.35</td>
<td>1.01</td>
<td>1.03</td>
<td>1.01</td>
<td>1</td>
</tr>
<tr>
<td>Everest Bank</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Himalayan Bank Ltd</td>
<td>1</td>
<td>1.02</td>
<td>1</td>
<td>1.01</td>
<td>1.01</td>
<td>1.02</td>
</tr>
<tr>
<td>Bank of Kathmandu Ltd</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1.01</td>
<td>1</td>
</tr>
<tr>
<td>Laxmi Bank Ltd</td>
<td>1.01</td>
<td>1</td>
<td>1.03</td>
<td>1.02</td>
<td>1.04</td>
<td>1.04</td>
</tr>
<tr>
<td>Siddhartha Bank Ltd</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

*Sources: NRB annual bank supervision report, 2012 and annual reports of sampled banks*

All commercial bank must maintain 1 percent provision for good loan. From the table it is clear that all sample banks have maintained this provision.

**Substandard loan**
Loans and Advances past due for a period of over 3 months to 6 months. As per NRB directives banks have to maintain 25 percent provision on these types of loan.

Percentage of Substandard loan loss provision has been presented on the table. From the table, it is clear that all banks have maintained the required percentage of provision as per NRB directives.
Table 4: Substandard loan loss provision

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NABIL</td>
<td></td>
<td>47.31</td>
<td>48.78</td>
<td>38.90</td>
<td>25</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Himalayan Bank Ltd</td>
<td></td>
<td>22.68</td>
<td>25.00</td>
<td>44.19</td>
<td>38.14</td>
<td>25.01</td>
<td>25</td>
</tr>
<tr>
<td>Laxmi Bank Ltd</td>
<td></td>
<td>41.75</td>
<td>27.37</td>
<td>-</td>
<td>25.00</td>
<td>25.00</td>
<td>25.12</td>
</tr>
<tr>
<td>Siddhartha Bank Ltd</td>
<td></td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
</tr>
</tbody>
</table>

Sources: NRB annual bank supervision report, 2012 and annual reports of sampled banks

Doubtful loan
Loans and Advances past due for a period of over 6 months to 1 year. As per NRB directives banks have to maintain 50 percent provision on these types of loan.

Table 5: Doubtful loan loss provision

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NABIL</td>
<td></td>
<td>62.06</td>
<td>49.95</td>
<td>51.42</td>
<td>50</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Everest Bank</td>
<td></td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Himalayan Bank Ltd</td>
<td></td>
<td>50.00</td>
<td>50.00</td>
<td>50.86</td>
<td>50.00</td>
<td>50.00</td>
<td>50</td>
</tr>
<tr>
<td>Bank of Kathmandu Ltd</td>
<td></td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Laxmi Bank Ltd</td>
<td></td>
<td>67.31</td>
<td>54.98</td>
<td>49.99</td>
<td>50</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Siddhartha Bank Ltd</td>
<td></td>
<td>-</td>
<td>30.79</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
</tr>
</tbody>
</table>

Sources: NRB annual bank supervision report, 2012 and annual reports of sampled banks

Percentage of Doubtful loan loss provision has been presented on the table. From the above table it is clear that all banks have maintained the required percentage of provision as per NRB directives.
Bad loans

Loans and advances past due for a period of over 1 year as well as advances which have least possibility of recovery or considered unrecoverable and those having thin possibility of even partial recovery in future shall be included in this category. It is also called a bad loan. All the loan and advances falling in the category of sub-standard, Doubtful and Losses are classified and defined as non performing loan. As per NRB directives bank have to maintain 100 percent provision on these types of loan.

Table 6: Bad loans loss provision

<table>
<thead>
<tr>
<th>Banks</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>NABIL</td>
<td>80.96</td>
</tr>
<tr>
<td>Everest Bank</td>
<td>100</td>
</tr>
<tr>
<td>Himalayan Bank Ltd</td>
<td>99.48</td>
</tr>
<tr>
<td>Bank of Kathmandu Ltd</td>
<td>96.10</td>
</tr>
<tr>
<td>Laxmi Bank Ltd</td>
<td>100</td>
</tr>
<tr>
<td>Siddhartha Bank Ltd</td>
<td>100</td>
</tr>
</tbody>
</table>

Sources: NRB annual bank supervision report, 2012 and annual reports of sampled banks

Percentage of Bad loan loss provision has been presented on the table. From the table it is clear that all banks have maintained the required percentage of provision as per NRB directives. Although Nabil, Himalayan, bank of Kathmandu did not maintain the provision in the initial year of sample period, they were able to maintain the provision after some years.

Capital deposit ratio

A bank carries out its transaction through the medium of ownership & borrowed capital. Naturally, the function of a bank requires a lot of capital it is known based on deposit in the bank, whether a bank has an adequate ownership capital or not. If there is 8-10 percent ownership capital of the total deposit of the bank, it is considered good. However, the ratio is to change according to the movement of the economy (Gautam, 2010). The capital to deposit ratio has a significant role in measuring capital adequacy ratios of banks. It is assumed that the capital to deposit ratio should be 10%. If the capital ratio reaches below 10 percent no CBs can flow the loan and cannot expand the branch, hence in line to this high capital deposit ratio is favorable.
Table 7: Capital deposit ratio

<table>
<thead>
<tr>
<th>Banks</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>NABIL</td>
<td>8.81</td>
</tr>
<tr>
<td>Everest Bank</td>
<td>6.61</td>
</tr>
<tr>
<td>Himalayan Bank Ltd</td>
<td>7.14</td>
</tr>
<tr>
<td>Bank of Kathmandu Ltd</td>
<td>8.02</td>
</tr>
<tr>
<td>Laxmi Bank Ltd</td>
<td>11.36</td>
</tr>
<tr>
<td>Siddhartha Bank Ltd</td>
<td>11.98</td>
</tr>
</tbody>
</table>

Sources: NRB annual bank supervision report, 2012 and annual reports of sampled banks

From the above table it has been clear that most of the sampled banks maintain capital to deposit ratio near to 10 times. Although there was problems on banks on maintaining this ratio at desired level at the initial period of the sample period, banks at the end of the sample period were trying to maintain this ratio at desired level.

Credit to deposit ratio (CD Ratio)

CD ratio measures the ratio of fund that a bank has utilized in credit out of the deposit total collected. More the CD ratio more the effectiveness of the bank to utilize the fund it collected (Shrestha, 2007). This ratio shows the efficiency of the commercial bank to use the liquidity during a particular time. The ratio helps to find out the liquidity position as well as the prediction for the need of additional capital for the CBs. It is calculated by dividing total deposit by credit. The credit / deposit ratio (CD ratio) is a major tool to examine the liquidity of a bank. Corresponding to NRB directives, the commercial banks are supposed to maintain up to 80 percent CD ratio.

Table 8: Credit to Deposit Ratio

<table>
<thead>
<tr>
<th>Banks</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>NABIL</td>
<td>66.60</td>
</tr>
<tr>
<td>Everest Bank</td>
<td>75.13</td>
</tr>
<tr>
<td>Himalayan Bank Ltd</td>
<td>56.57</td>
</tr>
<tr>
<td>Bank of Kathmandu Ltd</td>
<td>75.87</td>
</tr>
</tbody>
</table>
Credit to deposit ratio of selected commercial banks on each sample period has been shown on the above table. In the beginning period of the sample period sampled banks CD ratio was not as per NRB directives. Some banks had low CD ratio, which means banks had not properly utilized their deposit. But some banks had high CD ratio which indicates banks invested collected deposit aggressively which may result liquidity problems on the banks. But in 2010/11, 2011/12 banks had maintained it on desire level.

**Non performing loan to total loan ratio**

Non-performing loan is taken as a default or close to being in default. Many loans become non-performing after being in default for three months but this can depend on the contract terms. A loan is non-performing when payments of interest and principal are past due by 90 days or more. Loans become non-performing when it cannot be recovered within certain stipulated time that is governed by respective laws. The non-performing loans (NPL) of financial institutions are considered as a significant issue in the context of Nepal for last few decades. The immediate consequence of large amount of NPLs in the banking system is bank failure. Many researches on the cause of bank failures find that asset quality is a statistically significant predictor of insolvency and that failing banking institutions always have high level of non-performing loans prior to failure (Barr and Siems 1994).

There is no standard form to define non-performing loans globally. Variation may exist in terms of the classification system, the scope, and contents as per country. As a regulatory financial institution of Nepal, the central bank i.e. Nepal Rastra Bank has classified the loan basically into the pass loan, sub-standard loan, doubtful loan and loss or bad loan.

**Table 9: NPL to total loan ratio**

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NABIL</td>
<td>0.74</td>
<td>0.74</td>
<td>0.80</td>
<td>1.48</td>
<td>1.77</td>
<td>2.33</td>
</tr>
<tr>
<td>Everest Bank</td>
<td>0.80</td>
<td>0.68</td>
<td>0.48</td>
<td>0.45</td>
<td>0.34</td>
<td>.84</td>
</tr>
<tr>
<td>Himalayan Bank Ltd</td>
<td>3.61</td>
<td>2.36</td>
<td>2.16</td>
<td>4.15</td>
<td>4.22</td>
<td>2.09</td>
</tr>
<tr>
<td>Bank of Kathmandu</td>
<td>2.51</td>
<td>1.86</td>
<td>1.27</td>
<td>1.52</td>
<td>1.82</td>
<td>2.3</td>
</tr>
</tbody>
</table>

Sources: NRB annual bank supervision report, 2012 and annual reports of sampled banks
Ratio of Nonperforming loan and total loan has been shown on the above table. The table shows that all banks have ratio less than 5 percent which is required as per NRB directives. This means all banks have no large amount of nonperforming loan which shows the efficiency of banks to mobilize loan effectively and efficiently.

Cash reserve ratio (CRR)

All central banks impose legal reserve requirements on the depository institutions they regulate. All depository institutions at one time or another need immediately available funds to handle customer withdrawals, meet new loan demand, and satisfy other emergency cash needs (Rose and Hudgins, 2010). The CRR too can be taken as criteria of measuring bank liquidity. The CBs should maintain the CRR as fixed by the central bank by opening an account in central bank and should maintain the statutory liquidity ratio, in its own treasury. It changes from time to time. CRR was used even before 1990s. NRB, first time introduced CRR in December 1966. At that time, CBs were required to maintain CRR of 8 percent of total deposit liabilities. Since then, NRB changed CRR a time to times until to date, and sometimes, variable rates for different deposits, and sometimes, singular rate. In 1990, NRB directed the CBs even to maintain cash in vault of 4 percent of deposit liabilities. Such a provision was taken away in August 2003 (Gautam, 2010). At present; the level of CRR is 5 percent of total domestic deposit liabilities of the CBs in Nepal.

Table 10: Cash reserve ratio (CRR)

<table>
<thead>
<tr>
<th>Banks</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>NABIL</td>
<td>6</td>
</tr>
<tr>
<td>Everest Bank</td>
<td>6.48</td>
</tr>
<tr>
<td>Himalayan Bank Ltd</td>
<td>4.23</td>
</tr>
<tr>
<td>Bank of Kathmandu Ltd</td>
<td>8.02</td>
</tr>
<tr>
<td>Laxmi Bank Ltd</td>
<td>5.65</td>
</tr>
<tr>
<td>Siddhartha Bank Ltd</td>
<td>5.07</td>
</tr>
<tr>
<td>Required ratio</td>
<td>5</td>
</tr>
</tbody>
</table>

Sources: NRB annual bank supervision report, 2012 and annual reports of sampled banks
Cash reserve ratio of all banks on the sample period has been shown on the above table. Some banks were not able to maintain this ratio on some sample period but overall result is satisfactory.

Conclusions
Today, especially in developing countries, the financial system have been progressively oriented towards meeting national, socio economic objectives, including rural development and upliftment of the weaker sections of the society. As commercial banks and financial institutions play a vital role in the economy, their regulation and supervision by central bank is considered still more important aspect of sound monetary policy as effective, regulation and supervision leads banking industry to operate in a competent and constructive way. Realizing the fact, NRB had issued a set of guidelines to the financial institutions which is amended, added and removed as deemed necessary by NRB. The directives of NRB, which regulate the functioning of financial institutions of Nepal, have the power to drive the financial system of the country. If these directives are formulated without proper groundwork, the players of the financial system may not be able to implement them and there may arise unfair competition in the market. Not only this, the development of the banks also largely depends upon policies. The wrong formulation of policies can create the financial crises in the country, deteriorating the economy of the country as a whole. The NRB directives thus shall not just focus on increasing the number of financial institutions but shall also focus on improving the quality of banking in Nepal. There should be a continuous monitoring if the policies designed is been able to attain its objective or not.
References:


WHERE CUSTOMERS ARE EMPLOYEES AND EMPLOYEES ARE CUSTOMERS! LITERATURE REVIEW

Sushil Awale*

Abstract

Service marketing is marketing with a twist, where products are not visible, non monetary price are important, promotion is forecasting, distribution has limited scope, customers are considered partial employees and employees are considered important customers. As we grow into advancement customers are getting more and more active in marketing. Customer role in getting more and more important in creating better values for them. Customer education and training is becoming important especially in service marketing. Like wise happy employees are the bases for successful companies. Most successful companies have happy employees. Intelligent companies are focusing more on employees rather than external customer.

Key words: Internal customer, partial employee, interactive marketing, service.

Introduction

Customers
Customers are all those people and institutions who buy products, services, ideas and other marketing entities for personal, family or organizational uses. Buying is a major activity in the modern society. Thus, whosoever has a need and buys something to fulfill that need is known as the customer. There are mainly two categories of customers. Customers who buy the products and services for institutional or business purposes is popularly known as the institutional customers. Customers who buy the product for personal and household consumption are known as consumers (Kotler 2006:136).

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Employees
An employee is anyone who has agreed to be employed, under a contract of service, to work for some form of payment. This can include wages, salary, commission and piece rates. An employee is an individual who was hired by an employer to do a specific job. The employee is hired by the employer after an application and interview process results in his or her selection as an employee. The terms of an individual’s employment are specified by an offer letter, an employment contract, or verbally. In workplaces represented by a union, the collective bargaining agreement covers most aspects of an employee’s relationship with the workplace. An employee works part-time, full time or is temporary. An employee barters his or her skills, knowledge, experience, and contribution in exchange for compensation from an employer. An employee is either exempt from overtime or not exempt from overtime; the rules about paying an employee are governed by the Fair Labor Standards Act (FLSA 2014). Each employee has a specific job to accomplish that is often defined by a job description. In responsible organizations, a performance development planning process defines the work of the employee and the organization’s expectation’s for the employee’s performance.

Marketing
Now popularly, marketing is satisfying needs of targeted customers. If the needs of customers are addressed, sales are almost guaranteed. If they are satisfied, sales are repeated. In future, in newer sense, marketing is delivering values and building relationship with customer (Kotler 2006:5). Relationship itself is built on knowing each other, fulfilment of each other’s need, taking care of happiness, satisfaction and prosperity of each other. Once relationship is built, a customer becomes a partner; each finds prosperity in other partner’s development, which brings synergy effects. Customer as a partner buys even if the partner’s product is inferior to other competitors, the customer becomes a well-wisher, provides valuable feedback to improve the products, buys more (increases share-of-wallet), refers others to purchase from the partner’s company (generates word of mouth) which eventually results into sustainable business. Generally it is ten times cheaper to retain the present customer than find a new customer (Zeithaml 2009:189). Marketing is inspired by customer’s feelings and experiences.

As we have been defining marketing is satisfying, this definition does not satisfy completely in this ever growing competitive world. There may be many companies who can satisfy the customers but ultimate company that wins the customers is the company that delivers maximum value to customers among companies. Values can bebriefed as total benefits minus total costs.
In carrying out marketing, traditionally, it has four tools. They are; product, price, promotion and place, popularly known as 4Ps. For marketing services 7Ps are needed. If we design and arrange these tools rightly, we succeed in marketing.

Service
A service is taken as a deed that brings values/benefits for customers that are created in the form of convenience, healthiness, comfort, amusement, education, timeliness, education, security etc. for customers. Deeds, working for some body, cleaning, cooking, caring, washing, massaging, hair cutting, plantation, harvesting, carrying, packing, informing, counselling, constructing are all services. Service is intangible product like education, healthcare, finance, insurance, communication, transportation, consultancy, construction, entertainment, administration, trading (wholesaling, retailing, warehousing, distribution, marketing etc.), renting, leasing, lodging, fooding, community services etc. Transaction of all of these services does not result in possessing anything tangible by buyer, nor does the seller lose any tangible thing. Service does not possess material form, and thus cannot be touched, seen, heard, tasted, or smelled. Governments, courts, man power companies, hospitals, military, police, fire, postal, schools, museum, charities, church, college, universities, foundation, airlines, bankers, hotels, insurance companies, consultants, medical institutions, law firms, entertainment entities, real estate, retailing are all service companies (Awale 2012:3).

James B. Quinn, Jordan J. Baruch, Penny C. Paquette (1987): “Services include all economic activities whose output is not a physical product or construction, is generally consumed at the time it is produced and provides added value in terms (such as convenience, amusement, timeliness, comfort, health) that are essentially intangible concerns of its first purchaser”.

Service industries
If company’s core product is service then that company is Service Company or it can be said if company falls under service sector then that can be called Service Company or if more than 50% revenues are generated from selling services from the company then it can also be called Service Company (Rao 2009:12)

Some of the popular service industries in Nepal are for Healthcare service, Education service, Transportation, Tele- communication/internet, Banking service, Insurance service, Restaurant, Hotel/Lodge, tourism related services, Entertainment, Rental and leasing services, Utilities, Social and community service.

WTO (1991) secretariat has classified service sector into following twelve sectors (business services, communication, construction, distribution, educational, environmental, financial, health, tourism, recreational, transportation, other services). These twelve have been further divided into 155 sub sectors. This list does not include
non professional service, unskilled services, government services of non competitive or non-commercial in nature (like electricity supply, water distribution services), air traffic authority related services.

**Service marketing**
A service marketing is marketing of services. In service marketing it needs 7Ps that is additional 3Ps which are people, process, and physical environment. If we think of service in 4Ps terms, it is invisible (intangible) *product*. Monetary *price* is not so important in selling services. *Promotion* is challenging since service cannot be demonstrated. *Place* has the little scope since it is not transported through vehicles nor stored in the warehouses. Wholesalers and retailers of services do not exist. Among remaining 3Ps, *people*, the employees are assumed as more important internal customers in service marketing as they perform services. Service delivery *process* itself is considered as service. Customers judge the service on the basis of looks, appearance, *physical environment* of the service provider since customers cannot evaluate service even after receiving services most of the times. Three type of marketing takes place in service marketing (Zeithaml 2008:365).

**Services marketing triangle**
Service marketing Triangle is made up of Company, Employees, and Customer. In service marketing, marketing takes place in three fronts, Internal marketing, External marketing and Interactive marketing which are explained below (Awale 2012: 39).

![FIGURE 1. Services Marketing Triangle](image)

Interactive marketing (*delivering the promise*): interactive marketing take place between employee and customer. Which is also known as Real Time Marketing or Service Encounter or Moment of truth. It is concern with fulfilment of promise made during external marketing.
Interactive marketing is real time of delivering the service promises made during external marketing.

Interactive marketing is uplifting quality of interaction between seller and customer through stated service delivery and quality of delivery through high touch (human contacts) and high tech (access through calls, clicks of technology, equipments). Interactive marketing is marketing by service firm that recognizes that, the perceived service quality depends heavily on the quality of buyer-seller interaction. Interactive marketing is Managing Service Encounters. Encounter is duration of interactions between service providing employee or technology and the customer. How service encounter is managed that is explained below in the topic ‘Managing encounter’.

**Services encounters**
Services encounters are Building blocks for satisfaction and service quality or Foundations of service or “Moment of truth" in services marketing. The most vivid impression of service occurs in the service encounter (when the customer interacts with the service firm’s different people/technology in different times, in different purposes). Service encounter is duration of interaction where both employee and customer have their roles (Lovelock 2010:27).

**Levels of customer participation in service encounter**
Though service is the result of interaction between service provider and service receiver, all services do not need same level of customer participation. Customer has to participate in different levels to different services to make service successful. Levels of customer participation in service production can be studied in terms of how much duration customer has to stay at service station to receive the service. It can also be studied in terms service processing: customer processing, possession processing, mental stimulus processing, and information processing. Both customer and employee must cooperate, understand, each other (Zeithaml 2011:127).

Role and script should be well planned for all participants (employee, customer) in service marketing system. Customer must encourage and cooperate service provider and service provider must educate customers about their role and manage customer expectations. Customer should be educated, well instructed, their expectations must be managed.

Customers have role to play in service creation (production) initiated by the company. That is why they are considered partial employees of the company. Happy employees can only ultimately deliver good service to final customers. Therefore employees are most important people to be satisfied by company (Awale 2012:188). Marketing is aimed at satisfying customer. Here in service companies aimed at satisfying (creating happy) employees. Therefore in services marketing employees are considered as customer (internal).
Literature review

Customers are partial employees
Bitner, Faranda, Hubbert and Zeithaml (1997) in their study “Customer contributions and roles in service delivery” have identified three levels of customer participation in service production.
(1) The customer as productive resource;
(2) The customer as contributor to quality, satisfaction and value; and
(3) The customer as competitor to the service organization.

Customer as a productive resource
Service customers are referred to as “partial employees” of the organization. They are human resources who contribute to the organization’s productive capacity. In other words, if customers contribute effort, time or other resources to the service production process, they should be considered as part of the organization.

Customer inputs can affect the organization’s productivity through both quality and quantity of output. E.g. research suggest that in an IT consulting context: Clients who clearly articulate the solution they desire, provide needed information in a timely manner, communicate openly, gain the commitment of key internal stakeholders, and raise the issues during the process before it is too late will get better service (Lovelock 2010).

Customer as contributor to quality, satisfaction and value
Another role customers play in service delivery is that of the contributor to their own satisfaction and the ultimate quality of the services they receive. Customers may care little that they have increased the productivity of the organization through their participation. But they likely care a great deal about whether their needs are fulfilled. Effective customer participation can increase the likelihood of service delivery that their needs are met and that benefits the customer seeks are attained such services are health care, education, personal fitness, and weight loss, where the service outcome is highly dependent on the customer’s participation. In such services unless the customers perform their roles effectively, the desired service outcomes cannot be achieved.

Research has shown that in education, active participation by students – as opposed to passive listening – increases learning the desired service output significantly (Zeithaml 2008).

Customer as competitor to the service organization
Customers can perform most of the service themselves like cooking, cleaning, childcare, walking, entertaining, financing therefore customer are the competitors of service organization.

Priya Chetty (2010) in her Study “Role of customers in service delivery” writes, service delivery for customers can be seen in a factory. The place the service is produced and is
consumed interacting with the employees and other customers. E.g. in a classroom or in a training situation, students (customers) are sitting in the factory interacting with the instructor and other students as they consume the educational services. Since these customers are present during the service production, customers can contribute to or detract from the successful delivery of the service and to their own satisfaction (Lovelock 2010).

**Importance of customers in service delivery**
Customer participation at some level is inevitable in service delivery. Services are actions or performances, typically produced and consumed simultaneously. In many situations employees, customers and even others in the service environment interact to produce the ultimate service outcome. As the customers receiving the service participates in the service delivery process. He or she can contribute to the gap through appropriate or inappropriate, effective or ineffective, productive or unproductive behaviors (Dabholkar 1990).

Customers who are unprepared in terms of what they want to order can soak up the customer service representative’s time as they seek advice. Similarly, shoppers who are not prepared with their credit cards can “put the representative on hold”. While they search for their credit cards or go to another room or even out of their cars to get them. Meanwhile, other customers and calls are left unattended, causing longer wait times and potential dissatisfaction (Dabholkar 1990).

**Customer participation in service delivery**
The level of participation – low, medium, high – varies across different services. In some cases, all that is required is the customers physical presence (low level of participation), with the employees of the firm doing all of the service production work, as in case of a Ghazal/ musical concert. The listeners must be present to receive the entertainment service. In other cases, consumer inputs are required to aid the service organization in creating the service delivery (moderate level of participation).

Inputs can include *information, effort or physical possessions*. All three of these are required in case of accounting services who prepares a client’s income tax return effectively. *Information* in the form of tax history, marital status, and number of dependents. *Effort* in putting the information together in a useful fashion. *Physical Possessions* such as receipts and past tax returns. In case of long term consulting engagements involvement of the customers high as they co create the service (Rodie, Amy and Schultz 2000).

**Service production continuum**
- customer production
- joint production
- firm production
- Customer pumps gas and pays at pump auto
- Customer pumps gas and goes inside to pay
- Customer pumps gas and pays attendant at pump
- Attendant pumps gas and customer pays at pump auto
- Attendant pumps gas and customer goes inside to pay
- Attendant pumps gas and takes payment at pump

**A proliferation of new ssts (self service technologies)**
Here mostly customer produces the service. These technologies have proliferated as companies see the potential cost savings and effectiveness that can be achieved, potential sales growth, increased customer satisfaction, and competitive advantage. E.g. atms, pay at pump, airline check in, hotel check in, electronic blood pressure machines, internet, package tracking, online schools (Bateson1985).

**Customers as productive resources**
- partial employees: if customers contribute time, effort, or other resources to the service production they should be considered as part of the organization i.e. partial employee.
- in hospitals: family visiting and helping acts as a partial employee
- IKEA: customers do a lot including measuring, locating, transporting the products.
- any service activities that do not require customer contact or involvement should be performed away from customers.
- organizational productivity is increased by using customers as a resource to perform tasks previously done by employees. (Gas pumps).
- Customers are partial employees, human resources who contribute to the organizations productive capacity.
- health care, education, personal fitness - the outcome is highly dependent on customer participation
- unless customers perform their roles effectively, the desired outcomes are not possible.
- Ineffective coproduction can result in negative outcomes and dissatisfaction
- customers contribute to quality service delivery when they ask questions, take responsibility for their own satisfaction, and complain where there is a service failure.

**Low level of customer participation (Bitner 1997)**
Here all that is required is the customer’s physical presence with the employees of the firm doing all the service production work. E.g. symphony goes must be present to enjoy concert (Kyuusisto 2008). Characteristics of these services are as follows
- consumer presence required
- products are standardized
- service provided regardless of individual purchase
- payment is only customer input
- examples: airline travel, motel stay, fast food
- B2B examples: cleaning, pest control, maintenance
Moderate level of customer participation
Consumer inputs are required to aid the service organization in creating the service
- inputs can include: info, effort, physical possessions.
- input required for service creation
- client inputs customize standard service
- provision of service requires customer purchase
- customer input necessary for adequate outcome, but firm provides service
- Examples: haircut, physical, restaurant
- B2B: payroll service, freight transportation

High level of customer participation (Bitner 1997)
- customers are truly co creators of the service
- customers have important participation roles that will affect the nature of the service outcome
- weight reduction program - up to the customer to lose the weight
- customer creates service product
- client participation guides customized service
- cannot be created w/o customer purchase/participation
- customer input mandatory, co create outcome
- Examples: counseling, personal training, surgery
- B2B: consulting, management seminar, install internet

Scholars C.K. Prahalad and Venkat Ramaswamy(2000) introduced the concept in their Harvard Business Review article, "Co-Opting Customer Competence". They developed their arguments further in their book, published by the Harvard Business School Press, The Future of Competition, where they offered examples including Napster and Netflix showing that customers would no longer be satisfied with making yes or no decisions on what a company offers. Value will be increasingly co-created by the firm and the customer, they argued, rather than being created entirely inside the firm. Co-creation in their view not only describes a trend of jointly creating products. It also describes a movement away from customers buying products and services as transactions, to those purchases being made as part of an experience. The authors held that consumers seek freedom of choice to interact with the firm through a range of experiences. Customers want to define choices in a manner that reflects their view of value, and they want to interact and transact in their preferred language and style (Lovelock 2010).

In the early 2000s, consultants and companies deployed co-creation as a tool for engaging customers in product design. Examples include Nike giving customers online tools to design their own sneakers. At a MacWorld conference in 2007, Sam Lucente, the legendary design and innovation guru at Hewlett-Packard, described his epiphany that designers can no longer design products alone, using their brilliance and magic. They are
no longer in the business of product and service design, he stated; they are really in the business of customer co-creation.

During the mid-2000s, co-creation became a driving concept in social media and marketing techniques, where companies such as Converse persuaded large numbers of its most passionate customers to create their own video advertisements for the product. The Web 2.0 phenomenon encompassed many forms of co-creation marketing, as social and consumer communities became "ambassadors", "buzz agents", "smart mobs", and "participants" transforming the product experience. Other examples of co-creation can be found in arts.

Recently, the traditional producer-consumer model has begun to be replaced by the notion of co-creation of value. Central to emerging concepts, such as service-dominant (S-D) logic is that customers now are seen as actively involved in creating value, instead of being only passive recipients of service and the associated value (Beckett and Nayak 2008; Payne et al. 2008; Vargo and Lusch 2004; Xie et al. 2008). The customer is regarded as a resource together with whom the firm can create a valued solution that fulfils the customer's needs and solves his or her problems (Grönroos 2007, pp. 28-29). Customer co-production is seen as a component of co-creation of value. Kellogg et al. (1997) regard customer participation as a quality assurance behaviour, intended to ensure service satisfaction.

Efficiency in the process
Customers may participate in co-production to maximize efficiency, or minimize total monetary and nonmonetary costs (Bateson 1985b; Dabholkar 1996; Risch Rodie and Schultz Kleine 2000, p. 118; Silpakit and Fisk 1985). As Risch Rodie and Schultz Kleine (2000) state this may be most applicable to routine and low-risk contexts such as using a self-service food and drink dispenser. Customers commonly strive to make the most efficient use of their time, money, effort, and other resources (Risch Rodie and Schultz Kleine 2000, pp. 118-119). Swan and Oliver (1991) found that customers measure their inputs such as time, and energy. The level of perceived input may affect overall satisfaction (Swan and Oliver 1991).

Efficacy of the outcome
Customer co-production may be motivated by the objective to reduce the likelihood of substandard outcomes (Risch Rodie and Schultz Kleine 2000, p. 119). Kellogg et al. (1997) mention: “There seems to be a propensity on the part of customers to work at getting the level of quality they desire.” (p. 212)

Psychological benefits
Customer co-production can lead to psychological benefits. Etgar (2008) distinguishes between intrinsic and extrinsic benefits. Intrinsic benefits imply that an experience is appreciated for its own sake, while extrinsic benefits serve as means to an end. Potential intrinsic benefits can be a desire for play and fun, a search for aesthetics, and a drive for
ethics or spirituality. Hedonic experiences may be among the benefits of for example, visiting a spectator sports event, or a theme amusement park (Risch Rodie and Schultz Kleine 2000, p. 119). Novelty or anticipated enjoyment may also motivate customers to participate (Dabholkar 1996; Risch Rodie and Schultz Kleine 2000, p. 119). In a critical-incident investigation of customer experiences with self-service technologies, Meuter et al. (2000) found that for many customers, satisfaction results from the mere fascination with the capabilities of various self-service technologies.

Michael Guiry, University of Florida in his study on “Consumer and Employee Roles in Service Encounters” 1992 found, the consumption of services often involves the personal interaction of consumers and service employees. Past services research has focused almost exclusively on the behavior of service employees and excluded the consumer's role in this dual social process. Qualitative in-depth interviews were used to conduct an experiential investigation of how consumers want to participate in their service experiences and how satisfaction develops as a function of their participation expectations (Lovelock 2010).

The personal interaction between consumers and service providers is the heart of most service experiences. Whether the interaction consists of a flight attendant's brief standardized greeting to boarding passengers or entails the personalized attention of a physician during a medical exam, the moment the exchange commences the consumer is simultaneously involved in the production and consumption of the service and becomes an integral part of the service process. The consumer's experience within the service process is an important determinant of his/her satisfaction with the service and facilitates his/her assessment of service quality (Bitner 1990; Bitner, Booms, and Tetreault 1990; Parasuraman, Zeithaml, and Berry 1985, 1988; Surprenant and Solomon 1987).

Mark Liggas in his study “Changing Faces in Services Relationships: Customers Equals to Roles During Dissatisfactory Service Encounters” focus on customers as role-playing individuals within the services context introduces the dramaturgical metaphor into the research domain (Goffman 1959, 1967; Grove and Fisk 1983). Goffman (1959) distinguishes between the front-stage, where a performance takes place, and the back-stage where the individual contemplates and prepares for the performance. Grove, Fisk, and John (2000) explicitly discuss services as theater and apply Goffman’s terminology to both services personnel (actors) and customers (audience). With a focus on the customer in a service relationship, we suggest that the back-stage is the time prior to the service encounter when the customer determines which role he will take on during the encounter, and the front-stage, the actual service encounter, is where the customer engages in a particular role, and possibly changes roles (Zeithaml 2011).

Frank Jacob(2012) in his study “The Role of customer co-production in value creation” suggest that face-to-face contact and using self-service technologies are regarded as opposite poles in terms of levels of co-production. Two groups could be identified: One
group typically considered using self-service technologies as requiring the highest amount of own input or contribution whereas the other group shared a contrary view. Six factors could be identified that may influence participation in co-production and the amount of value-in-use that can be created: distinctive preferences, age, situational factors, customer role clarity and ability to co-produce, customer willingness to co-produce, and perceived “importance” of service.

Arja Kuusisto, Selina Päällysaho (2008) in their study “Customer role in service production and innovation – looking for directions for future research” highlighted Customer roles in business service production – consuming, coperforming, co-creating, and co-designing.

This research paper identifies four main customer roles in service production. They are based on literature examining customer-service provider interaction (Mills & Margulies 1980; Bitner et al.1997; Martin et al. 1999; Chervonnaya 2003; Wynstra et al. 2006; Flint & Mentzer 2006; Berthon & John 2006; Jaworski & Kohli 2006). The four roles are described as follows:

1. A customer’s coproduction role can be restricted to consuming the performance of a service provider. This refers to a situation in which value is created for the customer and by the customer as the customer interacts with the service provider’s performance (for instance, equipment rental service, an automated booking/ordering service, office cleaning).

2. In a co-performer role, the customer performs some tasks essential for the service mentally, physically, or with technological resources. The customer serves as a component in service production, in the sense that she carries out tasks in accordance to a plan or design of the service provider (e.g., foreign language training, development of an ICT application for a customer).

3. In a co-creator role, the service is essentially constituted in interaction between customer and service provider. Here, the customer is genuinely co-developing the solution to the problem/situation that needs to be solved (e.g., strategic R&D consultancy service).

4. Finally, in a co-designer or partner role, the customer and service provider jointly decide on the division of labour and the services each will produce. The first of the customer roles, that of consuming the performance of a service provider has been identified elsewhere (Chervonnaya 2003:349). It is typical that ‘consuming of service benefits’ is viewed as a “passive”, “idle”, even “inert” behaviour (Chervonnaya refers to an example of treatment of the unconscious patient).

Neda Ahrar1, Azizah Abdul Rahman(1998) in their study states, these days marketing have more attention in an electronic concepts and try to represent their services through the electronic ways. On the other hand Co-creation of value is a value creation by both customer and provider which used in marketing and without any focuses and attentions to
the customer perceptions, marketing will be failed in a short period of time. The aim of this study is to identify the role, importance and applicability of value co-creation concept in e-services. The method which used in this study is assessing the documents related to this area and the technique which applied in this way is content analysis. In conclusion considering the features of value co-creation and using its concepts in e-services cause improvement of e-services and setback to its fail.

Petranka Kelly, Jennifer Lawlor, Michael Mulvey (2007) in their study “Sources of Customer Role Learning During Self-Service Technology Encounters” states, advance of self-service technologies (SSTs) in the tourism industry has highlighted the role of the customer as co-producer during service encounters. Customer usage of SSTs requires that they have acquired the needed skills and knowledge towards operating the SST efficiently. Despite the recognition of the importance of customer role clarity and ability for successful SST encounters, there is a dearth of knowledge into the process of customer SST role learning. Therefore, this research contributes to knowledge by exploring the sources of customer SST role learning and how customers learn from them. The employed research method is short interviews with airline passengers at an international airport. The results identify six sources of customer learning, namely the SST interface, other customers, company employees, mass media and service environment, negative service outcomes and the customer’s workplace (Lovelock 2010). Lovelock and Young (1979) states, service firms should be encouraged to involve customers more in production in order to increase productivity.

**Employees are internal customers**

The term customer is most commonly associated with someone who purchases goods or services, but Joseph Juran (2009), the famous management consultant, taught that organizations have both internal and external customers, and internal customers have a direct link to a positive external customer experience. The external customer is the person who purchases the goods or services, while the internal customer is anyone within an organization who at any time is dependent on anyone else within the organization (Jacob 2014).
We all know the importance of taking care of the external customer (the people who purchase our products and services), but successful organizations recognize the importance of taking care of the internal customers – employees and any other stakeholders. For example, if a secretary is dealing with computer issues, the IT department considers that person an internal customer and makes as much of an effort to meet her needs as the call center person does to take care of the external customers who call in for assistance (Jacob 2014).

Rachel Miller (2011) on her study “Internal Customer Service: Satisfied Employees Create Satisfied Customers” found satisfied customers leads to increased revenue and increased brand awareness. Having satisfied employees is the key contributor to a company’s success — especially in tough economic times. Sound difficult? Providing great internal customer service may be easier than you think (Lovelock 2010). Karl Albert (2005) states “Unhappy employees can become a tourist for the organization”.

**What is internal customer service?**

According to Kevin Baitto (2009), internal customer service is the service provided to colleagues and other departments within an organization, as well as vendors and anyone else an employee interacts with to get their job done. When a colleague asks you for information regarding a project or when an employee calls Human Resources for information regarding their vacation time — that is internal customer service. How you or any other member of the company responds to such requests is reflective of how your customer’s issues are handled. If you want to provide world class customer service in your call center, you will need to start with providing great internal customer service to your employees (Berry 1999).

**Why Provide Great Internal Customer Service?**

- Increased employee satisfaction
- Lowered employee acquisition costs
- Increased employee productivity and performance
- Increased employee retention
- Streamlined processes and increased company cohesiveness
- Increased customer satisfaction

In the study “Internal Customer Service: Getting Your Organization to Work Together” it is emphasized that, great customer service isn't just about serving the people outside your company. Providing exceptional customer service lies at the heart of the mission of many organizations. It is the central theme of books, articles, motivational seminars and business courses. Its value is undisputed in business circles. What many companies fail to focus on, however, is the primary path to exceptional customer service: internal customer service (Miller 2011).
Nancy Mobley (2009) on her study “Focusing on the Internal Customer” states, another customer that often doesn't get as much attention: the internal customer. Better known as “employees” or “staff,” these internal customers are often viewed by what they can deliver to you or your organization. The unfortunate result of this perception: Internal customers lack the care and feeding that is given to external customers (Zeithaml 2011). Fáilte Ireland (2013) on their study “The Internal Customer” concludes, you cannot deliver for your external customers without the support and commitment of your internal customers, i.e. your employees. Focusing on the internal customer requires you to: Clearly define roles and responsibilities around customer service in your business so that there are no ‘grey areas’ and all play a defined, and supportive, role in the effort. Help employees to recognize the internal customer concept whereby they are all inter dependent on each other to do their jobs efficiently. Provide appropriate and continuous training for all employees on relevant aspects of service quality, including how to handle complaints. Create a working environment which engages employees to the fullest extent so they see customers as ‘theirs’ and not just ‘yours’. Get all employees actively involved in the service excellence effort including the active solicitation of ideas and suggestions. Measure employee satisfaction at regular intervals and address blockages which are reducing engagement levels (Zeithaml 2011).

CONCLUSION
Service marketing is newer discipline in marketing management. It is formally stated teaching in 1986 in United States of America. Services marketing is still in research and development phase. Services marketing require management of additional three tools people, process and physical evidence. Services marketing require marketing in three front internal marketing, external marketing and interactive marketing. Happy and satisfied employees can ultimately satisfy the end customers. Customer education and orientations is very important part of services marketing communication because many services fail because of poor performance of customer role in service creation.
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BOOK REVIEW: DIMENSIONS OF NEPALESE ECONOMY

Author: Bama Dev Sigdel
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By Mani Ratna Lamsal*

Nepal is a small Himalayan country located between two economically powerful nations India and China. Nepal is rich in various natural resources and particularly in water resource. Nepal has huge potential of generating 83,000 MW electricity. However, the country has not been able to produce more than 705 MW of electricity till the end of 2012 AD. It is one of the prime factors in the development dimension of Nepalese economy. Every year 4, 50,000 labour forces enter into Nepalese job market in search of job. So, managing Nepal’s human resource in domestic productive sectors is another dimension of the economy. The economy’s growth rate is very low (3.6 % in 2012) as compared with China and India because China has already achieved 2 digit growth rate and India is trying for that. Because of the hardworking characteristics of Nepalese people, Nepal could be developed by using available natural resources. Tourism sector and remittance are other potential future of Nepalese economy. According to the Economic Survey of Fiscal Year 2012/13 published by the Government of Nepal, Ministry of Finance the contribution of tourism and remittance in the GDP is 2% and 23.1% respectively. Political commitment and stable government and far sighted vision in leaders of political parties, commitment towards development of Nepal are some non-economic factors which could support the development pace of Nepal. Indigenous growth of primary, secondary, and tertiary sectors could yield better outcome for Nepalese people. So, progressive transformation of Nepalese economy to provide better and quality life in various aspects is the main concern of Nepalese economy and people.

In such economic background of Nepal, Dr. Sigdel published a book incorporating various dimensions of Nepalese economy under the title Dimensions of Nepalese Economy. This book under review consists of two sections. It consists of thirteen articles in English section and fourteen articles in Nepali section. The author reveals that the main aim of this book is to depict Nepali economy thru in an analytical way, explore problems and discuss the future prospects of Nepalese economy. The author discusses the future of the Nepalese economy in final section of the book.

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The English section includes the articles on the topics as: Economic liberalization, economic reform, food security, foreign direct investment, monetary policies and its effectiveness, energy, microfinance and poverty, remittance, privatization, foreign aid, intra-regional trade and investment, economic reform experiences of China, Japan, etc. Likewise, the Nepali section covers China’s economic growth, poverty/inequality in developing countries and Nepal, present economic situation/challenges and development prospects of Nepal, etc.

The first paper in the English section is entitled “Economic Liberalization and Prospects of Capital Account Convertibility in Nepal”. The main theme of this paper is composed of two distinct segments: one dealing with the economic liberalization of Nepal and the other with capital account convertibility. This paper gives clear dimensions of economic liberalization-including domestic and external. Domestic market liberalization refers to de-regulation of capital and labour market, removal of the control of price and privatization of State owned Enterprises (SOEs). The author points out that external liberalization consist of two components: trade liberalization and convertibility of domestic currency. These policies help government to use market mechanism more and less to influence the economy. Under financial sector reform, liberalization means gradual liberalization of all types of financial markets to the private sector. It helps to reduce the cost of financial intermediation.

The second paper is entitled “Experiences of Economic Reform in China: Lesson to Nepal”. This paper deals in detail how China shifted from the use of command economy to economic liberalization and privatization, economic liberalization and Foreign Direct Investment (FDI) in China. Form the early 1950 to 1970s, China had a command economy. However, at that period, the rural per-capita disposable income was significantly lower than that of poverty line. Despite launching several plans and policies in Mao’s regime, China could not succeed to achieve the desired goals. This escorted China to open the door for the economic liberalization, privatization and acceptance of FDIs. The writer reveals the causes for the failure of Marxist-Leninist socialist doctrines, SOEs (p.9). This identifies the major reasons for foreign investors in the form of FDI in China (p.17). Likewise, writer has accumulated sufficient data on FDI, SOEs, efficiency, etc. So, Nepal could learn a lot from the experiences of China.

The third paper written by Sigdel deals on “Japan’s Economic Growth during Tokugawa and Meiji Era: Lesson to Nepal.” This paper divides Japan’s Economic development into two phases-pre-Meiji era and post-Meiji era. During the economy of Tokugawa (1602-1867), there was low infrastructural development, economy was agro-based, the south west of Japan was ahead than north east in agro-products, trade with some countries increased and with some countries expelled (p.23). But, the Meiji era (1868-1912) was one of the most remarkable periods in the history of Japan. This paper further clarifies that Meiji government developed agricultural sector by providing land to the peasants introducing western methods of farming and animal husbandry, reducing the land tax, etc. Such encouraging policies brought agricultural surplus in Japan which was the sole cause of industrial expansion in early Meiji era. Many agro-based industries were
established in Meiji era especially between 1880-1931 A.D., which helped in industrial expansion in large scale. By producing export products and substitutes for imports Japan could collect foreign exchange which was necessary to purchase foreign goods and raw materials. In this way, the progress of Japan from agricultural development to modern highly developed industries may be a good lesson to Nepal.

The fourth paper is entitled “Food Security Situation in Nepal: NRB’s Response”. This paper provides theoretical concepts of food security (p.36), food production situation and its contribution to GDP in South Asia including Nepal. One of the notable points of this paper is that, in South Asia, Sri Lanka has significantly managed the food security and there is marginal food security in India. The writer has mentioned the challenges for food security in Nepal with appropriate data (p.38-39). This paper also includes the efforts of Nepal Rastra Bank (NRB) on food security through its monetary policy, through pro-poor microfinance programs, priority sector credit program etc.

The fifth paper is entitled “Foreign Direct Investment and Economic Growth: A Case of Nepal”. This paper deals with the need of FDI in developing and other countries to increase foreign trade, to introduce new technology and methods of production, to create job opportunities, to utilize resources, infrastructure development, and ultimately for sustainable development. This paper gives mixed views on FDI. It is said that the FDI is desirable for the host country only for short-term to accelerate the pace of economic growth. But in the long run, it reduces the growth rate due to increase in dependency. However, in case of Nepal, FDI has not picked-up due to political instability, degrading law and order situation and industrial security problem in the country (p.55). On the other hand, writer opines that, global recession is one of the responsible factors behind the declining trend of FDI in Nepal in recent years.

The sixth paper is entitled “Globalization and Monetary Policy Stance in Developing Countries with Reference to Nepal”. This paper deals with globalization and its essence, growing global financial integration and its impact on monetary policy with reference to various nations (p.70). This paper clarifies how NRB prepares and implements monetary policy to achieve multiple goals.

Likewise, the seventh paper deals on “Effectiveness of Monetary Policies and Strategies: A Case of Nepal”. This paper highlights the history of Nepalese monetary policy; monetary policies since 1980s to 2006 (p.74-80), strategies, operating procedures and objectives of monetary policy, effectiveness of NRB’s monetary policies and challenges. The author writes that NRB could not formulate a monetary policy independently even though it is an autonomous monetary authority. Its policies are affected by the government policies, agreement with International Monetary Fund (IMF), financial integration, etc.

The eighth paper focuses on “Growing Energy Demand in India: Nepal’s Hydro-Power Export Potentialities”. The author writes that new demand for electricity is expected to come from the developing countries with more than 75% of the world’s population. In
this context, South Asian region is demanding more energy. On the one hand, Nepal has vast potentiality of generating Hydro-electricity and on the other hand, economic growth and demand for commercial energy is increasing in India. The author brings in the data for India’s demand for and supply of electricity, the deficit in electricity supply and Nepal’s potentiality to export (p.93). India needs more electricity to meet her ambitious growth pace with her competitor China. The paper also speaks on the prospects and constraints on Hydro-power exports to India.

The ninth paper entitled “Microfinance vs. Poverty Lessening Efforts in Nepal”. The paper deals with theoretical concepts of Microfinance, effectiveness of microfinance, role of microfinance on developing countries like Nepal. Government of Nepal and NRB are encouraging to establish the microfinance, providing credit in priority sector to increase employment, income and thereby reducing poverty.

Likewise, the tenth paper is entitled “Nepal: Transformation towards Remittance Economy” deals on higher trade deficits of Nepal, growing labor force and problem of unemployment in domestic economy, the efforts of Nepal’s Government to manage foreign employment since 9th plan period, causes of labor migration, ratio of remittance and foreign aid in Nepal and labor migration and the flow of remittance in Nepal. This paper further clarifies that the manner of utilization of remittance by the recipient country is most important than the amount of remittance received. The proper utilization of remittance at appropriate place develops the remote areas, boosts the economic activities thereby increasing the living standard, increases the export trade and inflow of foreign currency and ultimately, nation could be improved in the long-run.

The eleventh paper is entitled “Privatization in Nepal” which discusses the concept of privatization, its global scenario, State Owned Enterprises (SOEs) and their performances in developing countries, privatization in Nepal, including its outcome. The process of privatization began since 1990 due to the various problems faced by SOEs (p.133-134).

Likewise, the twelfth paper is about " Foreign Aid in Nepal: An Analysis" which highlights on foreign aid and economic development, history of foreign aid in Nepal, and brings sufficient data on aid ( p.146-151) and reports some empirical findings. Due to low per capita income and high consumption pattern, the domestic saving is insufficient for development expenditure. So, a substantial portion of Nepal's development expenditure is met by foreign aid.

The thirteenth paper is about " Intra-Regional Trade and Investment in South Asia: Reference to Nepal". Under this paper the author analyses various aspects of SAARC region including economic integration, trade and investment liberalization efforts in South Asia, trade and investment policies of selected SAARC nations ( Bangladesh, Bhutan, India, Nepal, Pakistan, Sri Lanka) , intra-regional trade among SAARC nations, foreign investment in South Asia with reference to Nepal.
The Nepali section contains articles on the topics like China's Economic Growth, Poverty/Inequality in Developing Countries and Nepal, Financial Inclusion, Nepal-India Trade, Relevancy of Monetary and Fiscal Policies, Inclusive Growth, Political Economy of Nepali Economic History, Food Security, Present Economic Situation /challenges and Development Prospects of Nepal. These tropics are equally useful. On the whole, the book consists of papers which are very much relevant in the context of Nepalese Economy. All the papers are written by an experienced researcher, Sigdel. There is uniformity in writing format/style, systematic presentation of matters, use of sufficient references, etc.

However there are some spelling errors in the book. It would have been better if the English and Nepali sections were published separately as separate books. Despite some errors, it can be concluded that this book is very useful and relevant to those readers who want to know different dimensions of Nepalese Economy.
A MULTI-BILLION DOLLAR CHALLENGE: GLOBAL RISKS AND OPPORTUNITIES INVESTIGATED IN NEW BOOK ‘INTELLECTUAL PROPERTY VALUATION AND INNOVATION’

Author: James Brewer
http://www.allaboutshipping.co.uk/2013/12/20/a-multi-billion-dollar-challenge/

By Ruth Taplin, Ph.D. *

What is it that is often invisible but may be worth billions of dollars, and make or break commercial enterprises?

The answer is intellectual property, which manifests itself in tangible and intangible forms of assets. Even the international pioneers who have identified its pivotal importance in the modern world say that it is getting more complex to track, and to monetise what innovators are up to.

With research and development spending in China and India combined surging to 20% of the global total in the last five years, and western economies getting more reliant on Asia, experts contend that a global approach is urgently needed to the whole question of intellectual property rights and innovation.

This contention is precisely what is at the core of a just-published masterwork on the subject – Intellectual Property Valuation and Innovation: Towards Global Harmonisation – in which a series of specialists analyse the dramatic developments in attitudes and practices in relation to intellectual property valuation and innovation.

The editor of the book, Prof Ruth Taplin, who herself is a leading strategic commentator in this field, has assembled nine packed chapters each written by a guru in his or her area, ranging from technology to health to shipping. They confirm that valuation is increasing in complexity, whether in the residual value of maritime assets, or in financial services products.

A key feature of the volume, the 18th book to date edited and/or authored by Prof Taplin, is that it threads through many disciplines to stimulate greater understanding of the buzzing world of innovation, as it asks how the US legal-economic model, with its short-term outlook, and the more family-oriented ethos of many companies in Asia, will handle the shock of mutual conflict.

* Dr. Taplin is the Director of the Centre for Japanese and East Asian Studies.
It is certainly timely to publish a book of such kaleidoscopic range. Asian countries are leaping to the top of child education indices, while individual American innovation ‘mavericks’ continue to make fortunes as they transform the technology and energy world. China is reawakening its historic skills for invention and innovation, although it has yet to get on top of copyright piracy. The UK government is controversially becoming deeply entwined with Beijing in investment and services, raising questions of how the differing commercial and political interests can mesh.

Prof Taplin, director of the Centre for Japanese and East Asian Studies, told a City event on November 28 2013 to launch the book that identifying intellectual property is “such an inexact science – in fact it is not a science at all, it is an art. It is an immensely difficult thing to value an intangible asset, and even more difficult when you have to do it on a cross-border basis.

“On the one hand,” she said of the sphere of intellectual property, “it is progressing towards a universal standard, and on the other it is going in the opposite direction to universal, because of cultural concepts, and how things are valued in different countries.” She offered as an example of this dichotomy the brand Coca-Cola, which was difficult to value because attitudes towards the beverage varied from country to country. In South Korea the essence of the brand diminished because Coca-Cola was used as a generic term in much the same way that the word Hoover is frequently used to mean any vacuum cleaner. In India and South Africa because many people drink Coke the brand value is diminished because it costs less than elsewhere. In North America there is a lot of consumption of Coca-Cola but the brand value is high because the cost is high relative to other countries.
Turning to the popularity of the ‘open source’ model that gives unfettered access to products and designs, Prof Taplin asked: “Do we go with open source where patents and ideas are given away free ‘and everyone benefits,’ or will that kill the incentive for people to invest? Is value creation intangible?”

She commended the chapter written by Victor Bartenev, “possibly the only physicist/economist in Russia, who has come up with a novel proposal for a value added tax on a universal basis, in proportion to the use of energy.” He works through a series of algebraic formulae to elaborate a VAT system that could be used globally based on energy use, a key thesis, said Prof Taplin, “because energy is at the bottom of every transaction. This could be a viable way of creating a global tax system. It is an amazing idea to stabilise the world economy.”

Prof Taplin was adamant that “the maritime industry… can teach us a good deal about innovation and valuation. We have to remember that the maritime sector was the first to have a universal law. Many branches of law do not have universal application, but maritime law has that because it serves a global industry.”

Speaking highly of the contribution of Steve Allum, of London-based Renaissance Risk, she said that one of the biggest problems for maritime operators was predicting the value of their most important asset, the ship. Forecasting residual value (the expected value of the used physical asset at the end of its lease) several years in advance is fraught with difficulty, said Prof Taplin. Mr Allum had offered much insight into how a vessel’s value could be analysed and protected with insurance.

In the context of a clash of business cultures, Prof Taplin referred to the Apple-Samsung court battles in California. In a dispute which is expected to go to appeal, a retrial jury has ordered Samsung to pay $290m to Apple for infringement of patents in its smartphones and tablets. An earlier jury had assessed the damages at $1.05bn – and there is another colossal sum, of $598m,

Dr Tim Jones, founder of Future Agenda, who wrote a chapter entitled Future Innovation & Intellectual Property for the new book, said that innovation, centred around product development and technology, was rapidly spreading beyond the old boundaries. That so many ideas are mutating from one industry to another means you have to have as much awareness of what is happening outside your sector as inside it. “There is so much stuff coming out of left field,” he said.

He cited the success of Arm, the Cambridge designer of microprocessors, whose chip designs power most smart phones and tablets. Arm was a new type of company making its revenue purely out of intellectual property.

Dr Jones reminded the audience that, in the field of music recording, a file of a single by for example Beyoncé or Lady Gaga could be downloaded anywhere and “there is no way of putting it back in the box.” People might say “that is just music,” but that model of easy access was applying increasingly elsewhere. Dr Jones described how company structures were changing, with major enterprises like Microsoft employing many
thousands of its work-force on a freelance basis. He said that innovation firms would not be worried about those people taking their acquired knowledge elsewhere – “they are more concerned about the next big idea than the last big idea.”

Dr Jones writes in his chapter: “Although the end of IP has been on the cards in some sectors for several years, it has now become a more widespread concern. Just as new business models have challenged copyright in the music and education industries, many see that global regulation will fail to keep up with digital collaborative platforms for innovation and production.”

Graham Morgan, partner and head of innovation at Kingston Smith LLP, an advisory firm to owner-managed businesses, outlined the UK tax incentives available for intellectual property initiatives. He said that the Government considered it a good idea to use the tax system to stimulate innovation. To qualify, research and development products had to have a scientific or technological advance “with some uncertainties” involved.

It was estimated that only 60% of small and medium enterprises that could claim tax relief for research and development were doing so. Mr Morgan said that a special UK tax scheme named Patent Box to encourage patentable technology came into force in April 2013, allowing for a reduced rate of corporation tax related to patented technology in the UK and many other European jurisdictions. This had met opposition from Germany in particular as allegedly violating several provisions of the European Union code of conduct on tax.

It has since been reported that European Union finance ministers at a meeting on December 10 2013 took no immediate decision on the UK scheme, inviting what is known as the EU Code of Conduct group to examine all ‘patent boxes’ in the community by the end of 2014.

Mr Allum, founder of Renaissance Risk, and who has been chairman of marine global practice at broking group Aon and later a senior executive at JLT Specialty, analyses starkly in the book the downturn in shipping of the last few years. In his hard-hitting chapter on residual value insurance in the maritime sector, he warns of the “dangers of a vacuum of value information,” saying that value dislocation features prominently in negotiations between shipowners and banks. As the market has worsened, borrowers have begun to challenge valuations.

Mr Allum calls for new ways of valuation to be created so that shipowners can plan for, among other activities, buying ships.

He writes that risk management still seems to be viewed by many in shipping as a dark art that should be shunned, but shipowners who want to prosper might do well to revisit the management of financial risks. Among tools available are charterers’ default insurance, and residual value insurance. He insists: “The message is not to be afraid of the ‘dark arts,’ and carry out good risk management which will help with credit financing and public listing of a company, and make it possible to ride out even the ‘perfect
storm.” Residual value insurance provides the asset owner and financiers with asset value certainty at a pre-determined time in the future – it is an invaluable means of balancing exposures and removing asset risk from the balance sheet, Mr Allum asserts. Speakers at the book launch were introduced by Jon Dawson, a partner at Kingston Smith, which sponsored the event.

*Intellectual Property Valuation and Innovation: towards global harmonisation, edited by Ruth Taplin. Details and online ordering at www.routledge.com*